# The Evolution of the Turnover and of the Gross Profit Recorded by Economic Agents in the Main Towns of Constanta County, between 2016 and 2017

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### **Abstract**

Any company is concerned about the size and evolution of its activity in order to take the right decisions on the future orientation of its activity, in correlation with the evolution of the external environment, where it exists and operates. Based on this approach, economic operators calculate different economic indicators, according to the requirements of the national legislation and European directives, whereby they express the volume and in some cases the structure of their economic activity. This study analyzes the size and dynamics of the activity carried out by the economic agents that operated in the main towns of Constanta County, in 2016 and 2017.

This study is particularly important because, by processing a database containing values of several microeconomic indicators, we obtained a dynamic analysis on the evolution of the main economic performances of the companies that operate in the towns of Constanta county, during 2016 – 2017.

**Key words:** turnover, gross profit, evolution, towns, analyze **J.E.L. classification**: C01, C10,C40, M10, M20, M21, O11, O12

### 1. Introduction

The study aims to draw attention to the fact that a statistical database on the size of some economic indicators in the years 2016 and 2017, processed with quantitative statistical methods, can provide as a result both quantitative information about the size and the evolution of the economic activity, as well as comparative interpretations only between the cities from Constanta County.

### 2. Theoretical background

The economic literature states that the purpose of the activity carried out by any economic agent in a market economy is to obtain profit or, in other words to maximize profit. The importance of the profit indicator can be highlighted in several ways. Thus, it is known that the decisions made at the level of economic organizations aim to obtain profit; then establishing / determining / expressing efficiency depends on the profit achieved; the ranking on the market and the image of an economic agent are strongly influenced by its ability to achieve profit, but also by the size of this indicator

## 3. Research Method

This study is a quantitative analysis of the size and evolution of the "turnover" and "gross profit" indicators, for the period 2016-2017, achieved by the economic agents that operate only in the towns of Constanta County. (Jugănaru, 1998; Jugănaru, 2000)

The data were selected from a large database, i.e. from 19.125 companies registered in 2016 and 20.029 companies registered in 2017, including a series of economic indicators that companies are required to transmit (Accounting Law no. 82/1991 with subsequent amendments and completions, Official Gazette no. 902/11.12.2014, Matiş., Pop. 2007; OMFP 1802/2014). By processing the data, we determined the average values, the indices and the rhythms of change. (Aivaz.2007, pp. 329; Aivaz.2007, pp. 99). We also used the SPSS statistical software for the analysis (Field, 2009).

### 4. Data, results and discussion

The first step of the study was made by calculating the average values of the "Net turnover" indicator, recorded in each town in Constanta County in 2016 and 2017. Based on the individual values achieved by each company, the average value of the analyzed indicator was calculated, per each town, for the two years.

Table no. 1 The average value of the "net turnover" indicator, per town, in Constanta County, in 2016 and 2017

| Town        | Average<br>Net turnover,<br>2016 | No. of companies 2016 | Town        | Average<br>Net turnover,<br>2017 | No. of companies 2017 |
|-------------|----------------------------------|-----------------------|-------------|----------------------------------|-----------------------|
| Constanta   | 1.931.420,24                     | 11538                 | Constanta   | 1.915.753,87                     | 11972                 |
| Cernavoda   | 1.476.777,04                     | 322                   | Cernavoda   | 1.094.443,93                     | 324                   |
| Eforie Nord | 599.831,81                       | 286                   | Eforie Nord | 658.761,98                       | 297                   |
| Eforie Sud  | 753.080,78                       | 169                   | Eforie Sud  | 714.339,25                       | 178                   |
| Hârsova     | 1.633.322,41                     | 135                   | Hârsova     | 1.813.006,67                     | 141                   |
| Mangalia    | 3.043.498,81                     | 957                   | Mangalia    | 1.757.125,21                     | 991                   |
| Medgidia    | 804.590,92                       | 762                   | Medgidia    | 872.400,50                       | 768                   |
| Murfatlar   | 2.384.891,62                     | 134                   | Murfatlar   | 2.329.345,31                     | 138                   |
| Navodari    | 13.313.046,10                    | 727                   | Navodari    | 14.622.929,19                    | 835                   |
| Negru Voda  | 1.545.126,42                     | 38                    | Negru Voda  | 1.349.743,41                     | 39                    |
| Baneasa     | 1.001.992,25                     | 12                    | Baneasa     | 928.703,96                       | 23                    |
| Ovidiu      | 1.508.261,73                     | 371                   | Ovidiu      | 1.528.854,14                     | 383                   |
| Techirghiol | 962.402,81                       | 199                   | Techirghiol | 843.632,80                       | 204                   |
| TOTAL       |                                  | 15.650                | TOTAL       |                                  | 16.293                |

