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FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH IN TURKEY: AN EMPIRICAL INVESTIGATION BY THE BOUNDS TEST FOR CO-INTEGRATION AND CAUSALITY TESTS

ABSTRACT

This paper empirically investigates the level relationship and the direction of causality between net foreign direct investment (FDI) inflows and economic growth in Turkey by using the bounds test for co-integration and Granger causality tests. Results suggest that both variables are in long-run equilibrium relationship only when FDI is dependent variable under the ARDL (auto-regressive distributed lag) modeling approach. Final investigation in the paper is that economic expansion in Turkey stimulates expansion in net FDI inflows.

1. Introduction

The theoretical and empirical literature on the relationship between FDI and economic growth is quite extensive. FDI is often seen as an important catalyst for economic growth (Le and Suruga, 2005). Majority of empirical studies focuses on the effect of FDI on economic growth. Thus, the causal link from FDI to growth has been popular in the relevant literature. However, as also mentioned by Chakkaborty and Basu (2002), the causal link from economic growth to FDI and feedback relationship between FDI and economic growth deserves further attention. So, the direction of the relationship between FDI and economic growth needs to be further emphasized, because, FDI related spillover of knowledge promotes economic growth and economic growth in turn attracts more FDI (Chakkaborty and Basu, 2002).

Empirical studies in the literature investigated the FDI – growth nexus such as Le and Suruga (2005), Durham (2004), Borensztein et al. (1998) and Balasubramanyam et al. (1996). They generally confirmed the possibility of positive impact of FDI on economic

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growth through some mechanisms such as technology upgrading progress, human capital, absorptive capacity of the host country, and trade policy adopted by the host country. In these studies authors suggest that FDI can have positive but indirect impact on economic growth where they generally studied panel of countries. On the other hand, Le and Suruga (2005) suggest that FDI, public capital and private investment play important roles in promoting economic growth in the case of India. They also found that excessive spending in public capital expenditure can hinder the beneficial effects of FDI.

This article investigates long-run equilibrium relationship and the direction of causal link between FDI and economic growth for Turkey, which has a developing economy, strategic geographical location, and about 8,800 USD per capita income (GDP) in current prices (World Bank, 2009). Turkey had a highly volatile economy in the history, but its economy has started to stabilize during a one party period since 2002. Exports and imports of goods and services constituted 22% and 27% of GDP respectively in 2007. Inflation is about 5.73% according to consumer prices.

Figure 1

Net FDI Inflows (in million USD prices) to Turkey during 1960-2006
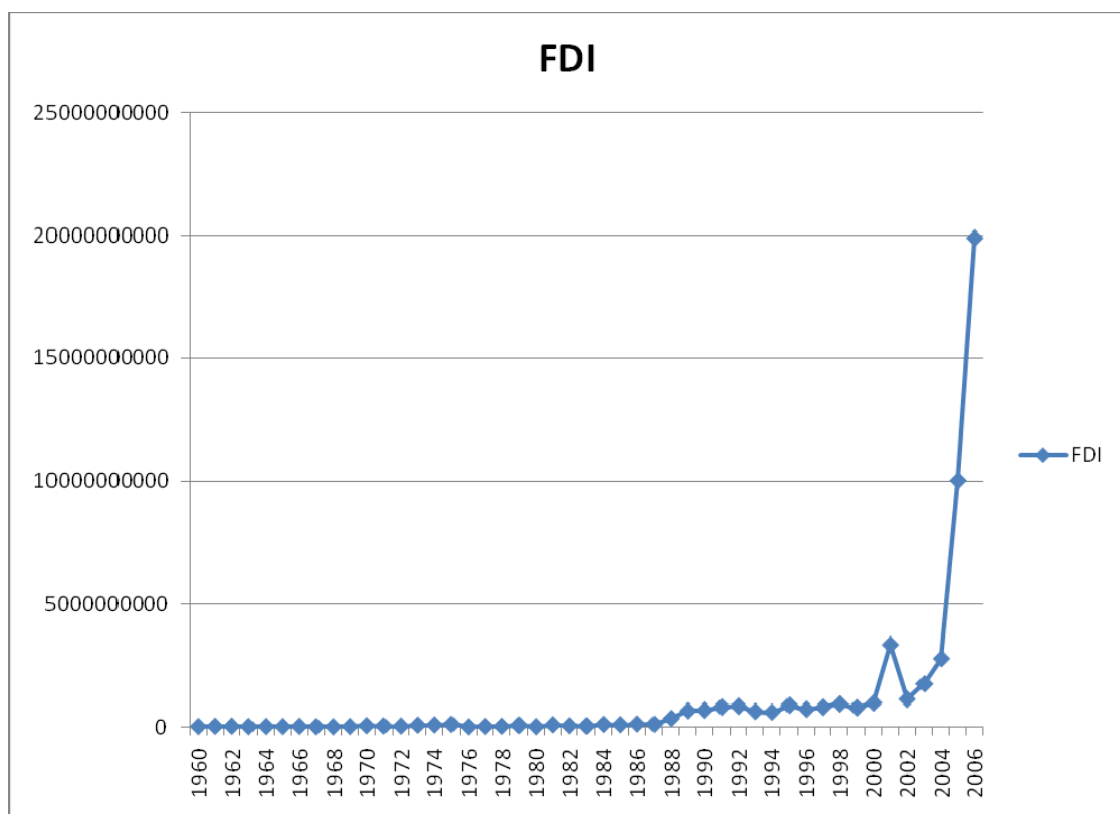
Source: Word Bank, 2009.

FDI inflows also showed a tremendous increase in the Turkish economy after 2002 as a result of successful economic policies of government as also can be seen from Figure 1.

Net FDI inflows reached to a maximum of 22.19 million USD in the history, which consituted 3.38% of GDP in 2007. Thus, this study is important to identify empirical relationship between FDI and real income growth in the case of such developing country like Turkey.

The paper proceeds as follows. Section II defines data and methodology of the study. Section III provides results and discussions and the paper concludes with Section IV.

2. Data and Methodology

Data used in this paper are annual figures covering the period 1970 – 2005 and variables of the study are real gross domestic product (GDP) and net FDI inflows. Data are taken from World Bank Development Indicators (World Bank, 2009) and both variables are at 2000 constant US $ prices.

The Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP)[1] Unit Root Tests are employed to test the integration level and the possible co-integration among the variables (Dickey and Fuller 1981; Phillips and Perron 1988). The PP procedures, which compute a residual variance that is robust to auto-correlation, are applied to test for unit roots as an alternative to ADF unit root test.

To investigate a long-run relationship between each pair of variables under consideration, the bounds test for co-integration within ARDL (the autoregressive distributed lag) modeling approach was adopted in this study. This model was developed by Pesaran et al. (2001) and can be applied irrespective of the order of integration of the variables (irrespective of whether regressors are purely I (0), purely I (1) or mutually co-integrated). The ARDL modeling approach involves estimating the following error correction models:

$$\Delta \ln Y_t = a_{0_Y} + \sum_{i=1}^{n} b_{i_Y} \Delta \ln Y_{t-i} + \sum_{i=0}^{n} c_{i_Y} \Delta \ln X_{t-i} + \sigma_{1_Y} \ln Y_{t-1} + \sigma_{2_Y} \ln X_{t-i} + \varepsilon_{1t} \tag{1}$$

$$\Delta \ln X_t = a_{0_X} + \sum_{i=1}^{n} b_{i_X} \Delta \ln X_{t-i} + \sum_{i=0}^{n} c_{i_X} \Delta \ln Y_{t-i} + \varpi_{1_X} \ln X_{t-1} + \varpi_{2_X} \ln Y_{t-i} + \varepsilon_{2t} \tag{2}$$

In equations (1) and (2), Δ is the difference operator, Y_t is the log of dependent variable, X_t is the log of independent variable and ε_{1t} and ε_{2t} are serially independent random errors with mean zero and finite covariance matrix.

Again in equations (1) and (2), the F-test is used for investigating a level (long-run) relationship between dependent variable and its regressors. In the case of a long-run relationship, the F-test indicates which variable should be normalized. In Equation (1), when Y is the dependent variable, the null hypothesis of no co-integration is H_0: σ_{1Y} =

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[1] PP approach allows for the presence of unknown forms of autocorrelation with a structural break in the time series and conditional heteroscedasticity in the error term.

$\sigma_{2Y} = 0$ and the alternative hypothesis of co-integration is H_1: $\sigma_{1Y} \neq \sigma_{2Y} \neq 0$. On the other hand, in Equation (2), when X is the dependent variable, the null hypothesis of no co-integration is H_0: $\varpi_{1Y} = \varpi_{2Y} = 0$ and the alternative hypothesis of co-integration is H_1: $\varpi_{1Y} \neq \varpi_{2Y} \neq 0$.

In the presence of co-integration based on the bounds test, the Granger causality tests should be done under vector error correction model (VECM) when the variables under consideration are co-integrated. By doing so, the short-run deviations of series from their long-run equilibrium path are also captured by including an error correction term (See also Narayan and Smyth, 2004). On the other hand, in the absence of co-integration, then, the Granger causality tests should be done under vector autoregressive (VAR) model. The VAR model can be specified as equation (3) where Y is the dependent variable, and the VECM can be specified as equation (4) where X is the dependent variable:

$$\Delta \ln Y_t = \alpha_0 + \varphi_{11}^p(L)\Delta \ln Y_t + \varphi_{12}^q(L)\Delta \ln X_t + \mu_{1t} \tag{3}$$

$$\Delta \ln X_t = \alpha_1 + \varphi_{21}^p(L)\Delta \ln X_t + \varphi_{22}^q(L)\Delta \ln Y_t + \delta ECT_{t-1} + \mu_{2t} \tag{4}$$

Where

$$\varphi_{ij}^p(L) = \sum_{n=1}^{P_{ij}} \varphi_{ijn} L^1 \qquad \varphi_{ij}^q(L) = \sum_{n=1}^{Q_{ij}} \varphi_{ijn} L^1$$

$$\varphi_{21}^p(L) = \sum_{i=1}^{P_{21}} \varphi_{21,i}^p L^i \qquad \varphi_{22}^p(L) = \sum_{i=0}^{P_{22}} \varphi_{22,i}^p L^i$$

In equations (3) and (4), Δ denotes the difference operator and L denotes the lag operator where, for example, $(L)\Delta \ln Y_t = \Delta \ln Y_{t-1}$. ECT_{t-1} is the lagged error correction term derived from the long-run co-integration model. Finally, μ_{1t} and μ_{2t} are serially independent random errors with mean zero and finite covariance matrix. Finally, according to the VAR model for causality test, having statistically significant F value in equation (3) and according to VECM for causality test, having statistically significant both F and t ratios for ECT_{t-1} in equations (4) would be enough condition to have causation from X to Y and from Y to X respectively.

2. Empirical Results

Table 1 gives ADF and PP unit root test results for net FDI inflows and GDP. Real GDP is non-stationary both in ADF and PP tests at level but stationary at first difference, that is integrated of order one, I(1). PP test suggest that FDI variable is integrated of order zero, I (0). However, this is not justified by ADF test. PP test will be taken into consideration for FDI variable due to the fact that PP procedures compute a residual variance that is robust to auto-correlation and are applied to test for unit roots as an alternative to ADF unit root test.

Table 1.

ADF and PP Tests for Unit Root

Statistics (Levels)	ln y	Lag	ln FDI	lag
τ_T (ADF)	-2.92	(0)	-3.30***	(4)
τ_μ (ADF)	-0.62	(0)	-0.58	(4)
τ (ADF)	5.75	(0)	1.19	(2)
τ_T (PP)	-2.92	(0)	-3.57**	(1)
τ_μ (PP)	-0.62	(0)	-0.84	(1)
τ (PP)	6.16	(1)	1.11	(13)
Statistics (First Differences)	Δln y	Lag	Δln T	lag
τ_T (ADF)	-6.34*	(0)	-5.74*	(1)
τ_μ (ADF)	-6.43*	(0)	-5.65*	(1)
τ (ADF)	-1.22	(2)	-2.26**	(3)
τ_T (PP)	-6.33*	(2)	-10.65*	(3)
τ_μ (PP)	-6.42*	(2)	-9.78*	(1)
τ (PP)	-3.78*	(4)	-9.67*	(1)

Note: y represents real gross domestic product; FDI is net inflows of foreign direct investment τ_T represents the most general model with a drift and trend; τ_μ is the model with a drift and without trend; τ is the most restricted model without a drift and trend. Numbers in brackets are lag lengths used in ADF test (as determined by AIC) to remove serial correlation in the residuals. When using PP test, numbers in brackets represent Newey-West Bandwith (as determined by Bartlett-Kernel).
*, ** and *** denote rejection of the null hypothesis at the
1%, 5% and 10% levels respectively.
Tests for unit roots have been carried out in E-VIEWS 5.1.

Now having the fact that FDI variable is stationary at level while real GDP is stationary at first difference for Turkey, long-run equilibrium relationship will be now investigated by using the bounds test for co-integration within ARDL modeling approach. Table 3 gives results of the bounds test for co-integration between net FDI inflows and real GDP for Turkey under three different scenarios as also suggested by Pesaran et al. (2001: 295-296), that are with restricted deterministic trends (F_{IV}), with unrestricted deterministic trends (F_V) and without deterministic trends (F_{III}). Intercepts in these scenarios are all unrestricted[2]. Critical values for F and t statistics are presented in Table 2 as taken from Pesaran et al. (2001) to be used in this study.

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[2] For detailed information, please refer to Pesaran et al. (2001), pp. 295-296.

Table 2.

Critical Values for ARDL Modeling Approach

k = 2	0.10		0.05		0.01	
	I (0)	I (1)	I (0)	I (1)	I (0)	I (1)
F_{IV}	3.38	4.02	3.88	4.61	4.99	5.85
F_{V}	4.19	5.06	4.87	5.85	6.34	7.52
F_{III}	3.17	4.14	3.79	4.85	5.15	6.36
t_{V}	-3.13	-3.63	-3.41	-3.95	-3.96	-4.53
t_{III}	-2.57	-3.21	-2.86	-3.53	-3.43	-4.10

Source: Pesaran et al. (2001): pp. 300-301 for F-statistics and
pp. 303-304 for t ratios.

Note: k is the number of regressors for dependent variable in ARDL models, F_{IV} represents the F statistic of the model with unrestricted intercept and restricted trend, F_{V} represents the F statistic of the model with unrestricted intercept and trend, and F_{III} represents the F statistic of the model with unrestricted intercept and no trend. t_{V} and t_{III} are the t ratios for testing $\sigma_{1Y} = 0$ in Equation (5) and $\varpi_{1Y} = 0$ in Equation (6) respectively with and without deterministic linear trend.

Results in Table 4 suggest that the application of the bounds F-test using ARDL modeling approach does not suggest the existence of a level relationship (long-run relationship) between real GDP and net FDI inflows when FDI is dependent variable since the null hypothesis of H_0: $\sigma_{1Y} = \sigma_{2Y} = 0$ is accepted. On the other hand, the bounds F-test suggest the existence of a level relationship between real GDP and net FDI inflows when real GDP is dependent variable since the null hypothesis of H_0: $\varpi_{1Y} = \varpi_{2Y} = 0$ is rejected according to F_{IV} scenario at 0.01 level. On the other hand, the results from the application of the bounds t-test in each ARDL model are less clear-cut and do not generally allow the imposition of the trend restrictions in the models since they are not statistically significant (See Pesaran et al., 2001: 312).

Table 3.

Bounds Test for Cointegration

Variables	With Deterministic Trends			Without Deterministic Trend		
	F_{IV}	F_V	t_V	F_{III}	t_{III}	Conclusion
						H_0
y and FDI						
F_y (y / FDI)	2.82^a	2.28^a	-2.64^a	1.41^a	-1.41^a	Accepted
F_{FDI} (FDI / y)	4.20^c	3.69^a	-2.18^a	4.03^b	-1.95^a	Rejected

Note: Akaike Information Criterion (AIC) and Schwartz Criteria (SC) were used to select the number of lags required in the co-integration test. Both gave the same level of lag order, VAR= 1. F_{IV} represents the F statistic of the model with unrestricted intercept and restricted trend, F_V represents the F statistic of the model with unrestricted intercept and trend, and F_{III} represents the F statistic of the model with unrestricted intercept and no trend. t_V and t_{III} are the t ratios for testing $\sigma_{1Y} = 0$ in Equation (5) and $\varpi_{1Y} = 0$ in Equation (6) respectively with and without deterministic linear trend. ^{a} indicates that the statistic lies below the lower bound, ^{b} that it falls within the lower and upper bounds, and ^{c} that it lies above the upper bound.

On the basis of the bounds test results for co-integration, the Granger causality tests require a VAR model in the case of (y / FDI) where real GDP is dependent variable and a VECM in the case of (FDI / y) where FDI is dependent variable. There are methods for lag length selection in the recent literature such as AIC (Akaike Information), SIC (Schwartz Information Criterion) and Hsiao's (1979) sequential procedure (which combines Granger's definition of causality and Akaike's minimum final prediction error (FPE) criterion). However, due to the limited number of observations in this study, maximum lag is set to 3 and both VAR and VEC models were estimated for each lag length. Pindyck and Rubinheld (1991) also point out that it would be best to run the test for a few different lag structures and make sure that the results were not sensitive to the choice of lag length.

Table 4.

Granger Causality Tests

Null Hypothesis	Lag Level 1 F – Stat	t_{ECTt-1}	2 F – Stat	t_{ECTt-1}	3 F – Stat	t_{ECTt-1}	Result
y and FDI							
FDI does not Granger cause y	0.10	-	0.08	-	0.29	-	$y \Rightarrow FDI$
y does not Granger cause FDI	6.44[*]	-2.81[*]	3.68[**]	-2.49[**]	2.96[**]	-2.85[*]	

Note: 1. [*], and [**] significance at 1% and 5% levels respectively.

Results in Table 4 suggest unidirectional causation in the long-run that runs from real GDP growth to net FDI growth in the case of Turkey. Short-run causation from FDI to real GDP growth is not confirmed since F statistics in the VAR model in Table 4 are not statistically significant in any lag length where both F and t statistics in the VECM are statistically significant in all of the lag lengths as a long-run estimation. Therefore, there is strong evidence that a growth in real income stimulates a growth in net FDI flows to Turkey.

3. Conclusion

This paper empirically investigated long run equilibrium relationship between real GDP growth and net FDI growth by using the bounds test for co-integration in Turkey. Results suggest that these two variables are only co-integrated when net FDI inflows are dependent variable in the ARDL model. Furthermore, the results of causality test using VECM suggest unidirectional causation from real GDP growth to net FDI growth in Turkey. Thus, it is important to mention that economic expansion in Turkey stimulates net FDI inflows. The highly volatile Turkish economy has started to stabilize apart from 2000s once single party government period is experienced after long years of coalition parties' governments. Having this opportunity, successful economic policies have been implemented in Turkey since then. Statistical figures also show that there is tremendous increase and improvement in bet FDI inflows to Turkey apart from 2000s. Thus, the results of this study have also shown that FDI growth in Turkey is stimulated by economic expansion. Having this major finding in the present study, a further research is recommended to be done on through which channels FDI is stimulated in the case of Turkey.

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IZRAVNA STRANA ULAGANJA I GOSPODARSKI RAST U TURSKOJ: EMPIRIJSKO ISTRAŽIVANJE POMOĆU GRANIČNOG TESTA ZA KOINTEGRACIJU I TESTA KAUZALNOSTI

SAŽETAK

Rad empirijski istražuje razinu odnosa i smjer kauzalnosti između prihoda od izravnih stranih ulaganja (FDI) i gospodarskog rasta u Turskoj koristeći granični test za kointegraciju i Grangerov test kauzalnosti. Rezultati ukazuju na to da su obje varijable u dugotrajnom uravnoteženom odnosu samo kad su izravna strana ulaganja ovisna varijabla po ARDL (autoregresijski model s distribuiranim vremenskim pomakom) pristupu. Zaključak rada je da gospodarska ekspanzija u Turskoj stimulira ekspanziju neto priljeva od izravnih stranih ulaganja.

JEL: C22; C51; F43.

Ključne riječi: *FDI (izravna strana ulaganja), gospodarski rast, granični test, Granger kauzalnost, Turska*

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FOREIGN DIRECT INVESTMENTS IN CROATIA: REGIONAL PERSPECTIVE

ABSTRACT

Foreign direct investments, according to the home countries as well as economic activities, have been analyzed in the 1993-2008 period. Special emphasis is put on the regional (NUTS 2) and county level analysis, based on the data for the 1997-2007. The FDI determinants on the county level have been analyzed for the first time in Croatia, and the results have confirmed that the share of the highly-educated, export orientation as well as higher share of domestic investment in the county represent positive characteristics for foreign investors, when choosing a location for investment within Croatia.

1. INTRODUCTION

According to the OECD (2008) definition, foreign direct investment reflects the objective of obtaining a lasting interest by a resident entity in one economy (''direct investor'') in an entity resident in an economy other than that of the investor (''direct investment enterprise''). According to the same definition, foreign direct investor is an individual, an incorporated or unincorporated public or private enterprise, a government, a group of related individuals, or a group of related incorporated and/or unincorporated enterprises which has a direct investment enterprise operating in a country other than the country or countries of residence of the foreign direct investor or investors. Furthermore, OECD recommends that a direct investment enterprise should be defined as the one in which a foreign investor owns 10 per cent or more of the ordinary shares or voting power. The reasoning behind this rule is that, an effective voice in the management, as evidenced by an ownership of at least 10 per cent, implies that the direct investor is able to influence or participate in the management of an enterprise.

Due to the main orientation towards long-term cooperation, local companies generally consider this type of investment more desirable than stock-related investment. With the first signs of economic crisis (or other problems in a national economy), the capital invested in stocks and securities 'runs away' from the country while the capital invested in the entrepreneurial structure tends to further develop and enhance the business of the subject in its (partial) possession, regardless the current situation in the wider and narrower environment. This does not imply that each foreign investor owning more than 10 percent of

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the domestic company acts in each situation acts in previously described manner, but rather that it is expected that an average foreign investor will tend to be focused on the continuance of the chosen economic activity.

It is often considered that FDI have positive effect on the national economy, which encourages countries to develop different strategies with the aim to attract foreign investors. Due to often inadequate domestic savings levels, under-developed countries use foreign direct investments to enable increased rates of capital accumulation. Within this framework it is assumed that foreign direct investments speed-up the economic growth.

This paper tries to identify some of the factors relevant for attracting foreign investments in Croatia, with special focus on the regional analysis[1] and thus to provide inputs relevant for defining the regional economic policy. The paper starts with the review of theoretical literature on foreign direct investors' motives for investment. Section 3 is focused on the analysis of Croatia's relative position in the overall FDI dynamics in the world as well as countries within the region. The analysis of foreign direct investments on regional level is in Section 4, and it is based on the available data of the Croatian National Bank 1993-2008 (the first quarter) – cumulative amounts, i.e. the analysis of the annual data is concentrated on the period from 1997 to 2007. The Section 5 is reserved for the analysis of the determinants of FDI on regional level, while the last secton brings conclusions

2. FOREIGN INVESTORS' MOTIVES: THEORETICAL BACKGROUND

Under-developed national economies with insufficeint national savings levels attract foreign investors with favourable macroeconomic settings, which comprises of economic stability at the national level and locations' overall safety. By removing the obstacles to the political and economic safety as well as reducing risks, particular country enters potentially more or less attractive investment zones; the particular area's level of attractiveness becomes primarily determined by the foreign investors' motives and the specific characteristics of national economy. Although there are various determinants of FDI, they can be roughly divided into two groups: the ones dependent on the company itself (internal) and the ones not under control of the company (external). In the economic literature[2] these factors are synthesized in the so-called OLI paradigm, according to which companies invest abroad only if they can achieve the following advantages:

- ❖ the *ownership* (O) advantage – internal factor which enables foreign investor to have an advantage over the local competition;

- ❖ the *location* (L) advantage – ensures lower production and transportation costs but also an access to specialised knowledge and skills available in the country of investment. Institutional factors can be added here, as well;

- ❖ the *internalization* (I) advantage –achieving certain advantages and the ability to keep them; usually within company.

According to the location theory[3], FDI can be:

- ❖ *resource-seeking*: foreign investments are aimed at exploiting resources in the host country. The resource- seeking FDI depends on prices of raw materials, lower unit labor cost of unskilled labor force, and the pool of skilled labor, physical infrastructure (ports, roads, power, and telecommunication), and the level of technology.

- ❖ *market-seeking*: foreign investor is primarily interested in launching its products onto new markets, thus locating production[4] process in the vicinity of consumers. An additional motive belonging to this category can refer to the possibility of avoiding trade barriers.

- ❖ *efficiency-seeking*: according to this theory, the third motive lies in the possibility of achieving higher business efficiency by using less expensive workforce or infrastructure. This often means that, in the production chain, some production stages (usually not all of them) are re-located to the host country (in order to use less expensive workforce or avoid more demanding regulations on the nature conservation or safety at work).

Foreign investments generally positively contribute to the development of managerial skills and techniques, add to the increase in the overall professional and educational level of the workforce, which, taken together and supported by sophisticated and more efficient technology, contributes to an increase in productivity.

It can be assumed that the FDI determinants identified to be relevant at the national level can be more or less straightforwardly applied at the regional level as well. The results of the previous studies indicate that the economic growth and openness are important to all regions, while the variables like return to investments, political instability, or fiscal incentives, could have a heterogeneous influence on regional dispersion of FDI (Sunesen, 2002). We assume that the regional disperson of FDI in Croatia is connected with the overall attractiveness of the whole country. Therefore, the first step in the analysis is the presentation of the overall FDI inflows in Croatia during the analyzed period. The following chapter presents the FDI trends in Croatia at the national level and provides the basic comparisons in relation to FDI data in the region but also in the world.

3. FOREIGN DIRECT INVESTMENTS IN CROATIA: COMPARISONS WITH THE EUROPEAN AND OVERALL TRENDS

The previous research on foreign direct investments in Croatia has mainly been oriented to studying whether these investments support the reversal of Croatian exports negative trends (Vukšić, 2005), whether foreign direct investments can influence an increase in the efficiency of overall investments (Lovrinčević, Mikulić and Marić, 2004), what are the expected effects of the accession to the EU in terms of attracting foreign direct investments in Croatia and other transition countries (Cvijanović and Kuliš (2002), Babić and Stučka (2001).

According to UNCTAD data, the total foreign direct investments have been since 2004 globally increasing in all the groups of countries, from developed national economies to under-developed, including transition economies, whereas increase rates were not uniform.

In 2007, total FDI recorded an increase for the fourth consequtive year (FDI equalled \$ 1.833 billion in 2007) and reached their maximal amount for the second time (the first one was reached in 2000). The overall amount invested in year 2007 was 30 percent more than a year before[5]. When considering Croatian wider region, it can be noticed that FDI in 2007 increased by 50 (in compariso to previous year) in South East (SE) Europe and the Community of Independent Countries (UNCTAD, 2008). The increased attractiveness of the regon to foreign investors can be easily explaind. Most of the foreign investors were primarily oriented to privatisation projects in SE Europe and the growing Russian market, as well as to the possibility of exploiting significant natural resources.

However, the growing interest is not equally present in all the countries of the region. The five most attractive countries in the region were accountable for 94 percent of all the investments realised in 2007 (UNCTAD, 2008). It could be argued that in the year 2007 the foreign investors were mostly oriented towards the markets with increasing potential (Russia), followed by the primary sector investments. Within this context, it has to be noticed that Croatia due to its size neither has large internal market nor vast reserves of natural resources.

According to the data presented in Table 1, Croatia exceeds EU-27, EU-25 and EU-15 averages, but generally does not exceed the FDI intensity of transition economies in the new EU member countries (for example, Hungary, Estonia). According to the attractiveness to the foreign investors Croatia obtained in year 2006 the position between the SE European countries and the Community of Independent Countries, i.e. Croatia was the sixth-ranked after Romania, Bulgaria and Serbia but before Macedonia (UNCTAD, 2007). In 2007 Croatia occupied the fourth position, after Russia, Kasakhstan and Ukraine.

Table 1

Degree of FDI Intensity* for the Selected Countries, 1997-2007

| Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2006
Croatia			3,5	2,7	3,5	3,3	3,4	1,9	2,6	4,2	4,7
Czech R.	1,2	3,1	5,4	4,5	4,7	5,8	1,3	2,7	4,7	2,6	3,0
Hungary	2,9	2,7	2,3	2,3	4,0	2,5	2,2	2,8	4,5	16,5	32,5
Estonia	4,0	5,2	3,4	4,0	6,0	2,9	5,5	5,1	12,9	8,8	10,2
Poland	1,6	1,9	2,2	2,7	1,5	1,1	1,2	2,6	2,3	4,1	3,2
Rumania		2,4	1,5	1,4	1,4	1,3			3,3	4,8	3,0
Slovenia					1,3	2,4	2,7	1,8	2,1	2,1	3,7
Slovakia	0,6	1,5	-0,1	5,3	3,7	7,8	3,6	3,6	2,7	4,1	2,4
EU-27								0,9	1,6	1,8	3,4
EU -25					2,4	1,3	1,3	1,0	1,7	1,8	3,5
EU -15	1,1	2,0	2,8	3,6	2,6	1,4	1,4	1,1	2,0	2,0	3,7

Source: Eurostat, www.eurostat.ec.europa.eu

* FDI**s** intensity degree is calculated as an average of coming and outgoing FDI**s** flows divided by GDP and multiplied by 100

The increased attractiveness of Croatia as the foreign investments host country is evident in the period since 2004. From 1993 to 2008, the overall amount of 20.6 billion euros was invested in Croatia, whereas 12.8 billions referred to equity investments, 3.7 billions to reinvested earnings and 4.2 billions to other capital (Croatian National Bank data). The structure of FDI was constantly changing. Namely, equity investments dominated (100 percent) until 1996, while the significance of other than equity investments increased from 1996 to 1999. From 2000 to 2004 the FDI exhibitted changing pattern, recording the years of increase as well as the years of decrease in investment amounts, followed by evidently more importance of reinvested earnings, which continued until recently. From 2005 to 2008 the average amount of 2.7 billion euros was invested in Croatia every year.

Figure 1

FDI in the Republic of Croatia 1993 – 2008 in Millions of Euros
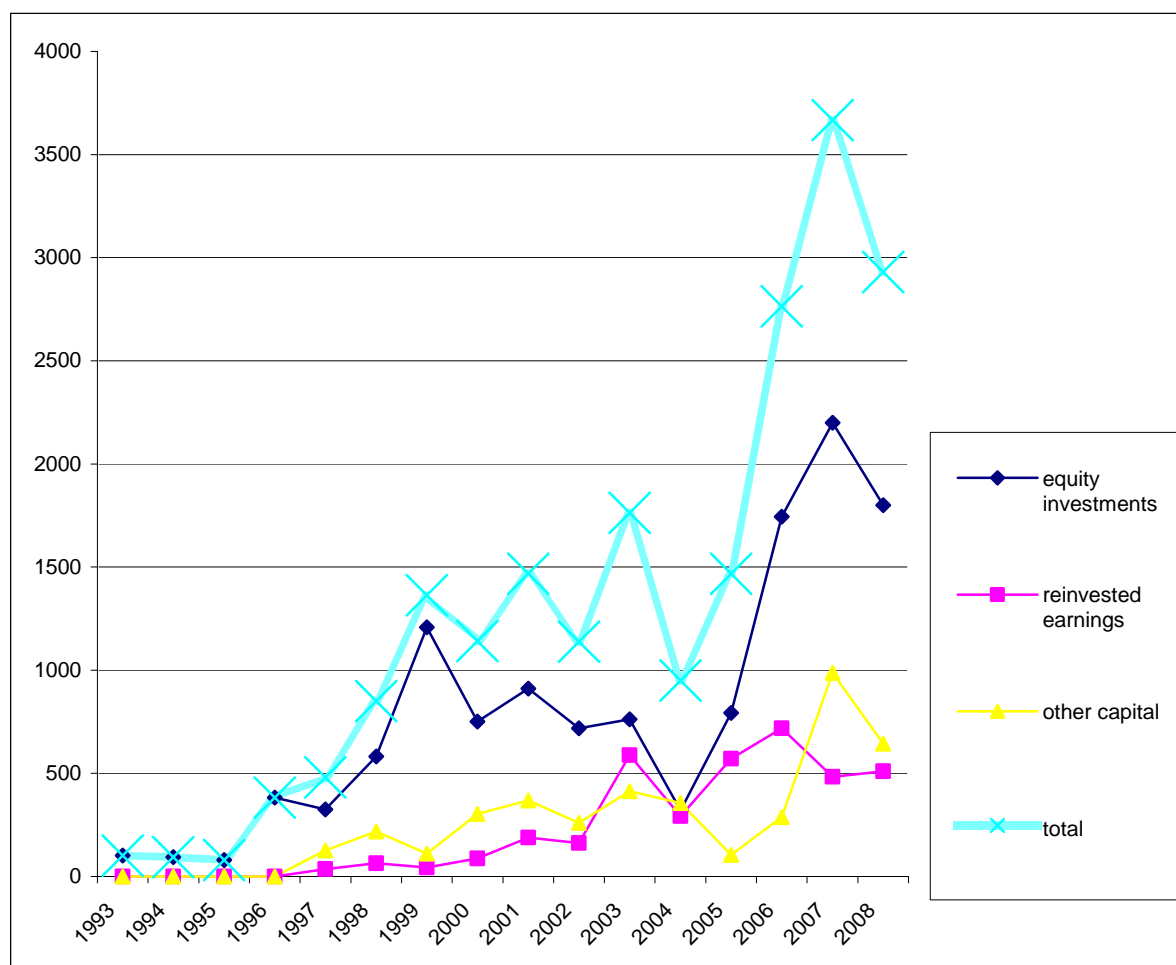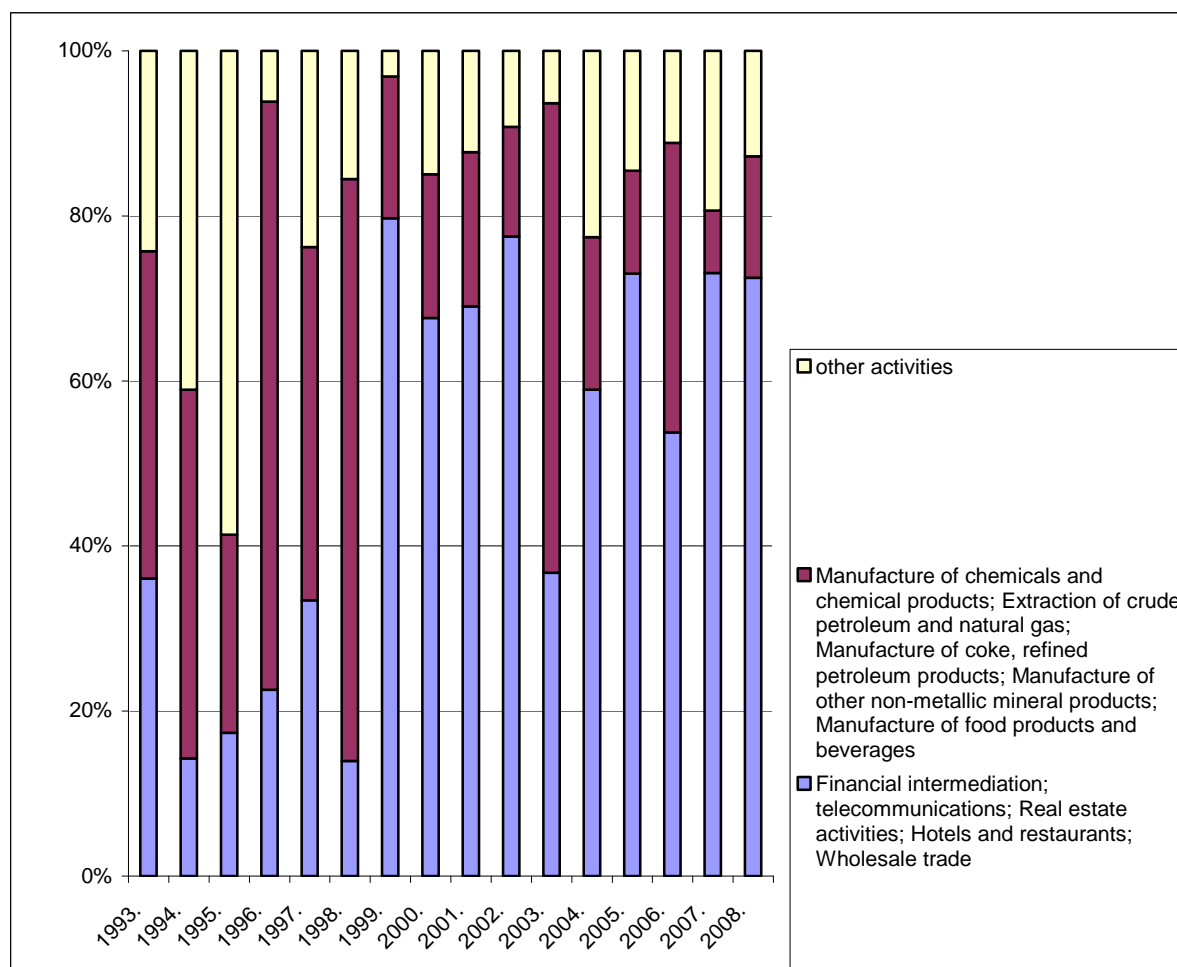

Source: Croatian National Bank.

The main countries-investors to Croatia from 1993 have been: Austria, the Netherlands, Germany, Hungary, and to a slightly lesser extent France, Luxembourg, Italy and Slovenia. The intensity of investments from specific country usually varies, which is usually related to investors' interest in specific privatisation projects. On the other hand, the countries that are also the most important Croatian foreign trade partners (Germany, Italy, Austria and Slovenia) have been proved to be more stable sources of investment. Keeping in mind Croatia's high traded deficit, FDI is probably motived by the growing potential of the local market. During the 1998 to 2008 period, the average FDI share of the four countries stated above was approximately 52 percent. Adding another four countries (the Netherlands, France, Hungary and Luxembourg) in the analysis, the concentration of FDI according to the countries of origin can be estimated between 80 and 90 percent during that period (Škuflić, 2008).

If the structure of FDI is analysed by economic activities, it is evident that FDI structure global trends, namely the higher share of FDI in service sector, has been introduced in Croatia since 1999 as well. Although countries in transition - and Croatia belongs to this group - usually have higher preferences towards FDI in manufacturing sector, the service

sector dominates. The following economic activities within the service sector have achieved exceptionally higher shares in total Croatian FDI: financial intermediation, telecommunications, real estates activities, hotels and restaurants, and wholesale trade. During the 1999 to 2008 period, the share of the service sector referring to several activities mentioned above was below 60 percent only in years 2003 and 2006 (Škuflić, 2008).

Figure 2

FDI in the Republic of Croatia According to Economic Activities, 1993-2008

Source: Croatian National Bank.

The FDI data classified by economic activities reveal that only five industrial branches participate with more than 65 percent in the total FDI inflows. These are as follows: financial intermediation (31,1 percent), telecommunications (13,5 percent), chemical industry (14,9 percent), manufacture of coke, refined petroleum products (4,7 percent) and wholesale trade (4,1 percent).

Based on the previously stated, it can be concluded that, although overall FDI inflows to Croatia were volatile, several sectors were dominant, due to the fact that investments were often closely related to the privatisation of larger state-owned companies (INA, telecommunications, hotel companies). This structure is also relevant for regional FDI

distribution in Croatia. The following section deals with the trends of foreign direct investments at the regional level in order to point out the similarities and differences in certain regions in relation to the national level trends.

4. FDI DISTRIBUTION ACROSS CROATIAN REGIONS

Foreign direct investments are not nor should be equally distributed in space.The high geographical concentration in certain Croatian regions during the last period cofirms this statement. In addition to determining the regions that were succesful in attracting FDI during last few years, we investigate the determinants of this success. The analysis is based on the FDI data provided by the Croatian National Bank, which were at the county level available for the period from 1997 to 2007. The first step in the analysis was to see whether, the dispersion of foreign direct investments in Croatia relatively increased or decreased, i.e. if it is possible to say that Croatian regions become equally successful in attracting foreign direct investments or the dispersion increases.

