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## EFFECT OF THE TOURISTIC PRODUCT PRICES AND COSTS ON THE INTERNATIONAL COMPETITIVENESS: A COMPARATIVE PANEL DATA ANALYSIS

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### ABSTRACT

**Purpose-** Tourism is an important sector for countries across the world which develops the fastest and contributes to country's economy. The countries in the tourism market are in a serious competition due to its contribution to the economic development. Therefore are countries increasing their international competitiveness by the price and cost advantage of the touristic products they offer in order to obtain a greater share of the international tourism market.

**Methodology-** In the study are the effects of the price and cost advantages on the tourism incomes determined by utilizing the data of 31 European stakeholder countries in the tourism sector for 2000-2014. The harmonized index of consumer prices, representing the price and cost advantage and established by the European Commission's (EC) Economic and Financial Affairs Council (ECOFIN) with 5 indicators based on the real effective Exchange rate, and the unit labour cost series are utilized.

**Findings-** The co-integration and causality relation between these series and the tourism income series of the current period are examined by the Kao (1999) panel co-integration and the Dumitrescu and Hurlin (2012) panel causality analysis.

**Conclusion-** As a result of the conducted analysis, it is determined that there is a co-integration between the price-cost advantage and the tourism revenues, and that the price-cost advantage is a statistically meaningful reason for the tourism revenues.

**Keywords:** Competitiveness, price, cost, tourism, panel data

**JEL Codes:** O11, L83, C23

### 1. INTRODUCTION

The factor, which determines the economic performance and economic precedence of a country, is the high competitiveness of such a country. And the supremacy of the competitiveness, which converts countries advantageous against other countries, is measured by quality, cost and speed (Kuşat, 2011). The international competitiveness of an establishment means that it is at the same level or better than competing domestic and foreign establishments with regards to product price and/or product quality, and elements except the price like the timeliness at the delivery and after sales services (Kibritçioğlu, 1996).

The ability of the economies of countries and the companies/establishments that constitute these economies to sustain their existence has started to develop depending on their competitiveness along with the globalization (Bahar & Kozak, 2005) and the companies/establishments converted such to compete seriously with each other with regards to price and

quality. This international competitive power has gained importance as a result of the competitive environment concentrated by the globalization (Tiryakioğlu, 2004).

As it is the case in all sectors were also the establishments in the tourism sector forced to develop their competitive strategies in order to make profits and to sustain or increase their existing market share (Bahar & Kozak 2005). Therefore needs a destination to ensure all its' attractivities and tourist experiences in order to obtain a competitive advantage in the tourism sector (Dwyer & Kim, 2003). One of the factors, which increases the competitiveness and ensures the competitive precedence of a destination are the cost and price. Destinations compete with each other with regards to the cost and price of a touristic product and ensure an attention competition advantage.

The success of touristic region/country is measured by its competitive power and the price competition index indicates the status of a touristic region with regards to its price competition power. It is revealed in this study that it is necessary to determine the competition power in tourism and to assess the different features destinations in competition by comparing these.

At the study are the real exchange rate based Harmonized Index of Consumer Prices (HICP) and Unit Labour Cost series (ULC) and the abroad tourism income relations (RECC) of 31 European countries<sup>1</sup> examined. According to the statistics definitions of the European Union are 5 statistics calculated in order to measure the price and cost competitions<sup>2</sup>. These are;

1. Consumer Prices (Index of Consumer Prices and Harmonized Index of Consumer Prices)
2. GDP Deflator
3. Goods and Services Export Deflator
4. Unit Labour Cost (for the whole economy)
5. Unit Labour Cost (for the manufacture industry)

These series, established according to the real exchange rate, are variables that represent the international price and cost advantage of a macro-economy. At the study is the harmonized index of consumer prices handled as a proxy variable, which represents the touristic product price advantage and the unit labour cost as a proxy, which represents the touristic product cost advantage and the relation thereof is examined by the co-integration and causality analysis and it is tried to determine the importance of the price and cost advantage for the tourism sector by empirical methods.