Source: Author's own processing by SPSS

The data presented in Table 1 show that in 2017, 16.293 companies operated in the analyzed towns, compared to 15.650 in 2016. There is an absolute increase of 643 in the number of companies or a relative increase of 4.11%.

Table no.2 The absolute and relative evolution of the "net turnover" indicator, per town, in Constanta County, between 2016 and 2017

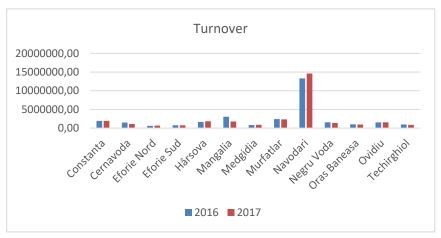
| No. crt. | Town        | Absolute change<br>Turnover | Index% | Rhythm % |
|----------|-------------|-----------------------------|--------|----------|
| 1        | Constanta   | -15.666,37                  | 99,19  | -0,81    |
| 2        | Cernavoda   | -382.333,11                 | 74,11  | -25,89   |
| 3        | Eforie Nord | 58.930,17                   | 109,82 | 9,82     |
| 4        | Eforie Sud  | -38.741,53                  | 94,85  | -5,14    |
| 5        | Hârsova     | 179.684,25                  | 111,00 | 11,00    |
| 6        | Mangalia    | -1.286.373,60               | 57,73  | -42,27   |
| 7        | Medgidia    | 67.809,58                   | 108,43 | 8,43     |

| 8  | Murfatlar   | -55.546,31   | 97,67  | -2,33  |
|----|-------------|--------------|--------|--------|
| 9  | Navodari    | 1.309.883,10 | 109,84 | 9,84   |
| 10 | Negru Voda  | -195.383,01  | 87,35  | -12,65 |
| 11 | Baneasa     | -73.288,29   | 92,69  | -7,31  |
| 12 | Ovidiu      | 20.592,41    | 101,36 | 1,36   |
| 13 | Techirghiol | -118.770,01  | 87,66  | -12,34 |

Source: Author's own processing by SPSS

The data in Table 2 show the absolute and relative values of the changes in the average of the "net turnover" indicator, per town, in Constanta County, between 2016 and 2017. The interpretation of these values allows us to assess the economic activity in each town.

Figure no. 1 The evolution of the "turnover" indicator, between 2016 and 2017, in terms of absolute values



Source: Author's own processing by EXCEL

Afterwards, we calculated the average values of the "gross profit" indicator, per town, in Constanta County, in 2016 and 2017. Further, based on the individual values achieved by each company, we calculated the average value of the analyzed indicator, per town, for the two years.

Table no. 3 Average of the "Gross Profit" indicator, per town, in Constanta County, in 2016 and 2017

| Town        | Average<br>Gross profit<br>2016 | No. of companies 2016 | Town        | Average<br>Gross profit<br>2017 | No. of companies 2017 |
|-------------|---------------------------------|-----------------------|-------------|---------------------------------|-----------------------|
| Constanta   | 116.492,46                      | 11538                 | Constanta   | 116.475,82                      | 11971                 |
| Baneasa     | 40.116,92                       | 12                    | Baneasa     | 68.209,61                       | 23                    |
| Cernavoda   | 1.028,59                        | 322                   | Cernavoda   | -95.147,03                      | 324                   |
| Eforie Nord | 88.300,54                       | 286                   | Eforie Nord | 119.892,57                      | 297                   |
| Eforie Sud  | 76.534,75                       | 169                   | Eforie Sud  | 77.786,34                       | 178                   |
| Hârsova     | 130.658,90                      | 135                   | Hârsova     | 168.965,36                      | 141                   |
| Mangalia    | -425.403,02                     | 957                   | Mangalia    | 227.177,12                      | 991                   |
| Medgidia    | 80.071,10                       | 762                   | Medgidia    | 55.240,43                       | 768                   |
| Murfatlar   | -569.940,87                     | 134                   | Murfatlar   | -248.200,04                     | 138                   |
| Navodari    | 124.885,86                      | 727                   | Navodari    | 619.335,60                      | 835                   |
| Negru Voda  | 399.225,47                      | 38                    | Negru Voda  | 354.152,44                      | 39                    |
| Ovidiu      | 134.181, 3                      | 371                   | Ovidiu      | 100.638,13                      | 383                   |
| Techirghiol | 60.472,61                       | 199                   | Techirghiol | 47.329,78                       | 204                   |