Figure 3

Regional Distribution of FDI in Croatian Counties, Measured by Coefficient of Variation, 1997-2007
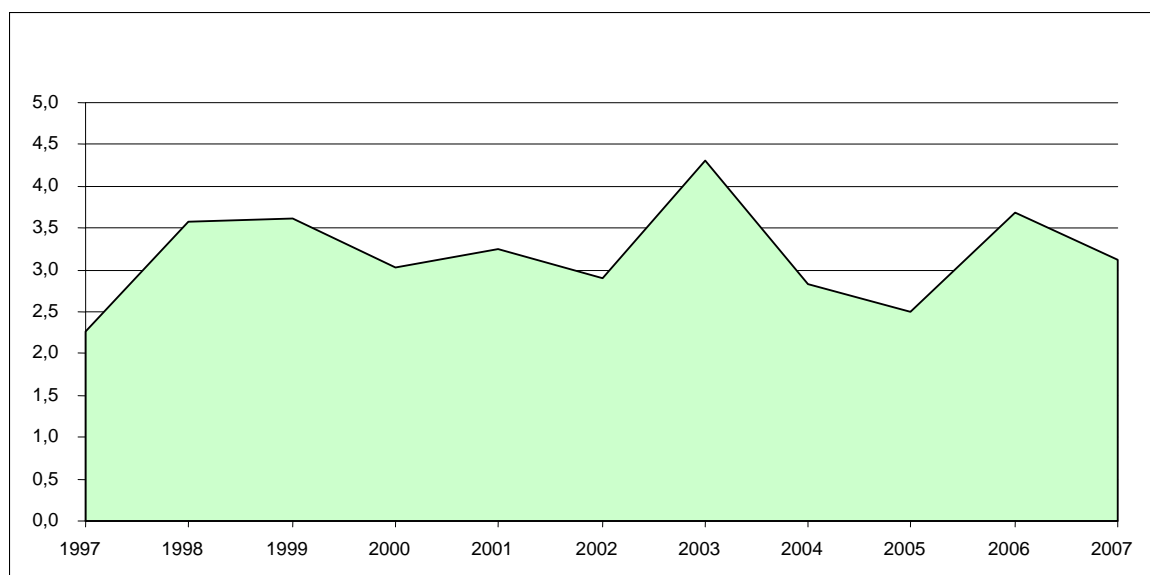
Source: Authors' calculations.

According to the data shown in the figure above, it can be noted that the significant trend of FDI concentration or FDI dispersion cannot be detected in the data. Although foreign direct investments were not present in four counties at the beginning of the analysed period and included all the counties in 2007, the statistical indicator measuring dispersion did not form any clear trend during that period. Moreover, it is difficult to identify either trends in each county or correlation between FDI trends in different counties.

The geographic distribution of the total FDI reveals high concentration in just one region, North West Croatia (80.8 percent), and in just one county within this region, the City of Zagreb (79.4 percentof the total capital invested by foreign investors during the analysed period). The second region interesting to foreign investors was the Adriatic Region, with the share of 17.4 percent. In the Adriatic Region, foreign investors mostly invested in the County of Primorje-Gorski kotar (5.5 percent share), followed by the County of Split-Dalmatia (5.3 percent share), and the County of Zadar (3.3 percent share). Only 2.4 percent of all the capital brought to Croatia was invested in the Central and East (Panonian) Croatia, and was mainly concentrated in the County of Osijek-Baranja (2.2 percent share).

Similar geographic distribution can be found in other countries, as well. For example, Hanson (2001) concluded that foreign investors are more interested in the areas where foreign companies already exist, implying that FDI contribute to the increase in future investments through increasing overall investment climate in a particular region. Such preferences shown by foreign investors contribute to the stronger concentration of FDI in some regions, while other locations start lagging behind. Based on the previously discussed data, it can be argued that similar patterns emerge in Croatia as well.

Figure 4 shows the foreign direct investments in Croatia by countries of origin, with data presented both at national and at the level of NUTS-2 regions. It can be noticed that investors in North West Croatia were mostly from Austria, the Netherlands and Germany. The share of Austrian investors is even higher in the Central and East (Panonian) Croatia, being followed by the Netherlands and Italy. The investors from France, but also Hungary, are significant in the Adriatic Region Croatia.

Figure 4

Equity Investments and Reinvested Earnings by Regions and Groups of Countries-Investors, 1993-2008, 1st Quarter
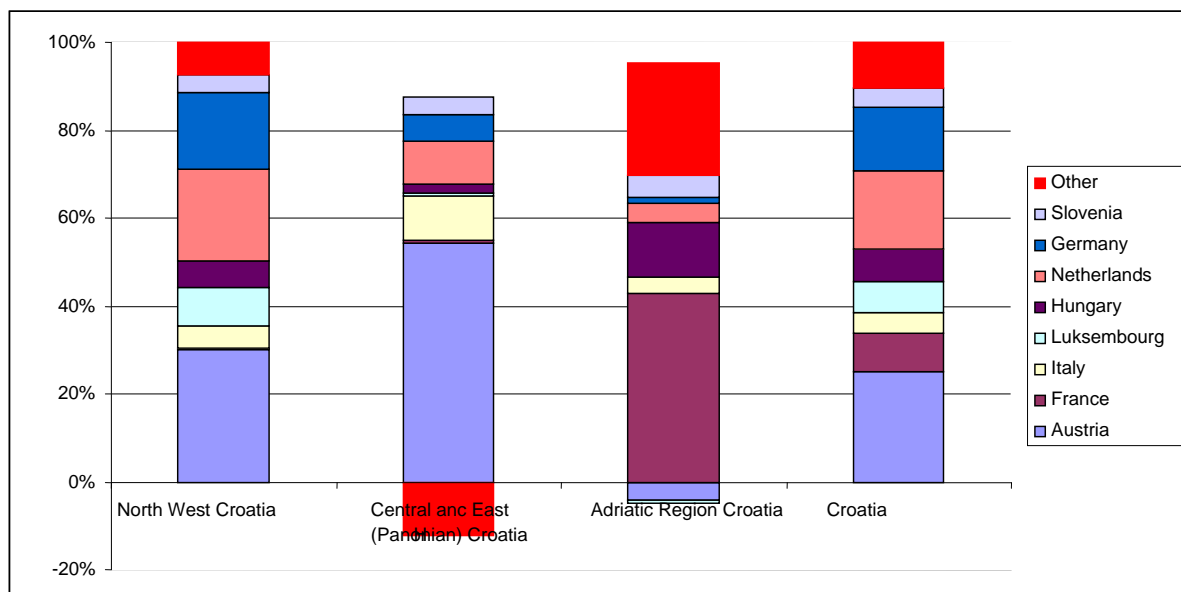
Source: Croatian National Bank.

Turning attention to the county level, a high concentration of foreign investors from two to three countries is evident, e.g. the County of Vukovar-Sirmium (investors from Italy), the County of Koprivnica-Križevci (investors mostly from Malta and Denmark), the County of Osijek-Baranja, County of Primorje-Gorski kotar and County of Šibenik-Knin (large share of investors from Austria). It can be concluded that at the county level the most significant investors during the entire period came from Austria, Italy, Germany and Slovenia (in 9 counties the share of these four countries was above 80 percent, in 3 counties between 40 and 60 percent, in the others below 40 percent), with certain exceptions in some counties. The investors from France, the Netherlands, Hungary and Luxemburg are relevant partners in the City of Zagreb.

Škuflić (2008) shows that the interests of foreign investors are different in each county, consequently is in each region, the dominant economic activities their investments are placed in, also different. Analysis of the cummulative data by regions and economic activities reveals the investors' orientation towards only few economic activities, financial intermediation being the first-ranked, exceeding all other economic activities with exception of insurance and pension funding.

The data on the distribution of foreign direct investments across Croatian regions classified by economic activities are shown in Figure 5. In the North West Croatia FDI is concentrated in the *Manufacture of chemicals and chemical products*, followed by *Manufacture of coke, refined petroleum products* and *Manufacture of fabricated metal products except machinery and equipment*. This data could be easily related to the occurance of large privatisation projects in Croatia, specifically privatisation of PLIVA, INA.

In Central and East (Panonian) Croatia, significant FDI inflows are recorded in *Manufacture of computer, electronic and optical products* as well as *Manufacture of machinery and equipment n. e. c.* The most striking fact revealed from the data presented in Figure 5 is related to the FDI outflows, which stems from the *Manufacture of food products and beverages*.

The FDI outflow is also recorded in the Adriatic Region Croatia in the *Manufacture of other transport equipment* (shipbuilding has a significant share here). On the FDI inflows side, the relatively significant concentration in this region was found in *Manufacture of basic metals*.

Figure 5

Equity Investments and Reinvested Earnings in Manufacturing Industry by Regions, 1993-2008, 1ˢᵗ Quarter
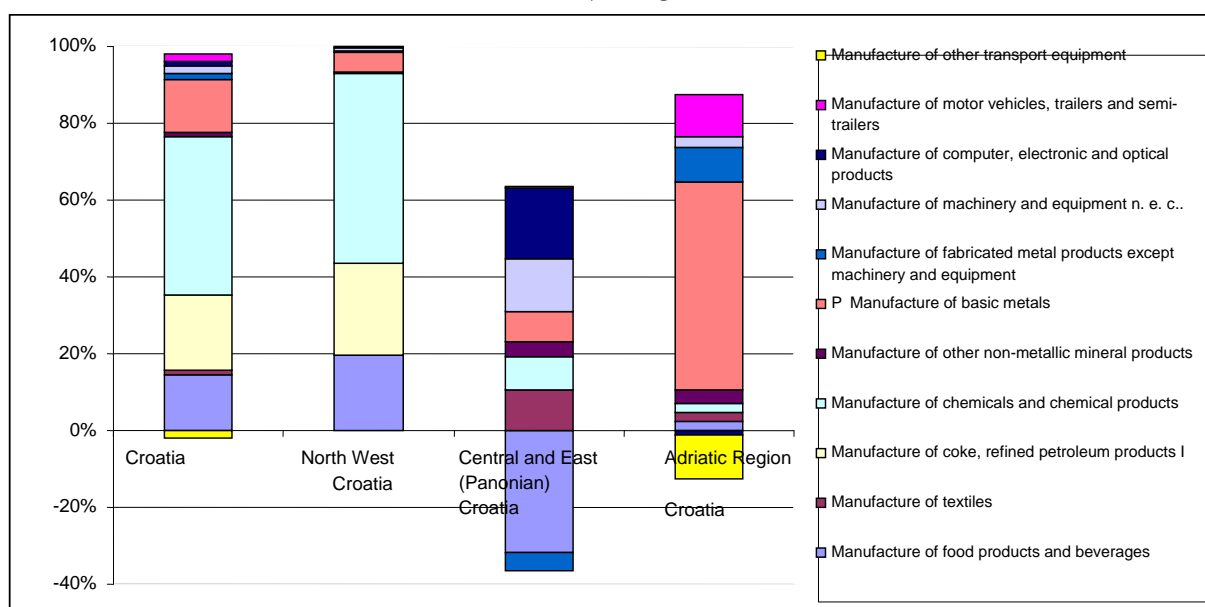
Source: Croatian National Bank.

When considering data on FDI distribution across regions it should be emphasized that the data sources are associated with specific region according to the enterpreneur's headquarters. The differences in the geographical distribution of FDI in some economic activities thus cannot be detected. The most evident example can be found in case of INA. Namely, the privatisation of INA and the foreign direct investments referring to this process have been recorded to the area of the company headquarters, i.e. the City of Zagreb. Taking into account the fact that INA runs business throughout Croatia, it is obvious that the effects of privatisation/foreign direct investments will be dispersed throughout the area, without being concentrated on one county or region. However, available data sources are not able to capture this geographical distribution.

Previous analysis has indicated that the FDI at the national level during the 1993-2008 period in Croatia was under the significant influence of the FDI structure and dynamics in one region – North West Croatia – which was accountable for more than 80 percent of overall

FDI. In North West Croatia FDI was concentrated in following economic activities: financial intermediation, telecommunications, manufacture of chemicals and chemical products and manufacture of coke, refined petroleum products, but also trade; which implied that the investors were primarily under the influence of market-seeking and resource seeking motives. In case of the Adriatic Region Croatia, the basic motive might be related to resource-seeking, accompanied by raising the efficiency of tourist companies. The second group of investors in this region was mainly orientated to the investments in real estates, which can also be categorised within the resourse-seeking FDI motive. Only in the Central and East (Panonian) Croatia investments were oriented towards production plants, but the share of the FDI in this region is relatively small. If we add to these considerations notion that the share of greenfield investment in Croatia was relatively low, due to the fact that most of FDI was related to the process of state-owned companies' privatization (HT, INA, hotel companies), it can be concluded that the expected positive effects of foreign direct investments (e.g. increases in export, employment, technological level of production capacities) should not be expected. From the structure of FDI it is evident that the foreign investors are predominately oriented at exploring the potential of domestic market growth.

5. FDI DETERMINANTS IN THE REPUBLIC OF CROATIA: THE REGIONAL APPROACH

Previously has been established that some regions are more attractive while other regions are less attractive to foreign investors. Although the analysis of FDI determinants is usually performed with the aim to answer the question why some countries attract more foreign investments[6], this paper tries to identify determinants which explain why some Croatian regions attract more foreign investors. The fact that the FDI regional dispersion in Croatia is relatively high and not decreasing indicates that this is rather interesting research question. In order to reach the more or less firm conclusion, we have supposed that variables established in the literature as significant FDI determinants at the national level, can be also relevant in selecting different FDI location regions within the country. Therefore, the preliminary choice of the variables is determined by the usual suspects often cited in the literature.

However, the concrete selection of variables for the analysis of Croatian counties is for the most part limited by the availability of data. With regard to these limitations comprehensive research into the determinants of foreign direct investments at the county level in Croatia was postponed until the data availability permits such analysis. For the purpose of this paper, the following indicators were chosen, even though not all of them were available even during relatively short period of time analyzed in this paper (10 years)[7]:

- Coverage – the coverage of goods imports by goods exports at the county level
- Export – a share of county's export of goods in the national import of goods
- Invest – gross fixed capital formation in fixed assets according to the headquarters of investor, related to the total gross fixed capital formation in the Republic of Croatia
- Educat – a share of the highly-educated (two/three-year college programmes and more) in the total number of employees in the county (employed in legal entities only)

- Enterpre –a share of the entrepreneurship sector employees in the total number of employees in the county (legal persons, craftsmen, free lancers)

The source for original county-level data for all the above mentioned indicators is Central Bureau of Statistics but the authors are responsible for calculating the indicators used in empirical analysis on the basis of original values.

Most of the indicators used in the empirical analysis can be directly related to the determinants of foreign direct investments previously established as relevant at the national level for the group of transition countries (Addison and Heshnati (2003), Botrić and Škuflić (2006), Mariotti, Mutinelli and Piscitello (2003)). The share of highly educated workforce thus presents an example of resource-seeking motive for FDI. On the other hand, exports share[8] can be seen as an indicator of the positive business climate because if the location is significantly integrated in the international trade, it might to be more attractive to foreign investors. The relationship between the FDI and domestic (or overall) investments is not as straightforward, as there might be crowding-out or crowding-in effects. Therefore, the literature review does not indicate the expected sign of the relationship between all the investigated variables in our sample. In order to obtain the initial insight into the sign and strength of the relationship between our chosen variables at the county level, we start with a simple correlation analysis.

Table 2

Correlation Matrix of Selected Indicators, 1998-2007

	COVERAGE	EDUCAT	ENTERPRE	EXPORT	INVEST	FDI
FDI	-0,30 (0,00)	0,60 (0,00)	0,58 (0,00)	0,82 (0,00)	0,57 (0,00)	1 -----
INVEST	-0,16 (0,05)	0,36 (0,00)	0,28 (0,00)	0,41 (0,00)	1 -----	
EXPORT	-0,27 (0,00)	0,62 (0,00)	0,69 (0,00)	1 -----		
ENTERPRE	-0,32 (0,00)	0,20 (0,02)	1 -----			
EDUCAT	-0,43 (0,00)	1 -----				
COVERAGE	1 -----					

Source: Authors' calculations, p – values in brackets

According to the data presented in the correlation table, it can be seen that there is a relatively high and statistically significant correlation between foreign direct investments at the county level and county's share in the export. The correlation is also relatively high for the education

variable, enterpreneurship variable and investment activity. The coverage is, however, relatively uncorrelated with other variables.

The choice of suitable methods to substantiate these results is relatively small. The regression analysis, with foreign direct investments at the county level as a dependent variable, would not obtain firm conslusions, as potential independent variables are highly correlated (e.g., entrepreneurship and export orientation). However, based on correlation analysis alone, we are not able to positively determine relevant characteristics of the Croatian counties for attracting foreign investments.

Statistically significant correlation can be also found between the variables without theoretical support in favour of its existence. In order to additionally clarify correlations between the analysed variables, we will apply the method developed by Granger (1969) to enable the examination of causal relations[9]. The method consists of analysing how much of the current value of the dependent variable can be explained by past values of dependent variable and to see whether adding lagged values of independent variables can improve the overall explanation. The method can be briefly presented by using the following formula:

$$y_t = \alpha_0 + \alpha_1 y_{t-1} + ... + \alpha_p y_{t-p} + \beta_1 x_{t-1} + ... \beta_p x_{t-p} + \varepsilon_t \qquad (1)$$

where t denotes time and p denotes number of time lags.

The method comprises of formulating the hypothesis on estimated beta-coefficients. If there is no causal relation between variables, beta-coefficients should equal zero.

It is important to emphasise that when the results of the performed Granger test indicate that one variable 'Granger causes' the other one, it does not mean that one of them is a cause and the other one an effect. This test tends to determine the sequence of certain processes (how much do the processes related to changes in variable x precede the processes related to variable y), i.e. the methods helps revealing the relevance of information about the previous changes contained in other variables. Due to the fact that we want to supplement our correlation analysis in order to provide some policy recommendations, if we could find out that, for instance, education "preceedes" FDI at regional level, then the policy recommendation can be stated as following – in order to increase their attractiveness to foreign investors, counties should increase the share of highly educated workforce.

The decision on appropriate number of time lags is crucial for the application of this method. With regard to a relatively short period of time (max 10 years) included in this analysis and the fact that we anaylse the annual data which should not be affected by the seasonal oscillations of indicators (e.g. the number of employees), we have considered 2 time lags as the maximum number that can be included in the analysis. The obtained results are presented in the following table.

Table 3

Granger's Causality Test Results

Null hypothesis	N	F-statistics	p-value
FDI does not Granger cause COVERAGE	168	0,82	0,44
COVERAGE does not Granger cause FDI		0,14	0,87
FDI does not Granger cause EDUCAT	168	3,43	0,03
EDUCAT does not Granger cause FDI		2,52	0,08
FDI does not Granger cause ENTERPRE	105	2,43	0,09
ENTERPRE does not Granger cause FDI		1,25	0,29
FDI does not Granger cause EXPORT	168	4,34	0,01
EXPORT does not Granger cause FDI		13,00	0,00
FDI does not Granger cause INVEST	168	53,28	0,00
INVEST does not Granger cause FDI		13,40	0,00

Source: authors' estimates.

The bolded text in the table above empahises the hypotheses we cannot reject. Hence, we can confirm that Coverage does not Granger cause FDI, and this statement is true in another direction as well. This result is logical as the correlation between those variables was the weakest. Although attracting foreign investments is often seen as an activity which should help to alleviate deficit in the international trade (Lovrinčević, Marić and Mikulić (2005)), during the analyzed period it did not have such effects. The overall coverage is relatively low in Croatia on the one side, and on the other, foreign direct investments can have both positive and negative effects on the foreign trade balance (Babić, Pufnik and Stučka, 2001). The final outcom of these two opposite processes also depends on many other factors which cannot be easily identified in a short period of time. The export activity stagnated in Croatia during this period while foreign direct investments at the national level, apart from certain oscillations, still recorded an increase. Such oscillations are even more noticable at the county level, implying that usual statistical methods are not capable of finding any correlation between these two indicators during the analysed period.

The Granger causality test results show that between foreign direct investments and share of the highly educated in the total number of employees, null hypothesis can be rejected in both cases, which indicates that there might be a two-way causal relation. This could be connected with the fact that foreign direct investments in Croatia are largely orientated to the service sectors (see Fig. 2). Foreign direct investors enter local markets (counties in our case) with a relatively higher share of the highly-educated (two/three-year college programmes and above) workforce. Then again, foreign investors themselves demand highly educated workforce, which additionally increases its share.

On the other hand, it seems that the direction of causal relation between foreign direct investments and number of people employed in entrepreneurship does not work in both ways. The test does not reject the null-hypothesis that entrepreneurship does not Granger cause foreign direct investments but does reject the one that foreign direct investments do not Granger cause an increase in the share of people employed in entrepreneurship in the total number, although with the level of significance of only 10 percent. This can be explained

with the fact that foreign investors in Croatia, similar to other transitional countries, often takeover the existing companies without starting the new ones. This is often accompanied by decrease in the total number of employees in these companies. If the company, overtaken by foreign owner, was previously private (not state-owned) as well, the total number of employees in entrepreneurship can even statistically decrease, not increase. This could be the case if the foreign investors opt to shed labour, as it often is the case in transition economies. Based on these results, we cannot confirm the statistically positive effect of FDI on the development of entrepreneurship on regional level, as the situation may be different from each individual privatization/FDI case to another.

Relatively stronger proofs about the existence of two-way causal relation with foreign direct investments on county level have been found in case of exports and investments. Foreign investors choose export-orientated counties, and foreign investments contribute to an increase in this export orientation. The locations that are more orientated to international flows of goods are more attractive to foreign investors. They thus choose the locations that are already well integrated in the international goods flows. Reconsidering this result from the standpoint of the economic policy, policy makers should not expect that the foreign investors decide upon the location which is isolated from the international goods flows and to contribute by themselves to the integration of such a region into the international markets. Instead, the policy measures favourable for this integration should be created in advance, in order to attract foreign investments.

Considering overall investment activity, the question freqeuntly addressed in the literature is whether foreign investments crowd-out domestic investment and whether foreign investments represent an additional financial source which enables an increase in the total investments in national economy (Lovrinčević, Marić and Mikulić, 2005). Although Granger's causality test cannot be used to confirm the existence of eventual crowding-out effect, it shows that the locations which are attractive to domestic investors (counties whose share in total national investments is higher) are also attractive to foreign ones. Propulsive counties are thus equally interesting to domestic and foreign investors.

The previous analysis has shown that some of the indicators relevant for attracting foreign investments at the national level (in a competition with other countries) remain relevant at the local level, as well. Therefore, the preceding analysis has confirmed that propulsive counties are generally more likely to attract foreign direct investments, which implies that the geographical distribution of the FDI will tebd to remain concentrated and not equally distributed in space.

6. CONCLUSION

National strategic documents in many under-developed and developing countries emphasize the role of foreign direct investments as means for increasing the overall competitiveness. Namely, it is believed that through FDI the domicile countries acquire not just capital but also patents, knowledge, technology and management skills, and at the same time the possibility

to enter new markets. It can be noticed that the previous foreign investements in Croatia have not resulted in exports increase, mainly due to the sectoral structure of FDI. It is thus difficult to find a positive correlation between export and FDI, as it is concentrated in financial sector and telecommunication, and trade – activities orientated to the national and not to the international market. The share of foreign investments in the manufacturing industry was less than 20 percent. The investments enabling export increase primarily include *greenfield* projects**,** of which only few have been realised in Croatia.

The reason lies in the motivation of foreign investors. According to OECD (1994) research, the main motivation of foreign investors includes 'access to the large domestic market' (43.8 percent of investors mentioned this reason), 'market share' (25.9 percent), and the reasons related to resources (low production costs and source of inexpensive raw materials) covered just 16 percent. Although OECD research was conducted several years ago, it clearly shows that Croatia, in comparison with other transition economies which more successfully attracted FDI, does not have the same or similar comparative advantages. Croatia has relatively small inner market and relatively high labour costs if compared to other countries in Central and Eastern Europe as well as the countries in SE Europe. Apart from the existing active measures for supporting FDI, the continuation of already implemented measures is required, from updating land register to signing bilateral and multilateral trade agreements with the aim to increase the potential market; reducing the corruption, and, in particular, making the most of the Croatian diplomatic offices.

In this paper, the attention has been paid to the regional distribution of foreign direct investments in Croatia. In addition to the usual findings about their distribution, unequal in terms of amounts, economic activities to which they refer, and countries they originate from, we have tried to identify the characteristics of the Croatian counties relevant for attracting foreign investments.

The results show that the counties with a relatively larger share of the highly educated workforce had more success in attracting foreign investments. Further on, foreign investors prefer the counties that are more integrated in the inetranational trade flows. Finally, the counties that are attractive to foreign investors are, at the same time, attractive to domestic investors. Propulsive regions are, therefore, successful in attracting both domestic and foreign investments. It means that, when designing policy measures at regional level we should not expect that the lack of national investors could be easily replacable by foreign investors. Policy measures should insist on the improvements of business climate in general which will then enable the economic growth in the region regardless which investors will contribute more to this growth – domestic or foreign.

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ENDNOTES

[1] In this paper regions refer to NUTS 2 regions in Croatia, although the analysis partly included NUTS 3, i.e. the level of counties.

[2] OLI Paradigm was first defined in Dunning (1977), and later redefined in many books and articles by the same author and his associates.

[3] See e.g. Campos and Kinoshita (2003) or UNCTAD (1998).

[4] Here production does not necessarily need to include only industrial activities. One of the examples from the Croatian market is the privatization of banks or HT privatization. In these cases foreign investors were predominately interested in consumers (savings) at the domestic market, and used the market to introduce new, previously non-existant, products to the local market, thereby increasing the consumers' demand.

[5] The rate is actually somewhat lower if we take into account dolar depreciation in 2007.

[6] See e.g. Addison and Heshmati (2003), Campos and Kinoshita (2003), Hunya (2004).

[7] It should be emphasized that the correlation matrix presented in Table 2 and the further analyses are based on the data from 1998, while we previously considered also the data from 1997. The main reason behind shortening the sample in the empirical analysis is that enlarged number of analyzed variables were not available for the year 1997.

[8] The literature lists different indicators of the degree of openness, such as export share in GDP, import share in GDP, international trade share in GDP, etc. These are frequently considered as FDI determinants in the empirical literature. See e.g., Singh and Jun (1995), Chakrabarti (2001).

[9] The method is used in literature in different fields of economic analysis. See, among others, Cota and Erjavec (1995), Bačić, Račić and Ahec-Šonje (2004), Bačić and Vizek (2006).

IZRAVNA STRANA ULAGANJA U HRVATSKOJ: POGLED S REGIONALNE RAZINE

SAŽETAK

U ovom se radu analizira kretanje izvravnih stranih ulaganja na razini nacionalnog gospodarstva, prema djelatnostima i glavnim zemljama partnerima u razdoblju 1993-2008. Poseban je naglasak stavljen na analizu ISU na regionalnoj (NUTS 2) i županijskoj razini, u desetljeću 1997-2007. Po prvi se puta istražuju determinante ISU na županijskoj razini u Hrvatskoj, te je potvrđeno kako udio visokoobrazovane radne snage, izvozna orijentiranost županije, ali i veći udio domaćih investicija predstavljaju karakteristike koje strani ulagači prepoznaju kao poželjne pri odabiru lokacije unutar Hrvatske.

JEL: F21, O18

Ključne riječ*i*: *izravna strana ulaganja, županijska analiza, Hrvatska.*

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CROATIA'S BEVERIDGE CURVE AND ESTIMATION OF NATURAL RATE OF UNEMPLOYMENT: 1990-2008

ABSTRACT

This paper explores the relationship between unemployment (UR) and job vacancies rate (VR) on Croatia's labor market during the observed period from January 1990 to December 2008 on the basis of empirical analysis using the framework of the UV Curve, also known as the Beveridge Curve. We estimated the natural rate of unemployment (in static and dynamic time varying equilibrium version) as a concept which follows from the Beveridge Curve theory that says that changes in vacancy rate push unemployment in the opposite direction.

1. Introduction

The key function of the labor market is to match unemployed workers with jobs available. New hires (successful matches) are the key output of the matching function. Analyzing the unemployment and vacancy relationship on the labor market (the Beveridge Curve) can thus reveal essential information about the flexibility and the current state of the labor market. The objective of the paper is not only to empirically estimate the Beveridge Curve for the Croatian labor market, but is somewhat broader.

Although not exactly neglected, the Beveridge curve has been somewhat overlooked due to heavy emphasis on the Phillips curve. Blanchard and Diamond (1989), in their seminal paper, consider this wrong and to quote: "The Beveridge relation comes conceptually first and contains essential information about the functioning of the labor market and the shocks that affect it" (p. 1). It is the centerpiece of several studies, of course, like that of Elmeskov (1993), Elmeskov and MacFarlan(1993), and Wall and Zoega (2001), to name a few which have provided insights for this research. Petrongolo and Pissarides (2001) provide an overview of different attempts to assess the matching function.

But first of all, let us present a history of this research; the Beveridge Curve conceptually shares some similarities with the Phillips Curve, some modest contribution in this direction has already been done (cf. Šergo, Tomčić, 2003a), but we failed in understanding what triggered the accelerating unemployment and recession in the last decade.

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Modeling of the matching function of the labor market by region for the selected countries in transition (included Croatia) is performed by translog regression function (Obadić, 2006). We should emphasize the contribution in modeling of NAIRU by the HP filter; Botrić shows that the NAIRU stands very close to the actual rate of unemployment (Botrić, 2005). But the natural rate of unemployment obtained *via* simple unemployment-vacancy rate contrary forces is still a dark room in the thoughts of our labor economists.

The paper undertakes the analysis at four levels. Firstly, the paper reports estimates of the Beveridge curves across Croatia using quarterly (and monthly) data in the period 1990 – 2008, highlighting the trends and any systemic effects across Croatia. Secondly, a more detailed study on Croatian economy is undertaken to account for the structural changes in the labor market, such as changes in the matching technology and the persistence of structural unemployment from the recent external shocks affecting economy. Thirdly, on the basis of various econometric results we will try to shed light on the magnitude of the natural rate of unemployment in Croatia.

2. The Concept of the Beveridge Curve

The Beveridge Curve draws an inverse relationship between the unemployment rate (UR) and the vacancy rate (VR) from the matching function of the labor market. The position on the curve can indicate the current state of the economy in any business cycle. For example, the recessionary periods are indicated by high unemployment and low vacancies, corresponding to the lower right end of the curve. Conversely, high vacancies and low unemployment indicate the expansionary periods, corresponding to the high left end of the curve (see Figure 1).

Figure 1

Natural rate of Unemployment
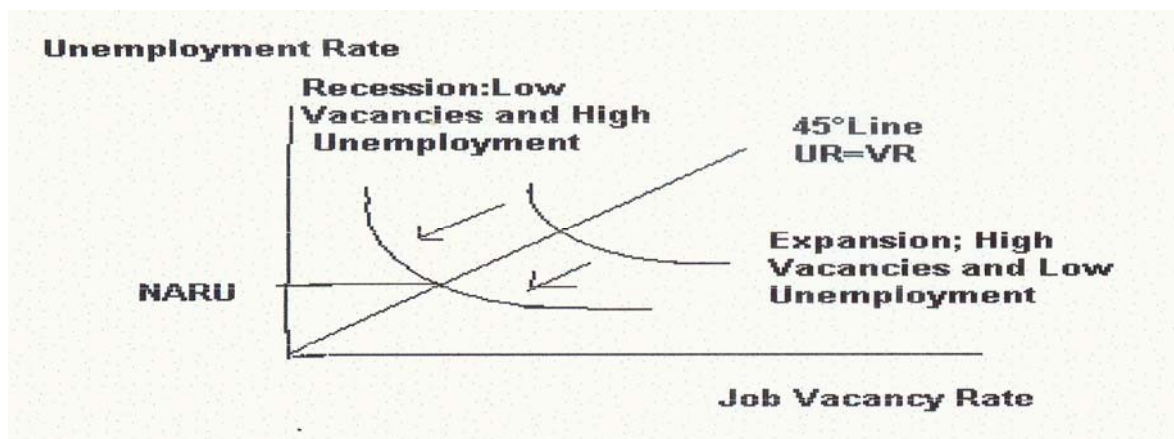
Source: Teo, E. T., Thangavelu, M. S., Quah, E., 2004

The position of the curve from the origin indicates the overall activity of the labor market. This would indicate the underlying structure of efficiency of the labor market, the mobility of workers within industries (intra-industry) and between industries (inter-industry). The following would account for shifts in the Beveridge curve (Teo, E. T., Thangavelu, M. S., Quah, E., 2004).

Increase in the rate of growth of the labor force will shift the curve outwards from the origin as new entrants will add more to the unemployed.

The matching process will determine how efficiently workers are matched with jobs. The improvements in the efficiency of the matching "technology" would shift the curve towards the origin, since an efficient matching process will create faster reduction in the unemployed stock and vacancies. Factors affecting the matching efficiency of the labor market include, for example, the introduction of labor market intermediaries, introduction of social insurance, unionization, and changes in the mobility of labor (Nickell p.4).

A decrease in the labor market "churn" would decrease the number of firms searching for workers and the number of workers searching for jobs. This would shift the curve towards the origin. Job losses, resignations in industry, and job creation in service sectors (in Croatia especially) are related to the labor market "churning", or reallocation effects. Increase in the "churning" or reallocation effects will shift the curve outward from the origin.

Long-term unemployment is positively related to the intercept of the Beveridge Curve. The persistence of long-term unemployment will push the curve outward from the origin. The persistence of structural unemployment could be caused by factors such as deterioration of human capital of the unemployed (skills out of date) or a negative perception of the unemployed on the part of the potential employers. In any case, unemployment of industrial workers which by causation can lead to increasing returns of permanent unemployment is into a hub of "hysteresis" problems.

3. The Natural Rate of Unemployment in the Beveridge Curve Framework

Let us try to define the natural rate of unemployment, or translate that concept in the Beveridge curve framework. We located the first occurrence of this concept in the history of macroeconomics thought.

In his 1967 American Economic Association (AEA) presidential address aimed at bringing the concept of a natural rate of unemployment to the attention of the economics profession, M. Friedman first defined the NARU concept. By a „natural rate of unemployment" Friedman postulated that it is „the level of unemployment which is consistent with equilibrium in the structure of real wage rates. At that level of unemployment, real wage rates[1] are tending on the average to rise at a "normal" secular rate, i.e., at a rate that can be indefinitely maintained so long as capital formation, technological improvements, etc., remain on their long-run trends". Different factors influence the natural rate of unemployment, including "market imperfections, stochastic variability in demands and supplies, the cost of gathering information about job vacancies and labor availabilities, the costs of mobility". There will always be some unemployment as a result of individuals who are between jobs, technological improvement, seasonal variations in employment, and so on. „The existence of a natural rate of employment" means that "the goal of zero unemployment is not realizable" (citation according to Ebenstein, L., 2007, p.161). We should point out that our concept of the NRU is closely linked with the variability of job vacancies/unemployment rate and its equilibrium (as part of conventional wisdom according to Beveridge curve) and otherwise has nothing in common with the Keynesians term NAIRU (nonaccelerating inflation rate of

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[1] We should stress out that Friedman's definition of natural rate of unemployment leaning on structure of real wage rates and etc. is abbreviated by NARU, and cannot be translating itself to the vacancy / unemployment rate equilibrium (abbreviated by NRU due to evident differences). We put the first definition only because of historical reasons, however, it is not an empirically valid framework in further analysis.

unemployment) although it shares some similarities.[2] Moreover, since Friedman's definition of the NRU in 1967 leads the Beveridge curve contribution we are prone to believe that equilibrium vacancies/unemployment rate deduced out of a regressing Beveridge curve (see below), or NRU is not the same term, but they both share same basis "equilibrium" idea. In short, if we imagine that the Croatian Employment Service as an economic agent intermediating and gathering information about unemployment and job vacancies does the job completely and perfectly in some economy and no job vacancies or involuntary unemployment are left unnoticed by that agent, we can obtain some equilibrium vacancies/unemployment (or NRU) rate by some statistical tool, as we will see later.

Graphical Analysis of the Unemployment And Vacancy Rate are presented in the figure below. Figure 2[6] shows the rate of unemployment and the vacancy rate over the period 1990:Q1 to 2008:Q4.

Figure 2

Unemployment & Vacancy Rate 1990:Q1 - 2008:Q4 in Croatia
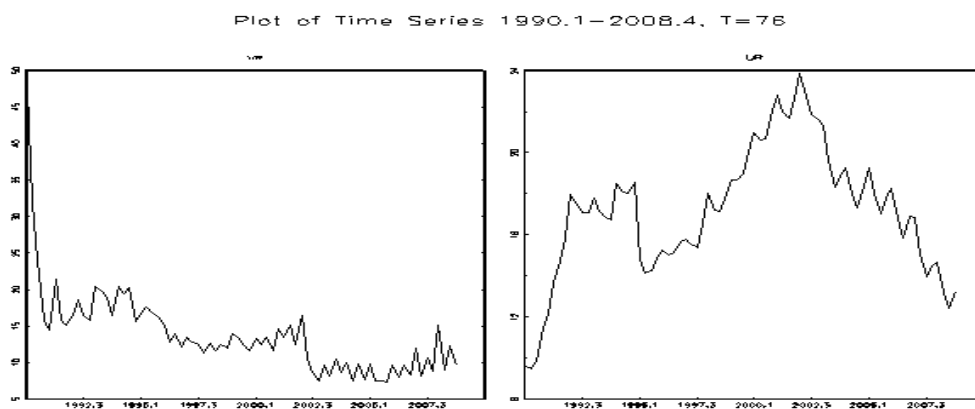
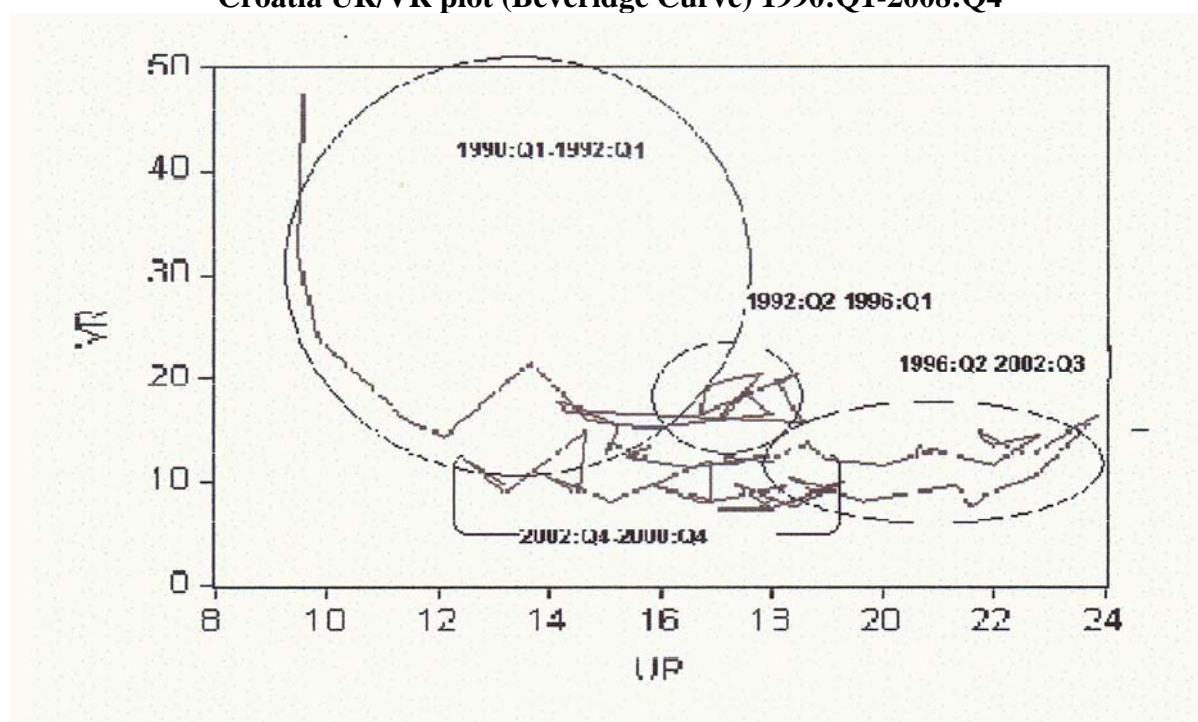Source: calculated by authors

Notes:
VR= Vacancy Rate
UR = Unemployment Rate

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[2] For example Mankiew answered when asked „Do you see the concept of NAIRU and Friedman's natural rate, as being the same idea or are they different ?"…- „I have always thought of them as being basically the same" (Snowdon, and Vane, page 113, 1999). Could we persuade the highly regarded reader of this paper in a similarity between Friadman's NARU and our Beveridge's NRU?

