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# Tourism, welfare and real estate market in small open economy: the case of Croatia



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**Abstract**

The paper investigates effects of the tourism boom on the real estate market in Croatia. According to the general equilibrium models of the tourism intensive small open economy, the most important benefit of the tourism is reflected in the fixed-factors rents, namely real estate market rents. This paper investigates results of the small open tourism intensive economy theoretical model in the case of the transition and EU accession of the Croatian economy. Analysis is focused on the real exchange rate changes in the tourism sector as the main source of welfare improvements and its effects on the fixed-factor prices in Croatia.

**Keywords**

tourism, real estate, development, EU enlargement, Croatia

**JEL classification**

R2, F2, F21

## INTRODUCTION

Tourism is a major source of export earnings for many countries, and it is often put forth as a potentially important source of economic growth for other countries. Governments in both developed and developing countries often, although with various level of success, invest in infrastructure and promotion of tourism sector. In the context of developing countries there has been considerable debate about the merits of promoting tourism as a part of development strategy (Copeland 1991; Bryden 1973; Diamond 1975, 1977; Turner 1976; Pearce 1989).

This paper analyses predictions of the general equilibrium model of small open economy with expanding tourism industry within the context of the transition of the Croatian economy. Although there is a substantial amount of literature on the economic effects of tourism, these issues have been previously examined within general equilibrium framework only by Copeland (1991).

In Copeland's (1991) paper effects of the increase of tourism demand on welfare of the small open economy has been examined. The backbone of the analysis has been closely related with the literature on "Dutch disease" (Corden 1984), which examines the effects of an expansion of export sector on the rest of the economy.

However, straightforward application of "Dutch disease" theory is not possible since there are several important differences between commodity export and tourism. First, in contrast to commodity export, tourists must visit the exporting country to purchase and consume goods and services. As a result, goods which are normally nontradable, became partially tradable in the presence of tourism. Second, tourists typically consume a bundle of goods and services and they assess the cost of the implicit vacation package as a whole, rather than price of the individual good. Finally, bundle of goods is consumed jointly with unpriced natural amenities, such as climate and scenery.

General equilibrium models of tourism boom in a small open economy usually indicate that in order to yield significant benefits, local residents must either reap gains from improvement in the terms of trade (real exchange rate), or must extract some additional rent from unpriced natural amenities enjoyed by tourists. In the absence of taxation and distortions such as unemployment, the appreciation of real exchange rate is the only mechanism by which tourism can benefit economy. Income received by the service sector partly reflects the value of unpriced natural amenities to tourists. In the presence of factor mobility, rents of the natural amenities are partially dissipated by entry of foreign capital, which mitigates the terms of trade appreciation (increased competition decreases prices) and the rents which are not dissipated will tend to accrue to fixed factors in the nontradable sector, such as land and real estate market (Copeland 1991).

This paper analyzes transitional movements in the Croatian economy in the tourism sector and real estate market. Primarily, analysis is directed toward identification of general movements in the prices in tourism sector and in the real estate market in Croatia. EU integration process in a tourism driven economy and accompanied real estate market creates an attractive option for the international capital flows. Having in mind that correlation between investment and savings is negatively correlated with EU integration processes (Feldstein and Horioka 1980; Blanchard and Giavazzi 2002) it is more than obvious that in Croatian case portfolio investments and FDI's are going to be almost solely focused towards real estate market and tourism industry in the next phase of integration (transition and EU accession process).

