

## ANALYSIS OF THE EFFECTS OF THE ECONOMIC CRISIS CONCERNING THE PENSIONS FROM THE DANUBE DELTA

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### Abstract

*Globally, the impact of the economic crisis on tourism was very high. In our country too, many units of accommodation and catering were closed. Gradually, things have returned to normal. In this paper we analysed in terms of economic and financial point of view a representative guesthouse from the Danube Delta to see the actual situation of tourism in the area. The main purpose was to see if the pensions of Delta managed to overcome the economic crisis both at national and global level.*

**Key words:** analysis, crisis, Danube Delta, effects, turnover

### INTRODUCTION

Touristic activities (especially for the Danube Delta) occupy a special place. Those are becoming more and more important in all economic activities taking place in this region. The Danube Delta is an area that is poor in an economic point of view, but is very rich in biodiversity and unique landscapes.

The tourism becomes a very interesting component of economic and social life of the inhabitants of the Danube Delta, as a new source of income. The tourist accommodation plays one of the most important roles in establishing the holiday destination for Romanian and foreign tourists, being a decisive factor in choosing them.

The Danube delta is a biosphere reserve by UNESCO. It contains more than 5400 species. Some of the area is strictly protected while another part of human settlements, agriculture and fishery is possible.

However, increasingly touristic activities lead also to higher environmental impact.

Turnover and net turnover are among the specific operational indicators. Those indicators, first in the income statement, reflect sales assessment of an economic entity

over a period of time. It includes all proceeds from sales by type of product or type of activity, and providing specific services the current activity of the economic entity after deducting fees related turnover, trade discounts and value added tax. Net turnover holds the largest share of operating revenue in class in terms of sustainable economic activities.

### MATERIALS AND METHODS

The series of values ordered in relation to the succession of periods / time points, time series form. It is the raw material, processed by statistical methods or specific econometrics, can highlight issues repeatable analogies conditioning benchmarks [3].

To identify the level of profitability is determined profits and rates of return: commercial, consumed resources, financial and economic. To determine rates of return commercial and consumed resources using profit related to net turnover, calculated as the difference between net turnover and turnover related expenses, according to the formula:

$$Pr = \sum qv * p - \sum qv * c \quad (1)$$

Profit for net turnover compared to net

turnover is the rate of return on sales (DRR), reflecting profit of the turnover accumulated to 100 lei turnover, after deducting the expenses incidental to achievement and promotion production and goods turnover [4].

$$R^{RC} = \frac{\sum qv*p - \sum qv*c}{\sum qv*p} \quad (2)$$

The rate of return of resources consumed (RRCOM) is determined as the ratio of profit for the same turnover and turnover expenses.

$$R^{RCOM} = \frac{\sum qv*p - \sum qv*c}{\sum qv*c} \quad (3)$$

The evolution of these indicators mentioned above will be analyzed further, building on information provided by a representative pension of the Danube Delta [6].

## RESULTS AND DISCUSSIONS

Eden Crişan pension has 20 places in 10 rooms and a development indicator: net turnover, total revenues, total expenses, gross profit, net profit, for a period of 6 years

(2010-2015) presented in Table 1.

The net turnover recorded a slight upward trend in 2010-2015, ranging between 7.22% and 26.06%. In 2013-2014 the indicator decreased by 17, 274 lei, respectively 24.11% as a result of the financial crisis that affected Romania and thus selling the services of the pension Eden.

During 2014-2015, net turnover increased by 22,496 LEI, respectively 21.39%, this being due to new marketing strategies applied by the pension.

The evolution of net turnover for the period 2010-2015 is shown in Fig. 1.

Both income and expenditure in the period under review increased by 34.14% indicates revenue in 2012 compared to 2010 and by 30.69% of spending, which generated a profit of 4,953 lei, namely 107,93%. In the period from 2011 to 2012 revenues increased slightly, with only 4.08%, while expenditures have doubled which is 8.4% (Fig. 2).