Source: Author's own processing by SPSS

Table no. 4 The absolute and relative evolution of the "Gross Profit" indicator, per town, in Constanta County between 2016 and 2017

| Nr .crt. | Town        | Absolute change<br>Gross profit | Index<br>% | Rhythm<br>% |
|----------|-------------|---------------------------------|------------|-------------|
| 1        | Constanta   | -16,64                          | 99,99      | -0,01       |
| 2        | Băneasa     | 28.092,69                       | 170,03     | 70,03       |
| 3        | Cernavoda   | -96.175,61                      |            |             |
| 4        | Eforie Nord | 1.592,03                        | 135,78     | 35,78       |
| 5        | Eforie Sud  | 1.251,59                        | 101,64     | 1,64        |
| 6        | Hârsova     | 38.306,46                       | 129,32     | 29,32       |
| 7        | Mangalia    | -652.580,14                     |            |             |
| 8        | Medgidia    | -24.830,67                      | 68,98      | -31,01      |
| 9        | Murfatlar   | -321.740,83                     | 43,55      | -56,45      |
| 10       | Năvodari    | 494.449,74                      | 495,92     | 395,92      |
| 11       | Negru Voda  | -45.073,04                      | 88,71      | -11,29      |
| 12       | Ovidiu      | -33.543,20                      | 75,00      | -25,00      |
| 13       | Techirghiol | -13.142,83                      | 78.27      | -21.73      |

Source: Author's own processing by SPSS

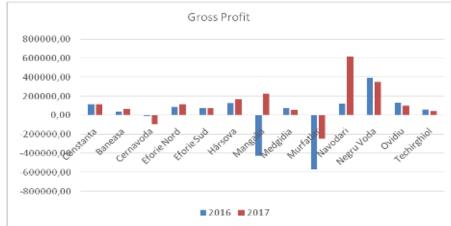
The interpretation of the values calculated and presented in Table 4 – representing the absolute and relative change in the average of the "gross profit" indicator – allows us to assess the evolution of the economic activity in each town.

The data presented in the four tables reflect the evolution of the economic profile of each town, over the analyzed period, considering the two analyzed indicators.

Constanta, the most important city of the county, recorded a decrease of 15.666,37 RON in the absolute value and a decrease of 0.81% in the relative value of the "turnover" indicator. Moreover, as far as the "gross profit" indicator is concerned, it recorded an insignificant decrease of 16,64 RON in absolute value and of -0,01% in relative value. It is noteworthy that over the analyzed period, the number of companies increased from 11.538 (in 2016) to 11.972 (in 2017).

Cernavoda recorded a decrease of 382.333,11 RON in the absolute value and of 25,89% in the relative value of the "turnover" indicator, as well as a decrease of 96.175,61 RON in the "gross profit" indicator; over the analyzed period, the number of companies increased from 322 (in 2016) to 324 (in 2017).

Figure no.2 The evolution of the "gross profit" indicator, between 2016 and 2017, in terms of absolute value



Source: Author's own processing by EXCEL

Eforie Nord recorded an increase of 58.930,17 RON in the absolute value and of 9,82% in the relative value of the "turnover" indicator. Moreover, as far as the "gross profit" indicator is concerned, it also recorded an increase of 1.592,03 in absolute value and of 35.78% in relative value. Over the analyzed period, the number of companies increased from 286 (in 2016) to 297 (in 2017).

Eforie Sud recorded a decrease of 38.741,53 RON in the absolute value and of 5,14% in the relative value of the "turnover" indicator, while the "gross profit" indicator increased by 1.251,59 in absolute value and by 1,64% in relative value. Over the analyzed period, the number of companies increased from 169 (in 2016) to 178 (in 2017).