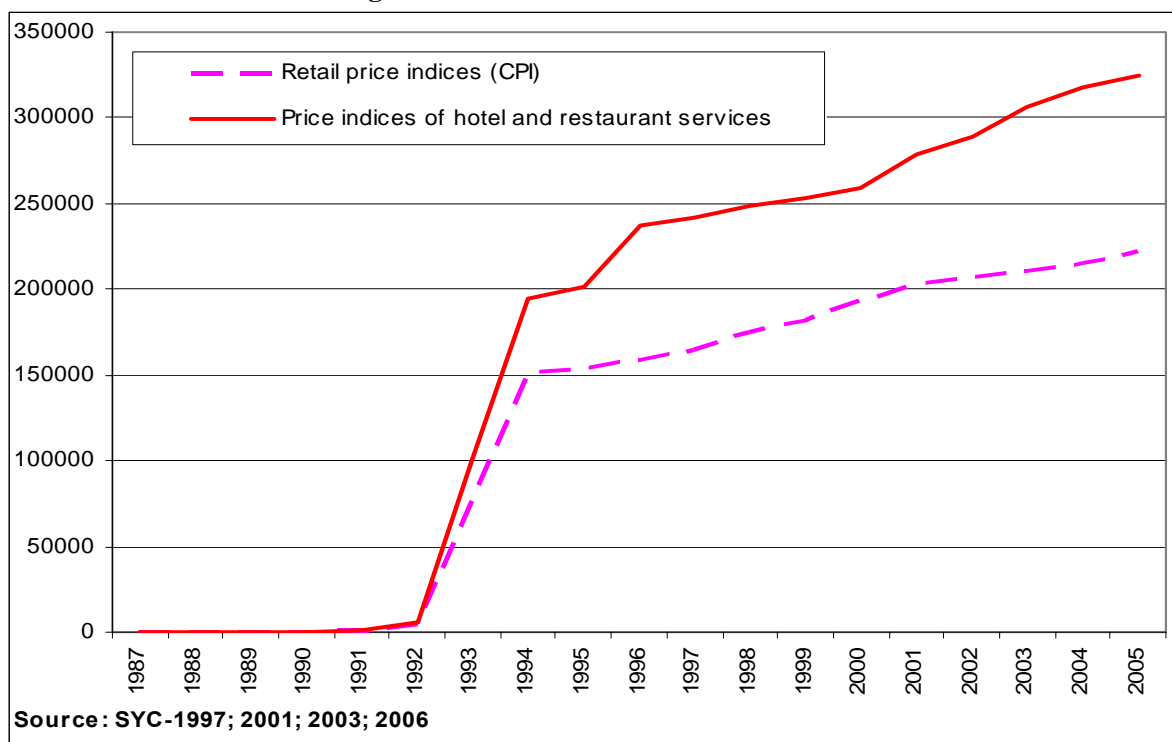
The first part of paper analyze developments in the Croatian tourism industry within the context of the Copeland's (1991) general equilibrium model without taxation and labor market distortions. In the second part of the paper, developments in the real estate market are analyzed with special focus on the real estate market in Zagreb (capital city) and on the Adriatic coast (major tourist destination). In the last part of the paper, experiences of other EU accession countries are analyzed within the context of negotiation about safeguard clause on the real estate market purchases of foreign citizens.

### TOURISM SECTOR

Tourism industry in Croatia has been quite strongly affected by the political instability in Croatia as well as by political turmoil in neighboring countries during nineties. The record pre-war and pre-transition year for the Croatian tourism industry is 1987. According to official statistics approximately 59 million of foreign tourist nights have been registered in the 1987. After record tourism season in 1987, the economical problems of late eighties and the homeland war in the early nineties resulted with a strong transitional slump in the tourism industry. Number of tourism nights decreased all the way to 7 millions in 1991. After the end of war conflicts in 1992, Croatian tourism industry started redevelopment process which was shortly interrupted in 1995 and 1999 by war conflicts. In 2005, number of foreign tourism nights amounted to 45 million, which is 25% bellow pre-transition and pre-war record (Figure 2).

On the other side, although quantity of tourism nights is still much lower than prior to transition, price level in Croatia is much higher than ever before. In the terms of purchasing power parity and/or Harrod-Balassa-Samuelson effect, Croatian economy is, after adjusting for level of productivity, single most appreciated transition economy. Furthermore, if we analyze price indices for hotels in restaurants it is quite obvious that tourism service sector appreciated even more than general price level in Croatia. Between 1987 and 2005, the ratio of price index in tourism (hotels and restaurants) and CPI (Retail price index prior to 1998) increased by 46% (Figure 2).

**Figure 1: Price indices in Croatia 1987=1**



In order to get approximation of real exchange rate changes for Croatian tourism industry, price index for hotels and restaurants has been divided by nominal exchange rate of German mark. In that way, ratio of tourism sector prices and nominal exchange rate of German mark multiplied by CPI of Germany can represent quite interesting approximation of movements in nominal prices expressed in real German marks (euros).