## **2. LITERATURE REVIEW**

### **2.1. International Competition Power and Tourism**

Competition is a term which, together with comparative supremacies, covers different disciplines like the price competition perspective, strategy and management perspective, historical and social-cultural perspective (Man, Lau & Chan 2002). While competition means that a country has the say in an international level by having more sources than the other countries, it is maximizing the production and revenue for establishments by mutually competing with other establishments (Uysal, 2000). Whilst the competition power is a precondition for the increase of the production and efficiency in an economy, the improvement of the living standards of the society and the development of employment (Doğan, 2000), means the sustainment of this efficiency that a country gains competitive supremacy in the international market (Porter, 1991). For an establishment is the competition power the ability to produce with lower costs compared with its competitors in the national or international markets (price and cost competition power), to tower above the competitors with regards to factors like the quality of the product, the provided services and the attractivity of the product (quality competition power) (Aktan, 2003) and the ability to make innovations, to increase the quality (Porter, 1991). Countries and establishments determine the factors total cost leadership, diversification, focussing as a competition strategy in order to ensure competitive supremacy and to by-pass their competitors (Porter, 2003).

The company internal factor, which determine the international competition power, are stated to be the quality, cost (labour, raw material, energy, capital, import, marketing, tax, social security costs) of the good or service provided by the company, the price, efficiency level, profit, the information technology employed in the company, the organization and management structure, the efficient usage of the sources, innovation and creativity. And the company external factors are stated to be the position and interventions of the state in and to the economy, the international trade system, the structure of the domestic demand, the flexibility of the labour markets, economic stability, the exchange rate and interest rate

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<sup>1</sup> Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Lethonia, Lithuania, Luxembourg, Hungary, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, United Kingdom, Norway, Turkey.

<sup>2</sup> [http://ec.europa.eu/economy\\_finance/db\\_indicators/competitiveness/documents/technical\\_annex\\_en.pdf](http://ec.europa.eu/economy_finance/db_indicators/competitiveness/documents/technical_annex_en.pdf)

policies, foreign capital, the physical and corporate structure, the structure of the financial markets and the standards and rules, which regulate the competition (Tiryakioğlu, 2004). Though the plentiness of these factors are factors like the real exchange rates, inflation, wages, costs, labour efficiency, profitability, investments, unemployment, qualified labour power, research and development activities, export shares, the export/import ratio, import penetration rates, incentives, information technology usage, the organization and management structure, price-cost margin, industry intern trade and innovation and creativity are the widespread used tools (Demir & Çoban, 1996; Doğan, 2000; Kotan, 2002).

And there are many factors that can be correlated with the destination competition in the tourism sector. These are subjective and objective measurable quantitative factors like the roles of human capital and education; IT and technological development; the offer and demand conditions of tourism; investment, incentives and financial regulations; number of visitors; expenditures of tourists; relative exchange rates; distance; advertisement and promotion and the number of the natural sources. Beside this, there are also subjective measurable qualitative factors like sustainable tourism and environment, service quality and customer satisfaction, productivity and the effective utilization of the sources, touristic product diversification, destination image, tourism marketing and competition strategy, government and bureaucracy, richness in terms of cultural and historical heritage and natural environment (Bahar & Kozak 2005).

While the definition of tourism competition in the literature is the preservation, sustainment and by time development of the market share by the destination (Hassan 2000; d’Hauteserre’e 2000), it is tried in many studies related to completion in tourism to determine the factors that influence the competition power and revealed that the different features of the destinations in competing need to be assessed by comparison (Peattie & Peattie, 1996; Pearce 1997; Crouch & Ritchie, 1999; Kozak & Rimmington, 1999; Buhalis, 2000; Dwyer, Forsyth & Rao, 2000; Go & Govers 2000; Mihalic, 2000; Prideaux 2000; Dwyer, Forsyth & Rao, 2001; Poon 2002; Enright & Newton, 2004; Crouch, 2007; Kozak, 2007; Hong, 2008; Smit, 2010; Mazanec & Ring, 2011; Dimoska & Trimcev, 2012; Knezevic Cvelbar, Dwyer, Koman & Mihalic, 2015). Tourism or destination competition is defined as a general notion, which covers the price differences by the combination of exchange rate movements, the efficiency levels of different components of the sector and the qualitative factor that influence the attractiveness of a region (Dwyer, Forsyth & Rao 2002).