Unemployment increased over much of the 1990s and up to 2002.Q1, while the vacancy rate has overall a declining trend. From 1995 on, the unemployment/vacancy rate gap continued to repeat its direction because the unemployment rate substantially oversized the vacancy rate and had been doing so continually in various quartiles yet almost twice above the vacancy rate level. A disastrous level of unemployment rate in Croatia in 2002, in the first quartile, mounted to 24% which is near the unemployment peak crises experienced in the USA economy during some episodes of the Great Depression in the thirties.[7] [8] After 2002 unemployment has sharply declined and amounts to 13.23% at fourth quartile of 2008. At the end of observation the vacancy rate has converged to unemployment rate from the bottom and almost equalized in magnitude (vacancy rate was 12.35% and 9.6% in last two quartiles of 2008), with the unemployment rate.

Figure 3

Croatia UR/VR plot (Beveridge Curve) 1990:Q1-2008:Q4

Source: calculated by authors
Notes: x-axis (UR) unemployment rate in %
        y- Axis is (VR) job vacancy rate in %

The scatter plot of the relationship between Croatia's unemployment and job vacancies reveals four distinct phases of Croatia's development (see Figure 3). The first period in row is

<u>1990:Q1-1992:Q1</u>, we could epitomize it in contradictory terms as „deterring trend of fragile or absent economic recovery", a consequence of Marković reform's program – in that period vacancy rate was substantial, at the end of cycle however only marginally, and unemployment was the lowest. At that time the socialist - self-government legislation with its inherent policy of employees' overprotection, had terminated. Meanwhile a first shocking ownership transformation and secondly, privatization efforts unleashed easier workmen banishment[9].

No wonder that in the latter period <u>1992:Q2-1996:Q1</u> (following a contraction on the labor market), which coincided with an acceleration of unemployment, there still persist some sparks of market vitality measured by a reasonably high rate of labor demand, so that vacancy rate is still higher than the unemployment rate despite of war, up to structural shift into labor market which, in our opinion, appeared for two reasons: - first, abrupt deindustrialization, and second, a broader restructuring of the labor market due to technology, industrial workers switched or opted in finding a new job in different service industries (first symptoms of Dutch disease occurred). During the first quarter of 1996, the unemployment - vacancy rate equalized at a level of about 15 % (very near the average NRU, see later). Later on there is the third cycle (1996:Q2-2002:Q3) observed as a distinguished pattern of our research. Apparently, the postwar economic depression, measured in job losses, is in full swing. The second half of this period can be (by future scholars) stigmatized due to the unemployment rate hitting unseen levels. The vacancy rate remains chronically much lower than the unemployment rate (which is over 20%), however, it is a renowned fact that in economy, debts are always paid with certain temporal lags. The fourth cycle can be defined as some sort of Economic Recovery, when unemployment is gradually falling from more than 21% to around 14,5% by the end of 2007, but the vacancy rate is nevertheless fluctuating at a very low level. If we postulate the vacancy rate as a proxy variable for labor demand, it seems that the labor market is on a path to recovery. In the first quarter of 2008, vacancy rate is just over the unemployment rate (which tells us that the global recession shock still did not affect Croatia's real sector at the end of 2008).

The scatter diagram with belonging dots, which pairs up UR/VR space and constructs the Beveridge Curve as a continuous line, becomes much closer to its origin as a time trend function at the end of the observed period[10]; dots at a later time in Figure 2 are closer than dots at the starting point of graphical observation. This decrease in the labor market "churn" as a function of time tells us that the labor market stabilizes over time because the number of firms searching for workers and the number of workers searching for jobs become less and less evident. This tendency shifted the curve towards the origin in three (even four – if we take for granted the beginning of observation) circular steps. There are job losses, forceful resignations, but also some job creation due to structural changes because of de-industrialization and a fast tertialization. This situation is mainly behind us and it seems that the huge reallocation surge present in the last two decades is somehow dampened. However, we cannot be too optimistic because of the oncoming shock of the global recession in 2009. As a matter of fact the global recession shock at the end of 2008 transmits potential for new economic depression and hence huge unemployment again, decrease in the "churning" or reallocation effects will shift the Beveridge curve transitorily inward closer to the origin.

From the visual inspection of Figure 2, the change in the UR/VR relationship after war shock 1992 Q2 is quite evident. The change in the business cycle appears to have pushed Croatia's UR points upward towards the higher right end of the Beveridge curves, indicating that in 1992 the economy was in a recession. In addition to the upward movements, the curve has shifted inwards (or more to the left toward the ordinate axes), in three circular steps (as

mentioned before). This raises an interesting question about the structural changes in Croatia's labor market after 1992, and the subsequent period of fragile economic recovery measured by the unemployment rate. On this point we can scatter some important factors in the labor force issue like the aging population and a very low rate of births, emigration flows during and after the war, decrease in the growth rate of the labor force, which shifted the curve inwards more toward the origin. Despite those favorable demographic changes, i.e. labor force shrinkage, in terms of unemployment problem, the crises could be much worse, as we can superficially conclude, if it wasn't for such a huge negative demographic shock in Croatia. The lower number of employed people resulted in an improved productivity, and less "hidden unemployment" within firms. It reminds us of the problem in socialist economies that absorbed the demographic increase of population through production capacities on the level of industrial expansion. The latter is a consequence of the capitalist orientation of economy based on liberal premises. In the 90ies there is hard evidence and econometric measurements proving the growth of the total productivity factor. (Šergo, Tomčić, 2003b).

4. Theoretical and Empirical Framework: Beveridge Curve

The starting point of the Beveridge Curve is the matching function in the labor market, which is given as:

$$M=M(U,V), MU >0, MV > 0. \qquad (1)$$

M denotes the number of hires or job matches, U is the number of unemployed workers, and V is the number of vacancies. The matching function summarizes the effectiveness of the technology that brings workers searching for jobs together with the employers searching for workers.

We could specify a Cobb-Douglas matching function that exhibits constant returns to scale:

$$M = A(U)^{\alpha}(V)\alpha^{1-\alpha} \qquad (2)$$

The matching technology is given by the A parameter. In equilibrium the number of separation will be equal to the number of matches and thus we could derive the following (dividing by labor force, L):

$$S/L = A\left(\frac{U}{L}\right)^{\alpha}\left(\frac{V}{L}\right)^{1-\alpha} \qquad (3)$$

This could be written as:

$$\log(s) = A + \alpha \log(UR) + (1 - \alpha) \log(VR)$$

(4)

where s denotes the separation rate, UR the unemployment rate, and VR the vacancy rate. With a fixed separation rate, the implicit theorem suggests that there is an inverse relationship between UR (unemployment rate) and VR (vacancy rate) - the Beveridge Curve. The theoretical construct of the basic model is that there is a relationship between the unemployment rate and the vacancy rate in a labor market, represented in the equation (5).

$$UR_t = a_0 + a_1 VR_t,$$

(5)

Equation (5) is transformed into logarithms so that the coefficients can be interpreted in terms of elasticities.

The Beveridge Curve also allows one to derive the natural rate of unemployment (NRU). It must be clarified that the natural rate, as defined in the context of the Beveridge Curve, is not directly equivalent to the definition of the natural rate of unemployment as defied by Friedman (1968), which too does not correspond to any particular rate of inflation. The natural rate of unemployment, in the context of the Beveridge Curve, is the equilibrium condition that must exist in a "steady-state" where unemployment rate is equivalent to vacancy rate - equality of the inflow and outflow in the labor market. In equilibrium, this would imply the point(s) where the job vacancy rate is equal to the unemployment rate, by plotting a 45° line from the origin (see Figure 1). The NRU is not necessarily the socially optimal, but is the rate at which a labor market system is converging for a given underlying economic structure of unemployment and vacancies.

From (5) we can deduce the so cold natural rate of unemployment (NRU), which is by definition some ratio of constant and slope less than one according to Beveridge curve regression parameters. Why? The unknown rate that equals left and right side of (5) (or deviation of steady state UR from deviation from steady state VR in time dynamics) should be NRU[11]. If the monthly time series URt and VRt are related by (5), then in steady – state equilibrium the relationship becomes

$$UR^* = a_0 + a_1 VR^*$$

(6)

So that we have the steady state solution

$$UR^* = \frac{a_0}{1 - a_1} VR^*$$

(7)

Now we ought to conclude that the NRU indicates some rate of unemployment toward which steady state rate of unemployment would converge if the steady state vacancies rate deviates in magnitude from long run unemployment rate. So, we can calculate the NRU from Beveridge regression curve according to NRU = exp (a0/ (1-a1))[12]. Equation (5) is augmented with a time trend variable (T) to capture improvements in the labor market efficiency over time (so regression specification refers to column 2 in Table 1.) We used 1 period lag of vacancies to capture the effects of vacancies as a leading indicator for unemployment (regression specification). The persistence of unemployment is captured by the lag of unemployment rate. The final form of the equations used in regression exercise is given as:

$$\log(UR_t) = a_0 + a_1 \log(VR_t) + e_t \qquad (8)$$
$$\log(UR_t) = a_0 + a_1 T + a_2 \log(VR_{t-1}) + e_t \qquad (9)$$

$$\log(UR_t) = a_0 + a_1 T + a_2 \log(VR_{t-1}) + a_3 \log(UR_{t-1}) + e_t \qquad (10)$$

where log (URt) = log (Unemployment rate in time t)
Log (VRt-1) = log (Job Vacancy rate in time t-1)
T = time trend
et = i.i.d error term

5. About the Data and the Unit Root Testing

The web page of the Croatian Bureau of Statistics and MojPosao contain data of monthly registered unemployment rate. On the Web page of the CBS we find data regarding filled job vacancies and opened job vacancies in Croatia in the observed period. The monthly stock data (1990-2008) are transformed to quarterly frequencies by the authors, by moving the average method.

Table 1

Unit root test on log of unemployment rate and log of vacancies rate (in levels)

	Log(UR)		Log(VR)	
	ADF	PP	ADF	PP
Case 1	-2.534d(2)**	-2.765c(1)***	-1,106c(4)**	-4,314a(6)***
Case 2	-2.232d(2)**	-4.086a(1)***	-1.768c(4)**	-6,521a(2)***
Case 3	-0,274 d (4)**	0,368c(1)***	-0,650c(4)**	-1,956b(4)***

Source: calculated by the authors
* Notes: Case 1 shows that the auxiliary regression is run with a constant. Case 2 shows that the auxiliary regression is run with a constant and time trend. Case 3 shows that the auxiliary regression is run without any deterministic term.
   (a) Implies that the null hypothesis of the existence of a unit root is rejected at a %1 significance level.
   (b) Implies that the null hypothesis of the existence of a unit root is rejected at a %5 significance level.
   (c) Implies that the null hypothesis of the existence of a unit root is accepted at a %10 significance level.
   (d) Implies presence of the unit root (I(1)) in series
(**) The lag lengths are chosen according to Akaike Information Criteria (AIC) for ADF tests.
(***) PP tests are estimated for Bartlett kernel truncation lags.

The ADF test statistics for unit root has found evidence of presence of unit-root for the log of unemployment rate variable for levels at least 1% significant, but PP test statistics does not give us hard evidence of the unit root issue in the log(u) series. The ADF test and PP statistics for unit root reveal evidence against unit-root null hypothesis for the log of vacancy

rate variable for at least 1% significance levels (in case of PP statistics). Thus, log of unemployment rate is non-stationary [I (1)] and log of vacancies rate time series is a stationary variable [I (0)].

6. The Beveridge Curve Regression Results

From the regression analysis, given in Tables 2 and 3, we are able to verify the existence of the negative Beveridge Curve for the Republic of Croatia. The higher negative elasticity coefficient of log (VR) and statistically significant in value (in (8) compared to other regressions referred to (9) and (10)) suggests that the Croatian labor market is experiencing higher vacancies-unemployed matching efficiency than was the case in the recent past. The time trend, which captures the matching technology or efficiency of labor market matching, is statistically insignificant (in (9) e.g. located in column 2 but not in the (10) regression contained in column 3) and negative, thereby suggesting that there is an inward shift in the curve over time. This indicates that Croatia is experiencing greater matching efficiency in the labor market over time. Therefore, this finding confirms the previous finding saying that the labor market is more efficient today than it was yesterday.

Table 2

Estimates of the Beveridge Curve for Croatia, 1990Q1-2008Q4, Dependent Variable; log (UR), by OLS Estimator

Independent variable	Coefficient (t-statistics)		
	(1)	(2)	(3)
Constant	3,426 (22,5)	3,41 (12.29)	0,46 (2,88)
Log(VR)	-0,234 (-4,014)		
Trend		-0,0004 (-0.26)	-0,001 (-2,79)
Log(VRt-1)		-0,236 (-0.253)	-0,062 (-2,73)
Log(Urt-1)			-0,91(-22,9)
White Test		14.54(0.006)	1.56(0.95)
Breusch-Godfrey Test		56.75684(0,00)	6.402(0.041)
DW	0,21	0.22	1,67
R^2	0,17	0,17	0,91
a0/(1-(a1+a2+a3))	2,776	2,758	2,948
NRU	16.06	15,77	19,08

Source: Calculated by authors
*Legend: NRU = exp (a0/ (1-(a1+a2+a3))

Granger and Newbold (1974) suggested the 'rule of thumb' for detecting spurious regressions. By simple visual inspection we see that *R2* is low enough and less than DW-statistics, so the regression (1 and 2) is not spurious. Early testing for presence of unit root confirms those findings because I (1) process (e.g. log (UR)) is regress by I (1) process (e.g. I (0)). To avoid spurious regression, the residuals of the estimated equations are tested for stationarity using the unit-root test. The results from ADF tests indicate that the residuals are stationary for the first two regressions but not for the third regression at least at a 0,05 level of

significance, hence the calculated NRU is overrated since the result of the third regression is very likely spurious, the conclusion for regression (1) and (2) suggests the above equations are cointegrated (the conclusions from the maximal eigenvalues and trace statistics according to Johansen cointegration tests confirm the last findings at at least 0,05 level significance for regressions) and hence, we can proceed without complications, because the estimations at levels for those equations are valid. This is important if we wish to extract the NRU as a steady state long run value from regressions.

The DW statistics test for the presence of first-order autocorrelation reveal these problems in regression (1); a more flexible test, covering autocorrelation of higher orders and applicable whether or not the repressors include lags of the dependent variable (regressions 2 and 3), is performed by the Breusch–Godfrey test. The simplest version of the test statistic from this auxiliary regression is TR^2, where T is the sample size and R^2 is the coefficient of determination. A test of serial correlation rejects the null hypothesis of no serial correlation in the reformulated equation (2) and (3). The White test for heteroskedasticity in the above OLS residuals show possible heteroskedasticity problem in those regressions.

The authors' response to evidence of nonzero autocorrelation in the above regressions includes running new regressions by the Newey-West HAC estimator.[13]

Table 3

Estimates of the Beveridge Curve for Croatia, 1990Q1-2008Q4
Dependent Variable; log (UR), HAC Estimator

Independent variable	Coefficient (t-statistics)		
Constant	3,5 (13,1)	3,2 (10,4)	0.46 (2.7)
Log(VR)	-0,26 (-2,4)		
Trend		-0,001 (-0,6)	-0.001 (-2.28)
Log(VRt-1)		-0,177 (-1,8)	-0.05 (-2.0)
Log(URt-1)			0.91 (22.682)
R^2	0,23	0,21	0,91
a0/(1(a1+a2+a3))	2,77	2,71	3,19
NRU	16,08	15,13	24,38

Source: Calculated by authors
*Notes: NRU = exp (a0/ (1-(a1+a2+a3))

The Beveridge Curve is re-estimated using the lagged unemployment rate to account for the persistence of unemployment over time (third regression). The unemployment persistence coefficient is statistically high significant and positive in our study.[14] The positive coefficient suggests that unemployment "hysteresis" has a strong outward effect on the Beveridge Curve creating inefficiencies in the labor market. Because of the magnitude of this elasticity coefficient we can categorically state that Croatia is also experiencing greater persistence of unemployment, which is still a great obstacle to further progress in labor issues. We can measure persistence by the coefficient of correlation between the current

unemployment rate and its own past values. There are clear positive correlations in the current rate and the previous quarterly rate of unemployment, the dying out effect (or decreasing autocorrelation of UR) in unemployment persistence is very slow – after the third year, hence the prolonged hysteresis problem still persists in Croatian labor market.

Table 4

The Persistence of Croatia's Unemployment 1998.Q1-2008.Q4

Time lag	Autocorrelation in unemployment rate over time (in quartile)
1	0.900
2	0.776
3	0.685
4	0.606
5	0.491
6	0.381
7	0.322
8	0.281
9	0.222
10	0.151
11	0.111
12	0.075

Source: Calculated by authors

The derivation of the natural rate of unemployment is given in Table 2 and Table 3. Croatia experienced a very high natural rate of unemployment, it is around 16 percent (if focused on value without persistence in unemployment rate only), and this huge figure which dictates the path of the natural rate of output happens, not surprisingly, as the consequence of huge social damages caused by privatization efforts in the early nineties. Hence the lower demand for work pushes the NRU as the balance rate of long-term unemployment, very high towards the top. It is not a surprise that the vast damage of privatization efforts in the early nineties pushed up the NRU as a steady state unemployment rate.

However, the assumption of a constant NRU underlying the above deduction is unauthentic.

It will be more plausible if we calculate and explain the NRU as a time varying parameter. There is plenty of references and authors that seek to estimate the path of a time varying NRU. This knowledge is based on the idea, discussed above, that movements in U* are long-term (or trending) shifts in the unemployment-vacancy relation, while the shock v captures short-run fluctuations. In the proceeding we use a Ball & Mankiew's approach that is a simplification of Staiger et al. and Gordon (1998) in calculating USA NAIRU according to the Philips curve. We already know that the Philips curve, in the case of rejecting the inflation variable and instead including the change of vacancy rate, transforms it in the Beveridge curve equation, so we can apply the previous approach without doubting its adequacy.

7. The NRU and a time varying approach

To see how we alternatively might estimate the NRU in the framework of the Beveridge Curve, we will alter slightly (6) exchanging the parameters sides in the Beveridge curve equation, and as endogenous variable we will set up first-differences of vacancies rate in levels, and we will leave out the constant parameter, to obtain

$$\Delta (VR_t) = b1 (UR_t - UR_t^*) + e_t. \qquad (11)$$

Suppose for the moment that we know the value of the parameter b1 (or slope coefficient), which gives the slope of the unemployment-vacancy differential change tradeoff. We can then rearrange to obtain the equation

$$UR_t^* + e_t/b1 = UR_t + \Delta VR_t/b1. \qquad (12)$$

The right-hand side can be computed from the data, yielding an estimate of $UR_t^* + e_t/b1$, which measures the shifts in the Beveridge curve inside the given framework. Within this sum, UR_t^* represents the longer-term trends, and $e_t/b1$ is proportional to the shorter-term supply shocks that draw demand for labor (proxies by vacancy rate) up and down. It is therefore natural to try to extract UR_t^* from $UR_t^* + e_t/b1$ using a standard approach to estimate the trend in a series.

We use the Hodrick-Prescott filter (Hodrick and Prescott, 1997), which is a generalization of a linear time trend that allows the slope of the trend to change gradually over time. Formally, the HP filter minimizes the sum of squared deviations between the trend and the actual series, with a penalty for curvature that keeps the trend smooth. If there were no penalty, the filter would yield the original series; if the penalty were very high, it would yield a linear time trend.

To implement this procedure, we must choose two parameters. The first is the modified Beveridge curve slope, b1.

Table 5

Dependent Variable: Δ (VR)

Variable	Coefficient	t-Statistic	Prob.
Constant	-6.428	-3.03	0.003
UR	0.342	2.81	0.006

R-squared	0.097	Mean dependent var	-0.503
Adjusted R-squared	0.085	S.D. dependent var	3.315
Log likelihood	-191.968	F-statistic	7.90
Durbin-Watson stat	2.127	Prob(F-statistic)	0.006

In our results below, we use a 0.34, the slope coefficient obtained from regressing ΔVR on unemployment and a constant. Both coefficients are above 2 and hence significant in our regression, hence the null hypothesis about the slope coefficient value used in further analysis is rejected at 0.001 levels. The obtained value of slope is consistent with conventional wisdom about the opportunity costs of decreasing demand on the labor market (it implies that reducing the vacancy differential (between two quartiles) by one percentage point in level produces an increasing unemployment rate by 1/0.342 = 2.92 %). The other parameter is the smoothing parameter in the HP filter- the weight that the procedure gives to keeping the estimated U^* smooth rather than fitting every movement in $URt^*+ (et/b1)$. The choice of this parameter is largely arbitrary. In some ways, this is not surprising: as we noted earlier, the distinction between UR^* and $a1$ is not well-defined.

Figure 4 presents estimates of Croatia's NRU over the last eighteen years. The solid line gives the values of URt^* computed as described above; this represents the long-term and permanent shift in the vacancy-unemployment tradeoff. The dashed line gives the actual unemployment rate as a series that serve as our estimates of UR^*.

Figure 4

Plot of Time Series 1990.1−2008.4, T=76
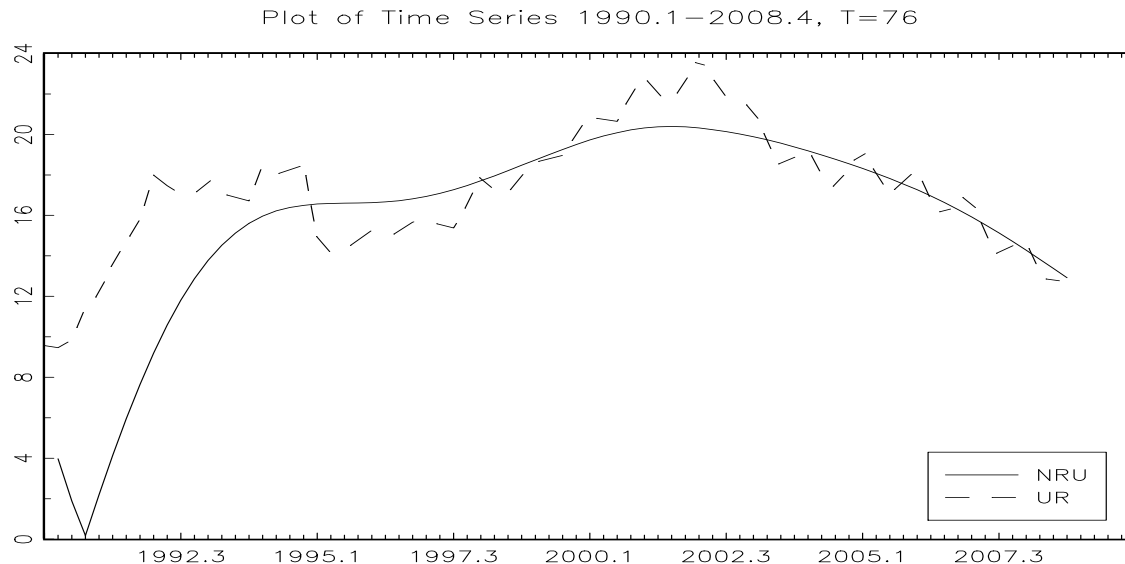
The NRU followed an irregular spiral-shaped path: it trended up very sloppy from the 1990.Q2[15] until 1992.Q4 – afterward the rising had been slow and its magnitude remained below the actual UR till 1995.Q1, at the start of 1995 the NARU intersects with the actual UR and simultaneously converges to a steady rate of 16% (calculated in the previous approach). From 1994.Q2 until about 1997.Q2 the NRU remained quit stable around 16%, then peaked in 2000.Q3 and followed very closely the trajectory path of UR (the ups and downs-margin duo to UR are narrow) and declined since then but slightly until 2003. Meanwhile, with skyrocket unemployment rate in 2002.Q1 (23.88%), the NRU remains below the actual UR. In the last

few years we can see that the actual unemployment rate is pressured below the NRU. But we can't predict how long it will prevail since global recession started at end of 2008. As we can see the NRU resembles, ironically, a "broken thermostat".

In Croatia, metaphorically speaking, as a home gets cold, the thermostat[16] switches on the heat. As the heat rises past a set point, the thermostat switches off, until the labor market cools back below the set point. The NRU dampens the fluctuations of unemployment in the national economy, keeping the unemployment rate close to the set point, e.g. room temperature of 16-18% degrees. But irony lay in the direction of switching on and off, and not so unimportant – the optimum set point of long-run (or full employment) unemployment rate which should be, in our opinion, like in a summer's cave, around 4-6% degree unemployment rate.

8. Conclusions

We will conclude in a few non-technical sketches. The results of the Beveridge curve scatter plot confirmed by regression results suggest that Croatia's labor market appears to have improved in its matching efficiency. The improvement of the matching efficiency has been rising since the war and the de-industrialization shocks in the 90es. Shortly, Croatia is experiencing a greater matching efficiency on the labor market over time, in other words, today, the labor market put in the capitalist framework of private employer – personal employee is more efficient than in the early transition period judged by our limited (read: official) dataset about unemployment and vacancy rate. The responsiveness of the labor market depends not only on the willingness of the unemployed to fill jobs but also on the responsiveness of employers to fill vacancies with workers. In the early nineties (in a state of shock due to the war and a breakup of the commercial connections with the ex Yugoslav republics) and after workers had changed their rational expectations about the future demand on the employment market, there is a certain structural breakup with the earlier structural needs for workforce. Workers requalify and thus change the situation regarding skills and capabilities. They readjust, undergo further education in order to remain employable. The height of the calculated natural rate of unemployment, mainly due to methodological consequences of HP filters, closely follows the current unemployment rate which is, on average, around 16% for the mentioned period. We also established an increase in "hysteresis" because of deindustrialization of the economic structure of Croatia. The "hysteresis" problem is greatly linked to the now aged unemployed workers in their 50s or 60s who did not adjust their skills to the big structural changes in the 90es and, after the privatization of firms in state-ownership[17], toward the new economy structures (lower industry workers formerly accommodated in goods export sectors are demanding, hence the persistence of unemployment).

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Notes

[4]

[5]

[6] The unemployment rate, calculated by the Central Statistical Bureau of Croatia is official unemployment, end of period, as a percentage of the labor force whereas the vacancy rate is number of vacancies, end of period, as a percentage of the job filled and open or vacant job. Therefore, the formulas are: UR = (unemployed persons/ (labor force))*100, VR=job vacancies / (job filled + vacant job)*100. Vacancies are collected by the Croatian State Employment Service, but as we know the CSES, alas, is not able to perfectly cover all the vacancies on the labor market (as there are other private intermediates); hence drawing further conclusions in our research on the basis of these limited sets of data ought not to be very strong but only indicative.

[7] In modern economic history of OECD countries (included Western European countries – beside the United States in the era of economic depression) the unemployment rate was never so hard an issue as in Croatia (and other former communist countries). There is no need to compare those countries to Croatia. In the short run almost all transition eastern European economies have experienced dramatic declines in GDP (and hence unemployment rising) before growth recovers, this „U shaped"pattern of output decline and recovery (followed by rising employment) is a stylized fact of the experience of transition (Blanchard, 1996; Blanchard and Kramer, 1997). In unemployment terms those experiences are fitted by inverse „U shaped" model, and if we assume that January 2001, with the unemployment rate of one forth of the labor force, lays about in the mean period of observed transitional dynamics, we can happily conclude that the worst unemployment problem is behind us.

[8] If so, (e.g. below 9,5 percentage margin) in spite of the economic recovery. We provide an estimate of the natural rate of unemployment in an implicit way, using the regression results based on the Beveridge curve estimation.

[9] Essentially, according to the simple Okun's law, any growth in unemployment is some quantitative reflection of a decrease in the aggregate output by some time lag. Croatian GDP does, at the beginning of our observations, transform itself in nearly half its standard volume. In 1991 GDP was half of 1989 sum, relatively minor by 21,1% of what we produced in 1990. In 1992 the aggregate output depreciated by 11,7% even compared with the disastrous 1991 as basis. A diminished external demand for Croatian goods and mainly tourist services was the result of the war in Croatia and Bosnia and Herzegovina. From 1989 up to 1994 industry production slowed down by half in volume, in 1994 Croatia had only 35,1% industrial workers employed. The job vacancy rates blow while the unemployment rate hit levels unprecedented in the formal communist era of development. But the irony of Croatia's labor market, judging from the growth of unemployment, is that it was much more effective during the war (1991-1995) than after the end of the war operations in Croatia and Bosnia.

[10] The closer the curve is situated to the origin, the less severe are the problems of mismatch, or market labor becomes more efficient (Sorensen, Whitta-Jacobsen, p. 318, 2005).

[11] In steady –state equilibrium, our economic variables take the same values from period to period, URt = UR t-1=URt-2=…. =UR*, and as well as VRt = VR t-1=VRt-2=…. =V R*, until the system is disturbed.

[12] If the reader is not persuaded after having read the mentioned technicalities about the link between NRU, unemployment rate and vacancy rate, we refer to Edward Teo, T., Thangavelu, M. S., Quah, E. (2005) because the extraction of the NRU in our paper and their is done in same way. Regarding to steady state solution in econometrics regression we refer to Judge, G., C. Hill, W. Griffits, and T. Lee (1985). For the determination of the long-term or steady state unemployment rates see Hejidra & van der Ploeg, p. 165 (2002). By the way, if the differenced model is considered $\Delta UR_t = a_0 + a_1 \Delta VR_t$ there is no solution (and the NRU identification which is one of the purposes of the paper is impossible). Hence, in this part of the paper we consciously neglect the seasonality issue because we want to consider levels rather than seasonal differences as a form of seasonal adjustment.

[13] The Newey-West HAC Estimator is a general covariance matrix estimator used to treat heteroskedasticity. It is consistent in the presence of both heteroskedasticity and autocorrelation of unknown form. (EViews User's Guide, p 252)

[14] Persistence problem in unemployment is intuitively implied early by the unit root testing of log (U) when we conclude that log (u) is I (1). Or, in the simplest case with one time lag if regress ut=aut-1 +et where et is „white noise", we obtain a =1.00255 and this coefficient higher than zero and approximately 1(and significant) expresses the strength of the persistence effect. According to the „hysteresis hypothesis" coefficient a would be unity (as in our case due to unit root hypothesis) , implying that the excepted rate of the unemployment in one quartal would be the actual rate in the period immediately preceding it (Lindbeck, 1993, pp 9-10)

[15] Because the difference operator 1990Q1 observation is missing; otherwise a few first and last observations in estimating time varying NRU via HP-filter are not suitable to interpret due to neglecting the power of HP-filter to extract the long time trend component from time series,

[16]The relevance of thermostats as a term in the rhetoric of economics refers to the enormously interesting paper by Schelling T, 1978.

[17]If someone wants to re-evaluate the effects of privatization on unemployment we strongly suggest reading the short essay which begins: "Man is an animal, technically, an alpha male primate. Man is parasitic, he practices slavery against conspecifies (other members of his species." (Bioeconomics: Lesson for Business, Nations and Life, Magee P. S., p. 255 in Colander, D., 2000).

HRVATSKA BEVERIDGE KRIVULJA I PROCJENA PRIRODNE STOPE NEZAPOSLENOSTI 1990-2008

SAŽETAK

Rad istražuje odnos između nezaposlenosti (UR) i stope slobodnih radnih mjesta (VR) u Hrvatskoj na tržištu rada u razdoblju od siječnja 1990 do prosinca 2008, na bazi empirijske analize koristeći okosnicu dane UV krivulje (poznatu još kao Beveridge krivulja). Procijenjena je prirodna stopa nezaposlenost (u statičnoj i dinamičnoj ravnotežnoj inačici) koja se kao koncept izvodi iz Beveridge krivulje, prema teoriji da promjena upražnjenih radnih mjesta potiskuje nezaposlenost u suprotnom smjeru.

JEL: J64

Ključne riječi: *Beveridge krivulja, stopa nezaposlenosti, stope slobodnih radnih mjesta, prirodna stopa nezaposlenosti.*

Moira Kostić-Bobanović[*]

FOREIGN LANGUAGE ANXIETY OF UNIVERSITY STUDENTS

ABSTRACT

Language anxiety has been one of the so-called personal factors that have been considered worth studying once a psychological theory of the process of second/foreign language learning started to develop.

The purpose of this research is to identify the main difference in language anxiety perceived by Austrian and Croatian university students of Economics who are studying Business English as a foreign language.

The author suggests that the findings obtained in this study should be verified in other socio-cultural and language contexts.

INTRODUCTION

For a number of years foreign language educators have hypothesized that anxiety impacts on foreign language learning. Early research suggested that the relation of anxiety to second language achievement was equivocal. Scovel (1978) reviewed a number of studies investigating the relation between anxiety and second language achievement and found evidence for positive, negative, and no relationships. Based on these findings, he proposed that there might be two types of anxiety, which he referred to as facilitating and debilitating anxiety. Other research being conducted at the time, however, found evidence to suggest that anxiety specific to language learning context (i.e. language anxiety) tended to be negatively related to second language achievement (MacIntyre and Gardner, 1989).

Some researchers examined students' self-reports of anxiety in relation to language skill measures, such as final course grades (Muchnick and Wolfe, 1982; Price, 1991)

Bailey (1983) studied the effects of environmentally induced anxiety on oral communication in a foreign language and found that students experiencing an anxiety-producing situation attempted to convey more concrete messages than those in a non-anxiety-producing setting. Krashen (1987) hypothesized that anxiety contributes negatively to an "affective filter" which makes an individual less responsive to language input.

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While many scholars have studied general language anxiety (Horwitz and Young, 1991), Horwitz and Cope (1986) were the first to suggest that foreign language research had neither defined anxiety that is specific to foreign language learning nor described the effects of anxiety on foreign language in classroom settings. According to Horwitz *et al.* (1986), there are three main interrelated factors that intervene in the foreign language classroom anxiety experience: *communication apprehension* (McCroskey 1977) or fear about real or anticipated communication with other people, *test anxiety* or fear of failing in test situations and *fear of negative evaluation*. The uniqueness of this experience in comparison with other academic anxieties, such as math's anxiety, lies in the special requirements of the language classroom context: on the one hand, the student is continuously required to communicate by means of an instrument that s/he only knows imperfectly, which is very likely to provoke a feeling of insecurity inside the learner; on the other hand, the difficulties perceived at trying to communicate are likely to challenge the concept that the individual has of him/herself as a competent communicator and result in his/her self-consciousness, fear or reticence (Young 1992). The learner's self-consciousness is usually associated with his/her worry about not being able to transmit an image of him/herself that corresponds to his/her true personality, but a basically incompetent self instead (Schumann 1978; Tsui 1996).

All these considerations seem to indicate that the interactive nature of language classrooms and their continual requests on learners to communicate are likely to make language classrooms more anxiety inducing than other classroom contexts. In fact, communicating orally in the foreign language has often been considered by both teachers and learners as more anxiety inducing than the practice of other language skills (Horwitz *et al.* 1986; Koch and Terrell 1991; MacIntyre and Gardner 1991; Young 1992).

This above mentioned may have more or less unconsciously impelled most researchers to study the problem of language anxiety with reference to groups of students of foreign languages at an elementary level. But the problem of language anxiety is not exclusive to beginners. University students with an extensive language learning background can also perceive considerable levels of language anxiety, as the results of this study indicate.

Department of Economics and Tourism "Dr. Mijo Mirković" as a part of Juraj Dobrila University in Pula puts special emphasis on international exchange programme within which our students and teachers co-operate with their colleagues from University of Applied Sciences in Eisenstadt, Austria.

In this research we would present the main difference in language anxiety perceived by Austrian and Croatian university students of Economics who are studying Business English as a foreign language.

METHODS

Measures

The research instrument used for this study was the *Foreign Language Classroom Anxiety Scale* (*FLCAS*) designed by Horwitz *et al.* (1986). After forming a support group for students who were having difficulties in learning languages, and on the basis of students' reported experiences, Horwitz *et al.* (1986) devised a Likert scale of five points which consisted of 33 items and was aimed at probing students' experiences of anxiety related to the learning of a foreign language in the classroom context. Several reasons encouraged the researcher to use the *FLCAS* in her study: on the one hand, this scale had been designed on the basis of previous in-depth qualitative research, which rendered it as one of the most comprehensive

and valid instruments that were available for measuring the situational anxiety directly associated to the specific context of the foreign language classroom; on the other hand, the scale had demonstrated satisfactory reliability coefficients with the first samples of population to which it had been administered (Horwitz 1991); in fact, nowadays it is the most frequently scale used often shortened or adapted in other research studies concerned with similar purposes.

This self-report measure assesses the degree of anxiety, as evidenced by negative performance expectancies and social comparisons, psycho physiological symptoms and avoidance behaviors.

Participants

The research was carried out on total of 200 subjects: 100 students were attending the University of Applied Sciences in Eisenstadt, Austria, and 100 students were studying at the Juraj Dobrila University in Pula. All the subjects were freshmen studying Economics. They were full time students, attending lectures in Business English as a foreign language. Participation was voluntary and took place during regular class time.

Data analysis

The results from the questionnaires were processed using SPSS for Windows (Statistical Package for Social Sciences).

RESULTS AND DISCUSSION

After administering the FLCAS to our group of subjects, the resulting data revealed interesting information about their anxiety levels. The thematic relationships among the different items of the scale have allowed us to organize the presentation of the resulting data in four groups regarding their relationship with the following different sub-topics of foreign language classroom anxiety: speaking anxiety, listening anxiety, test anxiety and general anxiety reactions towards the foreign language classroom.

Speaking anxiety

Speaking the foreign language seemed to be rather difficult for some of students since item 30 indicated that 25% of Croatian and the same number of Austrian students felt overwhelmed by the number of rules they had to learn to speak a foreign language.

Students' lack of self – confidence when speaking English language was revealed by the fact that 39% of Austrian and 45% of Croatian students agreed with item 1 (*I never feel quite sure on myself when I am speaking in my foreign language class)* and 30% of Austrian and 27% of Croatian students disagreed with item 18 *I feel confident when I speak in foreign language class.* Still in connection with the self – confidence factor, 27 % of Austrian students and 31% of Croatian students showed reticence to volunteer answers in the language class (item 13) and 20% of Austrian students and 25% of Croatian students said that they tremble when they know that they are going to be called on in language class. (item 3).

As far as speaking anxiety is concerned item 27 revealed that 15% of Austrian students and 38% of Croatian students got nervous and confused when they spoke in the foreign language classroom. Still, feeling one's heart pounding when being called on in class was a much more frequent sensation among students since, according, to item 20, 23% of Austrian students and 46% of Croatian students actually had this experience.

With regard to the intervening factors, we found that not feeling prepared made a larger amount of students anxious since item 33 indicated that 44% of Croatian and 20% of Austrian students got nervous when the language teacher asked questions which they had not prepared in advance. Students' fear of making mistakes was involved as an important factor, since there were 44% of Croatian and 25% of Austrian students who showed that they were worried about making mistakes in the language class item 2 (*I don't worry about making about mistakes in language class*).