Table 1. The evolution of the main economic and financial indicators of company Touring Delta - Eden pension from Crişan, Tulcea County

Touring Delta LLC Eden Pension-Crişan / 10 rooms	2010	2011	2012	2013	2014	2015
Net turnover - lei	84,133.00	106,055.00	113,709.00	122,429.00	105,155.00	127,651.00
Total revenues - lei	102,663.00	137,717.00	143,334.00	158,332.00	113,780.00	136,286.00
Total expenses- lei	98,074.00	128,175.00	138,941.00	157,398.00	108,320.00	120,844.00
Gross profit - lei	4,589.00	9,542.00	4,393.00	934.00	5,460.00	15,442.00
Net income - lei	1,722.00	6,317.00	3,351.00	627.00	2,047.00	11,483.00
The commercial rate (%)	2.05	5.96	2.95	0.51	1.95	9.00

Source: www.mfin.ro-2010-2015 financial statements [8], personal calculations

Compared to 2011, results of the indicators for 2012 were reduced respectively gross profit decreased from 9,542 lei to 4,393 lei, as shown in Table 2.

Analysing indicators for 2013 can be seen a modest increase in revenues (158,332 lei) to expenses (157,398 lei), which generated a positive gross result of only 934 lei, much less dynamic compared to the previous period. Reducing gross profit by 78.74% in 2013

compared to 2012 resulted in a reinvention of the marketing strategy; the results are visible in the next 2 years. In support of guesthouses in Crişan, this time, came local authorities that have attracted a number of European funds to improve the quality of life. In 2014, the gross result registered pension Eden was 5,460 lei, 484.58% higher than in 2014, as in 2015 it will triple from 15,444.2 lei and 182.82% higher than the same period 2014.

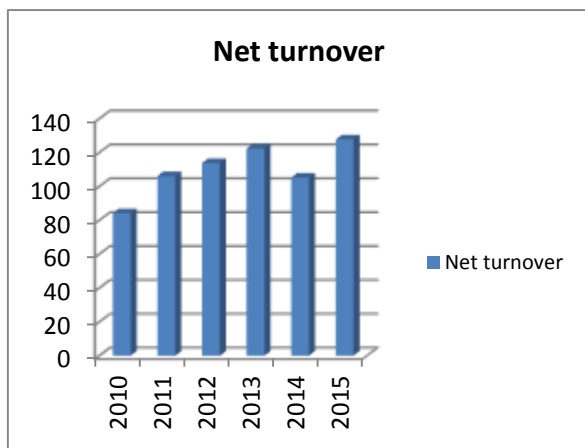


Fig. 1. Evolution of turnover in the period 2010-2015

In Fig.3. we can follow the evolution of gross profit, which increased from 4,589 lei to 9,542 lei, respectively 4,953 lei (107.93%) in 2009-2012.