The World Economic Forum (WEF) publishes the Travel & Tourism Competitiveness Report in order to determine the travel and tourism competition levels, the competitiveness of countries. In the report published in 2015, are the competition variables of 141 countries handled and these countries are evaluated by 90 criterions under 4 main groups and 14 sub-groups. The competition power indicators in the Travel & Tourism Competitiveness Report, representing a total value for the travel and tourism competitiveness of each country, are examined under 4 main groups; being (1) Enabling Environment, (2) Travel and Tourism Policy and Enabling Conditions, (3) Infrastructure and (4) Natural and Cultural Resources. The price competitiveness index is included into the Travel and Tourism Policy and Enabling Conditions main group. It is known that low costs increase the country’s attractiveness for travellers and provides a price competition in the tourism sector. At the measurement of the price competition in the countries are factors like flight ticket taxes and airport fees, the hotel price index, purchase power parity and liquid fuel price levels are taken into consideration at the calculation of the cheapness or expensiveness of the goods and services in a country compared with the the goods and services in other countries (WEF, 2015).

Turkey ranks 6<sup>th</sup> with 39,8 Million tourist arrivals and 8<sup>th</sup> with a tourism revenue of USD 29,5 Billion and is among the top ten countries holding the highest share in tourism across the world (The World Tourism Organization [UNWTO], 2015). But the tourism income of Turkey is much behind the 7<sup>th</sup> country before it. Table 1 indicates the travel and tourism price competitiveness index of 31 European countries. Turkey attracts the attention with the low price factor compared with other countries with regards to the price competitiveness in travel and tourism. It is seen that due to that price factor the added value is realized lower though the increase of the number of tourists in terms of Turkey.

**Tablo 1: 31 The Travel and Tourism Price Competitiveness Index of 31 European Countries (2015)**

The Travel and Tourism Price Competitiveness Index							
	Country	Order	Point		Country	Order	Point
<b>1</b>	Bulgaria	35	5,08	<b>17</b>	Cyprus	111	3,97
<b>2</b>	Poland	46	4,94	<b>18</b>	Greece	113	3,93
<b>3</b>	Romania	54	4,89	<b>19</b>	Belgium	120	3,73
<b>4</b>	Lithuania	57	4,87	<b>20</b>	Finland	121	3,71
<b>5</b>	Lethonia	58	4,84	<b>21</b>	Ireland	122	3,69
<b>6</b>	Estonia	72	4,62	<b>22</b>	Germany	126	3,62

7	Hungary	76	4,60	23	Netherlands	130	3,56
8	Slovakia	80	4,51	24	Austria	132	3,49
9	Czech Republic	87	4,47	25	Italy	133	3,49
10	Turkey	94	4,37	26	Sweden	134	3,38
11	Slovenia	96	4,34	27	Denmark	135	3,31
12	Croatia	101	4,28	28	Norway	137	3,23
13	Portugal	104	4,23	29	France	139	2,95
14	Spain	105	4,22	30	United Kingdom	140	2,73
15	Malta	106	4,22	31	Switzerland	141	2,57
16	Luxembourg	108	4,10				

Kaynak: WEF, 2015.

## 2.2. Competition Power in Tourism: Cost and Price

The increase of the competition in the international markets resulted in the pressure on the establishments towards decreasing their prices. Therefore have the costs started to provide a serious advantages to sectors and companies with regards to competitiveness (Oral, 1993). Costs and prices are the most important factors with regards to determining the competition power (Doğan 2000). Particularly companies strengthen their position in the market by a price advantage due to the decreasing costs by implementing methods, which decrease the production costs. The most appropriate and reliable method for a company in order to enter into competition in terms of prices is to increase its market efficiency by controlling its costs (Drucker, 1998; Doğan, Marangoz & Topoyan, 2003).

