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**Article**

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*Suggested Citation:* Plesco, Olga; Tabara, Neculai (2012) : Ten Years of Gdp Evolution in Correlation with the Turnover. The Case of Romania, CES Working Papers, ISSN 2067-7693, Alexandru Ioan Cuza University of Iasi, Centre for European Studies, Iasi, Vol. 4, Iss. 3a, pp. 595-604

This Version is available at:

<https://hdl.handle.net/10419/198203>

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# TEN YEARS OF GDP EVOLUTION IN CORRELATION WITH THE TURNOVER. THE CASE OF ROMANIA

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**Abstract:** *The economic environment must be parsed because of the multitude of phenomena that determine developments which generate effects and show sinuous ridges that can be interpreted differed depending on the context. Tourism is an important sector of the economy, and the evolution must be analyzed through the signification of a set of specific indicators. However, there are common indicators for all the areas of activity which are relevant both for industry and for the country's economic level. Thus, the analysis of the achieved turnover by the most successful travel agencies in conjunction with the evolution of gross domestic product per capita is important and highlights significant elements for the future forecasts, and analysis of the business environment in this area. The time period under analysis should be long enough so that the valuable judgments are issued from the normal not random trend of the indicators.*

**Keywords:** GDP, turnover, tourism, analysis.

**JEL Classification:** C82, D39, E01.

## INTRODUCTION

Financial statements represent the elements of standardized financial reporting, being subject to mandatory provisions imposed by the specialized bodies. A detailed treatment of the elements and indicators of economic-financial analysis is paramount to understand both the business environment and economic reality itself. Studies (Tabără and Briciu, 2012) shows that over 80% of information circulating within the information system of an entity is of an economic nature, and within it accounting information is about 50%. Thus, it recourse to the analysis of economic and financial, which is a mean of knowledge of reality through the causes (Mironiuc, 2006) and has a gnosiological role in setting the course in establishing the structure of studied phenomena/processes, the research of each structural element, the establishing of the causal relations between components, the discovery of mechanism which formed the basis for the formation and evolution of the phenomenon/process to be analyzed, the identification of the causes which led to the emergence of the phenomena/processes, as well as drawing conclusions and future development framework/process analysis of the phenomenon.

Tourism, as an economic phenomenon, became a veritable industry. The development of tourism operations and its growing complexity has led to the study of this phenomenon as a distinct sector of the economy. With the help of statistics, which facilitated the study of these phenomena and its variation in time and space (*The role of statistics in the knowledge economic phenomena*), tourism become easy to study and understand.

Romania has experienced a significant economic contraction in 2009 because of a fall in economic activity and significant drop of consumption. At the same time, increased the uncertainty regarding the duration of the global financial and economic crisis, and the negative effects it will generate. "The stagnation of economic growth and the increase of financial and fiscal burden resulted in significant tourism market uncertainties", said Taleb Rifai, UNWTO Secretary-General's during the press conference on 8 November 2011. But the recovery was not too much expected, since according to the annual report of the UNWTO for 2010, 2010 has exceeded all records in the field of tourism, due to the fact that many people have travelled through the world more than ever. However, in Romania, in 2011 was registered a decrease of approximately 1.5% of turnover achieved in the field of tourism by travel agents and tour operators.

## 1. METHODOLOGY

The case study is conducted on the basis of the results of the top 10 companies in the field of tourism which have as their primary activity "activities of tourist agencies". The data was collected from the official website of the Ministry of Public Finance of Romania and the European Commission website EUROSTAT and has been processed by electronic means, using the applications in Microsoft Office Excel 2007 and the package SPSS 15.0 for Windows.

This paper is based on the analysis of the evolution of turnover in correlation with GDP in the period 2000-2010. The analysis for a period of 11 years is relevant from the point of view of global economic development, avoiding in this way making conclusions without having carried out a thorough analysis, trend analysis, which will justify the conclusions which will be made in a scientific way. Quantitative techniques are used such as ordering, grouping, generating sets, tabulating and plotting, also applying the standardization of data. The research strategy is inductive, quantitative and case study.

## 2. BASIC CONCEPTS

Definition of the basic concepts is an indispensable part for this paper, because of the basic notions that ensures the understanding of phenomena.

National Bureau of Statistics of Moldova defines the tourism agencies, as economic agents' license holders for tourism activity, specialized in the purchase of tour packages from tour operators and the marketing of these packages directly to consumers, and in the marketing of their own services.