The fear of being evaluated by others could have been involved in the process to some extent. In this regard, we could appreciate among the students of this group that their fear of being evaluated by the teacher was bigger than their fear of being evaluated by their classroom mates: whereas 15% of Austrian and 32% of Croatian students were afraid that their language teacher was ready to correct every mistakes they made (item 19), 25% of Austrian and 32% of Croatian students felt very self conscious about speaking the foreign language in front of other students (item 24) and 15% of Austrian students and 25% Croatian students were afraid that the other students would laugh at them when they spoke the foreign language (item 31). A lot of Austrian 22% and even more of Croatian students 39% start to panic when they have to speak without preparation in language class (item 9). Comparing themselves with the other students could also have been involved to some extent in the process, since 47% of Austrian students and 30% of Croatian students had a permanent feeling that the other students spoke the foreign language better than they did item 23 (*I always feel that the other students speak the foreign language better than I do*) and 52% of Austrian students and 40% of Croatian students, thought that the other students were better at languages than they were item 7 (*I keep thinking that the other students are better at languages than I am*). Along with the factors already mentioned, the presence of native speakers of English seemed to be intimidating for some students in our group of subject: on the one hand, 25% of Austrian and 23% of Croatian students denied they would probably feel comfortable around native speakers of the foreign language item 32 (*I would probably feel comfortable around native speakers of the foreign language*). On the other hand 40% of Austrian and 53% of Croatian students would be nervous speaking the foreign language with native speaker (item 14).

Listening anxiety

With regard to listening anxiety, reactions were almost as frequent as those corresponding to speaking anxiety, since items 29 (*I get nervous when I don't understand every word the language teachers says*) and 4 (*It frightens me when I don't understand when the teacher is teaching in the foreign language*) showed that 32% of Austrian and 27% of Croatian students felt restless when they didn't understand what the teacher said in the foreign language. According to the results of our study, we found that the level of listening anxiety increased when error correction was involved in the process, about 37% of Austrian and 31% Croatian students said that they got upset when they didn't understand what the teacher was correcting (item 15).

Test anxiety

A high level of classroom anxiety was exhibited by those items related to the phenomenon of test anxiety. A large amount of students, 41% of Croatian and 37% 0f Austrian, were worried about the consequences of failing the subject, as item 10 shows. As we can see in item 8, 88% of Austrian and 64% of Croatian students denied being usually at ease during tests in their language class.

General reaction of anxiety towards the foreign language classroom

Analyzing the results of our research, we could also contemplate general reactions of anxiety towards the foreign language classroom existing in our group of subjects. Several items revealed that there was a considerable level of concern over foreign language lessons in general, both outside and inside the classroom. 28% of Austrian and 38% of Croatian students revealed that they felt pressure to prepare very well for the foreign language class (item 22); 42% of Austrian and 35% of Croatian students seemed to understand that foreign language classes could be a cause of distress (item 11) and 30% of Austrian and 43% of Croatian students actually said that they worried about the foreign language class even when they were well prepared for it (item16). Besides, 22% of Austrian and 27%of Croatian students denied feeling sure and relaxed when they were going to the English class (item 28); 19% of Austrian and 25% of Croatian students often felt like not going to the language class (item 17) and 12% of Austrian and 17% of Croatian students denied that it wouldn't bother them at all to take more foreign language classes (item 5).

As regards the anxiety experiences lived inside the classroom, 22% Austrian and 18% of Croatian of the students worried about being left behind because of the lesson's pace (item 25) ; 18% of Austrian and 32%of Croatian students showed that they felt more tense and nervous in the foreign language class than in other classes (item 26); 22% of Austrian and 36% of Croatian students also said that in class they could get so nervous that they forgot things they knew (item 12). Finally, almost the same number of students (39% of Austrian and 35%of Croatian) normally found themselves in class thinking of things that had nothing to do with it (item 6).

CONCLUSION

Learning a language implicates self-concept in a way that does not occur in other disciplines, and to entail a particular kind of anxiety related only to language situations. Indications of students having considerable levels of anxiety in the classroom were observed as an experience that is more likely to appear in foreign language lessons than in lessons on other subjects. A reason of this perceiving anxiety is the fact that in foreign language classrooms the students have to cope with the demands of being able to sustain communications in a language they are not completely familiar with. So, they get nervous and feel different levels of anxiety during classes. The symptoms of anxiety are different among individuals and can occur as physiological or behavioral manifestations.

Some of the most outstanding differences between Austrian and Croatian students were shown in the following items: 2, 3, 27 and 33 (see appendix). They are all in relation to speaking anxiety. Austrian students worry much more than Croatian ones about making

mistakes in language class. On the other hand, a great number of Croatian students tremble when they know that they are going to be called on in a language class. A higher number of Croatian students get nervous and confused when they are speaking in their language class. There is also a great difference between Croatian and Austrian students in being nervous when the language teachers ask questions which they haven't prepared in advance; Croatian students feel more nervous than their Austrian colleagues. The same amount of students agrees that they get nervous when they don't understand every word the language teacher says. They also agree that they feel overwhelmed by the number of rules they have to learn to speak the foreign language. In examining the results, we must not overlook the fact that contextual circumstances are likely to influence the levels of students' perceived anxiety.

Consequently, we could make use of contextual factors e.g. cultural diversity, classroom factors represented by rules and routines, grouping patterns, scheduling and classroom arrangement in order to try to speculate about the most outstanding differences observed between the two groups.

The findings obtained in this study should be verified in other contexts both socio-cultural and language.

We might state that the first step to take in order to overcome students' anxiety is to detect its presence among our students beyond mere intuition and diagnose which are the most influential causes of this experience in a particular classroom context. Therefore, it is suggested that awareness of foreign language anxiety be heightened and taken seriously by teachers and students alike. This may be accomplished by means of workshops or presentations elaborating foreign language anxiety and exploring the positive motivational aspects of anxiety reduction.

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APPENDIX
FOREIGN LANGUAGE CLASSROOM ANXIETY SCALE (FLCAS) (Horwitz, Horwitz & Cope 1986)

1. I never feel quite sure of myself when I am speaking in my foreign language class.
2. I *don't* worry about making mistakes in language class.
3. I tremble when I know that I'm going to be called on in language class.
4. I frighten me when I don't understand what the teacher is saying in the foreign language.
5. It wouldn't bother me at all to take more foreign language classes.
6. During language class, I find myself thinking about things that have nothing to do with the course.
7. I keep thinking that the other students are better at languages than I am.
8. I am usually at ease during tests in my language class.
9. I start to panic when I have to speak without preparation in language class.
10. I worry about the consequences of failing my foreign language class.
11. I don't understand why some people get so upset over foreign language classes.
12. In language class, I can get so nervous I forget things I know.
13. It embarrasses me to volunteer answers in my language class.
14. I would *not* be nervous speaking the foreign language with native speakers.
15. I get upset when I don't understand what the teacher is correcting.
16. Even If I am well prepared for language class, I feel anxious about it.
17. I often feel like not going to my language class.
18. I feel confident when I speak in foreign language class.
19. I am afraid that my language teacher is ready to correct every mistake I make.
20. I can feel my heart pounding when I'm going to be called on in language class.
21. The more I study for a language test, the more confused I get.
22. I *don't* feel pressure to prepare very well for language class.
23. I always feel that the other students speak the foreign language better than I do.
24. I feel very self-conscious about speaking the foreign language in front of other students.
25. Language class moves so quickly I worry about getting left behind.
26. I feel more tense and nervous in my language class than in my other classes.
27. I get nervous and confused when I am speaking in my language class.
28. When I'm on my way to language class, I feel very sure and relaxed.
29. I get nervous when I don't understand every word the language teacher says.
30. I feel overwhelmed by the number of rules you have to learn to speak a foreign language.
31. I am afraid that the other students will laugh at me when I speak the foreign language.
32. I would probably feel comfortable around native speakers of the foreign language.
33. I get nervous when the language teacher asks questions which I haven't prepared in advance.

STRAH OD STRANOG JEZIKA KOD SVEUČILIŠNIH STUDENATA

SAŽETAK

Još od početka razvoja teorije psihologije i proučavanja procesa usvajanja drugog/stranog jezika, strah od stranog jezika jedan je od takozvanih subjektivnih faktora vrijedan proučavanja.

Cilj ovog istraživanja je identificirati glavne razlike u strahu od stranog jezika među studentima ekonomije austrijskih i hrvatskih sveučilišta koji uče poslovni engleski kao strani jezik. Autor predlaže da bi rezultati dobiveni ovim istraživanjem trebali biti provjereni u ostalim socio-kulturnim i jezičnim sredinama.

JEL: I21

Ključne riječi: *Strah od jezika, Engleski kao strani jezik, Sveučilišni studenti*

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Wen-jen Hsieh[**]

RESPONSE OF OUTPUT IN ROMANIA TO MACROECONOMIC POLICIES AND CONDITIONS

ABSTRACT

This paper incorporates the monetary policy function and uncovered interest parity in examining the impacts of changes in major macroeconomic variables on real GDP in Romania. A lower ratio of government consumption spending to GDP, an appreciation of the expected real effective exchange rate, a lower world real interest rate, more world output, and a lower inflation rate would raise real GDP. Hence, fiscal prudence is needed, and the conventional approach of real depreciation to stimulate exports and raise real output does not apply to Romania.

1. Introduction

The recent global financial crisis and worldwide recession has affected many transition economies including Romania. We have seen declining output, wages, sales, and international trade, rising unemployment, continual government deficits, a weaker Romanian leu against the U.S. dollar, financial market vulnerability to external shocks, and declining stock values (*Monthly Bulletin*, National Bank of Romania, 2009a). According to the forecast of Romania's economy in 2009 by the International Monetary Fund (2009), its real GDP would decline 4.1%, and domestic demand would drop 8.2%. Its unemployment rate would rise from 4.0% in 2008 to 8.9%. The government would have a budget deficit of 4.6% of the GDP, and the gross public debt as percent of GDP would rise from 20.1% in 2008 to 23.6%. The current account balance, the merchandise trade balance, and the capital and financial account balance as a percent of GDP would be -7.5%, -7.1%, and -2.3%, respectively.

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This paper examines short-term output fluctuations for Romania and has several focuses. First, the model consists of a simultaneous-equation system incorporating the monetary policy function with inflation targeting, which is consistent with monetary policy of the National Bank of Romania. For example, the National Bank of Romania has adopted a medium-term inflation target of 3.5% with a range from 2.5% to 4.5% for 2009 and 2010 (National Bank of Romania, 2009b). Second, uncovered interest parity is considered to indicate that the exchange rate is affected by the interest rate differential and the expected exchange rate. Third, comparative-static analysis is employed to determine the possible impact of a change in one of the exogenous variables on the equilibrium real GDP.

2. Literature Survey

There are several recent studies examining fiscal policy, monetary policy, exchange rate policy, convergence, and other macroeconomic relations for Romania and its neighboring countries. Radulescu (2003) reviewed Romania's fiscal policy in the 1990s and found that Romania had incurred very large quasi-fiscal deficits, followed an unsustainable fiscal policy particularly up to 1996, and has made improvements recently.

Andronescu, Mohammadi, and Payn (2004) showed that real money demand was affected by real income, the domestic interest rate, and the depreciation of the Romanian leu. Hence, monetary easing or tightening leading to a lower or higher interest rate is expected to affect real money demand. Teiman (2004) revealed that the effect of the monetary policy rate on other market interest rates and inflation in Romania was evident and consistent with other Central European countries. Gabor (2008) reviewed the change in the monetary policy regime from targeting monetary aggregates in 1990 to targeting inflation in 2005 and argued that the new monetary policy was inconsistent with the conditions of Romania's economy. Kasman, Kirbas-Kasman, and Turgutlu (2008) found that there was monetary policy convergence between the German interest rate and the interest rates in Romania and the other five neighboring countries and that the uncovered interest parity (UIP) hypothesis can be rejected for Romania and other selected countries. Sideris (2008) found evidence that if we did not incorporate the intervention effect of the central banks in Romania and the other five Central and Eastern European countries to smooth exchange rate volatility or pursue a monetary rule, it would influence the ability to detect the behavior of the real exchange rate based on PPP in the long run.

Karfakis (2003) examined the behavior of the leu/dollar exchange rate during the hyperinflation period and found that significant increases in the money supply and inflation caused the leu to depreciate and that higher real income caused the leu to appreciate. Hence, the monetary model applied to the RON/USD exchange rate. Gueorguiev (2003) indicated that the exchange rate pass-through in Romania was fast and large, accounted for a large portion of inflation, was larger for the RON/USD exchange rate than other exchange rates, and had moderated based on the PPI.

Kutlu and Kavrukkoca (2007) showed that between Romania or Turkey and Germany, none of the convergence criteria was attained, that between Croatia and Germany, there was evidence of nominal convergence in the interest rates and the deficit/GDP ratios, and that between Bulgaria and Germany, the deficit/GDP ratios were cointegrated.

IMF (2008) indicated that Romania showed large external deficit, high CPI inflation, growing macroeconomic imbalances, increasing bank vulnerability to adverse shocks, short-term oriented, pro-cyclical fiscal policy, etc. It suggested that the authorities should pursue tight fiscal policy keeping the deficit/GDP ratio at 1.75%, implement inflation targeting and contain inflation expectations, and monitor the financial sector and take preempt measures to reduce the risk of financial instability.

3. The Model

Suppose that aggregate spending is determined by real output, the real interest rate, government spending, government tax revenues, the real exchange rate, and world output, that the real interest rate is a function of the inflation gap, the output gap, the exchange rate gap, and the world real interest rate, and that the real exchange rate is determined by the real interest rate differential and the expected real exchange rate. Applying Romer (2000, 2006) and Taylor (1993, 1999, 2001), we can express the open-economy IS function, the extended monetary policy function, and uncovered interest parity as:

$$Y = V(Y, R, G, T, E, Y') \tag{1}$$

$$R = X(\pi - \lambda, Y - \delta, E - \phi, R') \tag{2}$$

$$E = U(R - R', E^e) \tag{3}$$

where

Y	= real GDP,
R	= the real interest rate,
G	= government spending,
T	= government tax revenues,
E	= the real effective exchange rate (An increase means real appreciation.)
Y'	= world output,
π	= the inflation rate,
R'	= the world real interest rate,
E^e	= the expected real effective exchange rate, and
λ, δ, ϕ	= parameters.

Solving for Y, R, and E simultaneously, we have the equilibrium real output as:

$$\overline{Y} = \overline{Y}(G, T, E^e, R', Y', \pi; \lambda, \delta, \phi) \tag{4}$$

The Jacobian for the three endogenous variables has a positive value and is given by:

$$|J| = (1 - V_Y) - V_E U_R X_Y - U_R X_E (1 - V_Y) - V_R X_Y > 0. \tag{5}$$

More government deficit spending is expected to raise the equilibrium real GDP:

$$\partial \overline{Y} / \partial G - \partial \overline{Y} / \partial T = [(V_G - V_G X_E U_R) - (V_T - V_T U_R X_E)] / |J| > 0. \tag{6}$$

Note that deficit-financed government spending may not be effective due to Ricardian equilence hypothesis, crowding-out, uncertainties, and other reasons (Barro, 1989; Taylor, 2000). An appreciation of the expected real effective exchange rate may increase or reduce the equilibrium real GDP due to the possible negative effect on net exports and positive effect on aggregate spending after monetary easing caused by real appreciation:

$$\partial \overline{Y} / \partial E^e = (V_R U_{E^e} X_E + V_E U_{E^e}) / |J| > or < 0. \tag{7}$$

The impact of a higher world real interest rate on the equilibrium real GDP is ambiguous due to the positive effect caused by real depreciation and the negative effects partly caused by a higher real interest rate if the National Bank of Romania responds to the world real interest rate positively:

$$\partial \overline{Y} / \partial R' = (V_R U_{R'} X_E + V_E U_R X_{R'} + V_E U_{R'} + V_R X_{R'}) / |J| > or < 0. \tag{8}$$

A higher world output is expected to raise the equilibrium real GDP whereas a higher inflation rate would cause the equilibrium real GDP to decline:

$$\partial \overline{Y} / \partial Y' = (V_{Y'} - V_{Y'} U_R X_E) / |J| > 0, \tag{9}$$

$$\partial \overline{Y} / \partial \pi = (V_E U_R X_\pi + V_R X_\pi) / |J| < 0. \tag{10}$$

4. Data Sources and Empirical Results

The source of the data came from the *International Financial Statistics* published by the International Monetary Fund. Real GDP is expressed in millions with year 2000 as the base year. Due to lack of complete data for government deficit, the ratio of government consumption spending to nominal GDP is used as a proxy for fiscal policy. The expected real effective exchange rate is the lagged real effective exchange rate based on a trade-weighted measure. An increase in the value means an appreciation, and vice versa. The world real interest rate is represented by the U.S. federal funds rate minus the inflation rate in the U.S. Industrial production index for advanced countries with year 2000 as the base year is selected to represent world output. Due to highly seasonal variations of real GDP, three seasonal dummy variables, Q1, Q2, and Q3, are included in the estimated regression. The sample ranges from 1998.Q1 to 2008.Q4.

The Breusch-Godfrey serial correlation LM test is performed first. When one lag is selected, the F-statistic and the Obs*R^2 statistic are estimated to be 4.680 and 5.323, respectively. Compared with their critical values, the lack of serial correlation can be rejected at the 5% level. When two lags are chosen, the lack of serial correlation can be rejected at the 5% or 10% level. The White heteroskedasticity test is performed next. The

F-statistic and the Obs*R^2 statistic are calculated to be 2.124 and 21.088, respectively. Because they are greater than the critical values, the lack of heteroskedasticity can be rejected at the 5% or 10 level. Because of the existence of both serial correlation and heteroskedasticity, the Newey-West (1987) method is employed in empirical work in order to yield consistent estimates for the covariance and standard errors so that hypothesis tests will be valid.

Table 1 presents estimated coefficients, t-statistics, adjusted R^2, and other related statistics. The log scale is used except for the variables for zero or negative values. As shown, 97.4% of the variation in real GDP can be explained by the right-hand side variables. All the coefficients are significant at the 1% or 5% level. The equilibrium real GDP is positively associated with the appreciation of the expected real effective exchange rate and world output and negatively affected by the ratio of government consumption spending to nominal GDP, the U.S. real federal funds rate, and the inflation rate. The coefficients of all the dummy variables have the negative and significant sign at the 1% level, suggesting that real GDP in the first, second, and third quarters is less than that in the fourth quarter due to the seasonal effect. The mean absolute percent error (MAPE) is estimated to be 2.806.

To determine whether the estimated regression is stable, the CUSUM and CUSUMSQ tests are applied. As shown in Table 2, because the cumulative sum of recursive residuals or the cumulative sum of recursive residuals squared are within the critical lines at the 5% significance level, estimated parameters and the variance are relatively stable.

Table 1

Estimated Regression of log(Y) for Romania: 1998.Q1 – 2008.Q4

Variable	Coefficient	t-statistic
Log(GY)	-0.150	-2.046
Log(E^e)	0.543	5.287
R'	-0.021	-3.973
Log(Y')	1.255	5.198
π	-0.010	-2.634
Q1	-0.545	-24.247
Q2	-0.348	-16.049
Q3	-0.101	-4.299
Constant	2.513	2.714
Adjusted R^2	0.974	
AIC	-3.140	
Schwarz criterion	-2.775	
MAPE	2.806	
Sample size (N)	44	

Notes: GY is the ratio of government consumption spending to nominal GDP. Other variables are defined above. AIC is Akaike information criterion. MAPE is the mean absolute percent error. The Newey-West method is employed in empirical work.

Table 2

The CUSUM and CUSUMSQ Tests
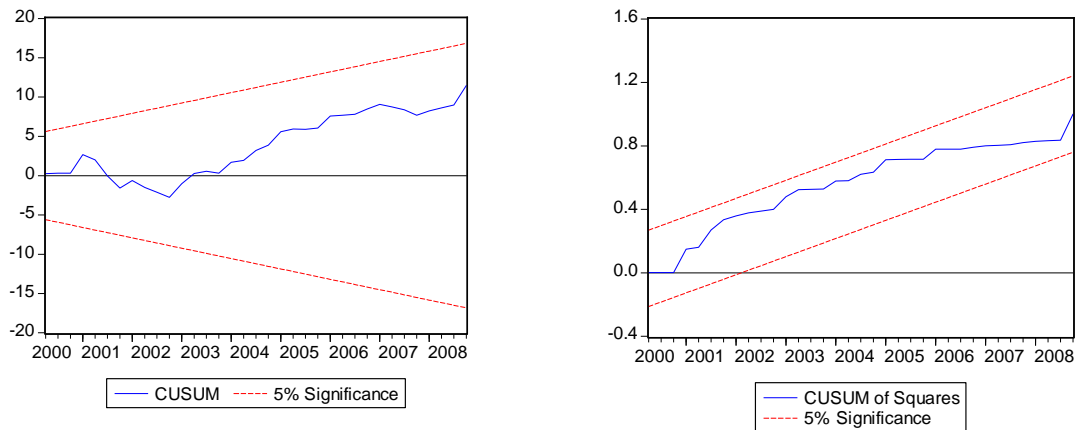
There are several comments. The negative and significant coefficient of the ratio of government consumption spending to GDP suggests that prudent fiscal policy would be appropriate. Second, the conventional wisdom to devalue a currency to stimulate net exports and aggregate expenditures would not apply to Romania. Instead, an appreciation of the expected real effective exchange rate would increase real GDP. Third, a higher world real interest rate would reduce Romania's real GDP partly because the National Bank of Romania would respond positively to the higher world real interest rate by raising its own monetary policy rate. Fourth, a higher inflation rate would hurt real output mainly because the National Bank of Romania would raise the real interest rate to pursue inflation target, thus slowing down consumption and investment expenditures.

Several different versions are considered to determine the robustness of empirical results. When the EU real refinancing rate replaces the U.S. real federal funds rate, its coefficient is negative and significant at the 10% level. The adjusted R^2 is slightly less than that in Table 1. The mean absolute percent error of 3.010 is slightly greater that reported in Table 1. When the regression includes both real interest rates for the U.S. and the EU, the EU real interest rate is negative but insignificant whereas the U.S. real interest rate is negative and significant, partly due to a high degree of multicollinearity. When the expected real exchange rate of the leu against the U.S. dollar is used to replace the expected real effective exchange rate, its coefficient is negative and significant at the 1% level. The adjusted R^2 of 0.978 is slightly greater than 0.974 in Table 1 where the expected real effective exchange rate is used. Other results are similar. To save space, these results are not printed here and will be available upon request.

5. Summary and Conclusions

This paper has examined the response of short-term output fluctuations to major macroeconomic variables. The theoretical model considers the open-economy IS function, the monetary policy function, and uncovered interest parity. Comparative-static analysis suggests that a change in the expected real effective exchange rate or the world real interest rate may affect the equilibrium real GDP positively or negatively. The results show that a lower ratio of government consumption spending to nominal GDP, a higher expected real effective exchange rate, a lower world real interest rate, a higher world output, and/or a lower inflation rate are expected to increase real GDP. Hence, relatively low world real interest rates and the expected world economic recovery would help increase real GDP whereas expected real depreciation of the leu would hurt real GDP. The ratio of government deficit to GDP needs to decrease to below 3.0% to meet the EU convergence criterion, and the inflation rate needs to decline to meet the established inflation target range between 2.5% and 4.5%.

There may be areas for potential research. The money demand function may replace the monetary policy function in the specification of the model. The formulation of the inflation rate may be incorporated in the model. If the data are available, the real financial stock value can be considered in order to estimate the potential impact of declining stock prices on real output.

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ODAZIV PROIZVODNJE U RUMUNJSKOJ NA MAKROEKONOMSKU POLITIKU I UVJETE

SAŽETAK

Rad obrađuje funkciju monetarne politike i nepokriven kamatni paritet pri proučavanju utjecaja promjena glavnih makroekonomskih varijabli na stvarni BDP u Rumunjskoj. Manji omjer državne potrošnje u odnosu na BDP, aprecijacija očekivanog realnog efektivnog tečaja, manje svjetske realne kamatne stope, veća svjetska proizvodnja i manja stopa inflacije povećati će realni BDP. Iz tog razloga je potrebna fiskalna opreznost tako da konvencionalni pristup realne deprecijacije kako bi se stimulirao izvoz i povećala realna proizvodnja nije primjenjiv u Rumunjskoj.

JEL: E52, F41, O52

Ključne riječi: *ciljana inflacija, funkcija monetarne politike, nepokriven kamatni paritet, fiskalna politika, realna aprecijacija i deprecijacija*

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OPENNESS AND ECONOMIC GROWTH IN AN EMERGING ECONOMY: THE CASE OF RUSSIA

ABSTRACT

This article investigates the relationship between trade openness and economic growth in the case of Russia. The results reveal that a bi-directional relationship exists between openness and economic growth. Not only does openness causes economic growth, but economic growth in turn causes openness. Moreover, this feedback relation is found for both, the short run and long run.

1. Introduction

This paper attempts to investigate the relationship between trade openness and economic growth in Russia. Russia provides as an interesting case study to examine this relationship: It's the largest emerging economy in the former Soviet bloc. It has undergone severe economic crises since 1991 when Boris Yeltsin became its first elected president. In fact, the metamorphosis of this communist regime into a market based economy was quite painful. According to the World Bank data real GDP per capita in Russia declined by as much as 25 percent between 1991 and 2001. In view of many western observers it came to be perceived as a failed state. Russia's economic performance was labeled as "a tragedy of historic proportions".

In the period immediately following the post Soviet era, Russia faced macroeconomic instability, rising inflation and rent-seeking among the elites. The Russian government developed a comprehensive privatization program in 1992 and seventy percent of its economy was in private hands within two years (Shleifer and Treisman, 2003). In order

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to cope with inflation it pegged the ruble to the US dollar that helped for a short period of time. However, unemployment continued to rise. The structural adjustment policies were slow to be implemented and the economic situation continued to worsen. Throughout the 1990s, output fell and unemployment rose. The price level increased and the ruble devalued by 99% against the US dollar.

Up until the late 1997, the sales of ruble denominated discount instruments and coupon bonds, known as GKOs and OFZs, by the government were quite successful. However, by 1998, the government began facing difficulties selling ruble denominated debt due to adverse domestic political developments, weak commodity prices, and global economic events. In 1997-1998 oil prices collapsed and the ruble fell over sixty percent with in two months of August and September. Hence, the government decided to replace the rubble denominated debt into US dollar denominated Eurobonds. The growing burden of borrowing had raised concerns about Russia's default on its Treasury bills as pressures on debt, equity, and exchange markets decreased the investors' confidence. During this time, the economy had made itself extremely vulnerable to adverse external developments. It became highly dependent on a healthy global economy, as its capital flow model was based on the assumption of ever increasing demand for exports. When the East Asian financial crisis broke out in 1997, prices for Russia's two most valuable sources of capital flows, energy and metals, plummeted. Given Russia's fragile economy, the rapid decline in the value of those two capital sources resulted in an economic chaos in the country where GDP per capita fell, unemployment soared, and global investors liquidated their Russian assets. By July 1998, Russian government was unable to rollover treasury bills maturing before the end of 1999. On August 17, 1998, Russian government abandoned to defend the exchange rate peg, declared unilateral default on $40 billion in short-term domestic treasury debt, of which about one third was held by foreign investors, and placed a 90-day moratorium on commercial external debt payments. Nonetheless, devaluation of the ruble soon improved the competitive position of Russia's exports, leading to a period of economic recovery. The subsequent period of reforms brought inflation under control and led to a massive privatisation programme. As can be seen in figures below, in the early years of 1990s, both trade and GDP experienced a long period of stagnation. However, following the crisis, soon there has been a striking growth both in trade and GDP. The economy's annual growth accelerated to seven percent by 2007 and fixed capital investment averaged ten percent. However, inflation returned in the second half of 2007 approaching 12 percent by the year end. In early 2008, Russia's economy was growing at 8.1 percent.

Russia is seeking the WTO accession. On theoretical grounds, a majority of economists support the idea of joining the WTO. However, some politicians and businessmen have recently opposed this idea on grounds that open economy model of economic development is not in Russia's best interest and therefore protectionist policies will be more favourable in restructuring the Russian economy. The findings of this study may shed light on the effectiveness of openness on the economic performance of the Russian economy. If it is found that openness promotes growth, then efforts to join the WTO should be enhanced on economic grounds.

The rest of the study is structured as follows. The next section will review the literature while section III will introduce the data and the methodology. Section IV will provide the

empirical results and the last section will point out the conclusions that emerge from the analysis.

2. Literature Review

Economic theory supports the notion that openness speeds up economic growth since it involves an efficient use of economic resources by a country. Growing markets and reallocation of resources exploit the economies of scale and thereby lower the cost of production. It improves access to foreign technology and inputs. The transfers of technology and managerial skills further improve quality and increase productivity and innovation. Foreign capital inflows lead to increased investments and thereby contribute to economic growth.

Empirical evidence investigating relationship between openness and economic growth is scarce compared to its predecessor: the export-led-growth (ELG) hypothesis that gained currency since the late 1970's. A rich literature has developed in this area of research. Most of the studies published in the 1970's and 1980's (Michaely,1977, Balassa, 1978, Tyler,1981, Balassa, 1985, Bhagwati,1988,Feder,1983) support the argument that export growth leads to economic growth. Most recent studies however using co-integration analysis looked into the causal factors and (e.g. Fung, Sawhney, Lo and Xiang, 1994 and Maneshiold, 2008) and have cast doubt on the unidirectional link from exports to GDP. In some cases the relationship has been found to be bidirectional (e.g. Canada) and in others (e.g. Mexico) the reverse causality has been observed (Chow,1987).

Recent studies favoring relationship between openness and economic growth include Grossman and Helpman (1991), Edward (1998), and Frankel and Romer (1999), Sachs and Warner (1995), Wacziang and Welch (2003), . On the other hand, some researchers have argued that openness is a necessary but not a sufficient condition to promote economic growth. For example, Eichen (2000), and Calderson and Fuentes(2006)) argue that in the presence of distortions and poor initial conditions, openness may not have any impact on economic growth. They are, however, in agreement with new developments in trade theory that claims that in addition to comparative advantage, other institutional developments are necessary for a country to benefit from openness. Rodriguez and Rodnik's (1999) empirical study questions the validity of Sachs and Warner's (1995) cross-sectional study. They take issue with the methodology used by Sachs and Warner. Their detailed analysis concludes that openness shows the predictive relationship only when it is combined with other structural variables. In isolation of other structural policies, they do not find that openness promotes growth. Wacziang and Welch (2002) have avoided some methodological issues raised by Rodnik and Rodriguez. They use panel data which, unlike cross-sectional data, allows observing within country effects of policy actions. Their findings support the notion that openness has positive impact on economic growth.

This brief review of literature suggests that the evidence on the role of openness is far from conclusive and therefore more time series studies should be conducted to examine

the relationship between openness and economic growth. The time series study conducted on Russia is intended to fill in this gap and contribute to the literature.

3. Data and Methodology

Following the standard practice, (Demetriades and Hussein 1996, Luintel and Khan 1999 and Levine et al, 2000), we take natural logarithm of per capita GDP as an indicator of Economic Growth that is denoted by *PY*. It is observed by Hesteon (1994) that real GDP per capita is superior to total real GDP, because some of the errors inherent in the estimation of the level of GDP and of population tend to be offsetting. Therefore we follow Demetriades and Hussein (1996) and prefer per capita GDP in domestic currency as an indicator of growth. The real per capita GDP is measured as a ratio of real GDP to total population. The Real GDP is measured as nominal GDP divided by GDP deflator (2000=100). Openness is captured by the variable *open* which measures total trade (computed as the sum of exports and imports as a fraction of aggregate *GDP*. This is the most basic measure to capture the trade openness (Yanikkaya 2002). Data spans the period from 1993Q4 to 2008 Q1 and is in quarterly frequency. It is obtained from the World Development Indicators (2008). Since population was not available in quarterly frequency, GDP per capita was adjusted based on its share of the annual population. Figure 1 and 2 shows the variables used in the analysis.

Figure 1

Real per capita GDP

Figure 1: real per capita GDP
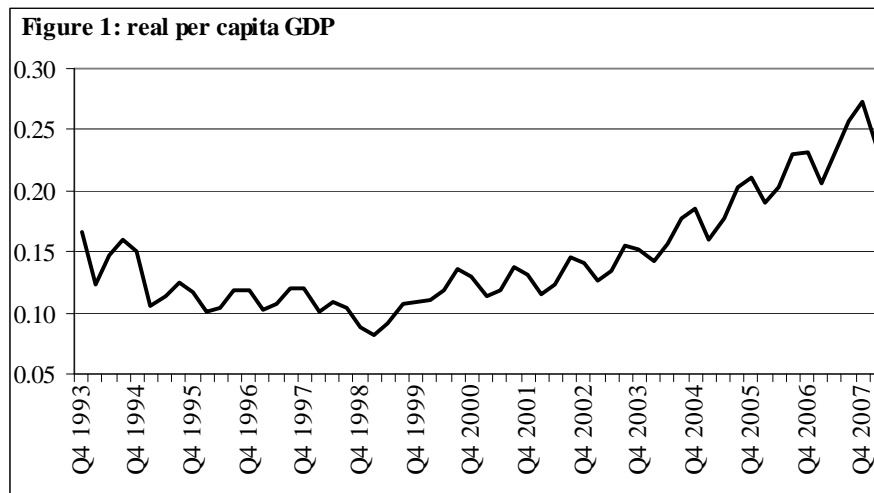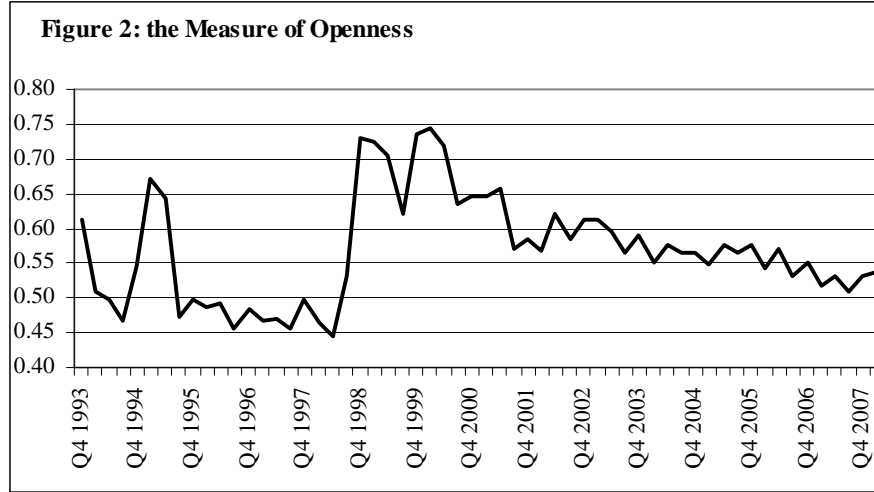
Figure 2

The Measure of Openness

Figure 2: the Measure of Openness

3.1. ADF Unit Root Tests

Many macroeconomic time series are found to be non-stationary at levels. If we estimate these series at level then we may find some spurious regression. Therefore, one can estimate the difference form of the variables to get rid of any spurious correlation. But the use of difference form of equation removes the long run information from the data set. It provides only partial information or short run information. Therefore it requires a special treatment. Nelson and Plosser (1982) point out that many macroeconomic time series contain unit roots dominated by stochastic trends. Unit root tests are important in examining the stationarity of a time series. The presence of a stochastic trend is determined by testing the presence of unit roots in time series data. Non-stationarity or the presence of a unit root can be tested using the Dickey and Fuller (1981) tests. The test is the t statistic on ϕ in the following regression:

$$\Delta Y_t = \alpha_0 + \alpha_1 t + \phi Y_{t-1} + \sum \psi_i \Delta Y_{t-i} + \varepsilon_t \qquad\qquad 1$$

where Δ is the first-difference operator, ε_t is a stationary random error.

3.2. Tests of Cointegration

Johansen's methodology takes its starting point in the vector autoregression (VAR) of order p given by:

$$y_t = A_1 Y_{t-1} + - - - - - A_p Y_{t-p} + Bx_t + \varepsilon_t \qquad\qquad 2$$

where y_t is an nx1 vector of variables that are integrated of order one , commonly denoted I(1), x_t is a d-vector of deterministic variables, A_1,.., Ap and B are matrices of coefficients to be estimated, and ε_t is an nx1 vector of innovations. This VAR can be re-written as:

$$\Delta y_t = u + \prod Y_{t-1} + \sum_{i=1}^{p-1} \Gamma_i \Delta Y_{t-i} + Bx_t + \varepsilon_t \qquad\qquad 3$$

where

$$\prod = \sum_{i=1} A_i - \mathrm{I} \text{ and } \Gamma_i = -\sum_{j=i+1}^{p} A_j \qquad\qquad 4$$

Granger's representation theorem asserts that if the coefficient matrix n has reduced rank $r{<}n$, then there exist n x r matrices α and β each with rank r such that $\prod = \alpha\beta'$ and $\beta' y_t$ is stationary. Here, r is the number of cointegrating relations and each column of β is a cointegrating vector.

3.3. Error-Correcting Modeling

The existence of cointegration relationships indicates that there are long-run relationships among the variables, and therefore Granger causality exists among them in at least one direction. The ECM was introduced by Sargan (1964), and later popularized by Engle and Granger (1987). It is used for correcting disequilibrium and testing for long and short run causality among cointegrated variables. The ECM used in this paper is specified as follows:

$$\Delta PY_t = a_0 + \sum_{i=1}^{m} a_{1i} \Delta PY_{t-i} + \sum_{i=1}^{n} a_{2i} \Delta OPEN_{t-i} + \lambda ECM_{t-1} \qquad\qquad 5$$

$$\Delta OPEN_t = b_0 + \sum_{i=1}^{m} b_{1i} \Delta OPEN_{t-i} + \sum_{i=1}^{n} b_{2i} \Delta PY_{t-i} + \theta ECM_{t-1} \qquad\qquad 6$$

where Δ is the difference operator, m and n are the numbers of lags, $a^s s$ and $b's$ are parameters to be estimated and, λ and θ are the error correction term, which is derived from the long run cointegration relationship. In each equation, change in the endogenous variable is caused not only by their lags, but also by the previous period's disequilibrium in level. Given such a specification, the presence of short and long-run causality could be tested.

In equation 5, *OPEN* causes *PY* if either λ is statistically significant (the long-run causality) or the $a_2 s$ are jointly significant (short-run causality). Similarly, in equation 6, *PY* causes *OPEN* if either θ is statistically significant (the long-run causality) or the b2s are jointly significant (short-run causality).

4. Empirical Results

Table 1 reveals that the null hypothesis of a unit root in the level series cannot be rejected, which means that both the series are non-stationary[1]. On the other hand, the null hypothesis of a unit root in the first difference of *PY* and *OPEN* is rejected. Therefore, both series are integrated for order one, i.e., I(1).This means we can apply cointegration tests to examine the long-run relationship.

Table 1

ADF Unit Root Tests

	ADF	k		ADF	k
PY	-2.71544	3	*ΔPY*	-5.15718***	3
OPEN	-2.12962	4	*ΔOPEN*	-3.64728**	3
Note: ** and *** represent 5 and 1-percent level of significance, respectively. k is the degree of augmentation that is automatically determined by following the procedure of Campbell and Perron (1991). ADF tests are performed with Constant and Trend at Lag length 3.					

On the basis of above unit root test, we performed the Johanson's conitegrated test to see whether any combination of the variables are conitegrated. This approach uses maximum likelihood procedure that tests for the number of cointegration relationship and estimates the parameters of those conietgrration relationships. Likelihood Ratio test statistics and 5% critical values are reported in Table 2 and Table 3.

Table 2

Results of Johansen's Cointegration Test: Trace Statistic

Null Hypothesis	Alternative Hypothesis	Trace Statistics	Critical Value (.05)
r=0	r=1	93.4977	15.4971
r≤1	r=2	5.67812	3.841466

The likelihood ratio tests show that the null hypothesis of absence of cointegrating relation (r = 0) can be rejected at 5% level of significance, and that the null hypothesis of existence of at most one cointegrating relation (r ≤ 1) can also be rejected at 5% level of significance (see Table 2). We can see that both tests suggest the existence of two conitegrating vectors driving the series with two common stochastic trends in the data. Thus, we can conclude that *PY* and *OPEN* are cointegrated. That is, there is a long-run relationship between *PY* and *OPEN* for Russia.