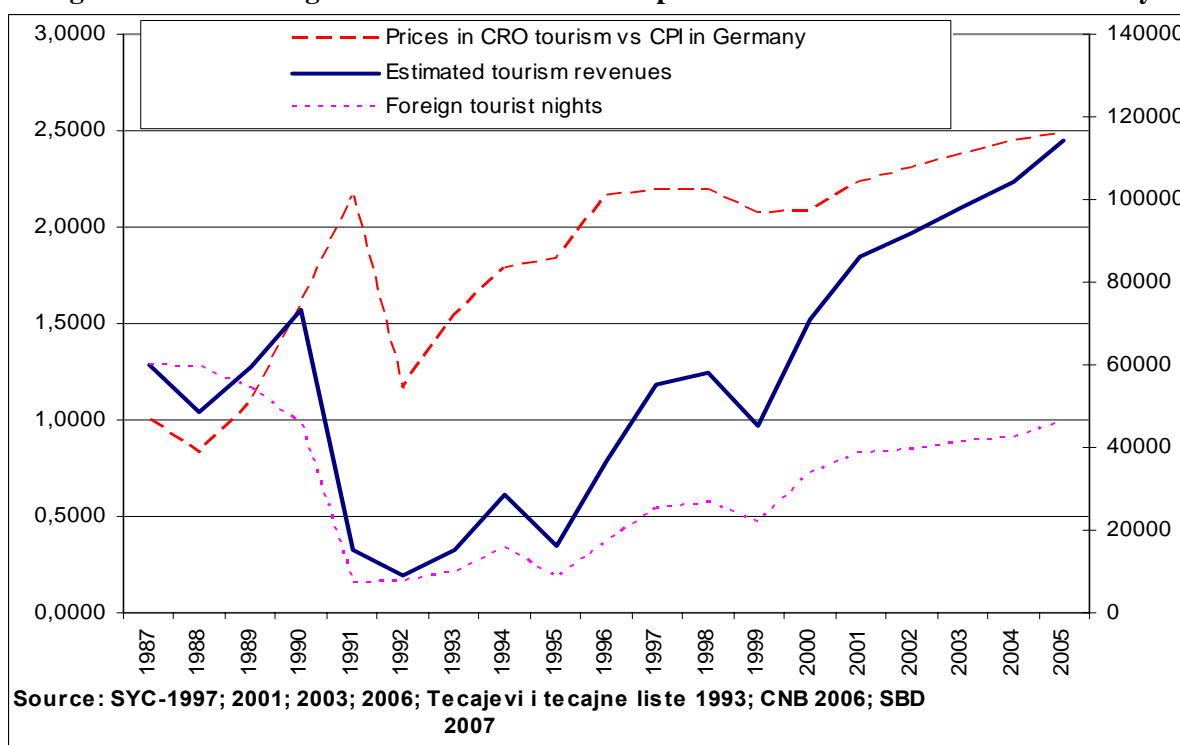
Nominal exchange rate of German mark has been selected due to two reasons. First, Germany has largest share in tourism arrivals in Croatia. Second, dollarization *vis a vis* German mark is standard feature of Croatian economy.

Under assumption that price indices of hotels and restaurants approximate prices of tourism industry and under assumption that tourism consumption in Croatia is price inelastic it is possible to highlight several general conclusion.

The ratio of hotel and restaurants prices and German mark nominal exchange rate multiplied by German CPI increased 148% between 1987 and 2005, indicating that revenues (expressed in German mark) for average night spent in Croatia in 2005 are approximately 1.5 times larger than in 1987. According to our estimate, in 2005 tourism industry revenues were approximately 168% compared to 1987, although tourism nights were 25% below 1987 level (Figure 2).

This conclusion is off course based on the assumption of price inelastic demand of tourist related goods and services which are not included in accommodation and restaurants. Therefore it represents upper bound for the tourism revenue growth with respect to the movements in relative prices and nominal exchange rate. Furthermore, our conclusion demands quite strong assumption that all tourists are Germans, which is only remotely truth. In reality, German tourists represent approximately 20% of total foreign nights in Croatia, with Slovenes and Italians representing additional 20%. Movements of prices in these other countries can quite substantially undermine our conclusions in regard to real exchange movements of non-German foreign tourists in Croatia.