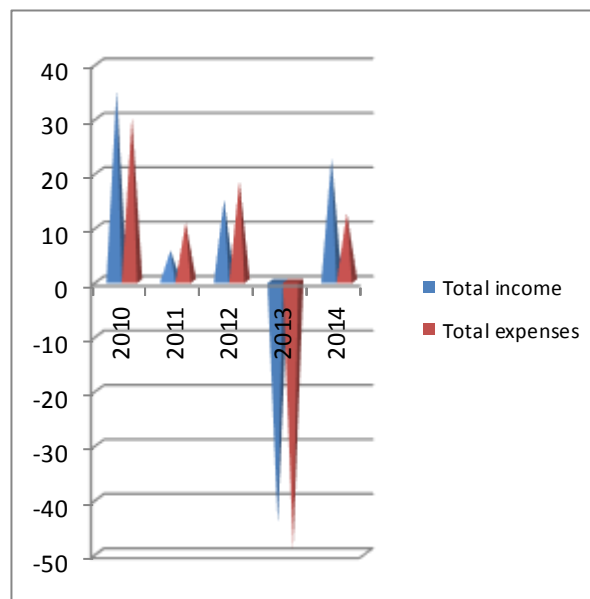


Fig. 2. The evolution of income and expenditure during the period 2010-2015

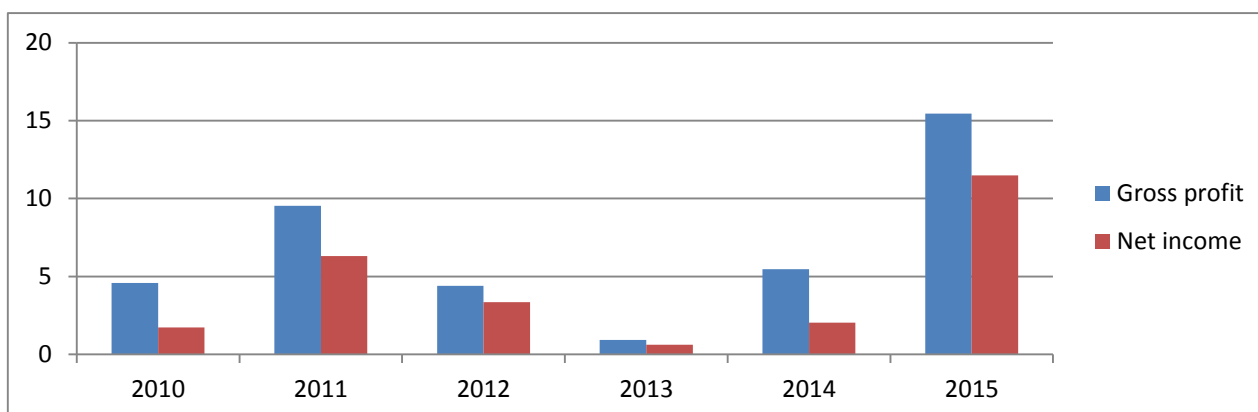


Fig.3. The evolution of the gross and the net result in the period 2010-2015

In the next two years due to the decrease in gross profit recorded economic crisis, falling from time to time with 53.96% and 78.74%, which is the turning point. 2014 and, especially, 2015 are, for the pension Eden, years of economic boom, gross profit increased by 485.58% and 182.82%, a sign that the crisis had been overcome.

For the next period, at least three years are necessary to draw up a sustainable strategy to attract as many tourists as, the Danube Delta having a huge potential in terms of ecosystem, unique in Europe and worldwide, as well as habitat for birds in increasingly rare.

In conjunction with gross profit we can analyse the evolution of net profit which is calculated as the difference between gross

profit and income tax. The evolution of the financial year net profit is similar to the evolution of gross profit, knowing that a substantial increase in 2010-2011, to 4,595 lei, respectively 2.66 times; followed by a 2-year period of decline of the indicator with 46.95% and 81.29%. 2013 is considered a turning point, when profits reached its lowest value of the range 2010-2015 of 627 lei. Analysing the chart no.3 in conjunction with Table 3 reveals, a positive indicator for both the period 2013-2014 - 1,420 lei, respectively 2.26 times in 2014-2015, when this indicator registered a substantial increase 9,436 lei, respectively 4.6 times.

Based on indicators presented can make in-depth analysis on the performance indicators

of the pension in 2010-2015, respectively tax at 1 LEU turnover rate commercial profitability, etc. The commercial rate can be calculated as the ratio of profit related to turnover, result indicator, gross margin over the cost of capitalized assets or net profit and turnover. It is an indicator of performance met both Romanian and foreign literature in English under the name of Return on Sales - ROS). The advantage of this is that the rates may be based on information from the profit and loss account, is easily calculated by those who do not have access to data from

enterprise management accounting. The commercial rate, however, present a limited informational value because net income can be influenced and result from operations other than sales or financial result, extraordinary result, fiscal policy and economic entity. The value of financial rate varies between 2.9% and 10.5% in the textile industry in the field of public utilities in US companies. There is an inverse relationship between the rate of return on net trade and rotational speed of total assets [11].