Turnover represents (Petrescu, 2004) a fundamental indicator of the activity of any undertaking, being located at the forefront of performance indicators, because it influence the level of profit and the value of return rate. This indicator corresponds to the volume of business conducted with third parties as a result of the current activity of the company and represents the amount of revenue arising from the supply of goods, performance of works and provision of services (income from activity). Analysis of the dynamics of the turnover is important for any field, because, in order to understand the business, is necessary to know the evolution over time of the results of this indicator, as well as existing trends.

For tourism companies the turnover consists solely of the services provided to the clients, and their turnover is largely derived from commissions on the sale of tourism packages.

Gross domestic product (GDP) is a key indicator to measure the level of a country. The European Commission, together with the International Monetary Fund, the Organization for Economic Cooperation and Development, United Nations and World Bank (1993) define GDP at market prices as the sum of the value added by manufacturers' residents at market prices, plus taxes and fewer subsidies on imports. GDP per capita is about the value of goods produced within the country relative to the population.

World Bank simplifies the definition even further and says that GDP per capita is the sum of gross value added by all resident producers in the economy plus the taxes and minus any subsidies not included in the value of products, divided by the number of population in the middle of the year.

And because the extent of the phenomenon of the global financial crisis is indescribable, it generates a cliché explanation. However, Horomnea (2009) expresses in a phrase the essence of this event as the bankruptcy of big companies, decline or extinction of small companies, a significant reduction in revenue, increase in unemployment and indebtedness, which make up the spectre of a life marked by uncertainty and stress.

### 3. ANALYSIS OF THE EVOLUTION OF INDICATORS

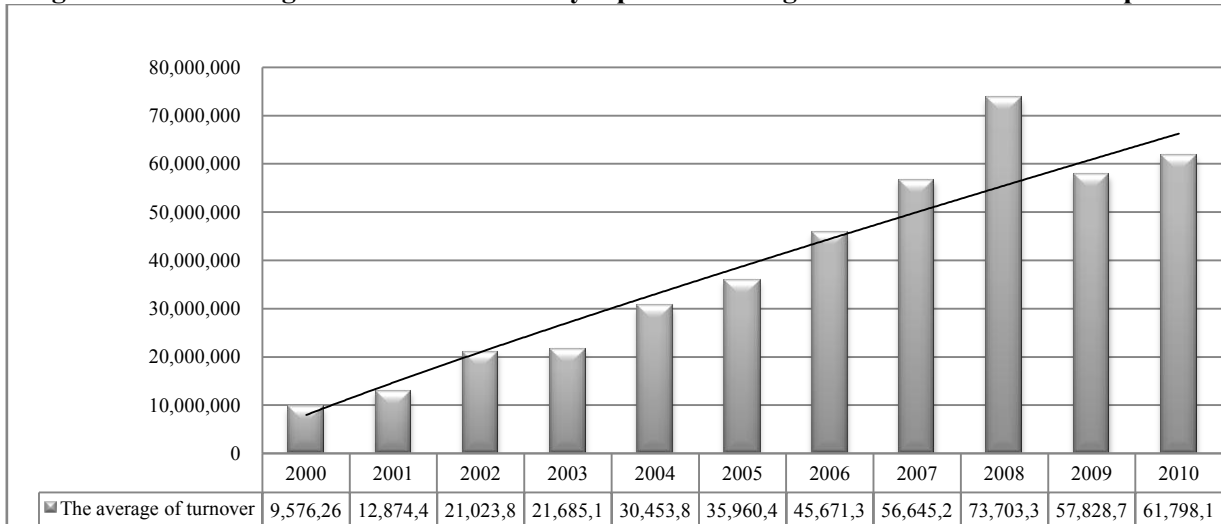
In the period under review, 2000-2010, the Romanian economy has experienced significant economic growth due to the development services field versus the production activity. But the important thing is that this growth was supported by consumption, so the offer is still growing because of demand.

The analysis was realized on the basis of the results of 10 travel agencies with the best results, taking as reference period the year 2010. During the first 3 years of analysis, the mean value is obtained by just 8 and/or 9 companies, the reason being that one of the companies has not submitted the financial statements to the Ministry of Public Finance and others were established after the year 2000.