**Figure 2: Tourism nights in Croatia and relative price level of Croatian tourism industry**



Obviously, process of transition and EU integration has created environment in which it was possible to change terms of trade in favor of Croatian tourism industry. The exchange rate based stabilization process induced appreciation followed by Harrod-Balassa-Samuelson effect has improved terms of trade in Croatian tourism sector quite drastically.

**REAL ESTATE MARKET**

Basic fundamental characteristic of the Croatian economy is it's biasness towards residential investments. Specific historical, anthropological, socio-psychological and economical environment (Stipetic 2003, Gelo 2002; Tica 2002) has created specific form of consumer preferences when it comes to the patterns of

consumption and private investments. As a consequence, Croatia is a country with population of 4.3 million inhabitants and dwelling stock of 1.9 million (SYC-2006, p. 334-335).

Furthermore, EU integration process has already created threefold effect on the real estate market in Croatia. Firstly, prospect of the possible accession of the Croatia in European Union has created expectation boom in the real estate market which have resulted with a strong positive trend in price levels. Potential future capital inflows have immediately started to influence market at the beginning of the negotiations.

Secondly, creation of European Monetary Union (EMU), specially the end of the process in 2002, has created structural brake in the behavior of financial sector in Croatia. During the process of the conversion of the euro, a large inflow of savings induced banks to soften lending. In turn, lower interest rates accompanied with traditional Croatian biasness toward residential investments resulted with a strong investment boom in the real estate market.

Thirdly, EU integration related reforms have forced fast and strong reforms of the cadastral and judicial system, which have speeded up formal procedures related to the real estate market. In Zagreb, the number of real estate properties without clear legal formal standing and ownership structure has decreased from 141,000 to 55,000 since 2004 (Vecernji list 2007).

As a consequence, the number of dwellings in Croatia increased from 1.86 million to 1.94 million with increasing growth rate. Between 2000 and 2005, annual number of completed dwellings increased from 17,487 to 19,995 (SYC-2006, p. 334-335.; DZS 2006). Such a dynamic in the real estate market is even more interesting if we have in mind the fact that there is 1.4 million of households in Croatia and demographics is indicating negative growth rate more than a decade. In 2001, there were 182,513 holiday dwellings and 196,633 abandon dwellings in Croatia (Tica 2002). A tourist intensive country with decreasing population and real estate boom obviously owes a lot to the expected tourism related welfare gains, capital inflows and EU integration process (SYC-2006, p.334).

IRS data also indicate that real estate market in Croatia is strongly growing, liquid and expanding industry. Total number of transactions has more than doubled between 1997 and 2004. In 2005 total activity slowly decreased and total volume of trade was 7.5 billion kunas, which is approximately 1 billion euros or 3.3 % of Croatian GDP (Croatian Chamber of Economy 2006).

Regardless of the slowdown in transactions in 2005, total tax revenues continued to grow indicating that on average, prices increased more than number of transactions decreased. In Zagreb, situation was slightly different. Drop of 8.7 % in the number of transactions was accompanied with 7.8% price growth, which has resulted in 1.6% smaller total property sales tax revenue (CentarNekretnina 2006).

**Table 1: IRS data for the real estate market in Croatia**

Year	Number of sales agricultural land	Number of sales building land	Number of sales dwellings	Number of sales commercial space	Number of sales mixed properties	Number of real estate market sales in Croatia	Real estate sales tax revenue (000 kn)
1998	16960	17119	41399	3559		79037	678943
1999	14787	15937	38416	3313		72453	618717
2000	21443	17499	47109	4069		90120	648111
2001	25866	18709	49509	4406		98490	699467
2002	27230	18506	50560	4651		100947	729917
2003	28645	21919	55814	4521	56	110955	714938
2004	30811	26233	57787	4716	1155	120702	875111
2005	32845	25297	54938	3911	1520	118511	925692
2006*	28977	20256	43290	2776	1339	96638	1189242

Note: temporary results for first nine months

Source: The Ministry of Finance of Republic of Croatia IRS Information System (2006)

In Croatia, statistical data on the real estate market is quite obscure. Statistical office is recording prices of newly built and sold square meter of dwelling in Croatia, Zagreb and the other parts of the country. According to these data, the primary real estate market average prices increased 46.2% since 1997 in Croatia. Prices increased 48.9% in Zagreb and in the rest of the country (including Adriatic coast) prices increased 61.3% in average.