Table 2. Absolute and relative growth rate of economic and financial indicators

<b>Touring Delta LLC Eden Pension-Crisan / 10 rooms</b>	<b>2011-2010 (mu)</b>	<b>(%)</b>	<b>2012-2011 (mu)</b>	<b>(%)</b>	<b>2013-2012 (mu)</b>	<b>(%)</b>	<b>2014-2013 (mu)</b>	<b>(%)</b>	<b>2015-2014 (mu)</b>	<b>(%)</b>
Net turnover	21,922	126.06	7,654	107.22	8,720	107.67	-17,274	85.89	22,496	121.39
Total income	35,054	134.14	5,617	104.08	14,998	110.46	-44,552	71.86	22,506	119.78
Total expenses	30,101	130.69	10,766	108.40	18,457	113.28	-49,078	68.82	12,524	111.56
Gross profit or gross loss	4,953	207.93	-5,149	46.04	-3,459	21.26	4,526	584.58	9,982	282.82
Net profit or net loss for the financial year	4,595	366.84	-2,966	53.05	-2,724	18.71	1,420	326.48	9,436	560.97

Source: Personal calculations

In Romania, practical studies carried out on economic entities listed on the stock market in 1996-2000 demonstrates that the rate of return on net trade (the ratio of net profit for the year and turnover) registered the most moderate levels of median 0.74 % - 4.84%, which confirms that the rate of return is the least affected by inflation, the takeover simultaneous effect of inflation on both profit and turnover costs [11].

The commercial rate calculated on data from the guesthouse Eden in the Danube Delta in the period 2010-2015 was in the range 0.51% - 9%, with an upward trend during 2010-2011,

2013-2015 and one descending period 2011-2013, sensitive period affected by the economic and financial crisis. Turnover in tourism may be obtained from various activities, namely: food, accommodation, transportation, additional services offered to tourists etc. Most of the volume of receipts or turnover in tourism is played by the accommodation, which in turn is influenced by the flow of tourists in the period under review, the accommodation capacity available, that number available places; the accommodation capacity occupied (occupied many places).

To determine the occupancy rate of available capacity or utilization of available capacity and efficiency of a busy place in the guesthouse Eden, you can use the following model factor analysis:

$$CA = Ld \times \frac{Lo}{Ld} \times \frac{CA}{Lo} \quad (4)$$

where:

CA = turnover specific for tourism activity

Ld = available accommodation capacity of the guesthouse

Lo = capacity of occupied accommodation

$\frac{Lo}{Ld}$  = the occupancy rate of available capacity or utilization of the available capacity

$\frac{CA}{Lo}$  = return of occupied place.

Table 3 presents the evolution of the indicators mentioned above for Eden pension, on the period 2010-2015.

Table 3. Evolution of indicators in activity of accommodation

Touring Delta LLC Eden Pension-Crisan / 10 rooms-20 places	Symbol	2010	2011	2012	2013	2014	2015
Net turnover - lei	CA	84,133	106,055	113,709	122,429	105,155	127,651
Number of seats available for accommodation per year – no.	Ld	7,200	7,200	7,200	7,200	7,200	7,200
Number of seats occupied per year – no.	Lo	2,880	4,320	5,400	6,120	5,760	6,840
Occupancy of available capacity	Lo/Ld	0.400	0.600	0.750	0.850	0.800	0.950
Return of occupied place	CA/Lo	29,213	24,550	21,057	20,005	18,256	18,662

Source: www.mfin.ro - Financial Statements 2010-2015 [8], data from pension, personal calculations

Analyzing the data in Table 3 we can highlight the relationship between the three factors of influence, namely: turnover, the occupancy rate of available capacity or utilization of the available capacity and efficiency of a busy place. When occupancy is approaching to the size of available capacity unit (0.400 to 0.950), turnover increase (from 84,133 lei to 127,651 lei), which is the purpose of any economic entity. Occupancy depends on various factors: competition in the area, seasonality in tourism activity that is essential and deltaic ecosystem is

a special case, charges of pensions, quality of supply, the strategy of marketing and many more [1]. Yield increases usually a busy place when accommodation rates increase. In order to not affect the occupancy of available capacity, price increase it's necessary to be economically substantiated: improving the quality of services offered, services supplementation, modification category of accommodation (number of stars), rising costs etc. A thorough analysis of the last two years can still achieve, based on data provided by Table 4.

