Dynamics of the Profit Rate of Companies Grouped
by Activity Fields in Constanta

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Abstract

The purpose of this paper is to analyze the business environment in Constanta per main fields of activity, by means of a synthetic indicator assessing the economic and financial performance, i.e. the profit rate. The analysis was carried out from a dynamic perspective, for two consecutive years, i.e. 2016 and 2017; the economic phenomena and processes were dealt with having in view their mutual movement and conditioning, thus revealing the position they hold and the changes that occurred at different moments of their evolution. The results shown in this paper support the strategy for increasing economic and financial performance by adopting policies adapted to the new challenges and uncertainties of the economic and social reality.

Key words: profit rate, gross profit, turnover, activity fields
J.E.L. classification: C10, C40, E240, M10, M20, M21, O11, O12

1. Introduction

Financial statements are official documents drawn up at the end of the financial year and are referred to as annual financial statements. They are drawn up in a clear and consistent manner with the provisions of Order no. 1802/2014 and provide a true and fair view of the assets, debts, financial situation and profit or loss of the entity. They represent the endpoint in the production of information about the financial situation of the enterprise. The drawing up of the annual financial statements and their submission is mandatory (required by the legal provisions in force) and at the same time they are needed by different users in the decision-making process.

The aim of this paper is to analyze the business environment in Constanta per main fields of activity, by means of a synthetic indicator assessing the economic and financial performance, i.e. the profit rate. The analysis was carried out from a dynamic perspective, for two consecutive years, i.e. 2016 and 2017.

2. Theoretical background

However, annual financial statements do not provide all the information that users need in order to make economic decisions, as they largely reveal the financial effects of past events and do not usually provide non-financial information. In addition, the components of annual financial statements are correlated because they reflect different aspects of the same transactions or other events. Although each situation provides different information, it is likely that none will serve only one purpose or provide all the information required by the users' significant needs. By calculating economic and financial indicators, we acquire knowledge of their evolution; moreover, by comparing them with the previous financial years, the entity management is provided with the possibility to carry out economic and financial analyzes, influencing the decision-making process. In addition, knowledge of the level of economic and financial indicators allows comparisons with other entities in similar indigenous or international activity sectors. In this context, starting from two relevant financial indicators, i.e. gross profit and turnover, this study performs a comparative analysis of the evolution of the gross profit rate in the main activity fields of the companies in Constanta municipality.

3. Research Method

The initial database, which consisted of information gathered from 26,978 companies in 2016 and from 28,292 companies in 2017, was refined, excluding the companies that reported zero turnover and zero number of employees (www.mfinanate.ro). Thus, 11,186 for 2016 and 11,945 for 2017 remained in the study.

The systematization of information and the calculation of statistical indicators were carried out by the SPSS software (Field, 2009). The quantitative research was carried out by using the system of absolute, relative and average indicators of chronological series (Aivaz, 2007).

4. Data, results and discussion

The starting point of the study was represented by the statistical description of the gross profit and turnover, having in view the following statistical indicators: average level (mean), number of companies (N), the cumulative value of financial indicators (Sum), the lowest value of the analyzed financial indicator (Minimum), the highest value of the analyzed financial indicator (Maximum), variation range (Range), structure of the financial indicator (% of Total Sum) and structure of the number of companies (% of Total N). The activity fields considered, according to the CAEN classification, are: 1. Agriculture, Forestry and Fishing, 2. Extractive industry, 3. Manufacturing industry, 4. Production and supply of electric and thermal energy, gas, hot water and air conditioning, 5 Water distribution; sanitation, waste management, decontamination activities, 6. Construction, 7. Wholesale and retail trade; repair of motor vehicles and motorcycles, 8. Transport and storage, 9. Hotels and restaurants, 10. Information and communications, 11. Financial and insurance intermediation, 12. Real estate transactions, 13. Professional, scientific and technical activities, 14. Administrative services and support service activities, 15. Public administration and defense, 16. Education, 17. Health and social services, 18. Performing activities, cultural and recreational activities, 19. Activities of extraterritorial organizations and bodies, 20. Activities of private households as household staff employer, 21. Other service activities.