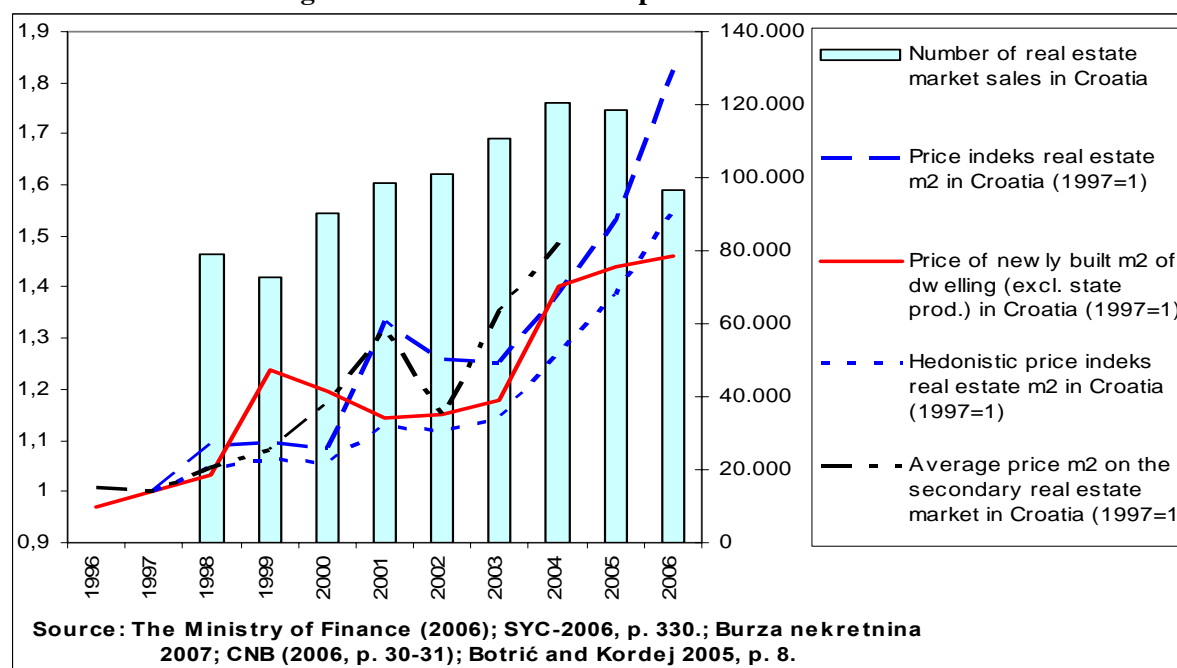
Secondary real estate market is quite poorly documented in Croatia. At this point in time there are only three sources of bid prices (Burza nekretnina, Centar nekretnina and Association of Real Estate Dealers). Since the index of Centar nekretnina is quite short (since May 2006) it is omitted from our analysis. Most of the data used in economic analysis of real estate market in Croatia is from the database of Burza nekretnina (2007) which spans from 1996. At this point even hedonistic real estate index of Croatian National Bank (CNB 2006) is based on the Burza nekretnina index. The index is based into four categories: dwelling price index in Zagreb, real estate price index in Croatia, real estate price index of Zagreb, and real estate price index at the Adriatic coast.

According to dwelling index in Zagreb, between 1997 and 2006, prices have increased 62.3%, and hedonistic dwelling prices have increased 59.1%. The index of average prices of real estate properties in Croatia increased 82.2% between 1997 and 2006, and hedonistic real estate prices increased 54.8%. In Zagreb, real estate price index increased 66.1% during the same period, and hedonistic real estate prices increased 51.2%. At the Adriatic coast, real estate index increased 111.5% since 1997, and hedonistic index increased 175.3% over the same period.