While, as it is the case in any sector of the country's economy, the consumers aim to purchase the most qualitative product for the lowest price, the manufacturers aim to produce the touristic products with the lowest costs and sell these with maximal profit. High costs are seen as a negative factor at the preference of a tourism region since they reflect as high prices on the tourists. Therefore convert establishments, which offer the touristic product to the tourists with the lowest costs, more competitive. One of the competition strategies applicable to the tourism sector should be based on pulling down the costs to the as possible lowest level and thus to dominating the market with the most affordable price.

The price is an important determining factor for the competition power in tourism (Buhalis, 2000; Dwyer et al., 2000; Dwyer et al., 2001; Dwyer et al., 2002; Barros, Botti, Peypoch, Robinot, Bernardind & Assaf. 2011; Assaf & Dwyer, 2013). At the measurement of the competition power of a touristic region are the appropriateness feature of the products in the tourism sector with regards to the price (Dwyer et al., 2001) and price sourced promotional activities (Peattie & Peattie, 1996) deemed to be important factors. The ability of a touristic country or region to gain competition power is related to whether the product prices in the country's tourism sector have a competitive structure or not, and the price competition depends on the other sub-sectors which provide goods and services to the visitors (Dwyer et al., 2001).

At the answers to the open end questions asked to tourists in the study conducted by Bahar (2004) in order to determine the competition power of Turkey in the tourism sector was indicated that Turkey is in general a cheap country, but that the prices at the airports (particularly in the duty free shops) are very high. It is stated at the question in the questionnaire during the same study applied to local businesses that the existence of a tourism specific cost and incentive policies will positively influence the competition power of the country, but that some participants noted that the fact, that the VAT rates in Turkey are much higher than in competing countries, contributes negative to this.

Ayaş & Baydur (2005) have compared in the study they conducted the competition power of the touristic regions of Fethiye and Marmaris in Muğla by the aid of the price competition index and determined the price competition power index for Fethiye to be 5,2%, and for Marmaris to be 3,9%. It can be stated that Fethiye is about 25% cheaper with regards to the local prices or 25% more competitive compared with Marmaris.

## 3. DATA AND METHODOLOGY

This section of the study will provide information on the data set established in order to examine the relation of the price and cost advantage with the tourism incomes and the used econometric methods and deal with the achieved findings.

### 3.1. Data

At the study is the panel data set of 31 European countries complied from the EC Ecofin<sup>3</sup> and World Bank's data<sup>4</sup> and covering the years 2000-2014. And used variables are the Harmonized Index for Consumer Prices (HICP) in representation of the price advantage established according the real exchange rate, the Unit Labour Cost (ULC) in representation of the cost advantage and the abroad tourism incomes (RECC, \$, 2005=100). Descriptive statistics related to the data are indicated in the table below (Table 2).

**Tablo 2: Descriptive Statistics**

	HICP	NWC	RECC
Mean	102.2579	103.2908	1.33E+10
Median	100.7176	100.3408	6.74E+09
Maximum	133.6062	170.9900	6.80E+10
Minimum	76.66926	66.95425	1.53E+08
Std. Dev.	8.535360	14.76455	1.62E+10
Skewness	0.813120	1.534688	1.740753
Kurtosis	5.658743	6.768691	5.072757
Jarque-Bera	187.7957	456.7326	317.3992
Probability	0.000000	0.000000	0.000000
Sum	47447.64	47926.95	6.18E+12
Sum Sq. Dev.	33730.65	100930.3	1.21E+23
Observations	464	464	464

### 3.2. Method

At the study is the effect of the price and cost advantages of the tourism incomes examined by the Kao (1999) Panel co-integration and Dumitrescu & Hurlin (2012) panel causality tests. The tests applied during the econometric analysis process and basic application procedures are presented below.