Companies have obtained values of turnover that reached maximum average amount – 73.703.332 RON - in 2008. Positive variation was resumed in 2010, but it was only at the level of 61.798.198 RON. The growth was sensitive in the early years of analysis, making it considerably in the period 2003-2008. The reduction with 15.874.621 RON in turnover in 2009 was motivated by the economic crisis triggered by the bankruptcy of Lehman Brothers announced in September 2008. The companies' activity has contracted, but managed to remain on the market in a period in which thousands of firms have suspended their operations or were in a state of insolvency. For example, according to ONRC, in January-December 2009 133.362 firms have suspended their activity, compared with only 12.019 companies in the same period of 2008, the dynamic being about 1009,59%. The situation of dissolutions is amazing: 18.766 companies in 2009 compared to 2008 - 3.762 of undertakings, meaning more with 398.83%. And the number of voluntary liquidations from the same period is significant: 43.615 companies in 2009, more by 147% than in 2008 when they were liquidated in these manner only 17.676 firms. Because it is relevant and the number of companies registered in the period 2008-2009, we note that in 2009 there were registered 57.038 companies compared to 100.735 registered in 2008, fewer with 43,38%.

Thus, the economic context in which these companies have resisted justifies the decrease by 22% of the turnover achieved in 2009. In the Descriptive statistics table must be said that the minimum value of turnover (97 RON) was achieved by a travel agency in 2001, the year in which he set up. The maximum value was obtained by a company established in 1994 which in 2008 achieved a turnover of 184.199.196 RON.

**Figure 1 - The average turnover recorded by top ten travel agencies over the 2000-2010 period**



Source: own calculations, data taken from the official website of the MPF

**Table 1 - Report SPSS**

TIME	Mean	N	Std Deviation.
2000	9576262.250	8	8496101.1400
2001	12874450.222	9	12819932.9454
2002	21023806.750	8	20302536.6713
2003	21685185.600	10	21572956.3740
2004	30453890.700	10	27911156.4011
2005	35960498.500	10	32451117.2877
2006	45671305.800	10	42945718.1892
2007	56645278.500	10	46906447.4157
2008	73703332.000	10	54869724.1235
2009	57828711.700	10	33555773.0494
2010	61798198.600	10	37373143.9331
<b>Total</b>	<b>39982234.457</b>	<b>105</b>	<b>38643206.5544</b>

Source: own calculations, data processed in SPSS

**Table 2 - Descriptive Statistics**

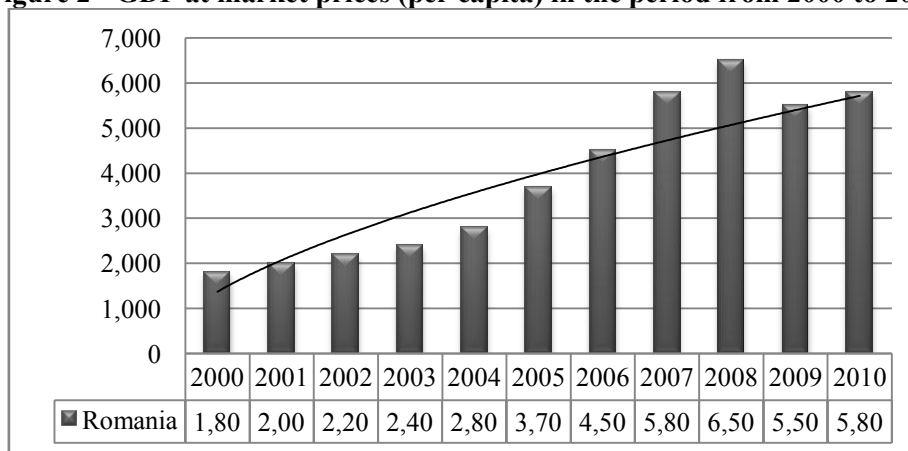
	N	Not Less Than	Maximum	Mean	Std Deviation.
value	105	97.0	184199196.0	39982234.457	38643206.5544
Valid N (list wise)	105				

Source: own calculations, data processed in SPSS

The GDP recorded a growth from 2000 to 2008 inclusive, from 1,800 euro per capita in 2000 to 6,500 euro per capita in 2008. The year 2009 was marked by a significant economic downturn for national economy, with GDP falling by 1,000 euro per capita (6,500 euro in 2008 to 5,500 euro in 2009). In 2010 it is noted an increase of 300 euro per capita, thanks to the redress of the economy and the overcoming the shock generated by the world economic crisis. So, it was back to the level of GDP per capita since 2007, but this return was unsustainable because in 2010 has grown considerably the accumulation of stock where in time when there wasn't an increase of consumption. The contraction of the consumption is due to the fiscal measures (the increase of VAT amount from 19% to 24% from 1 July 2010), but also because of the reduction in incomes of the population and increase the level of prices.