Association of real estate dealers' index shows similar dynamics, although for a short span of time. Average price of square meter on the secondary real estate property in Croatia increased 48.7% between 1997 and 2004. During the same period, average price of square meter of real estate property in Zagreb increased 21.4% and 95% at the Adriatic coast.

Comparative analysis of indices for average prices in Croatia varies between 46.2 and 82.2%. Although magnitude of the price increase varies among indices, it is obvious that strong growth started somewhere between 2000 and 2002. In year 2000, Croatia implemented some crucial EU reforms which have boosted negotiation process much faster and in 2002, conversion of euros induced real estate credit boom that was initially financed with domestic savings and later with foreign capital inflows.

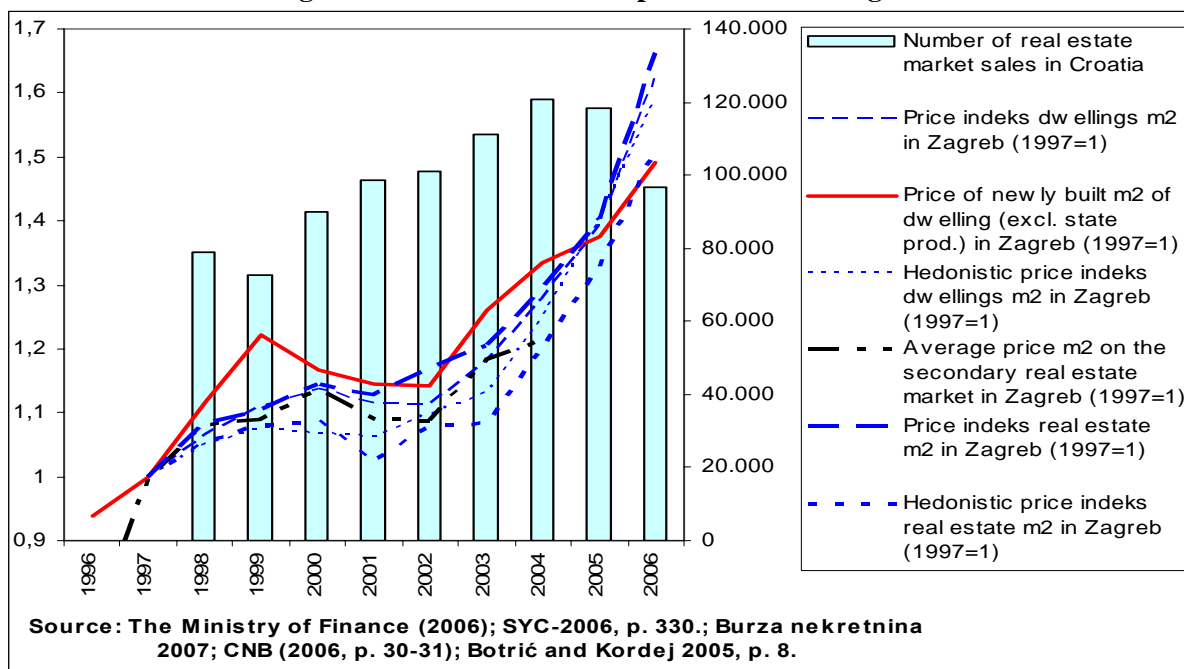
**Figure 3: Real estate market price indices in Croatia**