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[1] ADF test is performed with *Constant and Trend* at Lag length 3

Table 3

Results of Johansen's Cointegration Test: Max Eigen Statistic

Null Hypothesis	Alternative Hypothesis	Max Eigen Statistics	Critical Value (.05)
r=0	r=1	87.8196	14.2646
r≤1	r=2	5.67803	3.84128

If the series of two variables are non-stationary and the linear combination of these two variables is stationary, then the error correction modeling rather than the standard Granger causality test should be employed. Therefore, an ECM was set up to investigate both the short-run and long-run causality. In the ECM, first difference of each endogenous variable (*PY* and *OPEN*) was regressed on a period lag of the cointegrating equation and lagged second differences of all the endogenous variables in the system, as specified in Equation 5 and Equation 6. The results of error correction model are presented in Table 4.

Table 4

Results of Error Correction Model

Dependent variable	Lag Lenth	F-Staticits	t-stats for ECM
ΔOPEN	m=2, n=2	34.8374	-4.7000***
ΔPY	m=2, n=2	4.8559	-2.26083**
Note: ** and *** represent 5 and 1-percent level of significance			

According to the results in Table 4, the short-run causality is found to run from *OPEN* to *PY*. The reverse short-run causality also exists between the variables. Thus, there exists a bidirectional short-run Granger-causality. The coefficient of the ECM is found to be significant in both Equations indicating the long run bidirectional causality between PY and OPEN.

5. Conclusion

This paper has examined the relationship between openness and economic growth in Russia since 1991. The literature survey points to a lack of country-specific studies on this relationship. The Russian case is especially interesting since Russia is the largest emerging country in the former Soviet bloc and its economy has undergone many periods of destabilizations.

The theoretical basis of this relationship is that openness enlarges market size and increases competition, thereby improving efficiency. It also accelerates technology

transfer between countries. The results of the co-integration test suggested that the real GDP growth variable is co-integrated with the external sector of the Russian economy. The model was specified to assess both, the short run and long run relationship between the variables. The results of the study are interesting. Unlike previous studies that found causality running from openness to economic growth (Wacziang and Welch, 2002, among others), this study reveals that a bi-directional relationship exists between openness and economic growth. Not only does openness causes economic growth, but economic growth in turn causes openness. Moreover, this feedback relation is found for both, the short run and long run. The causality seems to be stronger from openness to economic growth. This is in line with the theoretical expectations as openness as the increased size of the market exploits the economies of scale and lowers the cost of production. Higher growth in turn attracts foreign investment that brings new technology and knowledge about markets and products. Foreign corporations have to compete in both domestic and world markets. They produce high value added products and raise overall productivity in the economy and thus the growth rate. The Russian evidence provided in this paper supports this theory as a bi-directional relationship has been found between the two variables.

The findings suggest that the Russian economic reforms have not only been beneficial in integrating the Russian economy with the rest of the world through commerce but have also had a significant impact on its economic growth. In early 1990s, the Russian government had liberalized much of its import regime and eliminated nontariff customs barriers on most imports. In addition, it had also established a two-column tariff regime in harmony with the United States and other members of the General Agreement on Tariffs and Trade (GATT), which in January 1995 became the WTO. The government had also eliminated quotas on oil exports in 1995 and export taxes on oil in 1996. The econometric analysis carried out in this study has shown that these reforms have indeed resulted in an increased GDP in Russia.

Future studies should explore linkages that play major roles in explaining such relationships. One suggested link is that the greater openness also attracts foreign investments that lead to higher growth, which in turn leads to higher degree of openness. Emerging countries can benefit if policy makers can implement policies promoting openness in their economies.The current financial crisis is world-wide in nature and it is adversely affecting economies of many countries. Some people are calling for protectionist policies to deal with these problems. However, it will be a mistake to pursue such policies since they aren't going to be successful as other countries retaliate and imports and exports of every country contract. As noted, this study has suggested that increasing openness is good for increasing economic growth in Russia.

The Russian economy grew over 5% in 2008. However, the current global financial crisis that adversely affected all emerging economies also affected Russia. The Russian economy suffered as oil prices hit a low of $35.00. This was accompanied with domestic inflation that was running at double digit rate. The oil prices are currently firming at around $60.00 a barrel and the deepest global recession in sixty years is nearing its bottom. According to the OECD report while world economies are expected to grow by less than 1% in 2010,,the Russian economy will grow by 3.7% in 2010. Paul Thomsen of the International Monetary Fund also observes that: "Russia has some strong advantages

compared to other emerging markets. The policy of taxing and saving oil revenue means that Russia has the fiscal room and reserves to have a monetary exchange policy that can counter negative shocks from abroad." Based on the evidence presented in this paper it can be argued that these observations will prove to be valid if Russia continues to be an open economy.

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OTVORENOST I GOSPODARSKI RAST U EKONOMIJI U USPONU: SLUČAJ RUSIJE

SAŽETAK

Rad proučava vezu između trgovinske otvorenosti i gospodarskog rasta na slučaju Rusije. Rezultati pokazuju da postoji dvosmjeran odnos između otvorenosti i gospodarskog rasta. Ne samo da otvorenost uzrokuje gospodarski rast već i sam gospodarski rast opet uzrokuje otvorenost. Osim toga, ta uzajamna veza postoji kako kratkoročno tako i dugoročno.

JEL: F43 O11

Ključne riječi*: Gospodarski rast, trgovinska otvorenost, Rusija*

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CHARACTERISTICS OF PRIVATE ACCOMODATION IN PRIMORSKO-GORANSKA COUNTY

Abstract

The private accommodation is an important segment of tourism offer of Primorsko-goranska county (PGŽ). The share of private accommodation in total accommodation capacities in PGŽ is growing and sources from year 2008 record that it represented 49,70% of total capacities. Therefore this paper analyses the main characteristics of that kind of accommodation. The paper was prepared upon the research analysis that was conducted in 2008. Since up to now there has not been a similar research of this segment of the accommodation conducted in the Republic of Croatia, this study can be considered original and fundamental.

Paper elaborates main weaknesses, strengths, opportunities and threats regarding the private accommodation. The goal of the paper is to point out the main problems and trends in the improvement of private accommodation in PGŽ. Conducted research opened a number of issues and represents a contribution to research of this significant segment of accommodation in Croatia and represents a basis for future research. Research of accommodation in hospitality services provided in the household is to be continued in the future.

JEL: D19 L26 O12

Key words: *private accommodation, tourist offer, SWOT, tourism development*

INTRODUCTION

Private accommodation is an important element of tourism offer in Croatia as well as Primorsko-goranska county (PGŽ). The share of private accommodation in total accommodation capacities in PGŽ is growing, and in a year 2008 it was 49,70%. Therefore, the research focuses on private accommodation in PGŽ. Questionnaires were distributed

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during 2008 and this paper was prepared on the base of that research. Legislative framework related to hospitality services in the households of Croatia is elaborated in the paper and the SWOT analysis is prepared and elaborated in the final chapter.

1. PRIVATE ACCOMODATION – LEGISLATIVE FRAMEWORK

Private accommodation represents an extremely important accommodation facility in Croatia and the Law states that hospitality services in the households can be provided by a person who is not a craftsman, nor a tradesman. According to same Law, correct term for such person is: renter/host/landlord (Law on hospitality - Zakon o ugostiteljskoj djelatnosti (NN RH 138/2006., act. 28.)

Also, this Law states that the person who decides to provide hospitality services in the household must be a citizen of Croatia, and the owner of a house that provides services in the household.

The renter in the household is registered under the County state offices administration, which includes the ***Approval of the provision of hospitality services in the household***. He is not a professional, and deals with the provision of accommodation services to guests without becoming a trade or a company.

Accommodation services in the household are provided by the citizens who possess the ***Approval of the provision of hospitality services in the household.***

Household accommodation in hospitality can be provided through the following types of accommodation: rooms, apartments, studio apartments (up to 8 rooms i.e. 16 beds), holiday homes and camps (up to 7 accommodation units i.e. 25 people).

Renter does not legally require any special qualifications and has no possibility of employment of oneself or others. However, current renter can become an entrepreneur if he opens a craft or establishes a limited liability company (Ltd.), or if the entire residential building or a part of the accommodation units (apartments or rooms in which the service is provided) is converted into the business area. Conversion of housing into the commercial space is possible if it is adjusted to the spatial plan and the conversion process itself is started at the county office responsible for issuing location, and then building permits.

Also, the current host can become an entrepreneur at a time when its business in the market exceeds over 85.000,00 kuna turnover. Registering in the crafts registry or registering at the trade court, is a decision that the host will make according to the income. He is obliged to it according to the ***Profit tax law*** - Zakon o porezu na dohodak. Until then, the host is not obliged to keeping books, and the tax is paid as flat-rate tax according to the Resolution of the Tax Administration (Profit tax law-Zakon o porezu na dohodak (NN RH 177/2004 and 73/2008).

Thus, under the new regulations, people who engage in these activities, determine their profit and pay income tax two ways: (1) Flat-rate tax according to the Resolution of the Tax Administration, (2) based on their book records that can be decided: by force of law, if the person is liable to VAT law - Zakon o porezu na dodanu vrijednost (NN RH 47/95...34/08) or per second basis if the person is liable to keeping book records or voluntarily if the taxpayer decides so.

2. RESEARCH METODOLOGY

This paper will show some results of the private accommodation survey. It is a descriptive research underdone on a randomly selected sample.

Target group in this study consists of the renter - the citizens who provide hospitality services for accommodation in the household. Results were obtained using the interviewing method, on a sample of 430 private renters in Primorsko-Goranska County.

As a template for data collection a specially designed structured questionnaire was created, and research in the field was carried out by six people (fourth year students of the Faculty of Tourism and Hospitality Management Opatija) during a period of 23 days, from 29th July to 20th August 2008. Core set is defined by taking data from the database of the State administration office in Opatija, Croatia - Economy service, the Department of Tourism (Služba za gospodarstvo, Odsjek za turizam, 2008). The used database, which the basic set consists of, are all *categorized accommodation facilities*, which provide accommodation hospitality services in households in Primorsko-goranska county. Criteria used when forming the sample is based on the provisions of the *Hospitality industry law* that defines the *hospitality services* in the household.

Elements were chosen from the core sample into the sample within the seven strata in particular, in order to get a better global proportionate view at the level of Primorsko-goranska county. Thus, the obtained number of elements in the sample is n = 430.

Table 1.

Layout of elements in the sample by stratum

Region	Krk	Cres-Lošinj	Rab	CRV	Opatija riviera	Rijeka and surroundings	Gorski kotar
430	85	70	65	80	80	25	25

Source: authors' research

The research was carried out and the results are analyzed for the whole area PGŽ (average) and individually for the area of individual nuclei and a destination, in accordance with the division laid out in the Master plan of Tourism in PGŽ: Krk, Cres and Lošinj, Rab, Crikvenica-Vinodol Riviera (CVR), Opatija riviera, Rijeka and surroundings, Gorski kotar.

Methods of the research are based on the descriptive analysis with Microsoft Access - 2007 program used for data analysis.

3. CHARASTERISTICS AND POSSIBLE DIRECTIONS OF PRIVATE SECTOR IMPROVEMENT IN PGŽ

Primorsko-Goranska County occupies the second place by the achieved tourist traffic in the Republic of Croatia and according to data of Bureau of Statistics in Rijeka covers a share of 19% of the realized tourist traffic in the country.

Table 2 presents the data on the achieved tourism traffic in 2003 in PGŽ (when the Master plan was started), achieved values for 2008 and planned for 2015.

Data clearly demonstrates that the Master plan for tourism development PGŽ anticipates significantly higher growth rates of tourism traffic (6.25) than so far realized (1.93). At the same time, planned maximum accommodation capacities were almost achieved (183,960 beds) and a higher growth rate than planned was recorded.

Table 2

Overnight stay, accommodation capacity, expenditures – planned and achieved for PGŽ

	2003	2006	2008	Plan for 2015	Planned growth rate 2003-2015	Achieved growth rate
Overnight stay	10.241.585	10.741.736	11.263.755	20.970.000	6,25	1,93
Permanent beds	159.931	169.923	181.285	183.960	1,75	2,53

Source: Glavni plan razvoja turizma PGŽ, Sveučilište u Rijeci, Rijeka, 2005; Statistički ljetopis PGŽ; Statistical press releases

Given the local conditions (suitable climate, the proximity of the outgoing market) PGŽ area has the necessary conditions for a permanent business, and the growth of tourist overnights stays which is a consequence of tendencies toward a permanent business.

However, it should be mentioned that a part of the PGŽ area still records very stressed seasonality. Another important reason of lower growth rates objectively arises from the global economy crisis that reflected tourism system. Therefore, it will be necessary to correct the planned indicators and the planned growth rates.

In accordance with the trends in the tourist market in the world and in the PGŽ area a decrease in average days of tourists' stay was recorded (from 6.1 days in 2003 to 5.1 days in the 2008). Average tourists' consumption, which was 38 euros per day in the PGŽ area in 2003, increases. According to plans for 2015 the amount should increase to 90 Euro per tourist per day. It is the very implementation of the Master plan and the tourist offer enrichment that form the prerequisites and a realistic basis for its further growth.

Table 3

Structure of accommodation capacities in PGŽ

	Beds 2003	Share % 2003	Beds 2008	Share % 2008	Beds 2015	Share % 2015
Hotels and villas	17.477	10,90	19.365	10,70	30.147	21,80
Camps	37.936	23,70	38.515	21,20	41.949	22,80
Households	72.476	45,30	90.080	49,70	74.620	40,50
Other	32.042	20,10	33.325	18,40	27.217	14,79
TOTAL	159.931	100,00	181.285	100,00	183.960	100,00

Source: Glavni plan razvoja turizma Primorsko-goranske županije (2005). Rijeka: Sveučilište u Rijeci, p. 50.; Odsjek za statistiku Službe za gospodarstvo Ureda državne uprave u Primorsko-goranskoj županiji (2009), Rijeka: Odsjek za statistiku.

The previous table shows that it is planned proportion of accommodation capacity in hotels and villas grow by 21.80% by 2015. Reduction by 40.50% of the accommodation in households share is also planned. The actual opposite trend that really happened, when compared to 2003 (as the base year for making the Master plan) should be noted, so the growth rate rises significantly and reaches 49.70%..(Glavni plan razvoja turizma PGŽ 2005, 50)

This is one of the reasons that this study focused on this type of accommodation and the expected tendencies of movement in this segment of the tourist offer. Also, the economic crisis and a more cautious spending of tourists shows an inclination to use this form of accommodation, so such a trend is expected for 2009 and 2010.

Another problem is linked to the private accommodation is a low level of capacity utilization. Unfortunately, whole Croatian tourism is faced with the same problem, so it should be noted that the private accommodation (with camping) recorded the lowest utilization of capacity.

Graph 1

Utilization of accommodation by selected types of accommodation in the Republic of Croatia and PGŽ in 2007
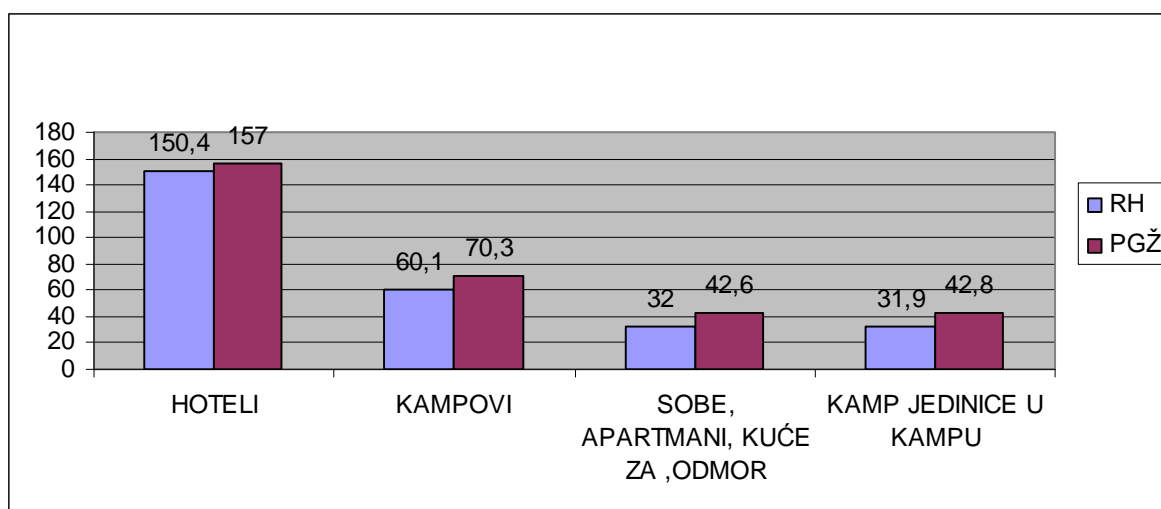
Source: DZS RH, Statistička izvješća: 1353 - Turizam u 2007, Zagreb 2008 and DZS RH, Statistička izvješća: 1354 - Turizam u primorskim gradovima i općinama u 2007, Zagreb 2008

Utilization of private accommodation in PGŽ is on the level of 42.6 days, which is higher than the national average of 32 days. However, compared with other forms of accommodation, private accommodation records significantly fewer days of utilization. Mentioned fact has resulted in significantly less economic effects of this form of accommodation offer in relation to the other.

The research results show that in the structure of accommodation capacities in households three star level accommodation prevails (82.38%); 12.47% of the objects are categorized with two stars, while only slightly more than 2% of capacity is categorized with four or five stars. Important progress in improving the quality of this segment of accommodation was recorded during field research and visits to identify the capacities. This was necessary on the one hand because of the expectations and demands of tourists, and on the other hand due to high competition in this segment of the accommodation (Evans, N. et al., 2003).

From the results of the survey it is clear that 36% of the hosts in PGŽ are in the business for more than 20 years, which shows the long-standing tradition. Discrepancies are visible when taking into account different stages of individual destinations tourism development. Gorski kotar is special, since 85% of the renters have been engaged in this work for less than 10 years, which is realistic, as is the area of Gorski Kotar was directed towards tourism in the last decade only. Island of Rab cherishes a long tradition of private accommodation, and research shows that more than 80% of the renters are engaged have been this business for more than 20 years. These indicators speak of an assertion of local population in the area PGŽ towards this form of participation in the tourist offer, and the apparent stability of the market.

The paper has already referred to the development orientation of PGŽ: the improvement of accommodation, which includes the improvement of the quality of private accommodation, but also significant investments in this segment, which should result in the transformation of part of the capacity into the small family hotels or apart-hotels.

The research results show that even 36.83% of the renters are older than 60 years, and 43.89% of them are aged from 45-60 years. So, less than 20% of registered renters in PGŽ are less than 45 years.

This is a very important fact, especially in the context of the need for new investments in the improvement of accommodation. Namely, if the renter's age increases realistic expectation that they will join new and significant investments decreases. Therefore, "status quo" tendency is more likely to take place even though it is not a good tendency.

Renting private accommodation, resulting from the above-mentioned, is seen as complementary and seasonal source of income of elderly population. There is a significant deviation (33.78% of registered renters are under the age of 45 years) in the area of the island of Krk, which has the largest share of the renters. In the area of Gorski Kotar even 50% of renters are under the age of 45 (tourism as a new activity).

Along with age, the research has observed the status of the renter (the employee, pensioner, housewife, unemployed, etc.). The obtained results were expected and can easily be compared with the previous data. 60.26% of renters in the area of PGŽ are employed, which corresponds to their considerations of renting as a supplementary source of income, and not the primary source of income. In accordance with the obtained data on the high share of elderly population among the renters, 29.94% in the renters PGŽ have the pensioner's status.

Interestingly, only 2.46% of the renters in PGŽ are unemployed, and 6.91% were housewives. Reasons for such a situation arise from the fact that according to the Law, the renter can only be a person who owns the real estate. Therefore, it can be assumed that there is still significant number of unemployed and housewives actively engaged in business related to the renting, but since the buildings are not in their formal ownership, a second family member (owner) is registered.

Table 4

Share of renters within the VAT system

Region	Within the VAT system in %	
	No	**Yes**
Krk	94,59	5,41
Cres-Lošinj	96,67	3,33
Rab	96,67	3,33
CVR	98,57	1,43
Opatija riviera	89,87	10,13
Rijeka and surroundings	100,00	0,00
Gorski kotar	100,00	0,00
Average-PGŽ	96,62	3,38

Source: authors' research

Also, according to the law, the renter has the market obligation to register and pay the VAT if his annual total income exceeds over 85.000,00 kunas. The results of the survey show that the renters represent only 3.38% in the VAT system, which is a very small percentage. The owners express displeasure with the relatively low limit of 85.000,00 kn, and many of them have recognized that they renounce further renting in the following year (a part of them undoubtedly does not present the correct data and thus violates the regulations).

According to everything stated so far (the limits for payment of VAT, older age of the renters, and the traditional perception of renting as only supplementary sources of income to improve the house budget) it is clear that the significant and active measures should be undertaken to support the current renters and significant new investment.

Specifically, the relatively low total annual gross turnover does not provide a real basis for new investments, but primarily reuse of objects to small family hotels, apart hotels and rural households. Results of research indicate that at the level PGŽ even 50% of the renters make an annual gross turnover of 40,000.00 kuna. Deviation may be noticed in the following area:
  (a) the Opatija Riviera, where almost 62% of the renters make an annual gross income greater than 40,000.00 kuna (of which 11.39% greater than 80,000.00 kunas)
  (b) Rijeka and its surroundings, where 73.33% of the renters make an annual gross income greater than 40,000.00 EUR (but no registered with income exceeding 80,000.00 kunas)

At the same time, these two destinations (Opatija and Rijeka) have the least expressed seasonality of tourist traffic, which obviously contributes higher income.

Restructuring and repositioning of this segment of accommodation undoubtedly requires considerable investment as follows:

- Investments in improving the quality of the existing accommodation facilities
- Investments in the construction of additional facilities with the existing accommodation ones
- Investments in the content, organizational and technical reuse of the existing buildings to small family hotels, or rural households
- Investment in knowledge (education) of the renter - especially important, since a large part of the renters have no formal education in the field of tourism and hospitality.

Given that all the capacities of households are owned by private persons, individuals or families, it is perceived logically that they need to access the mentioned investments. However, with the apparently modest financial possibilities, a strong dose of caution in investment is necessary.

Also, it is more difficult to get a loan, so undoubtedly, active measures presented by the state authorities but as well as local authorities are required, since they would trigger serious investment in this part of the tourist offer. The importance of these measures is eve greater if you take into account the attitudes of the renters, where 71.53% reported that they have no intentions of additional investments and/or offer expansion.

Table 5

The intention of new investments in the improvement and capacity expansion in PGŽ

Region	Expansion and investments in %	
	No	Yes
Krk	79,73	20,27
Cres-Lošinj	93,33	6,67
Rab	35,00	65,00
CVR	55,71	44,29
Opatija riviera	88,61	11,39
Rijeka and surroundings	73,33	26,67
Gorski kotar	75,00	25,00
Average-PGŽ	71,53	28,47

Source: authors' research

In 2008 specific support programs, such as those that are directly relevant and can be used for the improvement of private accommodation, were offered to entrepreneurs and/or physical persons at the level of Croatia: (www. hbor.hr, 2009)

- Crediting family entrepreneurship in tourism - Loan Program "Promotion for success" with a sub-program "Under the ancient roofs". Program "Promotion for success" is an economy based measure of policy-oriented towards development of small and medium-sized companies and is based on the credit funds of banks and subsidies from the Ministry of Sea, Tourism, Transport and Development. The funds are the Ministry support to small and medium businesses to encourage their initial investment in tourism. (This excludes individuals as beneficiaries of this subsidiary program.)
- Development of tourism in the rural areas - Loan Program for rural tourism. The goal of the program is encouraging the development of rural tourism in the rural areas of Croatia. Users of loans under this program may be physical or legal persons from the Upisnik poljoprivrednih gospodarstava (Register of agricultural holdings) and registered for the hospitality and tourism services and who have the approval for the provision of hospitality services in the country/rural households.

Local governments (cities, districts) may in accordance to their budget and the possibilities activate the following measures of stimulations the private accommodation owner:

- Local governments can make a decision on approval for a partial exemption from payment of municipal contributions, or payments of contributions by instalment, i.e. the accommodation unit, which is financed by funds from the program
- When building new or extending the existing accommodation according to the Spatial Plan (holiday homes, small family hotel, pension, tourism agriculture holding), a proposition is made: payment of municipal contributions with a delay of 18 months, no matter from which sources the construction / expansion of accommodation facilities is financed
- In the context of preserving the traditional architectural heritage, capital grant assistance from the local governments is suggested at the moment of purchase, reconstruction and development of the traditional house with the aim of putting them into function as tourist accommodation facilities. Funds should be awarded pursuant to a public competition which defines the maximum amount of assistance provided by the local governments per user, and other conditions for the fund's approval.

It is necessary to consider the possibility of conversion of the existing accommodation facilities in the household to small hotels. Specifically, the current regulations do not allow converting an object in the residential area into a small family hotel. Conversion of the existing buildings (owned by the renters) to provide hospitality accommodation services in the household should be characterized as business or at least residential and office building in the process of conversion and adaptation.

Existing legislation should therefore have to be adapted to these needs, procedures for defining and issuing licenses for the adaptation and conversion of the existing buildings into facilities that can turn into "small family hotels" (a boutique hotel, hotel with a special purposes, heritage hotels, family hotels, etc.) should be formulated and created. (Magaš, D.,

Milohnić, I., Smolčić Jurdana, D.; 2009). This would be a way to transfer a part of objects into commercial buildings (although they may be located in residential zones).

One of the important functions of local governments (counties, cities and municipalities) is advising local renters about all the possibilities that are available, since they lack sufficient knowledge and often face bureaucratic obstacles which are a common cause of cancellation of the new investment.

Given the large dissipation of accommodation offer in this segment, it is necessary to design a quality system so the following is suggested:

- Travel agencies and market intermediaries are to be connected into a commercial interest system so the distribution of the fees and share in the coverage of the market and promotion costs is formulated more correctly (reduced commissions of travel agencies into a more realistic framework, to protect the interests of the renters and to control the cost of capacity sales of the private accommodation).
- "Renters" should be organized and connected in collaboration into a system and an entity joined by the same interests, which will be the partner of the tourist boards and travel agencies, in order to obtain a better view of the market performance and the formation of identifiable market products.
- Strengthen monitoring over the renters to reduce "moonlighting" renting and simplify the process of categorization.
- Education in new e-technologies for the holders of private accommodation must be one of the following actions of interest groups at the level of municipalities and cities, since a more quality market performance would be significantly contributed by promotion through a shared web page.

Application of the above measures and incentives should be aimed to motivate private renters so they would focus their career towards a more professional participation in the tourist offer, and in the end to professionalize their business (establishment of a trade or company). This would significantly increase the competitiveness of both private accommodation, and tourist products of PGŽ as a whole.

4. SWOT ANALYSIS OF PRIVATE ACCOMMODATION IN PGŽ

Based on the research for this work, the key advantages, disadvantages, opportunities and threats to private accommodations in PGŽ are described.

With the aim of more precise positioning, SWOT matrix analysis was implemented and it summarizes the main ideas.

Specificity of these objects, a small number of units, individual approach and generally family atmosphere contributes to a growing recognition of this segment in the tourist market. Potentially unique services, interior decoration, gastronomic offer with traditional and authentic dishes, allow the formation of offer which would increasingly include high net worth products and services in a way that they would satisfy the 21st century guests, guests with diverse interests and desires.

Table 6

SWOT matrix of private accommodation in PGŽ

STRENGTHS (STRESSED)	WEAKNESSES (REDUCED)
• Individual approach to guests • Family atmosphere, ambience • Guest freedom in relation to the standards • Convenience • Accommodation quality • Value for money • Tradition, hospitality, family atmosphere • Security • Good source for high personal living standards	• Weak support to development and renters • Insufficient tourist destination quality • Lack of additional facilities at the destination • Cleanliness of the location • Insufficient education (languages, communication, ..) • liabilities and expenses • Weak channels of promotion and market image • bad promotional activities for renters • Lack of marketing strategies for private accommodation
OPPORTUNITIES (USED)	THREATS (AVOIDED)
• Distinctive features and specialization of renters • New tourist products and facilities • Selective forms of tourist offer • Tradition of region and county • Quality of accommodation and the content • The possibility of the whole-year-round business • Valorisation of cultural and environmental heritage • Partnership and networking with the stakeholders • Higher implementation of the Internet and e-sales • Increasing standards of the renters	• Lack of destination identity • Lack of destination content • Legal regulations • Lump sum payment of residence fees • Low threshold of entry into the VAT system • inadequate infrastructure (roads, walkways, beaches...) • Excessive building (apartments) • Constant changes and the introduction of new legal regulations • Potential pollution • Greater maintenance costs

Source: author's research, based on research

Specificity of these objects, a small number of units, individual approach and generally family atmosphere contributes to a growing recognition of this segment in the

tourist market. Potentially unique services, interior decoration, gastronomic offer with traditional and authentic dishes, allow the formation of offer which would increasingly include high net worth products and services in a way that they would satisfy the 21st century guests, guests with diverse interests and desires.

Individual approach in which the guest is not just a number but with a name and personality, as well as the warmth and hospitality is the main characteristics that are unique to the private accommodation. The business usually takes place within the family, and the presence of a strong strategy also highlights **strength** in relation to the operations of other business entities.

On the other hand, the weak channels of promotion and creation of market image, are the weaknesses that appear in the business, which refers to the so far unused opportunities of mutual connectivity and networking with the purpose of the joint appearance in the market.

In this are, a system of Tourist Boards has stepped out. New **opportunities** for renters in the family households appear with the opening of new markets; openness to the distant markets, and a step forward from, until now, the primary European generating market. Increase of market share in the existing markets, and the conquest of new markets, additional use of the Internet and e-sale is stressed as an important goal.

Most prominent **threats** to business appear primarily due to the above-mentioned lack of destination identity, because it is completely clear that there is no long-term construction of quality accommodation facilities, without adequate parallel monitoring of quality of tourist destinations (Ritchie, J., Crouch, G. ,2003).

Poor infrastructure imposes as one of the fundamental threats to the business. Improvement and renovation of roads, promenades, beaches, and parking space would significantly improve the competitiveness of individual destinations.

So-called process of appartmanisation of certain tourist areas along our coast makes this issue is even more important, along with overcrowded areas, infrastructure and repulsive attitude of the local population, causes pollution and visual space, with very small economic effects.

Finally, it is possible to determine that the fundamental purpose of the analysis is determining the strengths and opportunities, which interact directly and impact the strengthening of this important market segment. In addition, disadvantages and present threats should be minimized and avoided. Thus the diagnosis of weaknesses should be convert into strengths, and threats into potential opportunities.

CONCLUSION

Private accommodation is very important for the future tourism development of PGŽ because is makes up 49.70% of total available accommodation in PGŽ. Considering tourism traffic it has to be pointed out that 33,10% of the tourist overnights stays in PGŽ has been registered in private accommodation capacities.

The paper is based on the research analysis of the private accommodation status in PGŽ, so measures and the realization of the above mentioned objectives in this offer segment are proposed.

The SWOT analysis of the private accommodation in PGŽ shows a tendency for transformation in accordance with resource basis, the requirements of target markets and the qualitative model, respecting the realistic possibilities of positioning in the market. Obtained image refers to the need greater value offer by investing additional effort in private accommodation repositioning that would allow additional opportunities for creating new market position.

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OBILJEŽJA PRIVATNOG SMJEŠTAJA U PRIMORSKO GORANSKOJ ŽUPANIJI

SAŽETAK

Privatni smještaj je važan segment turističke ponude Primorsko-goranske županije. Udio privatnog smještaja u ukupnim smještajnim kapacitetima u PGŽ raste i izvori iz 2008 bilježe podatak od 49,70% koliko privatni smještaja participira u ukupnom broju smještajnih kapaciteta. Rad je izrađen na temelju istraživanja provedenog 2008. godine. Kako do sada na području Republike Hrvatske nisu provedena slična istraživanja ovog segmenta smještaja istraživanje se može smatrati originalnim i temeljnim.

Rad istražuje glavne slabosti, snage, prilike i prijetnje vezane za privatni smještaj. Cilj rada je istaknuti glavne probleme i trendove u poboljšanju privatnog smeještaja u PGŽ.

Provedeno istraživanje otvorilo je mnoga pitanja i predstavlja doprinos istraživanju ovog značajnog segmenta smještaja u Hrvatskoj, te predstavlja osnovu budućim istraživanjima.

JEL: D19 L26 O12

Ključne riječi*: privatni smještaj, turistička ponuda, SWOT, turistički razvoj*

Laura Giurca Vasilescu[*]

BUSINESS ANGELS: POTENTIAL FINANCIAL ENGINES FOR START-UPS

ABSTRACT

Business angels are becoming more important as an investor class that is able to bridge the investment gap that exists between the proximity financing of family and friends and formal venture capital. Business angels' investments can be both early stage and expansion and they can have a leveraging effect for other sources of funding, including bank loans and formal venture capital. Though angel investing has both its advantages and disadvantages, it is widely agreed that the advantages of business angels generally outweigh their disadvantages, making an active informal venture capital market a prerequisite for a vigorous enterprise economy.

JEL: G32, L26, M13

Key words: business angels, start-ups, financing, informal investors, venture capital

Introduction

Risk capital is increasingly recognized as an important source of financing, particularly for SMEs with high growth potential that are seeking substantial amounts of capital for expansion in return for a share of the business.

Risk capital comes from both the formal market and the informal markets. The formal market is essentially venture capital companies managing third-party capital, private equity and initial public offerings (IPOs) on public markets. The informal market comprises business angel investments and investments from friends and family.

There is a dispute that the informal venture capital market represents the largest source of external equity finance available for small and medium-sized enterprises (SMEs) and it is significantly larger than the professional venture capital market (Gaston, 1989). Recent studies in the US suggest that informal investment is more than twice as large as formal venture capital investment (Bygrave, 2006). Similar findings are available for the UK and Europe (Harrison and Mason, 1993; Lumme et all, 1994).

So called informal investors, business angels are private investors who invest in unquoted young entrepreneurial companies. Therefore, they are individuals who provide capital for a business start-up, usually in exchange for convertible debt or ownership equity.

The term 'business angel' originally comes from England where it was used to describe wealthy individuals who provided money for theatrical productions. The same term was used centuries ago by traders searching the world for merchants. In 1978, William Wetzel, professor at the University of New Hampshire and founder of its Center for Venture Research, completed a pioneering study on how entrepreneurs raised seed capital in the USA, and he began using the term "angel" to describe the investors that supported them.

More recently, the definition of ″angel investor″ was also traced to the world of show business, in which ″angels″ backed performances in return for the right to mingle with the cast, to get front-row seats and very occasionally to earn a financial return (The Economist, Sept. 14, 2006)

Despite the definition confusion that plagues research on angel investing, an angel investor can be defined as *a person who provides capital, in the form of debt or equity, from his own funds to a private business owned and operated by someone else who is neither a friend nor a family member* (Shane and Heights, 2008).

Business angels are usually "well-educated, middle aged person with considerable business experience and a substantial net worth." (Wetzel and Seymour, 1981) They are willing to take high risks because the investments they make do not put them personally at risk since the investment they make may be only a very small part of their personal investment portfolios.

Angel investors are often retired entrepreneurs or executives, who may be interested in angel investing for reasons that go beyond pure monetary return. These include keeping up with current developments in a particular business arena, mentoring another generation of entrepreneurs and making use of their experience and networks on a less-than-full-time basis. Thus, in addition to funds, angel investors can often provide valuable management advice and important contacts.

Business angels: main types and features

The institutional investors such as venture capitalists and banks, trade creditors, the entrepreneur's friends and family and other entities can provide capital to private businesses (Shane and Heights, 2008). Therefore, it is important to differentiate angel investors from other sources of capital and in order to minimize the confusion regarding the angel investor, the following definitions should be considered:

- *Institutional investor:* A corporation, financial institution, or other organization (e.g., venture capital firm) that uses money raised from another party to provide capital to a private business owned and operated by someone else;

- *Informal investors* which include:

- *Friends and family investor:* An individual who uses his own money to provide capital to a private business owned and operated by a family member, work colleague, friend, or neighbor;

- *Business angel* which is an individual (not an institution) who uses his own money to provide capital to a private business owned and operated by someone else.

Therefore, every angel is an informal investor but not every informal investor is an angel. The fundamental nature of the business angel market is informal and most angels share a desire for anonymity and are unwilling to divulge information about their investment activities. Thus all inferences about the true and potential size of the angel investment market are mostly based on guess.

Regarding the investor profiles, there can be distinguished different types of investors**:**

- *Corporate angels:* private investors which use their severance or early-retirement payment from former senior management positions at large corporations to make entrepreneurial investment. Their motivation for being an angel is to help others achieve as they have, and to generate greater financial returns from higher risk ventures;

- Entrepreneurial angels: the most active of the angel investors, they invest the largest amount (generally up to $500,000). They have been successful entrepreneurs themselves, now looking for ways to diversify their portfolio or expand their current business;

- Professional angels: this group of investors achieved wealth and experience through their professional career (doctors, lawyers, bankers, accountants or venture capitalists). They encounter investment opportunities through their business dealings and through their professional networks. They prefer to invest in firms that offer a product or service with which they have experience, frequently offering their sector expertise to the investee firm;

- *Enthusiast angels:* less professional than their entrepreneurial counterparts, these angels invest in firms more as a hobby now that they are in their later years;

- Micromanagement angels: these angels prefer great control over their investments, often micromanaging them from a seat on the company board rather than through active participation;

From others points of view, the business angels can be grouped as follows:

a) Individual Angels and Angel Groups (Shane and Heights, 2008):

• *Individual angel:* a person who acts on his own to provide some of his money to a private business owned and operated by someone else, who is neither a friend nor a family member;

• *Angel group member:* a person who acts as part of a group to provide some of his own money to a private business owned and operated by someone else, who is neither a friend nor a family member

b) Experienced versus Inexperienced Investors (virgin angels):

- inexperienced investors are the high-net-worth individuals with entrepreneurial backgrounds who wish to make their first entrepreneurial investment or have done it. The statistics indicate that a significant minority have made only one investment in their lifetimes (Van Osnabrugge, 1998);

- *experienced investors* which made more than one investment.

c) Active and Passive Investors:

• *Active angel investor:* An individual who uses his or her own money to provide capital to a private business owned and operated by someone else, who is neither a friend nor family member, and who invests time as well as money in the development of the company.

• *Passive angel investor:* An individual uses his/her own money to provide capital to a private business owned and operated by someone else, who is neither a friend nor a family member, but who does not invest time in the development of the company.

An important point that comes from these definitions is the heterogeneity among angel investors and this was underlined by specialists (Shane and Heights, 2008) (Freear et all, 1995) (Wetzel and Seymour, 1981). Thus, some angels are early-stage capital providers, while others put money into businesses that are cash flow positive at the time of investment. Some angels are passive investors, having low involvement with the companies or founders after they invest, while others get actively involved with the companies that they finance.

Some angels are very sophisticated former entrepreneurs who offer assistance to the new business they finance; but other individual investors may be quite naive about the risks and delays associated with building an entreprenorial firm. In fact, in some cases the involvement of unsophisticated individual investors can make it more difficult for an entreprenorial firm to raise outside capital.

Also, some angels are quite knowledgeable about investing in private companies, while others do not have much knowledge about entrepreneurship. Some angels take high risks to earn high returns, while others seek lower risks and lower returns. Some angels invest alone, while others invest as part of an organized group.

All these different dimensions affect the range of businesses in which angels invest, the organizational arrangements, their investment criteria, their decision-making processes and other things and make describing business angels quite difficult.