If you compare GDP at market prices in euro per capita, with the total value of the indicator, it is found that the total value of GDP recorded a growth of 1.2% in 2010 compared with 2009 (from 116,3 billion euro to 119,8 billion euro.) compared with the growth of 5% of the calculated indicator per capita. If you analyze the demographic evolution of Romania we must note that the values do not vary significantly: the amount decreases to 0, 17% from 21.498.616 people on 1 January 2009 at 21.462.186 people as of 1 January 2010.

**Figure 2 - GDP at market prices (per capita) in the period from 2000 to 2010**



Source: own calculations, data taken from EUROSTAT

With the help of statistics we can determine the stochastic links, in which case the changing of the quantity (or value) of GDP is influenced by the cause phenomenon. If we note GDP with  $y$ , the factor of influence – the turnover - with  $x$  and random factors with  $e$ , we get the following equation:  

$$y = f(x, e).$$

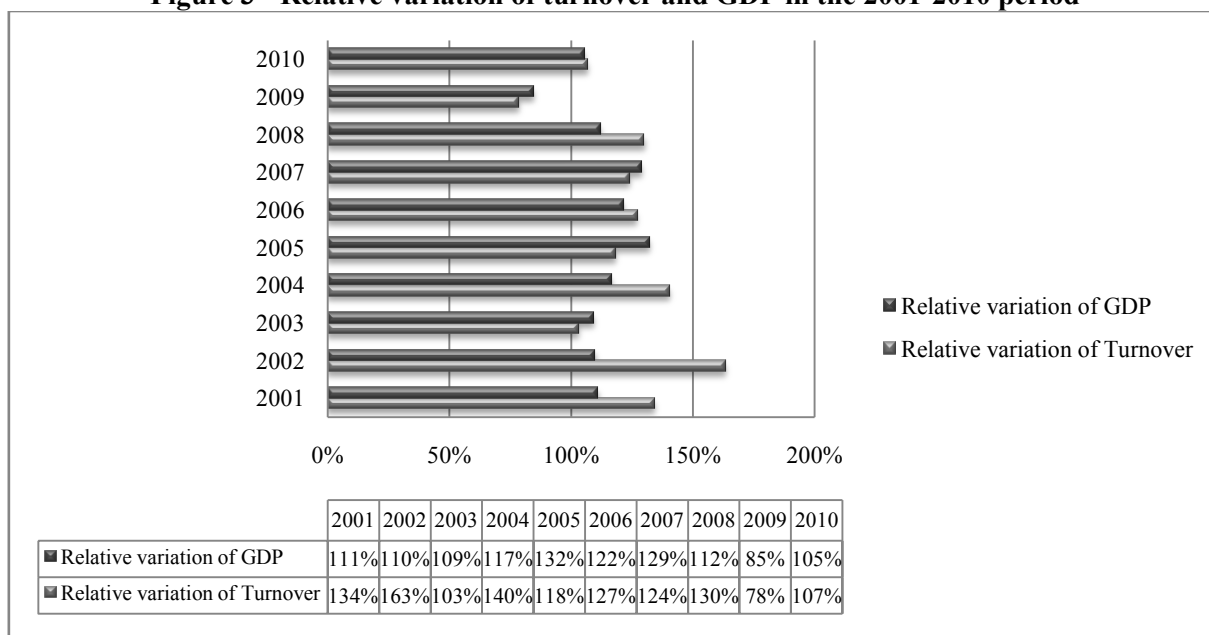
Why we considered the turnover the factor of influence? Because GDP is made up of the value added generated by residents, and the value added consist considerable from turnover. And the reverse relationship can exist, since tourism is an industry of which development depends and is strongly interrelated with other business areas of the economy and the inflation rate, unemployment rate, level of economic development, etc.