#### 3.2.1. Horizontal Section Dependency Test (CD Test)

Whether the dependency between the horizontal section, constituting the data set (in this study, countries), are taken into consideration or not influences the results to be obtained. Therefore needs at this study to control the horizontal section dependency in the series and the co-integration formula prior to starting with the analysis. At the investigation of the respective literature, we see that the Breusch-Pagan LM (1980), Pesaran LM (2004), Baltagi, Feng and Kao Bias-Corrected LM (2012) and Pesaran CD (2004) methods are widespread used in the studies, which test the horizontal section dependency. While results related to all of these tests are provided in the analysis section of the study, only information on the Pesaran CD test is provided in this section. The Pesaran (2004) test is as

$$CDLM = \left( \frac{2}{N(N-1)} \right)^{\frac{1}{2}} \sum_{i=1}^{N-1} \sum_{j=i+1}^N \hat{\rho}_{ij}^2 \frac{(T-K-1) \hat{\rho}_{ij} - \hat{\mu}_{Tij}}{\omega_{Tij}} \sim N(0,1) \quad (1)$$

Here represents  $\hat{\mu}_{Tij}$  the average, and  $\omega_{Tij}$  the variance. The tests statistics to be obtained show an asymptotic standard normal distribution. The test results against the zero hypothesis in form of that there is no horizontal section are presented in the following parts of the study in Table 3.

#### 3.2.2. Panel Unit Root Test

The stagnation of the series is tested in the study by the Breitung (2000) panel unit root verification method. This test uses a different approach from the other panel unit root tests; the data is converted prior to calculating the regressions in order to be able to use the standard t statistics. The model is as indicated below:

$$Y_{it} = \alpha_i + \beta_i t + X_{it} \quad (2)$$

here is,

<sup>3</sup>[http://ec.europa.eu/economy\\_finance/db\\_indicators/competitiveness/index\\_en.htm](http://ec.europa.eu/economy_finance/db_indicators/competitiveness/index_en.htm)

<sup>4</sup><http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators>

$$X_{it} = \sum_{k=1}^{p+1} \alpha_{ik} X_{i,t-k} + \varepsilon_{it} \quad (3)$$

assumed at the Breitung panel unit root test that all units have a fixed autoregressive parameter. The  $H_0$  hypothesis is the difference stagnation. The test, which the conclusion criterion, is defined as

$$\tau = \frac{\sum_{i=1}^N \sum_{t=1}^T (\tilde{u}_{it-1} - \tilde{u}_{i0}) \tilde{e}_{it}}{\sqrt{\sum_{i=1}^N \sum_{t=1}^T (\tilde{u}_{it-1} - \tilde{u}_{i0})^2}} \quad (4)$$

The unit root results of the series are provided in Table 4.

### 3.2.3. Kao Panel Co-Integration Test

Kao (1999) co-integration test examines the long termed relation between the panel series by utilizing the Dickey & Fuller (1979) and Generalized Dickey & Fuller (ADF) type test structure. For the test is a model established in form of,

$$Y_{it} = \alpha_i + \beta X_{it} + e_{it} \quad i=1, \dots, N \quad t=1, \dots, T \quad (5)$$

Here is to be seen  $Y_{it}$  and  $X_{it}$  series are not stagnating and that the model to be presumed might have a fake regression. Therefore need the stagnation levels of the series to be determined and the long termed relation between the series need to be examined by the residual based co-integration analyse. The  $Y_{it}$  and  $X_{it}$  series in the model are primary grade stagnating panel series. The failure definition  $e_{it}$  in the model is obtained as

$$\hat{e}_{it} = \rho \hat{e}_{i,t-1} + v_{it} \quad (6)$$

It needs to be examined whether the autoregressive parameter  $\rho$  equals to 1 or not in order analyze the unit root in the failure definitions. For this purpose are the hypothesis established as