In general, there should be analyzed the factors which can determine business angels to make or not to make the investment. The main reasons in order to decide against investing in a business are the followings:

- no confidence in the business owner and/or the entrepreneur management team;
- limited growth prospects of the business;
- limited market for the product/service;
- lack of proposals matching their investment criteria;
- proposed value of equity in the business is unrealistic,
- management's lack of expertise or talent necessary for success;
- the business depends totally on the owners skill;
- lack of experience in due diligence and monitoring.

On the other hand, the factors that most motivate angel investors are the followings:

- good trust in the entrepreneur and management team;
- co-investment with other more experienced investors;
- advice about making and structuring investments;
- better tax incentives;
- expectation of high financial return;
- playing a role in the entrepreneurial process;
- sense of social responsibility.

Business angels are often viewed as preferring local projects because they want to be in regular contact with the manager of the enterprise. The business angels can exert closer control over the activities of a company when they are geographically close.

However, this model is changing nowadays. Particularly in sectors like high-tech, where the number of companies in a given niche market can be very small in the whole world, business angels do not see the geographic location of the company as a limiting factor. On the contrary, they are willing to invest in relevant companies all over the world.

International trends regarding the angel investors

Business angels in US

Business angels are active, in one way or another, in every country worldwide. For instance, in the US, there were 258,000 active angel investors in 2007 in comparison with 234,000 active angel investors in 2006 (an increase of 10.3% over 2006) according to the Center for Venture Research. Also, the total investments increased in 2007 to $26.0 billion, which represents an increase of 1.8% over 2006. The modest increase in total amounts, coupled with the increase in investments and more angels participating, resulted in a smaller deal size for 2007.

In contrast to venture capital, in which money must be invested during the life of the fund and this is in part based on the size of the fund, angel investing is an individual decision and angels invest from their net worth. These data indicate that angels are exhibiting a cautious approach to investing in light of the recent volatility in the economy.

Despite these, the angel investments continue to be a significant contributor to job growth with the creation of 200,000 new jobs in the United States in 2007, or 3.3 jobs per angel investment (CVR, 2007).

The sector analysis reveals that the software sector represents the largest share of investments, with 27% of total angel investments in 2007, followed by healthcare services and equipment (19%) and Biotech (12%). Industrial/Energy accounted for 8% of investments, potentially reflecting an appetite for green technologies, being followed by retail (6%) and media (5%) (figure nr. 1).

Figure 1

Sector analysis of business angels (US) - 2007
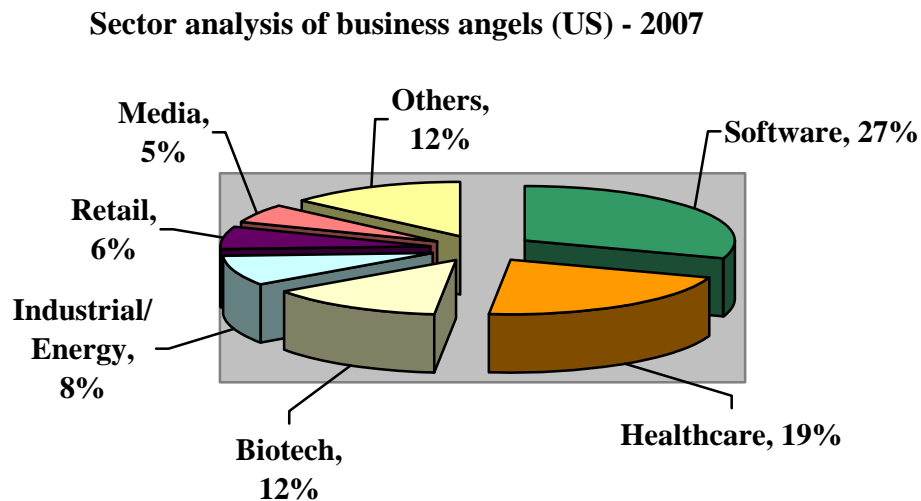
Source: Center for Venture Research, The Angel investors maket in 2007: market signs of growth (2007)

Since the angel market is essentially the spawning ground for the next wave of high growth investments, this sector investing provides an indication of investment opportunities that will be available for later stage institutional investors.

Beginning in the late 1980s, angels started to coalesce into informal groups with the goal of sharing deal flow and due diligence work, and pooling their funds to make larger investments. There are formed two important subsets of angel investors: angel groups and accredited angel investors.

Angel groups are generally local organizations made up of 10 to 150 accredited investors interested in early-stage investing. In 1996 there were about 10 angel groups in the U.S.; as of 2008, while there are no official statistics, data from the company that provides deal management services for the majority of organized angel investors indicates there are over 300 and these groups accounted for approximately 12,000 individual angel investors in 2008. The more advanced of these groups have full time, professional staffs; associated investment funds; sophisticated web-based platforms for processing funding applications; and annual operating budgets of well over US $250,000.

The accredited angel investor is an individual who meets Securities and Exchange Commission's (SEC) accreditation requirements and who uses his or her own money to provide capital to a private business owned and operated by someone else, who is neither a friend nor a family member. At the level of the investors, only 23 percent of the people who made an investment in the previous three years in a business run by someone who is neither a

friend nor a family member would meet SEC accreditation requirements (Shane, Heights, 2008).

The past few years, in North America, have seen the emergence of networks of angel groups, through which companies that apply for funding to one group are then brought before other groups to raise additional capital. The development of the Angelsoft network, connecting a majority of existing angel groups, has led to an increase in the syndication of investments among more than one group.

Business angels in Europe

In Europe, the most business angel network activity is concentrated in the large Member States, as the United Kingdom, Germany and France which have over 80 % of business angel networks (EC, 2003).

The United Kingdom angel market is the most developed in Europe, and the surveys indicate that the number of networks is stable, around 50, and almost one third of the businesses supported by a business angel attracted other sources of finance as well (from banks, venture capital funds, governments, and other business angels).

The estimated number of active angels in the UK is 20 000 to 40 000, who make about 3000 to 6000 investments yearly, investing £0.5 to £1 billion (Mason and Harrison, 2000).

In Germany, the actual size of the informal market was about half as big as the formal venture capital sector measured in total invested amount, but the informal sector funded more companies (EC, 2003).

Informal investment has been around in Europe for a long time, but business angel networks are a newer phenomenon. Business angel networks are organizations that are set up primarily to facilitate the matching of angels and entrepreneurs. The reason for matching services is that the angel investment market is characterized by an information gap on both sides. The entrepreneurs are not finding angels that would be interested in them and the angels are not able to find enterprises that would fulfill their criteria. These problems can be alleviated by business angel networks that make the matching process more efficient.

According to the European-level survey, the sampled business angel networks indicated that their average investment size was €200,000, although it varied between €40,000 and €750,000. In the United Kingdom, about half of angels invested more than £50,000 (€78,000), and in Germany 75 % of investments were less than €500,000 (EU, 2003).

Business angel networks facilitate the matching of investment demand and supply. Their services can include deal matching, training and investment preparation. The pioneer among European national networks has been the *National Business Angels Network (NBAN)* in the UK, which has been the model for several other national networks.

The development of business angel networks in Europe has accelerated since the establishment of the *European Business Angel Network (EBAN)* in 1998 with the collaboration of the European Commission by a group of pioneer business angels networks (BANs) in Europe and EURADA (the European Association of Development Agencies). EBAN is an independent and non-profit association representing the interests of business angels' networks, early stage venture capital funds and other entities involved in bridging the equity gap in Europe. Its main purposes are to: represent the early stage investment market in Europe; carry out research on the angel market and produce facts and trends; identify and share best practice; promote the role and visibility of business angel networks and early stage funds in Europe; support the emergence of professional structures and quality standards across Europe; support the internationalization of the angel and early stage industry and movement.

There are several types of European angel networks and most of them are small. Many regional networks can be more like investment clubs, whereas some of the larger regional networks resemble a national angel network. There are also networks that concentrate on a certain industry or sector and the frequency of meetings and contact forums of the networks vary greatly.

The average number of registered business angels per network in Germany was 25, and there were on average 9 deals per network per year. In France the number of angels per network was usually between 15 and 100, but two commercial networks had 300 and 500 potential investors (EC, 2003).

The legal form of business angel networks varies but in many cases they are non-profit entities.

The number of business angel networks in Europe has grown rapidly in the last few years and most countries have a national network and several regional ones (figure 2). The sizes and operating methods of the regional networks vary between countries reflecting local conditions, but the rapid increase in the number of networks indicates that there has been a need for them and that they are serving a purpose.

Figure 2

Business angels networks in Europe
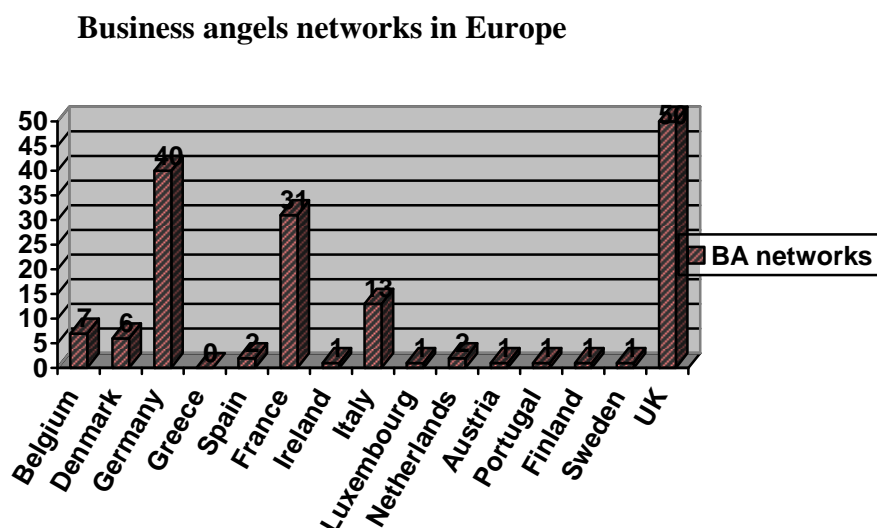
Source: European Commission, Enterprise Directorate-General, Benchmarking Business angels, Best Report No 1, 2003

Some angel networks have been set up – or are in the process of doing so – also in the candidate countries. This could provide the countries with an avenue towards an evolving entrepreneurial culture. A better availability of money can encourage entrepreneurs to come forward with their projects, and at the same time angel investments can increase confidence in the enterprise and in the whole economy.

Business angels financing

As a consequence of the new economic circumstances caused by the international financial crisis, the changing banking sector, the increased sophistication of entrepreneurs, enterprises consider access to finance as a long-term constraint to growth. The main constraints for SMEs expansion are considered the cost of finance and the availability of long-term finance. This problem is worse for start-up companies without collateral, credit history,

or track record. It is also particularly acute in countries where loan finance has traditionally been prevalent.

Therefore Europe's small and medium-sized enterprises are increasingly looking for alternatives to loan finance. These alternatives include equity, debt-equity combinations, leasing and guaranteed loans and equity.

The European risk capital market has developed considerably over the last years but it is still behind the US market. This gap is caused by factors such as: market fragmentation, institutions and regulations, taxation, paucity of high-tech SMEs, human resources and antreprenorial culture. The entrepreneurs and companies are highly dependent – much more than in the US – on bank loans and overdrafts for early-stage financing. Loan finance is usually a less flexible, more expensive, and less secure alternative than risk capital and frequently available only under favorable economic conditions. The collateral required by banks usually poses a particular problem for SMEs and loan finance is particularly inappropriate for high-tech start-ups where cash flow in the early stage is either negative or very limited.

It seems the supply and demand do not necessarily meet and therefore it is still difficult for start-ups to get enough capital for their early needs. Many institutional venture capital investors claim that there is no shortage of venture capital, only a shortage of good projects. However, this claim has to be seen in the context of the venture capital market, which is focused on larger projects at the later stage of enterprise development. Furthermore, under the present day difficult market conditions, venture capital funds are protecting their existing portfolios through additional investments in their existing clients and not investing in new start-ups.

The financing problem is particularly acute during the time the enterprise has not reached the size that most venture capital funds require. Business angels can be a crucial bridge between the initial investments of the entrepreneur, family and friends, and the later involvement of other investors, including venture capital funds and the public sector (figure 3). In fact, angels finance new technology-based firms and venture capital firms invest at a later stage in a company's life (Berlund et al. 1996).

It should be taken into consideration that there are various forms of cooperation between angels and venture capital funds, including sequential investment, deal referral and co-investment. However, cooperation between angels and other investors is only achievable when there is enough trust between them, based on, for example, previous relationship. The different motives, expectations, and the exit horizons of angels and other investors can create difficulties that are sometimes hard to overcome, but cooperation has potential (Harisson and Mason, 2000).This points to a need for transparency, increased cooperation efforts between investors, and possibly a quality assurance scheme by the networks.

Figure 3

The role of business angels on the firm's development
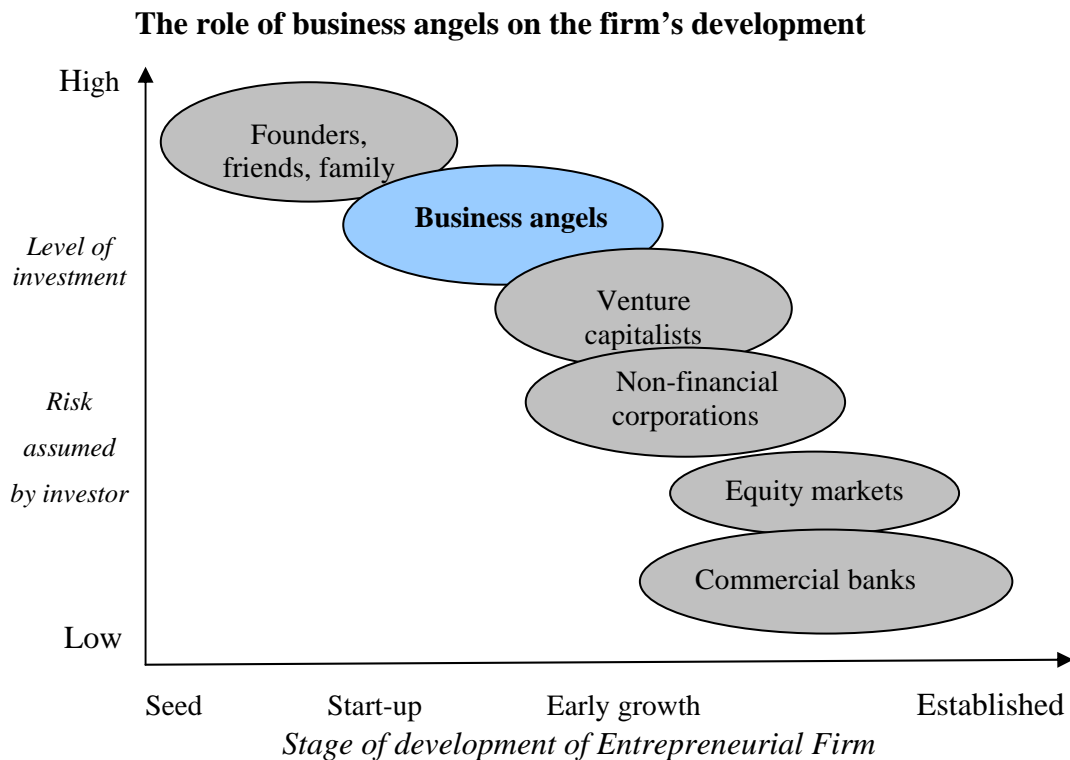
In the United States' equity culture, the venture capital industry is more mature and the size of average venture capital investment has increased rapidly to over $10 million (NVCA Yearbook 2002). The US angels have historically financed ten times more start-ups than venture capital funds, and there are an estimated 400 000 business angels investing $30 to $40 billion per year in 50 000 enterprises US (Sohl and Sommer, 2007).

In 2007, angels continue to be the largest source of seed and start-up capital, with 39% of angel investments in the seed and start-up stage. Angels also exhibited an interest in post-seed/start-up investing with 35% of investments in this stage. Expansion stage investing (21%) showed the biggest increase (CVR, 2007). While angels continue to represent the largest source of seed and start-up capital, market conditions and the capital gap are requiring angels to engage in more later-stage rounds. New investments represent 63% of 2007 angel activity, indicating a continued preference for new, as opposed to follow-on, investments (CVR, 2007).

In Europe, the high due diligence costs for small deals keep formal funds in many cases away from early stage financing, and the venture capital has been active in financing management buyouts and the later stages of firm development. Only 17 % of formal European venture capital went to seed and start-up investments – although measured by the number of companies, the only 40% of the companies received seed and start-up finance (EC, 2003). By its nature, the venture capital market is very selective and funds tend to concentrate on large investments.

The European averages hide big differences between Member States and in some of them the venture capital situation is considerably worse.

Finance is only part of the contribution of a proper business angel to a company. Arguably the most valuable contribution is experience, both in the operating field of the company, and in general management. Lacking managerial experience is a problem for growing start-up companies, and contributes to their high mortality rate (more than half of

European enterprises cease activities within five years of their creation) (EC, 2003). Furthermore, angels have usually a wide network of contacts that can benefit a start-up company.

Entrepreneurs are constantly emphasizing that the experience of the business angels is even more important for them than the actual financing (Lindström and Olofsson, 2001). Particularly for technology-oriented startups this is crucial, and these have ranked business and strategic advice as the first thing they wanted from their investors, followed by money and contacts.

It is widely recognized that a different set of skills is needed in setting up a company, which is an entrepreneurial activity, and in managing the growth phase, where the emphasis is on managerial skills. As business angels are experienced entrepreneurs, they can provide crucial hands-on managerial experience, which reduces the risk of failure.

Conclusions

Business angels are becoming more important as an investor class that is able to bridge the investment gap that exists between the financing of family and friends, and formal venture capital. The angels are also replacing bank lending, as these are reluctant to invest in risky start-ups.

Business angels' investments can be both early stage and expansion and they can have a leveraging effect for other sources of funding, including bank loans and formal venture capital. Thus, business angels are a key link in the financing and business development chain from start-ups to listed companies.

Business angels are individuals not just invest capital in, but bring entrepreneurial know-how and experience to enterprises with growth potential. Business angels can overcome the information problem plaguing banks and venture capital funds. They can make investment decisions using their knowledge of the field, and their appreciation of the potential of the company they are investing in.

Angels provide both financing and managerial experience, which increase the likelihood of start-up enterprises to survive. The effect of angel investments can be increased by public or private sector co-investment, and it can have a signaling effect for venture capital funds at a later stage. For public sector investments, the respect of state aid rules is necessary.

Taking into account the heterogeneity of the angel market, it would seem that the best way of stimulating it would be to create favorable framework conditions. This would point towards policies promoting an entrepreneurial culture in general, raising awareness about the potential and benefits of an angel market, and formulating policies that support the market.

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POSLOVNI ANĐELI: POTENCIJALNI FINANCIJSKI ALATI ZA POKRETANJE POSLA

SAŽETAK

Poslovni anđeli postaju sve važniji kao klasa investitora koja je u stanju premostiti investicijski jaz koji postoji između najpristupačnijeg financiranja od strane obitelji i prijatelja i formalnog rizičnog kapitala. Investicije poslovnih anđela imamo kako u početnom tako i u stadiju ekspanzije te kao takve mogu imati veliki utjecaj na druge izvore financiranja, uključujući i bankovne kredite i formalni rizični kapital. Iako investicije anđela imaju i prednosti i mane, opće je prihvaćeno mišljenje da prednosti poslovnih anđela premašuju njihove nedostatke, stvarajući od aktivnog neformalnog tržišta poduzetničkog kapitala preduvjet za snažno poduzetničko gospodarstvo.

JEL: G32, L26, M13

Ključne riječi*: poslovni anđeli, pokretanje posla/ start-up, financiranje, neformalni investitori, rizični kapital*

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Preliminary paper

Prethodno priopćenje

SPATIAL PLANNING AS THE FUNCTION OF SUSTAINABILITY OF THE ISLAND KRK

ABSTRACT

The processes of regional spatial planning and tourism are both interconnected and conditioned. The tourism development defined by its mass-participation certainly leads to spatial degradation. Any overbuilt area (recreational homes, concrete-paved beaches) is most likely to become unattractive to tourists. Within the island of Krk sustainable development the assumptions must be secured for the purposeful resource management based on new principles in order to form the basic suppositions for the transformation of comparative advantages into competitive ones. Two island of Krk essential resources - space and tourism - are particularly accentuated within this work. The future development must be directed towards the sustainable tourism which can protect the island of Krk from the future areal devastation, and in order to achieve it, the ecological-economic destination programme application is proposed by the authors.

JEL: R12, Q56

Key words: *sustainable development, space, apartment-overbuilding, tourism, island of Krk*

INTRODUCTION

Tourism development depends mostly on attractions within the natural surroundings, historical heritage and cultural goods, as well as on the housing and food capacities which represent valuable base for the sustainable development of both overall and tourism economy, and therefore sustainable development becomes extremely important. If the island of Krk resources were ruined or their value decreased, this destination would not be able to attract potential tourists, which would consequently result in the unsuccessful development model for the future generations. The island of Krk experience will be complete only if the offered attractions harmonize with its surroundings, the sought and the expected standards in attractions, cleanness, and neatness. The island of Krk is today confronted with the doubt weather to allow the further space devastation by apartment-overbuilding and by further oil-reloading and petrochemical facilities growth on the northern part of the island, i.e. within the

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Omišalj community area, or to preserve the already disturbed natural landscape with the peculiarities of scenic pictures that the island of Krk can offer. If the further investments into the already existing industry capacities are effectuated, the even greater difference among the wishes and the further tourism development possibilities will appear. Every potential investor is attracted by the island favorable geographical position, by its position as the nearest island tourist destination by the warm sea, by its nearness to the town of Rijeka and its connection to the coastline by the bridge. The recent uncontrolled development represents the explicit result of its favorable traffic and geographical position. The island destinations have been identified by undertakers and investors with business interest of investing into vacation homes construction trade, which brings to the uncontrollable decay of the overall island of Krk area and results in the decrease of the already limited resources and spaces for the future development of tourist facilities and objects.

Due to everything stated but owing to many other reasons as well, a group of measures, i.e. the **destination ecological-economic programme model** was conceived for the further sustainable development of the island of Krk. Within the stated research subject the research problem had to be defined, and, in this case, it is represented by the loss of comparative advantages because of the unbalanced vacation home overbuilding, concrete-paved seashore, spatial devastation and various other reasons, which lead to the typical island landscape devastation.

1.SPATIAL PLANNING AS A FACTOR OF THE ISLAND OF KRK SUSTAINABLE DEVELOPMENT

Spatial planning originated in urbanism. Urbanism represents a particular architectural specialization, but *interdisciplinary* was imposed by the space complexity problem concept. The interdisciplinary concept represents the functional co-operation of various applied sciences and professions, engaged in the mutual task. Such a co-operation can be placed within one discipline assisted by various others, or the solving problem can be represented by the common goal of all associated disciplines. The activity of *spatial planning* requires a number of various disciplines, so it represents a *poly-disciplinary* activity with the already developed proper research and working methods and is to a large degree autonomous (Marinović Uzelac, 1989).

According to the already existing political and economic situations which require the overall purposeful management, and according to the contemporary European and world-wide perceptions on the necessity of environmental and landscape protection, the so-called *European planning approach* (Črnjar, 1997) must be applied.

In order for new village development to be obtained by re-establishment of urban-rural relations, the scarcely populated isolated areas must be "consolidated" by both public and private activity projects in order to reduce and stop the emigration of inhabitants from rural areas, and contemporary enable the development of natural and healthy environment in areas where the emigration cannot be avoided based on the principle of *sustainable development* (Blažević Perušić, 1997). By the managing system the social and the economic development with the purposeful use of natural resources and the cultural heritage, environmental protection and the implementation and the control of both spatial and environmental planning system are understood (Črnjar, 1997). Preservation and care for cultural and natural heritage could consequently be obtained by new acts on spatial arrangements aiming at solving the problem of illicit building, in accordance with the proclaimed postures and principles of trade, with the leveling of spatial living conditions of inhabitants. In order for the sustainable development to "occur", the promoting activities connected to the good spatial planning must be established, the understanding of particular and social values related to space and

surroundings as well as to co-existence within urban, i.e. urbanized areas developed, and efficacious participation of various organizations and inhabitants in spatial planning decisions established (See Table no. 1).

Table 1

SWOT spatial and environment analysis of the island of Krk

STRENGTHS	WEAKNESSES
Geographical position and favorable climate	Abandoned agricultural areas and forests
Fairly good environmental preservation and preserved spatial area	Nautical tourism and berth growth
	Slow degraded areas return into the original state
Protected areas	Bad tourist information on natural wealth of the area
Luxuriant plant and animal world	Abandoned old objects, neglected facades
Olive-grow renovation	Shortage in expert human resources
Wealthy cultural heritage	Inadequate level of public transportation
Sufficient and additional water quantities	Shortage in pavements
	Insufficient parking places
Waste selection	Shortage in inspection control and illicit building
Quality drinkable water	Shortage in waste water purificators
Fuel transported through the settlement	Insufficiently organized sawage system infrastructure
Good settlement connections	Insufficient use in sustainable energy sources
Blue flag for organized beaches	Non-asssigned space use
	Mass tourism
OPPORTUNITIES	THREATS
Cultural heritage renewal	Unsettled land-registry, cadastre, and legislation
Use of restorable energy sources	Land selling off
Settled-up recreational grounds	Ineffective legal administration
Protected zones proclaiming	Centralized inspection service
Larger sea resources use	Shortage in adequate basis for the spatial plane elaboration
Raise in inhabitant and tourist awareness on importance of environmental protection	Non-domiciled game

Source: Drpić, D., Sustainable management development of the island of Krk, Master's thesis, Faculty for tourism and hospitality management, Opatija, 2008, p. 130

In the future of the island of Krk, the building within the coastline area must be diminished and even mostly prevented, while all new building should be oriented towards the free areas located more than one kilometer above the coastline. According to this, quality built object must have precedence, while recreational homes can be built within areas assigned by spatial plans. This thesis was confirmed by the author Marinović Uzelac, who states the *inadmissible coastline privatization*, because of which no tourist objects should be situated within the coastline part of tourist settlements, apart from those which according to their nature must be situated directly on the coastline or represent the mutual interest (harbors and harbor master's offices, town centers, etc.). The inadmissibility of setting apart coastline segments for hotel guests or specialized beaches is particularly emphasized by the author Marinović Uzelac, as the coastline represents *the natural good* and must be *equally and free of charge admissible to all the potential users. The coastline can be possessed by no private persons or firms*, even by no administrative body. All the exclusivity forms must be kept aside from the tourism "row material"[1]. By the rational space using the efficacious spatial organization and resource economizing are intended, first of all the restraining of unnecessary building space possessing. The use of sustainable energy sources[2] can bring to the long-term

decrease in the harmful environmental impact, as well as to new working places and investments into spatial development within the island of Krk.

Nevertheless, such undesired manifestations occur in professional life, favored by some particular acts passed in Croatia, which interlace with selling of coastline and island areas. According to specialists, for instance, "The Law on Areal Planning" which was effective until October 2007, mostly favoured large investors. According to others, it favored all that wished to invest and build in a regulated and controlled way aiming over all particular and partial interests – mostly to spatial preservation, and in this particular case to coastline and island space as the greatest development resources. The European Union Stabilization and Association Agreement and the Joint Statement within the chapter 60 were both accepted by Republic of Croatia, by which our market becomes completely liberalized from February 2009 and our islands and cultural goods can now be sold to foreign buyers as well. But, as previously stated, the selling cannot be stopped. On the other hand, development can be regulated and controlled, particularly the spatial assignment and utilization. If the sequence or the combination of measures must be pondered upon, the following must be taken into account: the application criteria on The Law on Areal Planning[3], and the penal responsibility of all included (urbanists, architects, contractors, investors, inspections) within its implementation.

2. THE VACATION HOME CONCEPT AND IMPACT ON THE SUSTAINABLE DEVELOPMENT OF THE ISLAND OF KRK

Although vacation homes represent housing framework with the greatest impact on the devastation of the original landscape image and scenic values throughout the island of Krk, they, on the other hand, represent places where the large number of people effectuate their need for experience, vacation, and recreation. However, it is disputed weather owners/users of vacation homes can be treated like tourists at all. Cohen, for instance, considers the owners/users of vacation homes to be a kind of marginal tourist, as the essential characteristic of their activity is represented by the stability of their destination. The owners/users of such vacation homes conduct their life between their primary and their secondary homes, and Cohen, when defining a tourist, persists on his or her unrepeatability, i.e. on alteration of voyage destinations as their essential characteristic. The wide definition of a tourist as every person which spends at least one night in collective or private accommodation[4] out of his or her domicile place of living by the World Tourism Organization, eliminates in a way the stay in vacation homes as tourism. Such an explanation is based on the circumstance that vacation homes use does not include implicitly the immediate consuming of offered services, which, from the economic aspects, forms the very essence of tourism. It is very doubtful weather to treat home owners/users as tourists, as there are, moreover, some difficulties in distinguishing them from local inhabitants living there throughout the year, especially in settlements with prevailing number of vacation homes. While observing the two groups – permanent and occasional inhabitants – some inter-connection is obvious to exist among them, and, in time, their status can be changed as well. Regardless of the difficulties with placing vacation home users into the already existing categories, the phenomena of the massive vacation home using is difficult to consider in detail separately from the tourism development – they surely represent a congruent phenomena, weather according to the social context they were formed in, or according to the impression they made (Müller, Hall, Kenn, 2004).

The authors Hall, Müller, and Kenn indicate the differences within secondary houses, depending on landscape and their position within a destination (Müller. Hall, Kenn, 2004). The regions with dominant number of secondary houses, or, popularly, "summer houses", represent for various reasons a multiple problem. In construction of such homes, local

traditional architecture is usually not respected and variously arranged homes can be found, which, because of their excessive "tinsel" and aggressiveness devastate the natural landscape beauty. In regard of this, vacation homes tend to provoke discomfort, distrust, and even disdain with local inhabitants, even more articulated because such homes are dominantly constructed on attractive location within a destination (See Table no. 2).

Table 2

Various forms and manifestations of recreational homes

|	**Summer houses**	**Vacation homes**
Redecorated houses	Mostly in rural landscape within urban regions	Located mostly in suburbs
Purposefully built houses or secondary homes	Luxuriously decorated, situated on the very seashore or a river bank	Mostly tourism areas, coastline and mountain landscape

Source: Müller, D.K., Hall, C.M., Keen, D. (2004): *Second HomeTourism Impact, Planning and Management* In Hall, C.M., Müller, D.K., (eds.): *Tourism, Mobility, and Second Homes: Between Elite Lanscape and Common Ground,* Clevedon: Channel View, 15-32

Vacation and recreational homes fully correspond to the definition of a flat, and are used occasionally or several months a year, for vacation and recreation only. Flats used for rent by their owners within the high tourist season are not included in this group. The vacation home can be situated in the separated i.e. summer house, in (inherited) family house, or in a residential house. In the group of "summer-houses", flats in residential houses built or bought in order to be used for vacation and recreation only (summer houses, villas, country residences, mountain houses, haunting lodges, etc.)[5], are listed. However, vacation homes can be found within other types of building; construction/buying of summer-houses lately becomes even less an individual undertaking, but even more within the frame of purposefully constructed multi-residential houses, i.e. apartments. Therefore, because of distinction and precision, either in domestic or in the foreign literature where the problem of vacation houses is elaborated, the professional term of "secondary homes" is used. Although the term of "secondary home" and "secondary living" seem neutral because their using is not explicitly suggested, their use as dwellings with the basic purpose of pleasure and enjoyment of their users has been established (Rogić, 1990). Even Croatian Central Bureau of Statistics acknowledges such situation, so the use of vacation homes is treated as non-commercial tourism movement. Returning to the questions of vacation homes, Coppock, in close inspection of the complexity of the phenomena, accentuates secondary homes as homes owned or long-term leased by private persons, and used as occasional residence of households usually living elsewhere (Cappock, 1977). The most frequent attraction factors for vacation home buyers is represented by natural beauties, and construction understands the changes in environmental conditions and therefore mostly causes negative consequences, i.e. flowing water and sea contamination (because of inadequate sewage system solutions), erosion causing, coastline vegetation wrecking, fire peril increase, and animal living space imperiling. The risks caused to local community are often greater than the expected advantages (taxes or various administrative liabilities). Along with local population, the vacation home owners are objecting to the further physical devastation as well – this comes as no surprise, as they wish to conserve the momentarily landscape appearance and prevent the further development and physical devastation. In fact, such development could eventually peril their comfort as well. The tourism development of a tourist destination can bring both to positive and negative consequences for space and life of local inhabitants. Negative consequences can be negative

social changes (crime rate growth, frequent drug addiction, multiplication of risky situations formerly unknown within the local community), loss in natural attraction which represented the tourism development originator, deprivation in local inhabitants' specific lifestyle, etc. The positive tourism effects on the local inhabitants' way of life can be measured by the additional economic profit (working places, tax income, higher life standard and buying power), which was out of reach of local inhabitants before the development of a tourist destination. Consequently, the attitudes towards the tourism development in general, but towards the vacation home building as well, are economically influenced, and some studies show the local inhabitants are much more inclined to tourism activities which include loyalty to a destination, i.e. multiple visits, as in such a way the social differences are reduced and favourable social climate established between the local inhabitants and the visitors/tourists. If the economic tourism benefits are taken into consideration, and the vacation home use presumes of loyalty to the destination established, the thesis could be established of the local inhabitants favourable to vacation home building within their settlements. (See Graph Chart no. 1).

Figure 1.

Homes according to their use, by towns/municipalities, island of Krk, census 2001
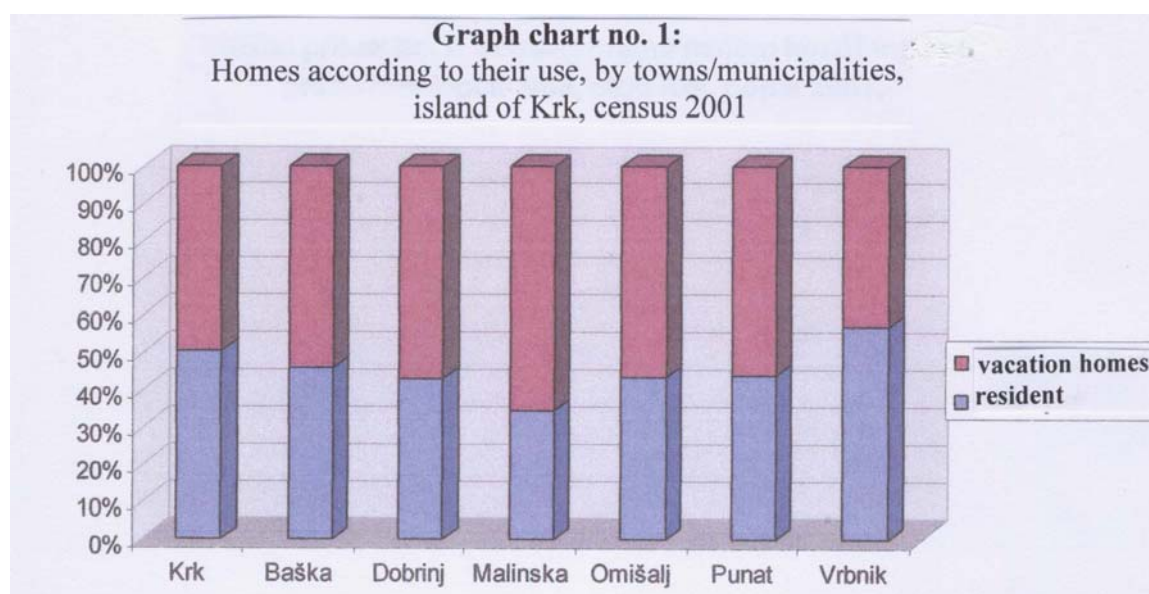
Source: Central Bureau for Statistics – Census (inhabitants, houses, flats) for year 2001

There are 159,354 flats within the county Primorsko-goranska (PGŽ). Within the island of Krk area the total of 20,065 (12.59% PGŽ) flats is recorded. The greatest number of flats is situated within the town of Krk: explicitly 5,166 flats, or 25.75% of the total number of flats recorded within the island of Krk. Within the county Primorsko-goranska, the total of 28,271 vacation homes is evident, 17.74% of the total number of flats. On the island of Krk 10,212 vacation homes are evident, or 50.89% of the total number of flats recorded on the island. The greatest number of vacation homes is evident in the Malinska-Dubašnica municipality: 2,283 flats or 60.51% of the total flat number, therefore the number of permanently inhabited flats is evidently overcome by the number of vacation homes.

The sole fact of over 10,000 vacation homes on the island of Krk by the year 2001 speaks for itself. Unfortunately, there is no evidence of decrease in their number, but, on the

contrary, the illicit building is coming in sight. This problem is not specific for the island of Krk only, it is happening throughout Croatia, but specifically along the Adriatic coast[6]. Illicit building is particularly present in the secondary home building not only legally but in the architectural sense, as such buildings mostly distinguish themselves from the island of Krk autochtonous and traditional architecture.

If the construction trends are followed, it must be noticed that the larger construction on the island of Krk started in the 1980s and 1990s, while its flourishing motion was reached within the last 15 years – when all its negative characteristics were brought to light. It happened in the period when the vacation home building was intensified all along the Croatian seashore, the island of Krk being no exception – it was a "trend" which extended to the most parts of the Croatian coast. The proportions of vacation home building on the island of Krk, nevertheless, particularly in its seashore parts (Malinska), exceeded greatly those in other coast and island settlements. There were obviously some additional impulses which contributed: accessibility (the airport, the Krk bridge, nearness to emissive countries, etc.). When looking for the reasons for such a massive island building expansion, we must remember that no regional spatial plan existed until recently by which the areal development together with the vacation home construction on the island could be directed, which, without doubt, brought to the island of Krk illicit construction.

It is interesting to point out that (in Table no. 3) the income in the amount of kn 1,200,000 was planned to obtain in vacation house taxes in the town of Krk for the year 2008 alone. The average of slightly over kn 8.18 is charged per m2 of vacation home (with the average size of 53.54m2) within the town of Krk.

The vacation home tax amount is decided upon by every local entity independently. So, for instance, and depending on a zone, the Dobrinj municipality charges the amount of 12-15 kn/m² of housing space, the Vrbnik municipality charges 15 kn/m², and 5 kn/m² for houses that were formerly permanently inhabited or were inherited. The town of Krk and the Punat municipality both charge 15 kn/m², or 7,5 kn/m² for first line inheritors. The Baška municipality charges 12-15 kn/m², depending on a zone, while Malinska charges 10-15 kn/m² of housing space. Within the Omišalj municipality, the settlements of Njivice and Omišalj are distinguished. Within the Njivice settlement the vacation home tax in the amount of 14 kn/m² is charged, and in the Omišalj settlement in the amount of 12 kn/m². Moreover, the owners of inherited or donated vacation houses or of those older than 50 years are charged an annual tax per m² of housing space in the amount of 6 kn in the Omišalj community, and of 7 kn in the Njivice community[7].

This heterogeneity between local entities indicates too large regulation differences between local entities in relatively small limitations of the island area. It would be therefore desirable to implement new tax amounts uniform for the island as a whole, but, on the other hand, private and legal persons should be differentiated in various tariff grades.

The growth in communal supplement of 45% or more for purpose of ecological taxes would be desirable, which would result in supplements amounting to 18-20 kn/m². The obtained income at least two goals would be achieved:
1. additional investments into projects linked to the sustainable development, environmental preservation, equipping of beaches and towns as a whole,
2. tax increase would lead to discouragement in construction on larger areas .

Thus collected means would be administered by special sustainable development offices established by the town and community authorities of the island of Krk (See Table no. 3).

