

Issues Regarding the Dynamics of the Economic and Financial Efficiency, Correlated with the Dimension of the Human Resources Used by Companies from the Urban Area of Constanța County, Romania

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Abstract

*This paper is part of a broader analysis of the business environment in Constanta County in 2016 and 2017. The present study includes the dynamic analysis of two economic and financial indicators: the value added and the average number of employees registered and reported by the companies operating in the **urban localities** of Constanta County.*

The quantitative research carried out helps to identify the urban localities where the highest values of the analyzed indicators are concentrated, provides information about their hierarchy and importance in the economy of Constanta County.

The results obtained from this study represent a database used to perform comparative analyses regarding the economic profile of urban localities (in terms of the indicators used), but also a starting point (for the managers of the companies and the decision-makers in the localities / county of Constanta) in terms of deciding the strategy for increasing the economic and financial performance, of adopting policies correlated with the current economic and social context.

Key words: efficiency, companies, value added, number of employees, urban area

J.E.L. classification: C10, C40, E24, J21, L11, L25, M10, M21, O11, O12

1. Introduction

The Chamber of Commerce, Industry, Navigation and Agriculture Constanta (CCINA) is a private organization, established under Law no. 335/2007. According to the law, Chambers of Commerce are autonomous, non-governmental, apolitical organizations, without a patrimonial purpose, of public utility, with legal personality, created in order to represent, protect and support the interests of their members and of the business community in relation to the public authorities and the organizations in the country and abroad. (Law no. 335 of 2007).

Each year, CCINA organizes the Top Companies in Constanta County event, in accordance with art. 4 of Law 335/2007 of the Chambers of Commerce and Industry of Romania, amended and completed. In order to draw up the Top Companies List, CCINA processes information from the balance sheets of the companies for the previous year, according to the EU Directives provided by the Ministry of Public Finance; information about companies legally registered in Romania, provided by the National Trade Register Office; as well as information about companies resulting from the activity of the county Chambers of Commerce. (Constanta Chamber of Commerce, Industry, Navigation and Agriculture, 2017 and 2018 ;Law no. 335 of 2007 ;OECD, 2018).

2. Theoretical background

The activity of any economic unit also involves drawing up balance sheets, in accordance with the provisions of the Order of the Ministry of Public Finance no.1802/2014. (The Ministry of Public Finance, 2017). These annual balance sheets are official documents drawn up at the end of the financial year and are referred to as annual balance sheets.

On the one hand, this information is of microeconomic importance for each economic unit as it provides an accurate image of the assets, liabilities, financial position and profit or losses of the entity (Matiş D. *et al*, 2007), reflects the company's present financial situation, but, at the same time, it is a database useful for different users in the decision-making process concerning the future of the activity.

On the other hand, these annual balance sheets are databases for meso and macroeconomic studies / analyses. Depending on the objective, the statistical-mathematical apparatus and the support of the information technology used, the way of combining the information from the annual balance sheets, various analyses can be made, which bring a host of useful information in understanding and explaining economic and social phenomena/aspects, but also in the formulation of business orientation decisions.

3. Research methodology

For the study presented in this paper, a broad initial database was used, consisting of information recorded in the balance sheets of 26,978 companies in 2016 and 28,292 companies in 2017 (Constanta Chamber of Commerce, Industry, Shipping and Agriculture, 2017 and 2018).

In order to obtain factual results, it was considered appropriate to improve this ample database in the sense that companies that reported zero turnover and declared a number of zero employees were excluded. Under the circumstances, 11,186 companies for the year 2016 and 11,945 companies for the year 2017 remained in the database of the study. In the quantitative research (Jugănar, M., 1998), conducted and presented in this paper, the system of absolute, relative and mean indicators of chronological series was used (Aivaz, K., 2007 a, p. 329 ; Aivaz, K., 2007 b, p. 99).

For the systematization of information and the calculation of statistical indicators, the SPSS software program (Field, A., 2009) was used.