$$H_0: \rho=1$$

$$H_a: \rho=0$$

The Y and X series will be converted such to eliminate the internal correlation between the series after the presumption of the P autoregressive parameter by the presumption method. As a result of the Kao co-integration test is the standard normal distributed ADF test statistics with zero average and 1 variance obtained as

$$ADF = \frac{t_{ADF} + \frac{\sqrt{6N\sigma_v}}{2\sigma_{0u}}}{\sqrt{\frac{\sigma_{0v}^2}{2\sigma_v^2} + \frac{3\sigma_v^2}{10\sigma_{0v}^2}}} \quad (7)$$

The results of the co-integration test are provided in Table 5.

### 3.2.4. Dumitrescu and Hurlin Panel Causality Test

The Dumitrescu and Hurlin (2012) panel causality test is used during the examination stage of the short termed relation between the variables after the co-integration analysis. This method has three important advantages compared with the other panel causality tests. First, that it is able to take into consideration the dependency between the horizontal sections that constitute the panel, that it doesn't distinct between largeness and smallness between the time dimension (T) section dimension (N) and that it is able to reveal effective results at non-balanced panel data sets, too (Dumitrescu & Hurlin, 2012; Göçer 2013). The presumed basic model is as

$$y_{i,t} = \alpha_i + \sum_{k=1}^K \gamma_i^k y_{i,t-k} + \sum_{k=1}^K \beta_i^k x_{i,t-k} + \varepsilon_{i,t} \quad (8)$$

It is tested against the zero hypothesis that there is no causality relation from X to Y at all horizontal sections.

At the study is the Schwarz information criterion used for the determination of the optimal delay length (K). The zero hypothesis for not having a heterogenous reason is suggested against the zero hypothesis for not having a homogenous reason while testing the alternative hypothesis which asserts that there is a causality relation between some sections from X to Y against the Dumitrescu & Hurlin zero hypothesis and this hypothesis has eliminated the situation that all units are same with regards to the causality. Thus, it is possible to vary in the model above for the  $\gamma_i^k$  ve  $\beta_i^k$  unit and consequently is a variation at the causality analysis with regards to units allowed (Güriş, 2015). Dumitrescu & Hurlin calculate in their method the individual Wald statistics for each horizontal section and obtain the Wald statistic regarding the panel by obtaining the arithmetic mean of these.

$$Z_{N,T}^{HNC} = \sqrt{\frac{N}{2K}} (W_{N,T}^{HNC} - K) \sim N(0,1) \quad (9)$$

$$W_{N,T}^{HNC} = \frac{1}{N} \sum_{i=1}^N W_{i,T} \quad (10)$$

$$Z_{N,T}^{HNC} = \frac{\sqrt{N} [W_{N,T}^{HNC} - N^{-1} \sum_{i=1}^N E(W_{i,T})]}{\sqrt{N^{-1} \sum_{i=1}^N \text{Var}(W_{i,T})}} \sim N(0,1) \quad (11)$$

The results of the conducted causality test indicated in Table 6 under the heading "Findings and Discussion".

#### 4. FINDINGS AND DISCUSSIONS

Before the examination of the influence of the price and cost advantage on the tourism incomes by the co-integration and causality test are the horizontal section dependencies within the frame of the variables related to the 31 European countries constituting the panel data and the co-integration models tested below. The results are indicated in Table 3. According to the results is there a horizontal section dependency between the horizontal sections based on each variable and the co-integration models. This means that there is a dependency between the price, cost and tourism incomes in the 31 countries in question. Any price shock in any country affects also the other countries or any change to the tourism incomes of any country influences also the tourism incomes of the other countries.