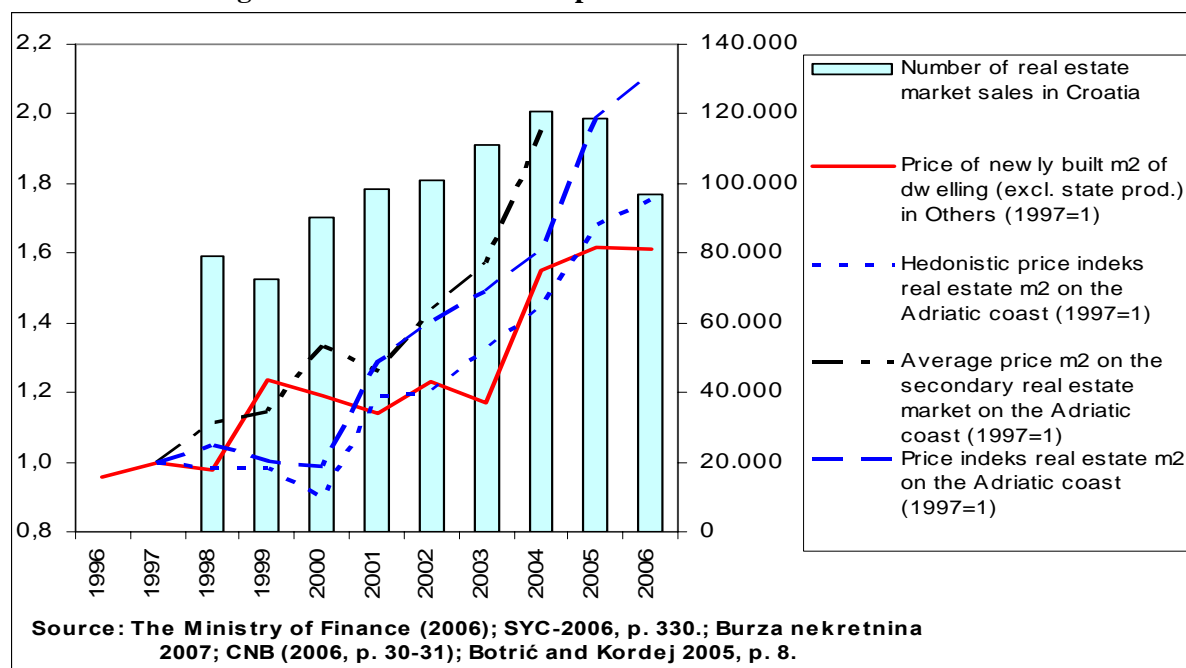


Dwelling and real estate price indices in Zagreb indicate growth between 51 and 66.1% annually. Compared to average prices in Croatia, growth in Zagreb is slower, but much more homogenous. All of the analyzed indices have indicated strong trend with short slowdown during the 1999 recession and 2000 political restructuring (elections). After the market correction during 1999-00, all of indices showed strong recovery of the real estate market in Croatia. Homogeneity of all indices and smaller growth compared to the national average can be attributed to tourism induced demand at the Adriatic coast and productivity induced growth in Zagreb (Harrod-Balassa-Samuelson effect). National indices depend more on the capital inflows, while Zagreb indices are strongly affected by the state of the economy. It is interesting to notice that all indices for Zagreb have been influenced by recession of 1999. On the other hand, national indices have not shown as much homogeneity during 1999 recession, as they did during 2002 after the euro conversion induced credit boom.

**Figure 4: Real estate market price indices in Zagreb**



The biggest growth rate is recorded on the Adriatic coast in Croatia. At the Coast prices surged between 75.3 and 111.5% since 1997. Index of the statistical office and index of the association of real estate dealers have not recorded any disturbance during 1999 recession. On the other hand, other two indices (Zagreb and National) showed significant slowdown indicating ambiguous effect of economic activity on the market. After 2000, prices surged sky high in the unprecedented way. In average prices almost doubled in less than a five year period on the secondary real estate market.

**Figure 5: Real estate market price indices at the Adriatic coast**

## EU INTEGRATION PROCESS

The real estate market in Croatia is booming together with a global real estate market elsewhere in the world. Croatian peculiarity is the fact that real estate market is booming much more in the economically underdeveloped coastal area compared to economically prosperous areas of Zagreb and north-western Croatia. Obviously, growth has been induced by recent EU and EMU enlargements and expected capital inflow from the future EU common market. On the other side big concerns exist in relation to the dynamics of integrations and question of soft landing is still in question.

Many new member countries managed to negotiate transitional arrangements with EU. Bulgaria, Cyprus, Czech Republic, Poland and Slovenia have transitional period of 3 years in which it is possible to use safeguard clause. In Malta, only EU nationals which are at least five years residents are allowed to acquire secondary residences. Slovenia have 7 years period to a general economic safeguard clause. Hungary has safeguard clause period of three years, except for the EU and EFTA nationals that resides in the country for more than 4 years (Mihaljek 2004, p. 194).