Table 4. Working situation for factorial analysis of the turnover from tourism

Touring Delta LLC Eden Pension-Crisan / 10 rooms-20 places	Symbol	2014 (lei)	2015 (lei)	2015-2014 (lei)	2015/2014 (%)
Net turnover	CA	105,155	127,651	22,496	121,39
Number of seats available for accommodation per year	Ld	7,200	7,200	0	100,00
Number of seats occupied per year	Lo	5,760	6,840	1,080	118,75
Occupancy of available capacity	Lo/Ld	0.800	0.950	0.150	118,75
Return of occupied place	CA/Lo	18,256	18,662	0,406	102,23

Source: Financial Statements 2014-2015 [8], [12] data from pension, personal calculations

$$0 + 19,716.48 + 2,777.04 = 22,493.52 \text{ lei} \quad (10)$$

**Model factor analysis and factor analysis scheme:**

$$CA = Ld \times \frac{Lo}{Ld} \times \frac{CA}{Lo} \quad (5)$$

**Quantifying the direct influences of three factors:**

$$\Delta CA = CA_1 - CA_0 = 22.496 \text{ lei} \quad (6)$$

of which:

the influence of accommodations change available on turnover:

$$\Delta Ld = (Ld_1 - Ld_0) \times \frac{Lo_0}{Ld_0} \times \frac{CA_0}{Lo_0} = 0 \text{ lei} \quad (7)$$

The influence of change in occupancy rate of

available capacity or utilization of the available capacity on the turnover:

$$\Delta \frac{Lo}{Ld} = Ld_1 \times \left( \frac{Lo_1}{Ld_1} - \frac{Lo_0}{Ld_0} \right) \times \frac{CA_0}{Lo_0} = 7,200 \times (0.15) \times 18,256 = 19,716.48 \text{ lei} \quad (8)$$

The influence of the modification yield a busy place on turnover:

$$\Delta \frac{CA}{Lo} = Ld_1 \times \frac{Lo_1}{Ld_1} \times \left( \frac{CA_1}{Lo_1} - \frac{CA_0}{Lo_0} \right) = 7,200 \times 0.95 \times 0.406 = 2,777.04 \text{ lei} \quad (9)$$

Checking:

$$\Delta Ld + \Delta \frac{Lo}{Ld} + \Delta \frac{CA}{Lo} = \Delta CA$$

## CONCLUSIONS

Compared with 2014, considered the base year, the turnover of the pension Eden Crişan, Delta grew in 2015, with 22,493.52 RON, respectively 21.39%, a situation considered to be favourable. This is due to three factors with direct action: the accommodation capacity available, the occupancy rate of available capacity or utilization of available capacity and efficiency of a busy place [6].

Available accommodation capacity (number of seats available bed) was constant in the analysed period 2014-2015 guesthouse featuring 10 rooms with 2 seats. During the year, 7,200 resulted accommodation pension, during this period by not extending the accommodation capacity, maximum occupancy is not reached.

The occupancy rate of available capacity or utilization of the available capacity increased number of 0.800 to 0.950, respectively 0.150 or 18.75% in the period, approaching the size of the unit in 2015, which indicating a relationship directly proportional to turnover, which is the purpose of any economic entity. This indicator was calculated as the ratio between the number of seats occupied per year and the number of seats available for accommodation per year.

Return a busy place increased from 18,256 lei / place to 18,662 lei / place to stay, or 2.23%, this being due to higher turnover from 105,155 lei to 127,651 lei, it means 22,496 increasing, respectively 21.39%, to increase the number of seats filled per year, and from 5,760 to 6,840 lei places resulting 1,080 lei

grow, respectively 18.75%.

Thus increasing the income of a busy place may be due either increase the number of seats held either increase the rates. This increase in tariffs should be based on economy, not to affect employment. It imposes a tariff increase due to the provision of additional services, increase comfort by improving the accommodation services offered in general, reclassification or increase the number of flowers/stars, rising costs etc [2].

It can be concluded from the foregoing that the pension Eden is in a favourable situation in economically that has successfully passed the economic crisis in the country, but imposed a number of measures for the future in order to maintain this position or why not improve it: improving the quality of services offered; infrastructure development; modernization of communications; knowledge needs of tourists, which are constantly changing, knowing that the number of foreign tourists visiting the Danube Delta is increasingly higher, and resources are limited; the opportunities for European funds and many more [5], [9].

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