**Table 3: Horizontal Section Dependency Test Results**

	Breusch-Pagan LM*	Pesaran scaled LM*	Bias-corrected scaled LM*	Pesaran CD*
HICP	2727,609	73,17735	72,07021	30,48714
NWC	1758,483	41,39844	40,29129	6,267456
RECC	5280,96	156,905	155,7979	70,97601
Model 1 RECC-HICP	2216,037	56,40224	--	43,22955
Model 2 RECC- NWC	2039,787	50,62277	--	39,02042

\* Meaningful at a level of 1% (p-value < 0,01)

And the Breitung panel unit root test results, indicating that the series are difference stagnated is presented in Table 4. The co-integration analysis is a method able to be applied between combined difference stagnating series. The fact that all the series are difference stagnating allows the examination of the long termed relation between the series by the co-integration analysis.

**Table 4: Breitung Panel Unit Root Test Results\***

	Level Values		First Differences	
	t- statistics	Possibility Value	t- statistics	Possibility Value
HICP	2,42288	0,9923	-7,97343	0,0000
NWC	0,15370	0,5611	-6,58774	0,0000
RECC	0,13760	0,2912	-10,2673	0,0000

\* All results are results of models with fixed and trend figures.

Kao co-integration test is referred to for the existence of the long termed relation between the variables. The test results are indicated in Table 5.

**Table 5: Kao Co-integration Test Results**

Model 1 $RECC_{it} = \alpha_{1i} + \alpha_{2i}HICP_{it} + \varepsilon_{it}$		Model 2 $RECC_{it} = \alpha_{1i} + \alpha_{2i}NWC_{it} + \varepsilon_{it}$	
ADF t- statistics	Possibility Value	ADF t- statistics	Possibility Value
-1,783712	0,0372	-2,087239	0,0184

According to Model 1, where the co-integration relation between the price advantage and the tourism incomes are examined, is there a statistically meaningful co-integration relation between the consumer prices and abroad tourism income. This means that the series are long termed acting together.

**Tablo 6: Dumitrescu & Hurlin Panel Causality Test Results**

	W-Stat.	Zbar-Stat.	Possibility Value
HICP → RECC	4,50813	2,69991	0,0069
RECC → HICP	3,63091	1,41074	0,1583
NWC → RECC	4,89168	3,26357	0,0011
RECC → NWC	2,16338	-0,74596	0,4557

The results regarding the causality relation between the series are indicated in Table 6. The harmonized price index is a statistically meaningful reason for the abroad tourism incomes. In other words is the price advantage a statistically meaningful descriptor of the tourism incomes. In a similar manner is also the unit labour cost variable a statistically meaningful reason for the abroad tourism incomes. According to these findings, it is determined that the price and cost advantage is a statistically meaningful descriptor of the abroad tourism data. As to be seen, the causality relation between the variables is unidirectional and the pre-analysis expectations indicate that the price and cost advantage influence the tourism income, but that there is no reverse relation.

## 5. CONCLUSION

The cost and price of the produced goods and services is among the most important competition power factors in the tourism sector for that a country/region and companies can conduct their activities successful in an international competition environment. Therefore are countries progressively increasing their competition power in the tourism sector by pulling down the costs of the products to the lowest levels and thus dominating the market with the most affordable prices. While the decrease of the costs is possible with the renovation of the methods and techniques to be used at the production of touristic goods and services, the conversion of the prices to a reasonable level is possible by increasing the quality of touristic products.

That companies and/or countries in the tourism sector, where the national and international competition progressively increases, get a larger share from the existing market, will increase with the advantages they will provide in the prices and costs of touristic products. The econometric results of the study have shown that the price and cost advantage is an important descriptor of the tourism incomes. It must be ensured that countries, which aim the increase of the international competition power of the tourism sector and to get a greater share from the tourism market, develop sectorial policies in order for that the sector can obtain a price and cost power. The first thought on this issue is that tax exemptions and the increase of the state contributions to the premiums of the working personnel will provide a significant cost advantage. On the other side, again incentive policies and the support of the sector are necessary for the strengthening of the companies in terms of international competition. This will particularly ensure that the tourism sector, which is faced with hard times, but is important in macroeconomic terms, can pass this period such to experience lesser losses and continue on its path without losing the share it has in the international market.

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