4. Data, results and discussion

The starting point of the study was the statistical description of the value added and the average number of employees, using the following statistical indicators: the average level (mean), the number of companies (N), the aggregate value of the financial indicators (Sum), the lowest value of the analyzed financial indicator (Minimum), respectively the highest (Maximum), amplitude variation (Range), the structure of the financial indicator - value added (% of Total Sum) and the structure of the number of firms (% of Total N). The results obtained for the first ten urban localities (selected according to the number of companies) in the two analyzed years (2016 and 2017) are presented in Table 1.

We note that, from an administrative point of view, there is a single Eforie Town, with two tourist resorts, namely Eforie Nord and Eforie Sud. Moreover, Mamaia is a tourist resort, however, from an administrative point of view, it is part of Constanta municipality. In the database used, the annual balance sheets of the companies are recorded separately, by cities and resorts, which is why we followed this particular method of presentation in our study.

In Table no. 1, the urban localities/resorts are placed alphabetically (as in the consulted database), but in the interpretation of the results their hierarchy was presented (according to the number of companies).

Table no. 1 The statistical description of the "value added" and "average number of employees" indicators for companies in the first ten urban localities of Constanta County, for the 2016-2017 period

2016			2017		
Locality		Value added	Average number of employees	Value added	Average number of employees
Cernavoda	Mean	499154.26	11.50	334891.89	9.69
	N	321	321	323	323
	Minimum	-764342	1	-30308786	1
	Maximum	21806236	558	20211395	414
	Range	22570578	557	50520181	413
	Sum	160228516	3690	108170081	3129
	% of Total Sum	1.9%	2.7%	1.2%	2.3%
	% of Total N	1.7%	1.7%	1.6%	1.6%
Constanta	Mean	465322.70	7.36	478821.65	7.10
	N	11533	11533	11963	11963
	Sum	5366566749	84860	5728143356	84989
	% of Total Sum	63.5%	62.2%	64.0%	63.2%
	% of Total N	60.3%	60.3%	59.8%	59.8%
Eforie Nord	Mean	220367.75	4.48	258525.07	4.25
	N	286	286	297	297
	Sum	63025176	1281	76781947	1263
	% of Total Sum	.7%	.9%	.9%	.9%
	% of Total N	1.5%	1.5%	1.5%	1.5%
Eforie Sud	Mean	209980.94	4.64	215753.08	4.34
	N	169	169	178	178
	Sum	35486779	784	38404048	773
	% of Total Sum	.4%	.6%	.4%	.6%
	% of Total N	.9%	.9%	.9%	.9%
Mamaia	Mean	873241.61	16.00	1016875.43	16.36
	N	146	146	137	137
	Sum	127493275	2336	139311934	2242
	% of Total Sum	1.5%	1.7%	1.6%	1.7%
	% of Total N	.8%	.8%	.7%	.7%
Mangalia	Mean	355543.88	11.10	364335.07	9.10
	N	957	957	991	991
	Sum	340255490	10621	361056059	9023
	% of Total Sum	4.0%	7.8%	4.0%	6.7%
	% of Total N	5.0%	5.0%	5.0%	5.0%

Medgidia	Mean	210651.23	5.00	197912.62	4.94
	N	762	762	768	768
	Sum	160516235	3810	151996895	3795
	% of Total Sum	1.9%	2.8%	1.7%	2.8%
	% of Total N	4.0%	4.0%	3.8%	3.8%
Navodari	Mean	1265024.32	7.32	1097870.64	6.48
	N	727	727	833	833
	Sum	919672679	5325	914526246	5398
	% of Total Sum	10.9%	3.9%	10.2%	4.0%
	% of Total N	3.8%	3.8%	4.2%	4.2%
Ovidiu	Mean	387386.99	6.35	392041.13	5.99
	N	371	371	382	382
	Sum	143720572	2354	149759710	2290
	% of Total Sum	1.7%	1.7%	1.7%	1.7%
	% of Total N	1.9%	1.9%	1.9%	1.9%
Techirghiol	Mean	187191.04	4.95	173372.86	4.24
	N	199	199	204	204
	Sum	37251016	986	35368064	865
	% of Total Sum	.4%	.7%	.4%	.6%
	% of Total N	1.0%	1.0%	1.0%	1.0%

Source: Data obtained by processing the information from the financial and accounting balance sheets of active companies in Constanta County

1. The municipality of Constanta has the highest value of the indicators analyzed. Thus, in 2016, the average value added of the 11,533 companies, of 5,366,566,749 lei, was 465,322.70 lei, and the share held by the companies in the city, in the total value added realized in Constanta county was of 63.5 %. In 2017, the values of the indicators increased. It can be noted that the 11,963 companies in this city achieved 5,728,143,356 lei total value added, reaching a mean of 478,821.65 lei and a share of 64% at the county level.