Table 3

The income calculation for year 2010 by communities (the communal supplement

is fixed on 20kn/per m²)[8]

	Flat/vacation home tax kn/ per m²*	*Vacation flats m²*	*Obtained income per year 2008*	*Possible income for year 2010 with supplement increased onto 20 kn per m²*	*Index 2010/ 2008*
Town of Krk	7,5 kn/m2	146.820	1.101.150,00	2.936.400,00	+166
Malinska-Dubašnica	10 kn/m2	158.789	1.587.890,00	3.175.780,00	+100
Dobrinj municipality	12 kn/m2	77.485	929.820,00	1.549.700,00	+66

Source: Author's calculations according to the data edited by Central Bureau for Statistics

The statement of foreign investments into land which can grant privileges for the Croatian tourism represents one of the justifications for the Croatian coastal area selling off. But no one can claim with certainty if the tourism will progress into a desired way. When no clear vision, strategy or the development programme either of islands or of the coast exist, the tourism building sites selling can seem the opportunity for local administration to ensure greater income, together with quicker and desired progress. But this, nevertheless, represents only the short-term solution. The community, for instance, can profit from vacation home site construction by large earnings in real estate sale compensation charges, but no answer is obtained for the limited areas which are definitely and irretrievably devastated, as well as for such sales that must inevitably come to an end. Further municipality income by minimal communal vacation home supplements is impossible to ascertain, and, consequently, the supplement increase at least by 15-20 kn/m² is necessary, with all vacation home taxes deductions abolished or reduced. At the same time, the difference between physical and legal person supplements should be established, as foreign citizens quite often create fictive companies in order to buy real estate, using them eventually for illicit renting or as vacation homes, rather than as business premises. The authors of the article suggest 20% higher vacation home taxes for legal persons. The total income should by 2010 become greater by 166% for the town of Krk, by 100% for Malinska, and by 66% for the municipality of Dobrinj in comparison with the year 2008. The obtained difference should be invested into further sustainable development – environmental and areal preservation.

3. THE ECOLOGICAL-ECONOMIC DESTINATION PROGRAMME MODEL

The aim of the ecological-economic destination programme (DEP) is to contribute to the sustainable development of a local community, and to the awareness growth on environmental and natural resources significance. DEP represents a process where, by the assessment of the environmental problem, defining of priorities, and establishing the actions, the proposal of actions for environmental protection and sustainable development for the island of Krk future is defined. The proposed project actions are planned for the period of 2008-2018. In order to follow the contemporary tendencies and the island of Krk local communities' needs, DEP must always be open and subject to possible revisions and supplements.

The main reasons of the DEP formation are the following:
➢ contributes to the sustainable development,
➢ includes the whole community area,
➢ develops awareness on the value of environmental preservation,
➢ determines the most important local natural resources within the long-term economic development.

Hopefully the value of this project development will be manifested in a number of ways, among which the environmental protection must be stressed as the key factor of every area sustainable development, and particularly of this particularly sensible island area.

Urbanism and construction

The island of Krk encounters a large number of problems within the field of urbanism and construction today, which disturbs considerably its planning picture and creates innumerable problems to the same area. Namely, the urbanization and the organized building in the island of Krk area began only in the 1960s. Urbanization and spatial planning were considered, which resulted in town plans carrying out. A lot of illicit objects constructed with no town planning and building permits exist today, as much as too large a number of vacation homes, which brought to the disappearing of the typical island of Krk landscape. In order to stop and solve the problem, the town planes are carried out today, by which building is forbidden in particular island of Krk areas. Closely connected to this is the preservation of cultural and historic monuments, land re-assignation, road construction, preserving and regulation of flawing waters (See Table no. 4).

Problem identification
➢ illicit building or overbuilding,
➢ insufficient care for preservation and protection of cultural and historical heritage,
➢ devastation of parks, insufficient care for vegetation,
➢ uncontrolled transformation of forest and economic areas into building-sights,
➢ objects and facades are not adjusted sufficiently,
➢ scarce space using,
➢ inefficiency of municipality bodies.

Problem consequences
➢ no knowledge on sustainable development,
➢ lack in plane documentation or falling behind schedule,
➢ shortage in communication between citizens and authority,
➢ inspection inefficiency,
➢ pavements and walkways are usurped (coffee-shops, stands),
➢ shortage in parking-places,
➢ destroyed parks, forests, lost typical Krk landscape,
➢ bad visual picture of island parts with marked vacation home construction,
➢ bad island social picture.

Goals
➢ spatial leveled and sustainable development of the urban region,
➢ preservation and protection of historical and cultural significance of the area,
➢ inhabitants' education.

Measures
➢ close present state inspection and stopping of space degradation,
➢ elaboration of the town planning documentation for particular areas not included into the already existing ones,
➢ walkways settling,
➢ protection of cultural and historical heritage monuments,
➢ adjusting parks, planting of new green areas,
➢ building of new parking places,
➢ building of marketplaces,
➢ building of pavements along the settlement roads,
➢ asphalt paving of macadam roads,

➤ elaborating of restoring planes and façade adjusting in town centers.

Table 4

DEP urbanism and construction

Description of activity	Activity bearers	Deadline	Possible financial resources
Consideration of the existing condition and stopping the spatial degradation	Municipality Research workers	2 years	Budget
Spatial urban documentation elaboration	Construction office	7 years	Budget
Arranging the walkways, parks, parking places	Municipality Tourist office	5 years	Municipality Tourist office
Arranging the streets, the names and house number placing	Municipality Municipal communal firm	3 years	Municipality Municipal communal firm
Regulation of local roads	Municipality Municipal communal firms	5 years	Municipality Municipal communal firm
Protection of cultural and historical heritage	Municipality	Continually	Municipality
Protection of traditional building	Municipality	Continually	Municipality

Source: Author's elaboration

CONCLUSION

The quality of life improvement and the prevention of areal over-pollution by the constructed accommodating objects should be the main goal of the island of Krk tourism development, which should be ensured by the adequate state developing approach and by the economic policy measures. The development of the original island tourist brand recognizable in the world tourism market is indispensable. Therefore the **ecological-economic destination programme (DEP) model** aims at contributing to the sustainable development, reviving the environment value, and including the whole community into the long-term economic action development proposal formation.

The general development goals can be derived from DEP: spatially balanced and sustainable urban area development, preservation and protection of historical and cultural important sights of the area, and inhabitants' education. Furthermore, the quality evolution of areal development must be carried out, based on its resources, i.e. natural and cultural goods, human potential, beauty, diversity, and singularity of the island area. In order for the appointed development goals to be achieved, the integral preserving system for historical and cultural goods must be defined to protect autochtonous values and qualities of the overall island of Krk area.

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[7] Vacation home tax was decided upon by the Decisions on island of Krk local entity municipality taxes, according to the local administration and self-administration obligations resulting from the Law on local administration and territorial (regional) self-administration (NN 33/01)

[8] In Table no. 3: The income calculation for year 2010 by communities (the communal supplement is fixed on 20 kn/per m²), in order to enable easier data comparison, in column „Tax per flat/vacation home in kn/m²" the lower supplement ammount is used, which was regulated by the Law on local administration and territorial (regional) self-administration (NN33/01) and by the decisions by local entities on communal taxes.

PROSTORNO PLANIRANJE U FUNKCIJI ODRŽIVOSTI OTOKA KRKA

SAŽETAK

Procesi regionalnog prostornog planiranja i turizma su međusobno povezani i uvjetovani. Razvoj turizma definiran kroz masovnost zasigurno vodi u degradaciju prostora. Svako preizgrađeno područje (prostori za rekreaciju, betonirane plaže) će najvjerojatnije postati neatraktivno za turiste. U sklopu održivog razvoja otoka Krka potrebno je osigurati namjensko upravljanje resursima bazirano na novim principima kako bi se stvorili osnovni uvjeti za pretvaranje komparativnih prednosti u konkurentne. Rad poseban naglasak stavlja na dva osnovna resursa otoka Krka – prostor i turizam. Budući razvoj se mora usmjeriti prema održivom turizmu koji otok Krk može zaštititi od buduće devastacije prostora, a kako bi se to postiglo autori predlažu primjenu programa stvaranja ekološko-ekonomske destinacije.

JEL: R12, Q56

Ključne riječi: *održivi razvoj, prostor, apartmanizacija, turizam, otok Krk*

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TOURIST DESTINATION - STANDARDS, STARS AND QUALITY; FROM MYTHS AND DELUSIONS TO THE REALITY

ABSTRACT

The paper defines quality standards in general and in tourism, both in Croatia and worldwide, demystifying star categorisation and its (im)possible implementation in the quality management practice throughout Croatian tourist destinations. As a result of the research, carried out for the purpose of the co-author's doctoral dissertation in selected Croatian and EU tourist destinations, the categorisation model regarding Pula/Istria as tourist destinations is proposed (depending on the definition and the scope of destination as a whole), based upon the current Regulations on Classification, Categorisation and Special Standards of Catering and Hospitality Facilities. This should encourage further thinking, research, analysis and possible establishment of the quality/categorisation system in regard to Croatian tourist destinations.

INTRODUCTION

Tourist product is also seen as a destination itself including all the processes which generate a huge variety of services required by tourists and offered to them. Tourist product is, therefore, a complete experience gained by a tourist, the one who pays a visit to some destination, ranging from acquiring the first information prior to journey itself, booking, using the services already paid, to coming back home and telling about his/her experiences to family members and friends.

How can the quality of destination be helped and supported by the government? After establishing the appropriate legal framework (in accordance with the environment – the EU) and reducing bureaucracy to a reasonable extent, the government has different ways available regarding co-financing, credit-granting, promotion, infrastructure building, education, even the introduction of system, i.e. standard of quality management.

Croatia has chosen the high quality tourism based on the principles of sustainable development, protection and preservation of natural and all other resources; the renovation and modernisation of the existing ones; the supervised building of new hotels and other accommodation forms as well as on new competitive tourist products (Mičić, 2004). The destination quality management system is not mentioned.

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In regard to the introduction of quality standards, recognisable and comparable in the closer (Mediterranean and European) and the further (world) environment, starting from the data available so far, only five Croatian hotels have been certified according to ISO 9001:2000: Excelsior Hotel Dubrovnik and Maestral Hotels – Commodore Hotel (Dubrovnik, 2); Palace Hotel and Phoenix Hotel (Zagreb, 2); Osijek Hotel (Osijek, 1) (www.kvaliteta.net/prikaz_res.asp (28/1/08). According to HACCP - ISO 22000, which determines the system of managing food safety, 28 hotels have been certified (www.kvaliteta.net/hrana/hcertifikati2.aspx (28/1/08).

Speaking about destinations, the European Commission suggests the system of integrated quality management (IQM), which has already recorded good results in some European destinations. The IQM term is still largely unknown to Croatian tourist boards [1].

QUALITY AND STANDARDS

For the last fifty years, resulted from the need to ensure some appropriate product/service quality, there has been a real revolution trying to provide the definitions and understanding of quality as a term, while the field comprising factors which affect quality has been expanded, as well. Today the prevailing belief is that all the functions and all the employees in economic and other companies/organisations/institutions, both in public and private sectors, more or less affect the quality of product/service provided by some company/organisation/institution. It is also believed that the same can be said about other chain links (Sinković, Šugar, 2006).

The expansion of insights into quality is accompanied by the introduction of terms such as quality control, quality assurance, quality management and total quality management (TQM). There have been efforts on adjusting the acquired theoretical knowledge and practical experiences to national and international standards, with the ones belonging to ISO 9000 being dominant [2].

Quality is defined in many ways, which often depends on a given context, and it is also possible to personalise quality so that each person could determine his/her own definition, in accordance to his/her personal wishes, expectations and requirements, regardless what it refers to - product or service. The most common, generally accepted, definition describes quality as something good, what meets demands (Crosby, 1996, 21).

According to the international standard ISO 9000, quality is defined as 'a degree in which a sum of important features (product-related) meets the stated requirements or expectations that a user or some other interested party may have' [3]. This definition points out that the term of quality is closely related to interests of different stakeholders who may have various, even opposite, expectations. The first and fundamental principle on which the above-stated standard is based refers to user-orientation, which is evident by the definition itself, so user's needs and expectations are of the highest importance [4].

Consumers, i.e. users want predictability and safety, regardless what it implies – products or services. The Committee on Consumer Policy (COPOLCO), International Organisation for Standardisation (ISO), considers the market regulated by laws as the best way to protect users' interests. Standards are secondly ranked, provided they include the economic and legal safety to users [5].

Till the end of 2007, at least 951, 486 certificates (ISO 9001:2000) were issued in 175 countries, 32% of them covering services (www.iso.org/iso/pressrelease.htm?refid=Ref1178 (21/12/08). The long-announced and long-expected norm – ISO 9001:2008 – was issued in November 2008. It reveals no special news but explanations based on the eight-year-long practice all around the world.

ISO 8402 defines quality as 'a sum of features and characteristics of products, processes and services referring to the possibility of meeting already determined or indirectly stated needs'(http://kvaliteta.inet.hr (29/12/07). ISO 9001:2000, international generic norm, describes the quality management system applicable to almost any organisation, regardless its type, size or activity, thus, applicable to a shipyard, factory, hospital, state and/or local administration, as well as to a restaurant or a hotel. It is important to mention that processes are certified, not products or services.

Although it is not possible to standardise everything, the general aim of standardisation is to avoid the lack of safety and possible conflicts between producers/service providers and consumers. Consumers, generally speaking, lack knowledge and information on standards they may ask for.

QUALITY AND STANDARS IN TOURISM

The importance of tourist activities in the world economy is best illustrated by the figures, which were announced by the World Trade Organisation.[6]. The 2008 WTO Statistical Year Book (www.wto.org/english/res_e/statis_e/its2008_e/section3_e/its08 _highlights3_e.pdf (30/12/08) states that the number of international tourists exceeds 903 millions (6,6% increase), while revenues resulted from international travels record 14% increase ($ 855 billions in total). The leading exporters in the field of international travels are the EU and the USA recording 57% of the world export. The travelling industry has a very significant place in the economies of developing countries, where revenues based on travels, in 2007, recorded $285 billions, i.e. 33% of their export including all the commercial services.

As for services, and services are the main products in tourism, they result from the communication between producer/provider and consumer/user/orderer. The quality of services can be improved and the regulations of standard are used for such a purpose.   .

The better both sides, i.e. service providers and service users (consumers), are informed (educated) about their mutual rights, wishes and needs, the less needed are the regulations of standard; they serve more like a communication framework, a means for revealing the message about the expected, predictable quality of a product/service than like an obligation.

The larger scope of back-office, i.e. mediation between service providers and consumers, is (such as administration), the bigger need for standardisation is. One of the fundamental characteristics of tourism refers to a large number of stakeholders and a variety of their needs and expectations.

On one side, there are tourists seen as users, whose needs must be a basis for any quality management system. They have different expectations, which sometimes may exclude each other. On the other side, there are local residents, who more or less share the same living space with tourists, so their interaction is unavoidable. On the third side, there is a large number of various operators, such as travel agencies, carriers, hoteliers and providers of other services, all together they make a supplying chain and affect the total quality of tourist product. The efficient quality management must take into account all the above-mentioned factors.

The regulations considering ISO 9000 standard are general to be applicable to all activities but this is also the reason why sometimes they cannot successfully solve specific problems of some activities. The data shows that the application of this standard in the sector of services, especially in tourism, is significantly lagging behind.

The World Tourist Organisation viewpoints on tourist standards are expressed by the following elements [7]:

a) The role of standard in tourist activities has evidently increased as an answer to the needs of exchange, protection of consumers/users, promotion, marketing, communication and openness as well as to, in accordance with terminology, the management system and technical specifications.

b) The Quality Committee, as suggested by its Committee on Consumer Policy, has welcome the recent ISO initiatives, in other words the foundation of the new Technical Committee on Tourism Standards whose task is to deal with tourist terminology and technical specifications, develop the existing quality management standards (ISO 9000:2000; ISO 14000), and elaborate their application in specific tourist conditions.

c) The Committee has considered the existing ISO standards and a need to adjust them to tourist terminology in order to achieve a wider international consensus.

d) Taking into account the future standards and their specific features in relation to the services in tourism, the Committee has recorded that the main aims of standardisation should be safety and protection, hygiene, and availability; it has also recommended that the future standards, whenever they touch these aims, should also protect cultural identity and cultural diversity.

In regard to tourism, standard ISO 18513, Tourism Services - Hotels and Other Types of Tourism Accommodation - Terminology, was announced in 2003. Introducing standard terminology is an important step but this is not enough and is not in accordance with the significance that tourist activity has in the world economy and its affect upon the development of global society. Due to a lack of international standards, many countries has started publicly announcing national standards (www.nsf.org/international/press_release.asp?p_id=11201, 8 (24/10/2005), **some of them being shown in**

Table 1).

Table 1

Examples of National Standards for Tourism Services

Country	Tourism Sector Standards as a Whole	Specific Standards
Botswana	Standards address physical facility requirements for grading of hotels, lodges, bed and breakfast, and guesthouses	a) BOS 50-1:2001 Hotels and related establishments - Grading requirements - Part 1:Fully serviced hotels. b) BOS 50-2:2001 Hotels and related establishments - Grading requirements - Part 2:Selected service hotels. c) BOS 50-3:2001 Hotels and related establishments - Grading requirements - Part 3:Game lodges and camps. d) BOS 50-4:2001 Hotels and related establishments - Grading requirements - Part 4: Domestic

		guesthouses. e) BOS 50-5:2001 Hotels and related establishments - Grading requirements - Part 5:Commercial guesthouses f) BOS 50-6:2001 Hotels and related stablishments - Grading requirements - Part 6:Self-catering establishments
Canada	Standards on hotels, campgrounds, vacation centers, bed and breakfasts, youth hostels, residences in teaching establishments	Published standards - in French only NQ 1014-010/2001 *Bus Transportation Services.* NQ 9700-010/2001*Tourism — Customer Service — Guidelines for Standards.* NQ 9700-050/2001*Tourism — Customer Service — Travel Agencies.* P 9700-065 *Tourism — Customer Service —Adventure and Ecotourism.* NQ 9700-075/2002 *Tourism — Customer Service — Cruise Ships and Ferries.* NQ 9700-085/2002 *Tourism — Customer Service — Attractions and Events.* P 9700-100 *Tourism — Customer Service —Vacation Centers.* NQ 9700-110/2002 *Tourism — Customer Service — Hotels.* NQ 9700-120/2002 *Tourism — Customer Service — Campgrounds* <u>Standards in Development (in French only)</u> P 9700-060 *Tourism —Ecotourism Products.* P 9700-130 *Tourism —Customer Service —Outfitters.*
France		NF237 – Service d'accueil et d'information des offices de tourisme et syndicats d'initiative PR NF EN 14804 – Séjours linguistiques - Organisateurs de séjours linguistiques NF X 50-055 – Service organisateurs de séjours linguistiques NF EN ISO 18513 – Services touristiques - Hôtels et autres types d'hébergements touristiques - Terminologie NF S52-104 – Pistes de ski - Information sur les risques d'avalanche - Drapeaux d'avalanche
Germany	Hotel Classification System by German Hotel Assn (DEHOGA)	DIN 77001, Publication date:1999-09 Tourism services - Symbols used in travel brochures DIN EN 13809, Publication date:2003-06 Tourism services - Travel agencies and tour operators - Terminology DIN EN ISO 18513, Publication date:2003-12 Tourism services - Hotels and other types of tourism accommodation - Terminology SN EN 13809, Publication date:2003-03 Tourism services - Travel agencies and tour operators - Terminology
Ireland	Compulsory registration system for Hotels and Guesthouses (but not Bed & Breakfasts and Self-catering businesses) Voluntary, widely-use classification system for Hotels and Guesthouses	
Lithuania	Law on tourism requires all	

	hotels, motels and camps to be classified.	
Netherlands		NEN-EN-ISO 18513:2003 – Tourism services - Hotels and other types of tourism accommodation - Terminology NEN-EN 13809:2003 – Tourism services - Travel agencies and tour operators - Terminology
Spain		UNE 150101:2001 EX Sistemas de gestión medioambiental. Guía para la implantación de un sistema de gestión medioambiental conforme a UNE-EN ISO 14001 en hoteles y otros alojamientos turísticos UNE-EN 13809:2003 Servicios turísticos. Agencias de viajes y turoperadores. Terminología UNE 41512:2001 Accesibilidad en las playas y su entorno PNE 150104 Sistemas de gestión ambiental. Guía para la implantación de sistemas de gestión ambiental conforme a la Norma UNE-EN ISO 14001 en playas Registrada
UK		BS EN ISO 18513:2003 – Tourism services. Hotels and other types of tourism accommodation. Terminology BS EN 13809:2003 – Tourism services. Travel agencies and tour operators. Terminology
USA		ISO 18513:2003 – Tourism services -- Hotels and other types of tourism accommodation -- Terminology BSR/NSF 166-200x – Hotels: Public Health Protection PREN 13809 – Tourism Services - Travel Agencies and Tour Operators Terminology NFPA 1194: Standard for Recreational Vehicle Parks and Campgrounds, 2002 Edition

Source: Report for the World Tourism Organization: Opportunities for Collaboration in the International Standardisation of Tourism Services, WTO Briefing Paper (2004), www.tourism.lt/nsv/engl/WTO%20seminar/ISO%20proposal%20for%20WTO%20(eng).doc

According to the definition given by the World Tourism Organisation (WTO), quality in tourism results from the satisfaction that a user feels after being provided some service, i.e. the accordance with the requirements and expectations, as well as the relation between price and value (value for money). The same definition determines the following quality features:

- Safety (tourist product must not present any danger to people's lives or possessions – protection and safety standards are legally regulated);

- Hygiene (standards considering the cleanness of accommodation facilities, food and drinks facilities, and others, have not belonged only to the requirements for higher quality facilities but today they are *conditio sine qua non*, from street stalls to fancy restaurants and airplane catering);

- Accessibility (no more physical, communication, discrimination, and any other obstacles);

- Unambiguousness (transparency – true information about products and services included in the price) and autochthony (authenticity) of what is offered (characteristics of culture and tradition of destination, recognisability, differentiation of products and services at the market);

- Harmony between tourist destination and human/natural environment (there is no sustainable development without quality (www.zg.hgk.hr/vijece hotelijera/kvaliteta.htm, (19/6/2005).

These are also the elements of integrated quality management (IQM), the trend which has already achieved certain results in some European tourist destinations since the 1990s.

Alike the traditional approach to quality management, which mainly refers to some tourist companies, the destination integrated quality management implies equally meeting demands of visitors, local residents, and all the subjects included in the sector of tourism. The European Commission defines the integrated quality management as a systematic effort for achieving inner and outer quality, i.e. the economic progress in short-term sense and the local development in long-term sense.

The inner quality of a tourist destination is seen as a value which tourists obtain through a chain of experiences, from the first information about destination to after-sales services upon their return home. Such a chain includes services in both public and private sector. The inner quality has short-term aims. The outer quality refers to the sustainable development of tourism with a rational use of restorable and non-restorable natural and other sources and attractions that destination offers in order to prevent potential undesired consequences (European Commission, 2000, 15).

Evaluating, monitoring and benchmarking (comparisons with the best ones) tourist destination as an entity as well as its products and services enable *QUALITEST* (make it easier, also), the practical tool comprising 16 interrelated indicators which reflect the integrated approach to quality management.

QUALITEST is equally intended for urban, rural and coastal destinations, and contains 16 fields of measurement, divided into two groups: destination quality and tourist product quality. The first group collects data about the entire quality, i.e. key fields of tourist destination functioning. The second group includes data about the quality of tourist product seen by tourists. Each of 16 fields (capability of local tourist industry, satisfaction among local residents, support to local tourist industry, marketing and promotion, safety and protection, destination air quality, environment quality, communication prior to arrival, accessibility, transportation, accommodation, information, food and beverages, activities, swimming water quality, value for money) results in three groups of indicators: indicators considering the perception of quality conditions, quality management indicators, and quality performance indicators (Enterprise DG Publication, 13).

The indicators related to the perception of quality conditions point out the level of satisfaction among tourists and tourist professionals caused by a destination and measured in different fields of destination quality and tourist product quality. These indicators result from research into attitudes of tourists and tourist professionals, and contain the main elements of IQM concept: improvement of satisfaction among tourists and living conditions that local residents live in, improvement of business conditions and results of tourist industry, and constant care of environment quality.

The quality management indicators are directly related to the first group of indicators (see above), and they are not numerical. They are seen as a form of self-evaluation and reveal how much the quality management practice has been rooted in a destination. 16 indicators listed in QUALITEST supplement the IQM concept, fitting into its 4 main elements: meeting the demands of tourists, local residents and tourist sector in a destination; sustainable development; care of environment; concerns about natural, historical and cultural heritage.

These indicators are an important sign of the destination management communication level and destination stakeholders communication level, e.g. through tourist associations, which is crucial for IQM.

QUALITEST can be used by anyone that is interested in the tourist destination quality management and responsible for it, such as follows:

- local DMO (destination management organisation) which intends to apply IQM and, thus, needs a tool for measuring and supervising (monitoring) destination quality, as well as for comparing results obtained in similar destinations, i.e. comparing with competitors,
- other public administration institutions that are interested in improving tourist sector quality and in search for practical suggestions and recommendations,
- the ones providing tourist services, from accommodation and food to various activities, who wish to learn about the key points of evaluating and monitoring their own performances and results in the field of quality,
- travel organisers and mediators that are interested in monitoring the implementation of quality system in a destination where they send their clients, and that tend to use the indicators as a foundation for establishing a dialogue with local destination managers.

ISTRIA – HOW MANY STARS?

Many websites present Istria as 'the Green Mediterranean', referring to the Istrian Tourism Development Master Plan which, in terms of marketing, positions Istria as a four-star destination. It suggests 'a new portfolio of products, moving from the old-fashioned sun-and-sea concept to rural tourism, special interests (e.g. golf, gourmet, sport, marine biology) wellness, events, meetings, nautical tourism, and cruses. A new visual identity of Istria was created (in 2005) and there is currently going on the process of repositioning the perception of quality in Istria towards the anticipated four-star destination.' (Istrian Tourism Development Master Plan 2004 - 2012, CD ROM)

Picture 1

Presentation of Umag as a Four-Star Destination

Primjeri nedavno realiziranih investicija
Umag – destinacija 4*
KAMPOVI PARK UMAG, FINIDA, STELLA MARIS, PINETA, KANEGRA NATURIST

Investicije 2005 - 2006

Parameteri	Iznos
Vrijednost investicije	**15 mil. €**
Kapacitet	3500 parcela. 9300 osoba
Svih 5 kampova kategorije 4 zvjezdice.	

Kamp Park Umag – kamp godine 2007 prema odabiru ANWB kamping vodiča i KCK magazina. Žuta tabela ADAC 2007 za kvalitetu sanitarija i vizualan dojam parcela.

Sadržaji: moderna infrastruktura, luksuzne jedinice, pristup satelitskoj TV i Internetu, mobile home-ovi, bazen, zabavni park, membranski bioreaktor za pročišćavanje otpadnih voda

Source: Mičić, Z.: *Hrvatski turizam; putovanje prema novim horizontima*, Ljubljana, 29/03/2007 http://www.mmtpr.hr/UserDocsImages/ljubljana_2007.pdf (1.6.07.)

What do stars mean? Has Istria already become a four-star destination or is it to become as such [8], as it is complimented from political speaker's stands? Why has not Umag become the so-called 'four-star destination' (yet), and Rovinj 'a five-star destination'?

In the context of the above-mentioned questions, it is interesting to interpret a part of the lecture on the Croatian tourism, given by the state secretary for tourism and held in Ljubljana (Picture 1).

Namely, presenting Umag as 'a four-star destination', based only on the investment in tourist facilities, could be called pretentious. In particular, because of the fact that destinations are so easily labelled as four-star/five-star destinations (especially in public speeches given by our politicians), with no support primarily to the existing standardised nomenclature, then the reality, everyday living, life quality of local community, and level of all its services. As it has previously been explained in this paper, destination as a whole is much more than a hotel, apartment, restaurant, swimming pool, camp site and other accommodation, food and entertainment facilities.

As we still do not have any standards for tourist destinations, thus, any determined destinations (places, cities, municipalities, regions, counties … or what), and as we are still far away from the developed brand, all the attributes ascribed to destinations with these or those stars are completely arbitrary.

The elements of quality degree, i.e. categorisation of different tourist facilities according to stars are determined by regulations, and the elements of destination quality might be the following (not necessarily in the same order):

- accessibility and communications (traffic infrastructure, communication channels, favourable accommodation);
- attractions (natural, human-created, historical monuments, stories and legends, famous people, cultural and other events);
- peace and safety;
- (pleasant) climate;
- sunny days;
- beaches, sea water quality;

- accommodation and catering facilities (hotels, restaurants, apartments, villages, camp sites, private houses, rural/agrotourist/farming households nearby);
- various activities (events, concerts, exhibitions, workshops – autochthonous culture);
- excursions;
- entertainment, night life;
- repair shops (car repair, etc.);
- facilities for kids;
- shopping facilities;
- ecological consciousness (cleanness of places/streets/squares/parks, sea, beaches, air, tapped water, healthy food, less noise);
- information (available in the right time, complete);
- sport and recreation (variety, availability, arrangements of facilities), wellness;
- aesthetic value (tidiness) of place (destination);
- value for money and value for effort;
- hospitality and knowledge of foreign languages;
- quality of life of local residents, participation in decision-making;
- *IQM*;
- others.

If we tried, in the context of the Regulations on Classification, Categorisation, Special Standards and Special Quality of Accommodation Facilities from Hotel Group [9], to apply the elements of destination quality, it would be a very difficult, even completely impossible task. The categorisation of tourist accommodation facilities (hotels, apartments, villages, camp sites), as it is shown in practice, is not final and should be changed and adjusted. However, using the current Regulations on Categorisation (just) as a signpost, it is possible to create a hybrid model of categorisation of a destination (Table 2).

Table 2

Proposal for Categorising Tourist Destination (Example for Pula / Istria)

DESCRIPTION	3*	4*	5*
COMMUNICATION AND WELCOME		*	*
1. multilingual signposts, traffic signs from border crossing (for Pula from Kaštel, Plovanija & Požana) to destination	*	*	*
2. interactive multilingual Internet pages regularly updated		*	*
3. free phone number available 24 hrs with operators speaking languages of the most common guest groups			*
4. promotional materials (brochures, guide books, multimedia: CD, DVD, billboards, authentic souvenirs)		*	*
5. reception desk services – tourist information centre (TIC) located in the visible and easily accessible place (parking lot), open 24 hrs (in peak season)			*
6. TIC open at regular working hours; person on duty at the rest of the time – mobile phone number visible at the entrance next to the working hours table	*	*	*
7. tourist guide services on demand, available at TIC and through free phone number			*
8. tourist guides 'in packets'	*	*	*
9. mobile phones – guides (e-guide services available for some attractions/sights through mobile phones)		*	*

10. public transportation and taxi services (roads)	*	*	*
11. public transportation and taxi services (roads, sea, air)		*	*
12. charter and taxi services (roads, sea, air) available 24 hrs in season			*
13. parking lots for coaches outside city centre/old town, e.g. Valelunga-Pula		*	*
14. spacious parking lots and service zones in the suburbs, from where e-buses and/or other means of public and taxi transportation take visitors to the main attractions			*
15. e-tourist information points at places where people usually meet, in accommodation and catering facilities, next to the main attractions, in shopping centres		*	*
16. good, modern, well-maintained traffic infrastructure; fast, good and easily accessible roads, air, railway and sea communications		*	*
17. local roads of high quality	*	*	*
18. communication with tourists after their departure (research into market satisfaction)		*	*

19. destination as an entity with recognisable characteristics (*brand* [10])
 ▪ Pula has several options:
   a) Ancient story –Arena as a symbol;
   b) *K und K* story – one of fortifications, e.g. Brijuni Minor as a symbol
   c) City of festivals and culture grad – from the classical to the alternative – Film Festival as a symbol;
   d) City of knowledge – students', university city – Rojc;
   e) Maritime affairs and shipbuilding – from Argonauts to Uljanik – Maritime Museum;
   f) City for pleasant living - the most beautiful seafront promenade – *lungomare* from Arena to Fažana)
 ▪ Istria has them, as well:
   a) Cultural events (Film Festival, Dance Festival, Theatre Festival, Book Fair, concerts, exhibitions, etc.)
   b) Historical sights (Pula, Poreč, Motovun, Dvigrad, Beram, etc.)
   c) gastronomy (truffles, famous restaurants, inns serving local specialities, wine and olive oil roads, cooking fiestas (*brodetto*, pilchards, smoked ham, sausages, porridge, asparaguses, ...) etc.
   d) sport and recreation (ATP Umag, bike roads, wintertime sports trainings in Pula, Medulin and Poreč, extremely adventurous sports, etc.)
   e) autochthonous Istrian life-style, old houses and farm houses, music (Nello Milotti, Tamara Obrovac, Dario Marušić, Gustafi), bovine, ethnological heritage, etc.
			*

20. communication channels open in all directions: local administration – inhabitants – economy (public and private sector) – tourists			*
COMFORT – IN GENERAL			
1. peace, safety and protection of people and possessions	*	*	*
2. satisfaction with the quality of life local residents lead, participation in decision-making (*IQM*)		*	*
3. hospitality and knowledge of foreign languages	*	*	*
4. traffic regulation and number of parking lots according to out-of season and seasonal needs [11]		*	*
5. sunny days	*	*	*
6. pleasant climate	*	*	*
7. tidiness (regular maintaining of communal infrastructure, urban equipment, etc.)	*	*	*
8. aesthetics (tidiness + cleanness): facades, streets, parks, ecological lightening, uniform urban equipment			*
CLEANNESS - ECOLOGY			
1. clean beach, clean seawater and all the public areas	*	*	*
2. measurement stations and information on seawater/air quality, quantity of noise on appropriate places (beaches, reception desks, info points, etc.)		*	*
3. well-arranged beaches, blue flags, guards, beach facilities (deck chairs, parasols, swimming schools, sport, recreation, restaurants & cafes, etc.)		*	*
4. special beaches for dogs (and other pets)		*	*
5. harmony between market demands and limits of destination's carrying capacity [12])			*

6. ecological awareness of local administration, residents and tourists (cleanness, protection of places/streets/squares/parks/seawater/tapped water, healthy food, reduced noise, ecological lights, etc.)		*	*
7. ecological sewerage system and disposal maintenance		*	*
FACILITIES AND SERVICES			
1. events, concerts, exhibitions, workshops – language and autochthonous culture		*	*
2. excursions	*	*	*
3. entertainment, night life	*	*	*
4. entertainment and night life zones in places where quiet life of locals is not disturbed			*
5. repair services (car repair, vessel repair, etc.)	*	*	*
6. children's facilities	*	*	*
7. *shopping* of good quality (possibility, variety and availability)		*	*
8. sport and recreation (variety, availability, arrangement of facilities)		*	*
9. wellness		*	*
10. (value for money and value for effort	*	*	*
ATTRACTIONS			
1. natural, human-made, historical monuments, stories and legends, famous people, cultural and other events	*	*	*
2. managing attractions on the basis of cadastre and atlas of attractions			*
TOURIST CAPACITIES (FACILITIES)			
1. accommodation and catering facilities (hotels, restaurants, apartments, villages, camp sites, marina, private houses, agro-tourist and farming house-holds nearby)	*	*	*
2. tourist capacities integrated in tradition, life and developmental strategy of destination (respecting sustainable development, carrying capacity, *IQM*)			*
3. tourist infrastructure – premises and facilities, available all year round			*
OTHOR			
1. DMC [13] or DMO [14] manages destination quality			*
2. utility infrastructure adjusted to the needs of quality destination (temporary or permanent residents and economic subjects)			*
3. space management of quality – management of space quality [15] (from regional planning to building) in accordance with *IQM*			*

Source: V. Šugar according to: http://www.mmtpr.hr/UserDocsImages/prilozi-I-XIII-PHoteli.pdf (10/6/07) i http://www.mint.hr/UserDocsImages/080611-P-hoteli-proc.pdf (26/12/08)

Istria has been often presented recently (for the last 7-8 years) as a more developed and more successful part than any other one in Croatia, especially speaking about tourism [16], encouragement to small businesses and sustainable development. Some figures can really support this [17], especially when used in a particular context (political marketing), whereas some other ones say something completely different [18], but we are not going to compare them here but to encourage the creation of tourist destination quality management system.

Consequently, the results obtained through research carried out in Croatian tourist boards do not equally reveal the high level of satisfaction in practice regarding the quality of tourist offer in Istria.

Besides, the lack of quality management system is evident and 'tangible' in the most attractive areas, not just in the coastal part but also in the Istrian inland. The declared intention to help the development of neglected (rural) areas is being turned into its contrariness, their degradation, even material and aesthetic destruction.

Almost every day we are the witnesses of appeals and rallies of inhabitants, 'the green' and other associations, as well as opposition politicians, but (almost) all of them are *post mortem*, being late. The contradictory Brijuni Rivijera Project [19], planned building of some 20 golf courses [20], building of apartments out of control (Medulin, Premantura, Peroj, Barbariga) and a huge hotel (Banjole) without taking into consideration any plans, regulations or licences, turning agricultural sites into potential construction sites, the so-called rural villas

with swimming pools [21] (with no sewage system) in the inland of Istria [22],Rockwool Factory located in Potpićan [23], TE Plomin and potential LNG terminal [24], all are these 'the black points' that are, according to needs and different rhetoric, used in discussions - for or against (someone's) policy, strategy or master plan.

CONCLUSION

Croatia (according to statements made by those who decide on its present and future) is declared as a maritime and a tourist country, abundant in valuable natural and human-created resources, which should be protected and wisely managed but, in the reality, such statements rarely (or hardly ever) generate practical, developmental effects. In regard to the complexity of tourism as an economic branch, multidisciplinary related to almost all other segments of the global economy, it is very important to establish the system/standards of quality management and destination (as a whole) management, which do not exit now in Croatia, as it is explained in this paper. Quality management systems (ISO or others) are just partially being introduced in some companies/organisations/institutions. Tourism can help Croatia, its destinations, even to reduce regional differences, to develop the neglected and abandoned rural areas, but, without any systematic quality management, these areas are endangered by degradation, even destruction of natural and human-created resources, i.e. attraction basis. Istria is (with no good reason?) often presented as a very developed tourist region, trying to reach the high quality tourism level (four- or five-star destination). Research results and some statistical data bring certain doubts into this idyllic picture. As it has been explained in the paper, slogans promoting four- or five-star destinations remain (just) in the marketing domain until the quality management system with long-term strategies and goals, based on the vision of future, monitoring (global) trends and never-ending learning, is created.

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www.iso.org

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www.wto.org

ENDNOTES

[1] According to the results of the research carried out in tourist boards (counties, cities, municipalities, and areas) during 2006 and 2007, many subjects did not answer the question about the application of quality management methods/tools, such as total quality management (TQM), benchmarking,, integrated quality management (IQM) or balanced scorecard method, i.e. they skipped this question in the questionnaire, which can be interpreted as a lack of information about the above-stated methods/tools. The comments provided by those who answered the question actually support this interpretation pointing out the lack of information, knowledge, education in brief, about the current European/global quality management trends.

[2] The latest publication (2000) contains 4 standards comprising a whole (see: *ISO 9000: Quality management systems - Fundamentals and vocabulary, 2nd* edition, 2000, p.   ,)

[3] *ISO 9000: Quality management systems - Fundamentals and vocabulary, 2nd* edition, 2000

[4] Eight principles upon which standard is based, stated in *ISO 9000: Quality management systems - Fundamentals and vocabulary, 2nd* edition, 2000, p.

[5] Improving services – how can standards help?, COPOLCO (ISO Committee on Consumer Policy) Workshop, Oslo, 2001, www.iso.org, (15/6/2007)

[6] Report for the World Tourism Organisation: Opportunities for Collaboration in the International Standardization of Tourism Services

[7] From the report made by the Quality Support and Trade Committee (*2nd Meeting of the Quality Support and Trade Committee)*, Madrid, 2004.