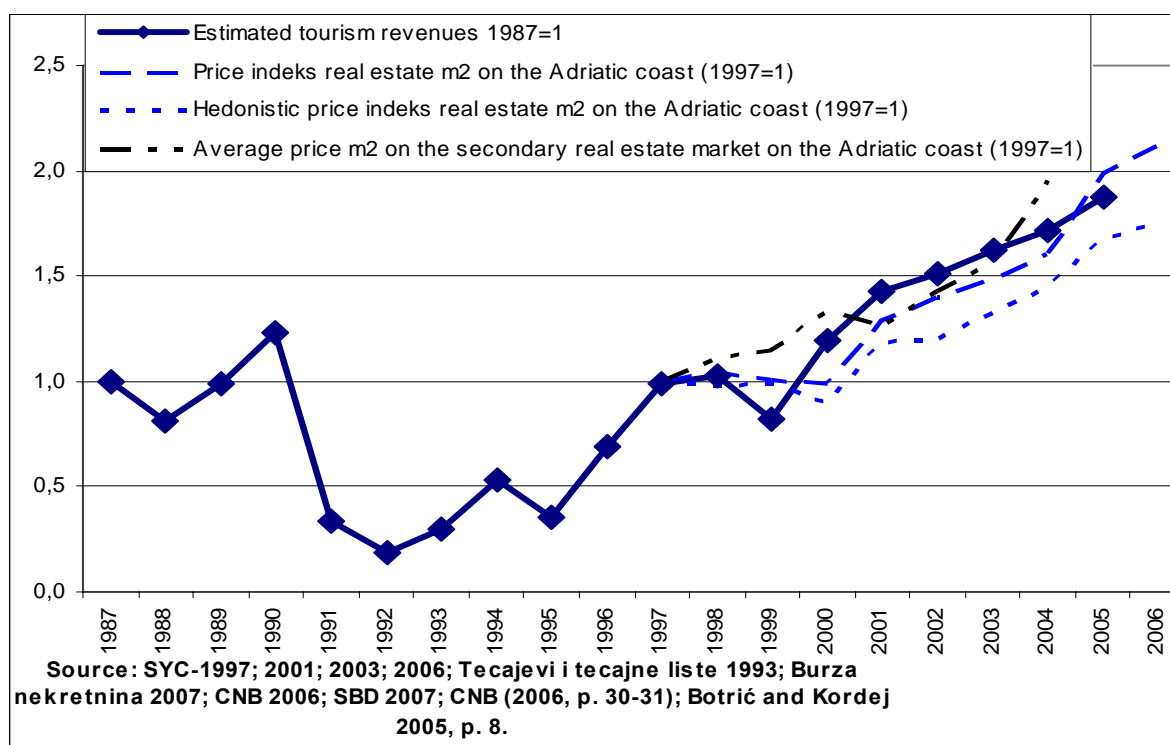
Croatian position on transitional arrangement is still more or less unknown and the date for the accession of Croatia is still unknown. On the other hand, Croatian legislative allows acquisition of real estate by all firms founded in Croatia regardless of the foreign/domestic ownership structure. Furthermore, in 2006 bilateral agreement on real estate acquisition with Italy has been agreed. Besides that, individuals are also allowed to acquire real estate with the approval of the Ministry of foreign affairs. Up until 2004, 3202 non-resident applications to buy real estate in Croatia have been approved by the Ministry (Mihaljek 2004, p. 190). Nevertheless, expectations based on the present value of the future tourism rents combined with spill-over effect are obviously driving prices in Croatian real estate market.

## CONCLUSION

It is more than obvious that Croatian real estate market in the coastal area is still strongly growing even after national and global real estate markets slow down. The growth is mostly generated by future expected

demand from EU countries and in the expected growth of tourism sector. In the post war period after 1997, prices of real estate market in Croatia moved quite closely with estimated tourism revenue (Figure 6).

**Figure 6: Relationship between estimated growth of prices on the coastal real estate market and estimated revenues of tourism sector**



Question of transitional agreements on real estate market are still on the table and most definitively strong efforts of policy makers are going to be directed towards soft landing of real estate market during EU integration process. As a business and investors opportunity Croatian real estate market seems as a market in a strong surge and it might be expected that trend will continue throughout integration process and even after.

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