As for the average number of employees, there is a slight increase, from 84,860 in 2016 to 84,989 in 2017. The number of employees in the city's companies represented 62.2% in 2016 and 63.2% in 2017, in the total number of employees of the companies in Constanta County.

2. Mangalia municipality, ranked second on the top list of urban localities in Constanta County, registered 340,255,490 lei of value added in 2016, which increased to 361,056,059 lei in 2017. These values show that Mangalia Town made a contribution of 4% (both in 2016 and in 2017) to the achievement of the total value added indicator at the county level. The share of companies in this city is 4% over the analyzed period, even if their number increased in absolute terms from 957 in 2016 to 991 in 2017. Furthermore, the mean value added indicator increased from 355,543.88 lei in 2016 to 364,335.07 lei in 2017. Decreases were recorded in the average number of employees, from 11.1 in 2016 to 9.1, in 2017, but also in the share of the number of employees in the city of Mangalia in the total number of employees of companies in Constanta County, i.e. from 7.8% in 2016 to 6.7% in 2017.

3. In Medgidia Municipality, as the total number of companies increased from 762 in 2016 to 768 in 2017, there were decreases of the value added indicator, in terms of total value: from 160,516,235 lei in 2016 to 151,996,895 lei, in 2017; and as a mean value from 210,651.23 lei in

2016 to 197,912.62 lei in 2017, but also as share, from 1.9% to 1.7% over the analyzed period. Further decreases were registered in the number of employees: from a total of 3,810 employees in 2016 to 3,795 employees in 2017; from a mean number of employees of 5 in 2016 to 4.94 in 2017.

4. The evolution of Navodari Town is very similar to that of Medgidia. Given that the total number of companies increased from 727 in 2016 to 833 in 2017 (as a share, from 3.8% to 4.2%), there were decreases of the value added indicator, as a total value: from 919,672,679 lei in 2016 to 914,526,246 lei, in 2017; and as a mean value from 1,265,024.32 lei in 2016 to 1,097,870.64 lei in 2017 and in share from 10.9% to 10.2% over the analyzed period. The difference is that in Navodari Town, compared with Medgidia municipality, there have been increases in the number of employees indicator: from a total of 5,325 employees in 2016 there were 5,398 employees in 2017, but also a decrease from the 7.32 average number of employees in 2016 to 6.48 in 2017.

5. Ovidiu Town shows a positive evolution of the value added indicator: in terms of total level, the increase was from 143,720,572 lei in 2016 to 149,759,710 lei in 2017; in terms of average level, it increased from 387,386.99 lei in 2016 to 392,041.13 lei in 2017, and in terms of share it remained at 1.7% over the analyzed period. As far as the number of employees indicator is concerned, in terms of total value there was a decrease from 2,354 in 2016 to 2,290 in 2017, the average level reduced from 6.35 employees to 5.99 employees over the analyzed period, while the share of the total number of employees in the companies operating in Ovidiu Town, in the total number of employees in the companies operating in Constanta County, remained 1.7%.

6. The evolution of Cernavoda Town is similar to that of Navodari and Medgidia towns. A very small increase in the total number of companies, from 321 in 2016 to 323 in 2017, was accompanied by decreases of the value added indicator at a total level: from 160,228,516 lei in 2016 to 108,170,081 lei, in 2017; in terms of mean value, from 499,154.26 lei in 2016 to 334,891.89 lei in 2017, and in terms of share, from 1.9% to 1.2%, over the analyzed period. Unlike Navodari Town and similar to Medgidia Town is that there have been decreases in the number of employees: from a total of 3,690 employees in 2016 to 3,129 employees in 2017, a decrease in the average number of employees from 11.5 in 2016 to 9.69 in 2017.