[8] "Using a consensus and the Master Plan (2004-2012), it has been decided that Istria is not going to be a cheap destination, the Istrian tourism is to be restructured and repositioned to be able, by 2012, to achieve the four-star level quality on average, which is happening even now. Repositioning, followed by the modernisation of capacities and the supply of new products, can significantly prolong the season, as well. The new capacities, adjusted to the County Regional Plan and the Istrian Tourism Master Plan, will reach the number of 255,000 accommodation units (also including the existing ones), and this increase primarily refers to the realisation of new projects, such as Brijuni Rivijera, Porto Mariccio Golf and Yacht Resort- Kempinski, Crveni vrh-Kempinski Residence Skipper, Dragonera, Terra Istriana, then small family-run hotels, and rural tourism in the inland as a new product, which is on the rise. Thus, the increase is not viewed through new capacities, so big ones, but it is recognised through a new offer implying Istria as a destination of experiences, just as profit (the Istrian tourism participation in the Croatian tourism profit is 70%) cannot be searched only through price increase but, first of all, through the value for money formula", Veljko Ostojić: U Istri do 2012. 255.000 smještajnih jedinica, http://www.poslovni.hr/50871.aspx, (9/8/07)

[9] Narodne novine 48/02 (http://www.nn.hr/clanci/sluzbeno/2002/dodaci%5C2002%5C0966A.htm), 108/02, 132/03, 73/04, 67/06, Ministarstvo mora, turizma prometa i razvitka - propisi u donošenju, http://www.mmtpr.hr/UserDocsImages/prilozi-I-XIII-PHoteli.pdf (10/6/07)

[10] According to the American Marketing Association, *brand* is "a name, term, design, symbol, or any other feature that identifies one seller's good or service as distinct from those of other sellers. The legal term for brand is trademark. A brand may identify one item, a family of items, or all items of that seller. If used for the firm as a whole, the preferred term is trade name." http://www.marketingpower.com/mg-dictionary-view329.php (1/7/07) Besides, the final aim of *branding* is to create good, long-term relations between company/producer/service provider and potential clients/consumers/visitors/tourists. Through *branding*, clients/consumers/visitors/tourists, can get a lot of information about company (city, destination), product, service, potential users, benefits from using product/service. It is not possible to create, to build. *brand* if there is no relation and mutual understanding between producer/offerer/company/destination and market/consumer/visitor/tourist. It is important to mention that *brand* is not only obvious by the name of company or product/service, logo or marketing campaign, it is included in any business decision, in anything that is spoken or done, from the first answer to phone call to newspapers articles or TV reportages. *Brand* is also created and confirmed by interaction with consumers/clients/visitors/tourists. Briefly,   in the wide sense, *brand* is a reputation, good voice, very subtle and fragile category of priceless value.

[11] From article by S.Z Terlević, "Problem parkiranja neće se riješiti bez parkirne kuće", published in Glas Istre 14/6/07: "Apart from some 157,000 registered vehicles in Istria, presumably 30,000 to 40,000 of them in the biggest city, Pula, there are also several thousands of everyday drivers-'guests' from the neighbouring places; it is also well-known that there are 1,280 parking lots which are paid and several thousands of them that are not paid – a new chaos in the streets is then unavoidable! How to park several thousands of vehicles on just a few thousands of parking lots that are available?"

[12] One of the *carrying capacity* definitions is offered by the American Carrying Capacity Network: "Carrying capacity refers to the number of individuals who can be supported in a given area within natural resource limits, and without degrading the natural social, cultural and economic environment for present and future generations. The carrying capacity for any given area is not fixed. It can be altered by improved technology, but mostly it is changed for the worse by pressures which accompany a population increase. As the environment is degraded, carrying capacity actually shrinks, leaving the environment no longer able to support even the number of people who could formerly have lived in the area on a sustainable basis. No population can live beyond the environment's carrying capacity for very long." http://www.carryingcapacity.org/whatis.html (10/6/07)

[13] *Destination Management Company*, alike non-profit DMO (destination management organisation), is aimed at making profit but including both public and private interests, public-private partnership.

[14] *Destination Management Organisation*, public, non-profit, responsible for managing destination and/or destination marketing and, generally, reports to WTO, the World Tourism Organisation (http://www.unwto.org/projects/destination/DMO%20Final%20report.pdf, 1/7/07), and belongs to one of the following categories: 1. national tourist organisation (management body) responsible for managing and promoting tourism nationally; 2. regional, responsible for managing and/or marketing area it covers – sometimes, but not always, this area overlaps with administration borders, e.g. county's; 3. local organisation responsible for managing and/or marketing a smaller area, town, or municipality.

[15] Regional Planning Council of the Republic of Croatia, in his Report (2005), after visiting the Istrian County, states the following:" After learning about the current regional planning issues in the Istrian County, the biggest problems and the issues of importance for regional planning were pointed out: 1) ILLEGAL BUILDING (it is estimated that there are 10,000 -12,000 illegal constructions in Istria; failed regulations – it is possible to obtain a house number in case of illegal building; 2) BRIJUNI RIVIJERA (the developmental strategy of the area is being worked out); 3) NEW USES OF EX-MILITARY AREAS (urban transformation into tourist and other facilities); 4) BETTER PROTECTION OF LANDSCAPE AND NATURE (it is suggested that the obligatory landscape plan should be incorporated into the regional planning system; bad experiences with the nature protection department at the Ministry of Culture); 5) USE OF MINERAL RESOURCES (tougher measures are suggested for exploting stone and other mineral resources). "; http://www.mzopu.hr/doc/Savjet_09022006.pdf (10/10/06)

[16] "Istria is the most developed tourist region in Croatia. For the last years, there has been a shift from massive to individual market. New tourist products are being introduced. Among all the Croatian regions, Istria invests the largest amount of money in accommodation facilities and destination management in Croatia. Investments are aimed at improving the competition of Istria as a tourist region.."; Brijuni Rivijera tender for greenfield investitors, http://www.brijunirivijera.hr-2hr.pdf (8/8/07)

[17] "At the end of February 2006, the Central Bureau of Statistics announced, for the first time, data about GDP across counties (2001-2003); in February 2007, data valid for 2004 were announced. In the analysed period, the Istrian County exceeded (35-38%) the average GDP per capita in the Republic of Croatia and realised 6,3 - 6,5 % of the Croatian GDP. In 2004, the average GDP per capita in Istria was 8,843 € or 10,982 USD; which is bigger (32 %) in comparison to 2001." http://www.istra-istria.hr/index.php?id=1409 (15/7/07)

[18] According to the 2001 census, the share of the highly-educated (colleges, academies, masters, Ph.Ds) in the total number of people above 15 was 7,8% (RH), and 7,2% in the Istrian County, i.e. a bit less. http://www.dzs.hr/ (15/7/07)

[19] 29th Sept 2006 – In the mid-September, the Central Council for Regional Planning negatively evaluated the tourist *Brijuni-Rivijera* Project, which Veljko Ostojić, who headed the Brijuni Rivijera Company at that time, understood as a wish aimed at improving this project but he criticised the Council because they had not invited the representatives of the company, mainly state-owned, to attend the meeting and clarify misunderstandings about the project. As this is one of the biggest projects in Croatia this year, the representatives of the Brijuni Rivijera Company should have been invited to the meeting, as well, to be able to clarify all the misunderstandings about this project, said Mr Ostojić at the press conference in Pula. The Council found the project weak points considering the lack of professionalism, slapdash quality, excessive apartment building, possibility of selling the coastline at low prices, and the neglect of urban, culture-and-landscape-related and economic aspect of the development of the Brijuni Islands. http://vijesti.hrt.hr/arhiv/2005/09/29/KRV.html (10/6/07)

[20] "Golf in Istria: Building golf courses in Istria is of strategic importance for the development of Croatian tourism. Such a strong statement at the very beginning of the overviews in regard to the development of golf in Istria and Croatia realistically depicts the decisions and efforts of the Istrian County considering the realisation of golf project, and the fact that 14 out of 23 locations planned for building golf courses (Decree of the Government of the Republic of Croatia, August & December 1999) are situated in the Istrian County is particularly welcome, but it also requires a need to overtake the role of subject in charge of the entire golf project in Croatia. In order to further expand the possibility of developing this completely new, currently non-existing tourist sector in Istria, the number of potential locations needed for the golf project realisation has been increased by the Regional Plan of the Istrian County, from 14 to 22." http://www.istra-istria.hr/index.php?id=273 (10/6/07)

[21] In Paradiž, near Vodnjan, in the area of 2 ha, the so-called 'traditional Istrian villas' with swimming pools and tennis courts (24 in total) are to be finished soon. It is quite clear to anyone who has ever visited at least one Istrian village and seen old stone houses that these constructions do not have so much in common with the tradition, in particular swimming pools and tennis course!

[22] From the article by D. Šišović (Nekontrolirana turistička izgradnja i apartmanizacija s priobalja se "seli" i na zelene brežuljke Poluotoka) published in Glas Istre on 15/01/07: "Pouring concrete not only onto the coastline but also into the inland is increasingly evident in Istria, so it is high time we took into account this as well through predicting the ways of rural development and incorporating them into the strategic developmental programme«, this was often mentioned by Gracijano Prekalj (Director of the County Agency for the Rural Development of Istria – AZZRI) at workshops held in December, when the process of working out the Strategic Programme of Istrian Rural Area Development 2006-2012 started. In 'political speeches' so far, the phrase 'pouring concrete and excessive apartment building' has referred to the Istrian coastline, already captured by excessive building of massive tourist facilities, but a careful observer will notice that even the inland also experienced the vigorous building of this and that in the last decades, often almost completely in accordance with the valid legislature. Diagnosing such a problem, acknowledged and recognised by the political and administrative power in Istria, is certainly a positive move to institutionalising the awareness of the values that the Istrain region possesses. "

[23] "Public reactions to Rockwool are late: Something that should have been done in 2004 and 2005 by the Istrian County, Pićan Municipality and the investor, Rockwool (Denmark), was *post festum* organised by GONG, hoping that the two sides could move away from ignoring and accusing each other. We mean the round-table discussion entitled "Rockwool - Yesterday, Today, Tomorrow."; http://www.zelena-istra.hr/modules.php?name=News&file =article&sid=239 (10/6707)

[24] "Public discussion on LNG and Plomin 3 held in Labin; Everyone who participated in the discussion was mainly against the thermo electric power plant Plomin 3 (coal) and the LNG terminal in the Plomin Bay, and the reasons mentioned as follows: fear for health and safety, children's in the first place; threat to other perspective and acceptable economic activities such as tourism. Leaving the area as a consequence in case of the realisation of the stated projects was mentioned by a larger number of participants. People mostly disapprove the target transformation of the eastern Istrian coastline into an inferior industrial zone, undertaken by the Istrian County, as well as the arguments expressed by the head of the County in favour of Plomin as the best location for the LNG terminal without consulting the local community "; http://www.zelena-istra.hr/modules.php?name=News&file=article&sid=249 (10/6/07). In September 2008, the DINA complex – Petrokemija (Omiš, Krk Island) was chosen as a location for the LNG terminal, from where 10 billions m2 gas will be sending to Europe after 2014.

TURISTIČKA DESTINACIJA - STANDARDI, ZVJEZDICE I KVALITETA;
OD MITOVA I ZABLUDA DO STVARNOSTI

SAŽETAK

U članku se definiraju pojmovi standarda kvalitete, općenito i onih u turizmu, u Hrvatskoj i svijetu, demistificiraju zvjezdice kao oznake kategorizacije i njihova (ne)moguća primjena u praksi upravljanja kvalitetom hrvatskih turističkih destinacija. Kao rezultat istraživanja provedena za potrebe doktorske disertacije koautorice u odabranim hrvatskim i EU turističkim destinacijama, a na temelju aktualnoga Pravilnika o razvrstavanju, kategorizaciji i posebnim standardima ugostiteljskih objekata, predlaže se model kategorizacije Pule/Istre kao turističkih destinacija (ovisno o definiciji i obuhvatu destinacije kao cjeline). Time se želi potaknuti na razmišljanje, istraživanje, analiziranje i moguću uspostavu sustava kvalitete/kategorizacije hrvatskih turističkih destinacija.

JEL: O30, R00, M11, O21

Ključne riječi*: kvaliteta, standardi, turistička destinacija, zvjezdice, kategorizacija, sustav upravljanja kvalitetom*

Doris Peručić[*]

THE MOTIVES OF CRUISE COMPANIES FOR GOING MULTINATIONAL

ABSTRACT

The process of business consolidation has been present throughout the history of the cruise industry. Economies of scale and the need to expand into new markets around the world have been, in part, the cause of mergers and acquisitions of cruise companies. Today, on a global scale, three large corporations dominate the cruise market. They account for 84.3% of the total gross tonnage and 83% of the total number of lower berths. The companies enriched their supply with the introduction of increasingly larger ships and with product innovations, and exploit an internationally renowned corporate image to extend operations overseas. The paper investigates the motives for multinational operations and how cruise companies manage the supply in order to reduce costs and their business risks.

JEL: L10, L21, M31

Key words: *cruise companies, motives, expansion, economy of scale, costs, marketing advantages*

1. INTRODUCTION

In the tourism sector, a number of economic changes have impacted upon the structure and organization of tourism business. Industry concentration through mergers and acquisitions is present, premised by perceived economies of scale and efficiency gains. The modern business of cruise companies is also globally oriented. Global expansion relies not just on the need to achieve international growth, but also on the maximization of financial return. The growth in demand and the economy of scale have caused the appearance of gigantism. Larger ships increase business risks, as the greater amount of invested capital assumes a high occupancy level of available capacities. Such ships are registered in countries that offer flags of convenience, and the crewing of such ships is often provided from low-wage countries. The increasing internationalization of business requires managers to have greater know-how and skills in managing supply.

2. MOTIVATIONS OF GLOBAL EXPANSION, MERGERS AND ACQUISITIONS

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Many service industries are becoming dominated by a few large global players. The need for efficiency in the international tourism market has accelerated the emergence of multinational corporations. For a tourism enterprise operating in a multinational market there are many advantages to increased size (Cooper, et al., 1996, 270): economies of scale, ability to resource high-profile promotional campaigns, brand name benefits through standardization and quality control, ability to spread the risk among various markets, implementation of advanced marketing techniques on an international basis, utilization of technology (especially CRS), optimization of capacity/inventory usage and reduction of seasonality problems, access to the international labor market, advantages over other members of the distribution channel, improved political influence, managers who have more time to „manage", market prominence and stronger branding.

For many cruise companies, the key to prosperity in the current industry is growth. The strategic implementation of a company's growth is a complex process involving the understanding of many factors. The purpose of business consolidation was to enter international markets, first within the region of activity, and then to distant regions, in the search for new attractive destinations, and new generating markets. Partnerships are made with other cruise companies, hotel companies, travel agencies, transportation companies, and so on. Global expansion relies not just on the need to achieve international growth, but also on the maximization of financial return. The growth of cruise corporations can be explained by the advantage of economies of scale. According to Knowles the significant economies of scale can be derived from risk spreading, which enables groups to offset losses in one area against profits in another; there are purchasing economies to be achieved from the ability of groups to buy supplies in bulk and negotiate favorable terms and groups can benefit from marketing economies that are offer the opportunity to create a recognizable group image in the market and promote it jointly, thereby increasing consumer awareness as well as reducing costs (Knowles, 1996, 93). Today, a small number of large cruise companies dominate with their capacities and financial powers.

One of the ways for large cruise companies to grow and to enter a foreign market is by joint investment and direct foreign investment. There are examples of joint investment for cruise companies and tour-operators, ie. in 2002, Royal Caribbean Cruises Ltd. announced a joint venture with British tour operator First Choice Holidays Plc to form Island Cruises and in 2007 they announces a joint venture with German tour operator TUI AG to form TUI Cruises (Royal Caribbean Cruises Ltd., 2007 Annual Report); in 2007 Carnival Corporation & Plc and Orizonia Corporation, Spain's largest travel company finalize a new multi-ship joint venture serving the Spanish cruise market. Carnival owns 75 percent of the new company, called Iberocruceros, with Orizonia owning 25 percent (http://phx.corporate-ir.net/phoenix.zhtml?c=200767&p=irol-corporatetimeline).

Foreign direct investment is also a significant factor in the corporate strategy for entry on foreign markets. A strong incentive for horizontal integration may be the reduction in competition that occurs from buying foreign competitors (Tribe, 2001, 345). The main objective in mergers is to create a unit that will be able to satisfy tourist demands, using an adequate level of coordination between all parties, including the realization of greater profits from this form of business. There are numerous examples of mergers and acquisitions of cruise companies with an already formed brand image and a good knowledge of local markets and the economy, but with no chance of market survival under the harsh competitive conditions. Such processes in the cruise market had already started in the early 70s, when the British cruise company P&O, due to a

decline in demand from the European market, turned towards the North American market and purchased the North American operator Princess Cruises in 1974 (Cartwright & Baird, 1999, 38). In the mid-90s, these processes intensified with the entry of American companies on the European cruise market. For example, in 1997, Carnival Corporation became a 50% owner of Costa Cruises, an Italian company. In 1998, it purchased the British Cunard Line, and in 2000, the remaining 50% of Costa Cruises. The biggest step was the merger with P&O Cruises, the third largest in the world (Shipping Statistics and Market Review, 2002, 9), which already owned Aida Cruises, specialized for the German market, and Princess Cruises specialized for the North American market. Royal Caribbean Cruises Line (RCCL), the second largest in the world, made similar moves. It entered the European market by becoming the owner of the Greek Celebrity Cruises in 1997. In fall of 2006, it took over Pullmantur S.A. (Royal Caribbean acquires Pullmantur, www.cruise-community.com/ Headlines.asp), Spanish national cruise operator, and strengthened its position in Spain and in Europe. Many cruise companies expanded their business by acquiring other operators with experience in a different market segment. The original brand name was frequently retained, as it often carried considerable customer loyalty.

The dynamics of the sector, buying, selling, merging, separating, entry and exit from large corporations have resulted in increasingly greater concentrations of capacities in fewer large companies.
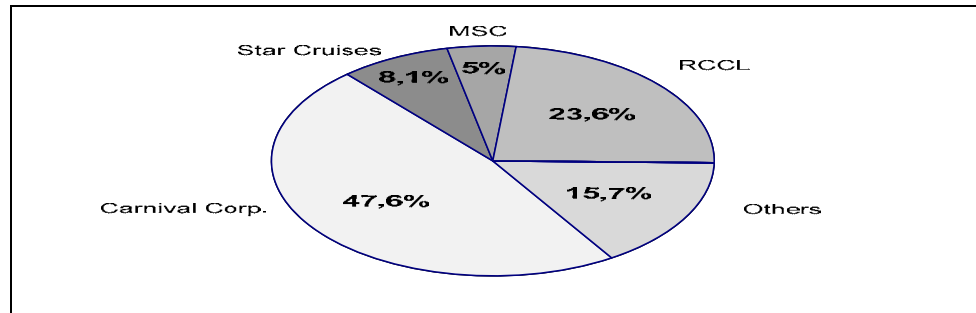
Figure 1

Market share of the four leading cruise companies 1996 (gross tonnage -%)
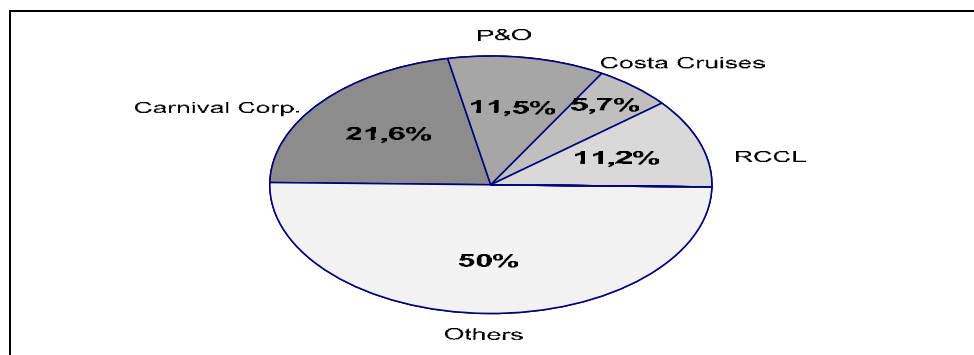
Source: Calculated from the Shipping Statistics and Market Review, (1996), Institute of Shipping Economics and Logistics (ISL), Bremen, 40 (7), p. 4.

Figure 2

Market share of the four leading cruise companies 2008 (gross tonnage -%)

Source: Calculated from the Shipping Statistics and Market Review, (2008), Institute of Shipping Economics and Logistics (ISL), Bremen, 52 (8), p. 12.

In 1996, four leading companies, P&O Princess Cruises, Carnival Corporation, RCCL and Costa Crociere, accounted for 45.8% of lower berths and 50% of gross tonnage (Shipping Statistics and Market Review, 1996, 4). Thirteen years later, that is, in 2008, the concentration level is even greater, so that the four leading operators account for 83% of lower berths and 84.3% of the total gross tonnage (Shipping Statistics and Market Review, 2008, 12). In the meantime, P&O Princess Cruises and Costa Cruises became part of Carnival Corporation, and Star Cruises Group and MSC joined the four leading companies. Transnational corporations represent a great force, as their access to finances, technology and information gives them the strategic power that results in a competitive advantage.

3. ECONOMY OF SCALE, GIGANTISM AND COSTS

Cruise fleets are on the rise. There are increasingly more large ships that can carry more than 3000 passengers. The appearance of gigantism in the cruise industry was primarily conditioned by economic reasons and the dynamic and continuous growths in demand. The number of lower berths in the period from 1990-2008 increased more than three times, from 114,000 to 364,000 berths, and the average capacity of cruise ships almost doubled, from 671 to 1,282 berths (Shipping Statistics and Market Review, 2008, 35). The dynamic growth in the demand for cruises in the latter half of the 80s encouraged ship owners to invest in the construction of newer and larger ships. This was made possible by the revenues realized and the profits made precisely with the new ships and their numerous facilities, which thanks to their variety and abundant offer onboard attracted an increasingly greater number of passengers and additional revenues (Ban, 1998, 18).

Table 1

Average capacity worldwide fleet 1995-2008

YEAR	NUMBER OF SHIPS	LOWER BERTHS	AVERAGE CAPACITY
1995	222	160,000	721
2000	243	223,000	918 (+27.3%)
2008	284	364,000	1,282 (+39.6%)

Source: Calculated from the Shipping Statistics and Market Review, (2008), Institute of Shipping Economics and Logistics (ISL), Bremen, 52 (8), p. 35.

Economy of scale is the main reason for building increasingly larger ships, as this kind of ship can accommodate more passengers at lower transportation costs (fixed and variable) per passenger (transport unit), and can offer cheaper travel packages, including greater revenues and profits. In the cruise industry, the economy of scale is best expressed and seen as a growing economy of scale (growing economies of scale occur when the growth of all imputes cause more than proportional growth in production levels (Samuelson & Nordhaus, 1992, 111), which can be shown by the fact that revenues grow above what is proportional according to the money invested in a new, larger capacity ship (Ban, 1998, 58).

The order book for new ships in the period 2009-2012 shows that there are 38 ships on order with a total number of 84,430 lower berths. The fact that the average capacity of new ships on order is 2222 berths supports the claim that the cruise market is introducing increasingly larger ships. The data from the order book show that mainly leading cruise corporations invest in large ships, and that the price per berth decreases with the growth in the ship's capacity. In 2009, Royal Caribbean International, the owner of presently the largest ship in the world, will introduce an even larger ship to the market, whose capacity will be 5400 lower berths and with a 220,000 gross tonnage (www.cruise-community.com/Search/nb.asp).

Table 2

Orderbook

Cruise Line	Ship Name	Yard	Gt	Lower Berths	Reported Price	Cost per berth
2009						
AIDA Cruises	AIDAluna	Meyer Werft	68,500	2050	$390m	$190,244
American Cruise Lines	Independence	Chesapeake Shipbuilding	3,000	104	$30m	$288,462
Carnival Cruise Line	Carnival Dream	Ficantieri	130,000	3652	$668m	$182,913
Celebrity Cruises	Celebrity Equinox	Meyer Werft	122,000	2850	$641m	$224,912
Costa Cruises	Costa Luminosa	Ficantieri	92,700	2260	$528m	$233,628
Costa Cruises	Costa Pacifica	Ficantieri	114,500	3004	$579m	$192,743
MSC Cruises	MSC Splendida	STX Europe	133,500	3300	$550m	$166,667
MSC Cruises	MSC Magnifica	STX Europe	93,000	2550	$548m	$214,902
Pearl Seas Cruises	Pearl Mist	Irving Shipbuilding	8,700	210	$64m*	$304,762
Royal Caribbean Line	Oasis of the Seas	STX Europe	225,000	5400	$1,24bn	$229,630
Seabourn Cruise Line	Seabourn Odyssey	T. Mariotti	32,000	450	$250m	$555,556
Silversea Cruises	Silver Spirit	Ficantieri	36,000	540	$300m*	$555,556
2010						
AIDA Cruises	AIDAblu	Meyer Werft	71,000	2174	$513	$235,971
Celebrity Cruises	Celebrity Eclipse	Meyer Werft	122,000	2850	$698m	$244,912
Costa Cruises	Costa Deliziosa	Ficantieri	92,700	2260	$548m	$242,478
Cunard Line	Queen Elizabeth	Ficantieri	92,000	2092	$708m	$338,432
Holland America Line	Nieuw Amsterdam	Ficantieri	86,000	2100	$567m	$270,000
Norwegian Cruise Line	F3	STX Europe	150,000	4200	$940m	$223,810
Oceania Cruises	Marina	Ficantieri	65,000	1260	$530m	$420,635
P&O Cruises	Azura	Ficantieri	116,000	3076	$535m	$173,927
Ponant Cruises	Le Boreal	Ficantieri	106,000	264	$150m*	$568,182
Ponant Cruises	L'Austral	Ficantieri	106,000	264	$150m*	$568,182

Cruise Line	Ship Name	Yard	Gt	Lower Berths	Reported Price	Cost per berth
Royal Caribbean Line	Allure of the Seas	STX Europe	225,000	5400	$1,4bn	$259,259
Sea Cloud	Sea Cloud Hussar	Factoria Naval de Marin	-	136	$140m	$1,029,412
Seabourn Cruise Line	Seabourn Sojourn	T. Mariotti	32,000	450	$250m	$555,556
2011						
AIDA Cruises	Bez imena	Meyer Werft	71,000	2174	$557m	$256,210
Carnival Cruise Line	Carnival Magic	Ficantieri	130,000	3652	$738m	$202,081
Celebrity Cruises	Bez imena	Meyer Werft	122,000	2850	$798m	$280,000
Costa Cruises	Bez imena	Ficantieri	114,200	3012	$726m	$241,036
Disney Cruises Line	Bez imena	Meyer Werft	124,000	2500	$899m*	$359,600
MSC Cruises	MSC Meraviglia	STX Europe	93,000	2550	$548m	$214,902
Oceania Cruises	Bez imena	Ficantieri	65,000	1260	$530m	$420,635
Seabourn Cruise Line	Bez imena	T. Mariotti	32,000	450	$290m	$644,444
2012						
AIDA Cruises	Bez imena	Meyer Werft	71,000	2174	$565m	$259,890
Celebrity Cruises	Bez imena	Meyer Werft	122,000	2850	$768m	$269,474
Costa Cruises	Bez imena	Ficantieri	114,200	3012	$726m	$241,036
Disney Cruises Line	Bez imena	Meyer Werft	124,000	2500	$899m*	$359,600
MSC Cruises	MSC Favolosa	STX Europe	93,000	2550	$548m	$214,902
Total Ships: 38		**Total Berths: 84,430**		**Total Order Book Value: $21.509.0m**		**Average Price Per Berth: $254,755**

*estimation

Source: www.cruise-community.com/Search /nb.asp, 07.01.2009.

The faster development of the sector, the increase in capacities and the ever-growing competition has promoted the quality of the supply and the search for new destinations. Larger ships increase business risks, as the greater amount of invested capital assumes a high occupancy level of available capacities. Companies resolve the risk of filling capacities with aggressive marketing and the transfer of ships to regions where there is a high season. As compared to the hotel industry that changes rates according to season, ship operators change cruise regions and itineraries (Toh, et al., 2005, 123). Considering that ships can be transferred from one region to another, companies can resolve the problem of seasonality, which is characteristic for most cruise regions. The world has become a global destination, for today, all regions are included on cruise itineraries. More embarkation ports are developing closer to the passenger's domicile in each cruise region. The development of regional embarkation ports affects the growth in demand by local residents for cruises, and globalization processes make these ports more accessible to customers worldwide.

The result of globalization in the cruise sector is the use of the so-called Flag of Convenience (FOC), which enables cruise companies to substantially reduce their

running costs. This is not a new phenomenon, as some processes, which in theory we now consider to be the results of globalization, have occurred in practice even before. As with the case of cargo ships, most cruise ships are registered under favorable registries. The reasons are economic ones, as the ship operator can benefit from less stringent shipping regulations and lower taxes, which strengthen their competitiveness, enabling the sale of cruise package at lower prices (Ban, 1998, 22). Most cruise ships sail under the Bahamas, Panama and Bermuda flags, 54.2% ships and 63.1% gross tonnage (Shipping Statistics and Market Review, 2008, 35).

Figure 3

Cruise fleet by registered flags 2008 (ships of 1000 gt and over)
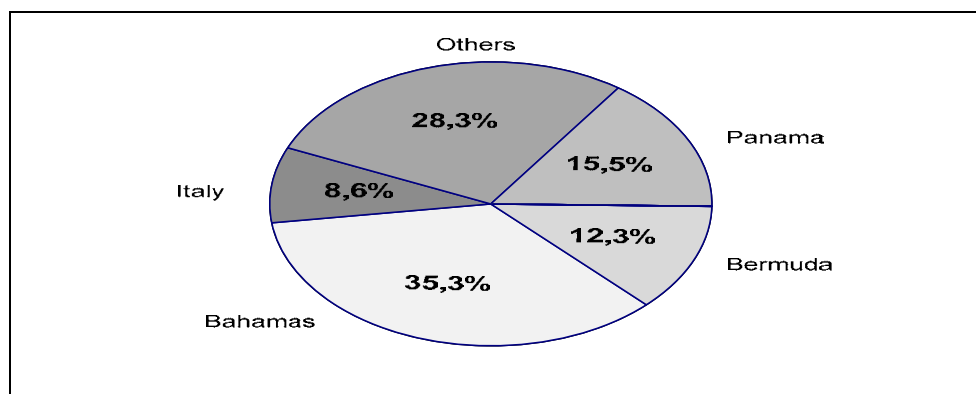
Source: Shipping Statistics and Market Review, (2008), Institute of Shipping Economics and Logistics (ISL), Bremen, 52 (8), p. 35.

In order to achieve price leadership, cruise companies are constantly attempting to lower their costs. The use of flag of convenience enables companies to use cheap labor force from economically less developed countries. For a ship with a 24-member crew, the difference between an all-northern European crew and an all-Chinese crew came to 698 400 US dollars a year (Wood, 2006, 401). Considering the fact that the larger cruise ships may have over 1000 crew members (about 70% of them on the hospitality side), the labour costs savings afforded by flag of convenience are enormous. The crew aboard a mega cruise ship is likely to be diverse by nationality and culture. For example, on a cruise in the Mediterranean on one of the Princess Cruises ships, there were 2054 passengers from 64 countries and 980 crew members from 54 countries (Gibson, 2006, 96). The cruise companies have access to a truly global labour force.

4. MARKETING ADVANTAGES

Major cruise companies, like many other hotel chains, are developing a portfolio of cruise brands to attract a wide range of market segments and to develop brand loyalty. This is being achieved through carefully planed cruise brands, developed, operated and marketed to satisfy the needs, expectations and budgets of clearly defined market segments. Leading cruise corporations have an internationally renowned corporate image which they exploit to extend operations overseas. By branding they differentiate their products in an increasingly competitive marketplace. For example, Carnival Corporation diversified its supply with 11 various brands (Carnival Cruise

Line, Princess Cruises, Seabourn, Cruise Line, Holland America Line, Costa Cruises, Cunard Line, Ocean Village, P&O Cruises, P&O Cruises Australia, Iberocruceros and Aida Cruises) that were successfully positioned in almost all market segments (http://ph x.corporate-ir.net/phoenix.zhtml?c=200767&p=irol-prlanding).　　Branded　　names guarantee standard.

Table 3

Major groups and their brand sectors

CARNIVAL CORPORATION
Carnival Cruise Line (Contemporary) North American market
Princess Cruises (Premium) North American market
Holland America Line (Premium) North American market
Seabourn Cruise Line (Luxury) North American market
P&O Cruises (Premium) British market
Cunard Line (Premium) European market, mostly British
Ocean Village (Budget) British market
AIDA Cruises (Contemporary) German market
Costa Cruises (Contemporary) European market
Ibero Cruceros (Budget) Spanish market
P&O Cruises Australia (Budget/ Contemporary) Australia/New Zealand
ROYAL CARIBBEAN CRUISES
Celebrity Cruises (Premium) North American and European market
Royal Caribbean International (Contemporary) North American market
Azamara Cruises (luxury) - North American market
Pullmantour (Budget) - Spanish market
CDF – Croisiere de France - (Contemporary) French market
Island Cruises (Budget) – joint venture with First Choice Holidays – British market
TUI Cruises (Budget) - joint venture with TUI AG – German market
STAR CRUISES GROUP
NCL America (Contemporary) North American market
Norwegian Cruise Line (Contemporary) North American market
Star Cruises (Contemporary/Budget) Asian market

Source: Author according to Peisley, T., (2006), The Future of Cruising – Boom or Bust? A worldwide Analysis to 2015, (Essex: Seatrade Communications Ltd.), p. 35-36.; *http://phx.corporate-ir.net/phoenix.zhtml?c=200767&p=irol-products*, 07.06.2008, Royal Caribbean Cruises Ltd., 2007 Annual Report (*http://media.corporateir .net/media_files/irol/10/103045/2007_AnnualRep_LR.pdf*), 10.09.2008.

The strategy of creating multiple brands – the management of a group of brands within the same product category – enables better market segmentation, as each brand has various benefits and qualities that give rise to various shopping motives with various groups of clients (Kotler, et al, 2007, 566). Cruise companies, which are part of large corporations, develop their own strong *brand*. It is brands that the customer identifies with rather than the actual company (Cartwright & Baird, 1999, 118). A corporation develops a global strategy, within which it develops strong *brands* for various market segments. Each company within a large corporation usually develops a

single *brand*, as the corporation's objective is to have strong *brands* aimed at a specific market segment. Most companies dispose of a number of ships. Each ship is a unique product, yet part of the principal *brand* that is differentiated from others through specific partial products (there are no two identical ships). Partial products, which are specific to this brand and which are recognizable on the market, are the same on all ships, whereas others are different and unique to each ship (the name of a ship, the name of a deck, the interior, people, contents, etc.).

Global strategy of Carnival Corporation is creating multiple brands for different market segments. The business model driving Carnival Corporation is recognition and respect for each brand that needs its own unique history and unique future in order to be successful. Each company has its own true culture, which the customer expects to find. Separate organizations are in the best interest of the overall profitability of the group and in the viability of each brand (Cruise Industry News, 2003/2004, 18). Companies, as strategic business units, define its own marketing strategies in order to compete successfully on the current and prospective markets and develop competitive advantage. P&O Cruises, for example, traditionally aimed at British market, decided to angle each of their ships at slightly different parts of the market. The Arcadia, is aimed at a slightly younger, affluent passenger base, made up of people who don't mind paying premium ticket prices and who are apt to spend more onboard and traveling without children, Artemis is aimed at older, more experienced cruisers also without children onboard and Oceana is contemporary and family-focused (Cruise Industry News, 2005, 74).

Choosing the right brand name contributes greatly to the product's success. Just as a brand's name should be easy to pronounce, recognize and remember, so must a ship's name be able to transfer a certain message to passengers, regarding product benefits and quality (entertainment, tradition, quality, etc.), and yet at the same time show to which brand it belongs to. The name of a ship contains the name of the principal brand with some companies, which is the best solution, for example, Carnival Legend, Carnival Glory, Carnival Liberty, etc. or Princess Cruises, Coral Princess, Grand Princess, Diamond Princess, and Sea Princess.

Brand names are very important as they often carry with them considerable customer loyalty perception. Even when a cruise company acquires another company, they will often keep the name and ambience of the acquired company in order to retain the company base (Cartwright & Baird, 1999, 73). In this manner, large corporations develop specific international *brands* that serve particular market segments. As early as 1974, the British company P&O, when acquiring the North American operator Princess Cruises, kept the original name that was well known in the US. By keeping the Princess name they were able to expand into the North American cruise market. Other companies made similar moves as it was considered common practice for large companies and corporations entering new markets when acquiring well positioned companies on specific market segments. For example, Carnival Corporation entered the luxury market segment by taking over the American operator Seabourn, and the European market by taking over the Italian company Costa Crociere.

Another part of branding is making the product, in this case the ship, easily identifiable through the colors painted on their funnels, the exterior design, the color of the hull, the logo etc. For example, HAL and Cunard ships are recognizable by the hull's dark blue color, as compared to other ships whose hulls are usually painted white. The Aida Cruises and Norwegian Cruise Line companies have gone a step further by painting recognizable and easily visible symbols on the hull. Large eyes and a mouth are painted on the hulls of Aida Cruise ships, and the Norwegian company has floral wreaths, sun and stars, and variously colored ribbons. Ships are recognizable by their

funnels as well. For example, Carnival cruise ships have a distinctive red-winged funnels and Costa ships have yellow funnels with a large «C», etc. These distinctive features form part of the brand image. Every time a cruise ship anchors off a holiday resort it is a floating advertisement for the company (Cartwright & Baird, 1999, 74).

The cruise companies have been dominated by product innovations and branded names to attract different segments of passengers and increase sales. The products offered by various cruise companies are differentiated in many ways, such as in the quality and configuration of their ships and the itineraries they carry. In competitive market place companies are much more aware of need for achieving price leadership or adding value to their products in order to achieve market share and profitability.

5. CONCLUSION

The globalization processes have encouraged the development of the cruise industry that is presently characterized by gigantism, and the strong development of business centralization. Today four leading corporations account for 83% of lower berths and 84.3% of the total gross tonnage. The motives of cruise companies for going multinational are: economies of scale, profit maximization, access to the international labor market, ability to spread the risk among various markets, investments and growth in cruise fleet, brand name benefits through standardization and quality control, implementation of advanced marketing techniques on an international basis, optimization of capacity usage and reduction of seasonality problems, market prominence and stronger branding. Cruise ships, which today are considered as a complete destination, are mobile, which means that they can relocate anywhere, anytime and they sail under flags of convenience, which allows them to realize greater profits. Cruise companies, in order to reduce their business risk and to achieve an economy of scale, are developing new markets, attracting new customers, seeking new destinations and new itineraries. An internationally renowned corporate image and companies brand name has been exploited by extending operations oversees. The construction of increasingly larger ships, the use of flags of convenience and the employment of a cheap labor force from economically less developed countries led to cheaper package prices, directed towards a mass market. The cruise market today has the features of a global market. Sailing the sea for pleasure has become a mass phenomenon and a greater number of passengers are selecting this kind of vacation.

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MOTIVI KRUZ KOMPANIJA ZA MULTINACIONALNI RAST

SAŽETAK

Proces poslovnog povezivanja kruz kompanija prisutan je kroz povijest razvoja kruz industrije. Ekonomija veličine i potreba za širenjem na nova tržišta bili su između ostalog razlog spajanja i akvizicija kruz kompanija. Danas tri velike korporacije dominiraju na svjetskom tržištu pomorskih krstarenja. Njihov udjel iznosi 84,3% ukupne svjetske bruto tonaže i 83% ukupnog broja brodskih ležajeva. Kruz kompanije obogaćuju svoju ponudu novim i sve većim mega brodovima i inovacijama proizvoda te koriste globalnu poznatost korporacijskog imidža kako bi se proširile na međunarodna tržišta. U ovom radu se istražuje zašto kruz kompanije šire svoje poslovanje na međunarodna tržišta i kako upravljaju ponudom u cilju smanjenja troškova i rizika poslovanja.

JEL: L10, L21, M31

Ključne riječi: *kruz kompanije, motivi, ekspanzija, ekonomija veličine, troškovi, marketing*