From the first idea, we have the figure below, where the relative variation is presented to the turnover achieved by the undertakings as an average of the tourism agencies and GDP per capita. The first obvious issue is that the two indicators vary in the same sense and with roughly the same intensity, with some exceptions. In the beginning of the studied period, GDP increases more slowly than the turnover obtained by travel agencies, understandable if one takes into account the fact that the year 2000 was the first year for Romania's economic growth after three years of recession. But in 2003, GDP increased by 9% compared to results of 2002, while the turnover of enterprises with just 3%. Another such situation happens in 2005, comparing with 2004, when GDP grew by 32%, and the turnover with just 18%. The scenario is repeated in 2007, but with the difference of only 5 percentage points (relative variation is 129% to GDP and 124% for turnover average). In 2008, the year of the start of the economic crisis which we live today, GDP is growing, but at a rate of only 12%, a percentage too small relative to the period immediately prior to the increase. But, the tourism agencies having resources from the previous years, as well due to the fact that the crisis has triggered official after the closure of the summer season, continued to grow, with a variation of 130% in 2008 compared to 2007. The following year, as was expected, both the GDP and the evolution of turnover generated by tourism agencies decrease significantly: GDP falls by 15% and turnover by 22%. The purchasing power of money has declined, the inflation rate was 7, 85% in 2008, the unemployment rate was below 4.5% in December 2008 and has reached 7.5% in November 2009 (Figure 4), and the concern of population for tourism activities has decreased considerably in the favour of solutions to overcome the crisis of a modern society. Both indicators registered in 2010 growth in relation to sensitive evolution before the crisis: 5% for GDP and 7% for turnover.

Thus, the results of the analyze shows the indicators are evolving in the same direction, which can justify the conclusion that the GDP and turnover by tourism agencies covaries.

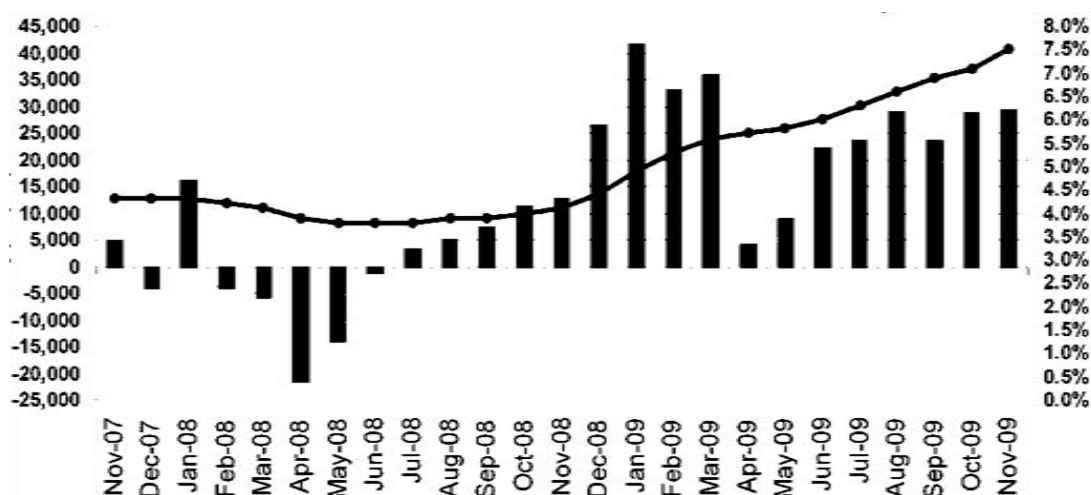


**Figure 3 - Relative variation of turnover and GDP in the 2001-2010 period**



Source: own calculations

**Figure 4 - The evolution of unemployment during the period November 2007-November 2009**



Source: <http://businessday.ro/12/2009/rata-somajului-a-ajuns-la-7-5/>

## CONCLUSIONS

The analysis carried out on the basis of the data collected showed that GDP per capita at market prices covaries with the turnover achieved by the travel agencies in the 2000-2010 period. Both indicators have the influence factor of the global financial crisis, with adverse evolution immediately after the onset of the phenomenon. Regeneration of tourism companies activity boost

the raising of GDP per capita, even if there are other numerous factors that determine economic evolution of this indicator.

The case study conducted to highlight a trend for GDP and for the turnover, with a solid foundation for a forecast: next 3 years GDP per capita will be unstable due to an unsustainable increase in 2010, while the average of turnover realized by of travel agencies will grow slowly but steadily. So, it appears that the two indicators will evolve in different ways, which do not lead to breaking of the relationship between them. The decisions taken at the country level will not have the same weight as the fiscal and political measures in 2010, which is one of the reasons that companies have the necessary conditions to attract customers in a smart way: by folding the offer on their purchasing power. The current rate of inflation is 2.59% (February 19, 2011/2012), meaning that the price increase is subtle, not affecting the ability of tourist population to make tourism acquisitions, thereby supporting both business and consumption, developing the national economy and increasing the economic potential of the country.

This study has demonstrated that between GDP, which is an indicator of the macroeconomic and turnover, which examines the micro-level only, there is a direct relationship and in future studies we will present in detail the stochastic link, highlighting their similar nature.

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