7. In Eforie Nord there was a positive evolution of the economic activity, similar to the one recorded and presented about Ovidiu Town. The total level of the value added indicator increased from 63,025,176 lei in 2016 to 76,781,947 lei in 2017; the mean level increased from 220,367.75 lei in 2016 to 258,525,07 lei in 2017, and in terms of share it increased from 0.7% to 0.9% over the analyzed period. As regards the number of employees indicator, there were decreases in total value from 1,281 in 2016 to 1,263 in 2017, and the average level decreased from 4.48 employees to 4.25 employees over the analyzed period, while the share of the total number of employees in the companies operating in Eforie Nord from the total number of employees in the companies operating in Constanta County remained 1.5%.

8. Techirghiol Town's evolution is similar to the towns' of Cernavoda, Navodari and Medgidia. In the context of a very small increase in the total number of companies, from 199 in 2016 to 204 in 2017, there were decreases of the value added indicator in terms of total level: from 37,251,016 lei in 2016 to 35,368,064 lei in 2017; in terms of mean value, from 187,191,04 lei in 2016 to 173,372.86 lei in 2017, while the share remained at 0,4% over the analyzed period. There were decreases in the total number of employees: from a total of 986 employees in 2016 to 865 employees in 2017; from 4.95, the average number of employees in 2016 to 4.24 in 2017; the share decreased from 0.7% to 0.6% over the analyzed range.

9. In Eforie Sud there was a positive evolution of the economic activity, almost identical to that of Eforie Nord. It can be noted that the total value added indicator increased from 35,486,779 lei in 2016 to 38,404,048 lei in 2017; the mean value rose from 209,980.94 lei in 2016 to 215,753.08 lei in 2017 and in terms of share it remained at the 0.4% level over the analyzed period. As regards the number of employees indicator, there were decreases, in terms of total value, from 784 in 2016 to 773 in 2017, the mean value decreased from 4.64 employees to 4.34 employees over the analyzed period while the share of the total number of employees in the companies operating in Eforie Sud in the total number of employees in the companies operating in Constanta County remained 0.6%. This evolution was possible as a result of the increase in the total number of companies from 169 in 2016 to 178 in 2017.

10. The evolution registered by Mamaia resort is positive, given that the total number of companies decreased slightly from 146 in 2016 to 137 in 2017. It can be noted that the total value added indicator increased from 127,493,275 lei in 2016 to 139,311,934 lei in 2017; the mean level increased from 873,241.61lei in 2016 to 1,016,875.43 lei in 2017, and the share increased from 1.5% to 1.6% over the analyzed period. As far as the number of employees indicator is concerned, there were contradictory changes: on the one hand, there was a decrease in total value, from 2,336 employees in 2016 to 2,242 in 2017, and on the other hand there was a slight increase in terms of mean value, i.e. from 16 employees to 16.36 employees over the analyzed period, while the share dropped from 8% to 7%.

5. Conclusions

The research carried out has focused on the following aspects:

More than half of the total value added in Constanta County is realized in Constanta municipality, i.e. 63.5% in 2016 and 64% in 2017. Furthermore, more than half of the employees in Constanta County (62.2% in 2016 and 63.2% in 2017) are concentrated in the companies operating in Constanta municipality.

The municipality of Medgidia is notable for the decrease in the efficiency of the economic activity over the analyzed period, due to the quantitative increase in the number of companies.

Navodari Town (ranked No. 4), with a smaller number of companies, has higher values than those of Medgidia Town (ranked third). The explanation lies in the fact that in Navodari the largest refinery in Romania, as well as other larger companies in the petrochemical industry are operating.

In conclusion, one can speak of an intense concentration of economic power in Constanta County. Thus, the 10 urban localities contribute to the total value added realized in Constanta County by 86.9% in 2016 and 85.7% in 2017; they total 80.9% of the total number of companies operating in the county in 2016 and 80.4% in 2017, and they hold 85% in 2016 and 84.5% in 2017 of the total number of employees in Constanta County.

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