Harsova recorded an increase of 179.684,25 RON in the absolute value and of 11.00% in the relative value of the "turnover" indicator. Increases of 38.306,46 in the absolute value and of 9.32% in the relative value of the "gross profit" indicator were also recorded. Over the analyzed period, the number of companies increased from 135 (in 2016) to 141 (in 2017).

Mangalia recorded decreases in both the "turnover" indicator, i.e. 1.286.373,60 RON in absolute value and 42,27% in relative value; the "gross profit" indicator also recorded a decrease of 652.580,14 in absolute value; the number of companies increased from 957 (in 2016) to 991 (in 2017).

Medgidia recorded, on the one hand, an increase of 67.809,58 RON in absolute value and of 8,43% in relative value, as far as the "turnover" indicator is concerned. On the other hand, there was recorded a decrease of 24.830,67 RON in the absolute value and of 31,01% in the relative value of the "gross profit" indicator. These changes occurred given the fact that, over the analyzed period, the number of companies increased from 762 (in 2016) to 768 (in 2017).

Murfatlar recorded decreases in both the "turnover" indicator, i.e. 55.546,31 RON in absolute value and 2,33% in relative value, as well in the "gross profit" indicator, i.e. 321.740,83 RON in absolute value and 56.45% in relative value. It is noteworthy that over the analyzed period, the number of companies increased from 134 (in 2016) to 138 (in 2017).

Năvodari recorded increases both in the "turnover" indicator (195.383,01 RON in absolute value and 9,84% in relative value), as well as in the "gross profit" indicator (494.449,74 in absolute value and 395,92% in relative value). Over the analyzed period, the number of companies increased from 727 (in 2016) to 835 (in 2017).

Negru Voda recorded decreases in both the "turnover" indicator, i.e. 195.383,01 RON in absolute value and 12,65% in relative value, and in the "gross profit" indicator, i.e. 45.073,04 in absolute value and 11,29 % in relative value. Over the analyzed period, the number of companies increased from 38 (in 2016) to 39 (in 2017).

Baneasa recorded, on the one hand, a decrease of 73.288,29 RON in the absolute value and of 7,31% in the relative value of the "turnover" indicator. On the other hand, it recorded a remarkable increase in the "gross profit" indicator, i.e. 28.092,69 in absolute value and 70,03% in relative value, given that the number of companies increased from 12 (in 2016) to 23 (in 2017) over the analyzed period.

Ovidiu recorded, on the one hand, an increase in the "turnover" indicator, i.e. 20.592,41 RON in absolute value and of 1.36% in relative value. On the other hand, it recorded a decrease of 33.543,20 in the absolute value and of 25,00% in the relative value of the "gross profit" indicator. Over the analyzed period, the number of companies increased from 371 (in 2016) to 383 (in 2017).

Techirghiol recorded decreases in both the "turnover" indicator, i.e. 118.770,01 RON in absolute value and 12,34% in relative value, as well as in the "gross profit" indicator, i.e. 13.142,83 in absolute value and 21,73% in relative value. Over the analyzed period, the number of companies increased from 199 (in 2016) to 204 (in 2017).

#### 5. Conclusions

The results obtained by processing the database allowed the elaboration of a presentation on the evolution of the main indicators of the financial results, obtained by the active companies in the towns of Constanta county, without questioning the causes that triggered the changes of the two analyzed indicators, i.e. "turnover" and "gross profit". We should also specify that the towns selected and analyzed in this study are different in terms of size, number of inhabitants, number of

companies, their field of activity and other aspects. Even under these conditions, it is noteworthy that Navodari recorded the highest increases, respectively of 1.309.883,10 RON in the "turnover" indicator and of 494.449,74 RON in the "gross profit" indicator. As far as Mangalia is concerned, it recorded the largest decreases, i.e. 1.286.373,60 lei in the "turnover" indicator and 652.580,14 in the "gross profit" indicator. Several towns (Constanța, Cenavodă, Murfaltar, Negru Voda, Techirghiol) recorded decreases in the values of the two indicators, but only two towns (Eforie Nord and Hârșova) registered increases in the values of the two indicators. A particular situation is represented by Medgidia and Ovidiu, which recorded increases in the "turnover" indicator and decreases in the "gross profit"indicator. At the same time, Baneasa and Eforie Sud recorded decreases in their turnover and increases in their gross profit.

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