It is noteworthy that certain activity areas according to the CAEN classification cannot be found in the database of Constanta municipality (such as the 19th and 20th sectors); moreover, some activity fields recorded losses and hence the calculation of the profit rate was not justified.

Table 1 Statistical description of Gross Profit/ Gross Loss in 2016 for the companies in Constanta city, per activity field

2016	Gross Profit/ Gross Loss							
CAEN	Mean	N	Sum	Minimum	Maximum	Range	% of Total Sum	% of Total N
1.00	535453.96	194	103878069	-2654406	9284462	11938868	7.8%	1.7%
2.00	125433.30	23	2884966	-2671693	3127837	5799530	.2%	.2%
3.00	166611.48	797	132789353	-9708982	19960077	29669059	10.0%	7.1%
4.00	Loss	23	-230800430	-256472540	87304766	343777306	-	.2%
5.00	1041180.31	54	56223737	-2339527	25582370	27921897	4.2%	.5%
6.00	124710.50	836	104257975	-11485238	16380953	27866191	7.8%	7.5%
7.00	106268.43	3277	348241637	-6222714	27223286	33446000	26.1%	29.3%
8.00	339445.13	1451	492534887	-4660702	71459365	76120067	36.9%	13.0%
9.00	98659.05	727	71725127	-5126347	6918892	12045239	5.4%	6.5%
10.00	Loss	350	-6182431	-27661328	2440264	30101592	-	3.1%
11.00	85742.43	191	16376805	-555614	1982920	2538534	1.2%	1.7%
12.00	114042.21	457	52117291	-6879673	4800720	11680393	3.9%	4.1%
13.00	52792.49	1414	74648575	-2219452	4077543	6296995	5.6%	12.6%
14.00	110065.45	574	63177567	-1677304	6495640	8172944	4.7%	5.1%

15.00	Loss	1	-14294	-14294	-14294	0	-	.0%
16.00	26290.99	125	3286374	-1210654	2015630	3226284	.2%	1.1%
17.00	114860.00	314	36066039	-393209	4114759	4507968	2.7%	2.8%
18.00	28812.94	265	7635430	-6238560	2685302	8923862	.6%	2.4%
21.00	48077.96	113	5432809	-121117	1002505	1123622	.4%	1.0%
Total	119281.20	11186	1334279486	-256472540	87304766	343777306	100.0%	100.0%

Source: Data obtained by processing the information from the financial accounting balance sheets of active companies in Constanța city

Table 2 Statistical description of Gross Profit/ Gross Loss in 2017 for the companies in Constanta city, per activity field

2017	Gross Profit/ Gross Loss							
CAEN	Mean	N	Sum	Minimum	Maximum	Range	% of Total Sum	% of Total N
1.00	450413.99	205	92334868	-1058902	6522895	7581797	6.6%	1.7%
2.00	Loss	18	-179635576	-193667158	11835625	205502783	-	.2%
3.00	119990.21	798	95752187	-31104359	24117294	55221653	6.8%	6.7%
4.00	Loss	22	-163685300	-192996063	58735586	251731649	-	.2%
5.00	513560.61	46	23623788	-2820758	12365384	15186142	1.7%	.4%
6.00	143682.19	860	123566682	-14189480	27857176	42046656	8.8%	7.2%
7.00	121580.97	3282	399028757	-10066458	41812244	51878702	28.5%	27.5%
8.00	337620.35	1474	497652389	-7369034	102072991	109442025	35.6%	12.3%
9.00	163067.71	742	120996239	-881561	11505321	12386882	8.7%	6.2%
10.00	69796.66	393	27430089	-1587443	2437713	4025156	2.0%	3.3%
11.00	91567.57	175	16024325	-751328	2081023	2832351	1.1%	1.5%
12.00	103049.99	538	55440897	-9038351	13358353	22396704	4.0%	4.5%
13.00	81591.32	1498	122223803	-1587249	11010297	12597546	8.7%	12.5%
14.00	95726.23	597	57148559	-3659305	7721186	11380491	4.1%	5.0%
15.00	Loss	2	-87166	-65314	-21852	43462	-	.0%
16.00	27044.96	141	3813339	-337208	1504458	1841666	.3%	1.2%
17.00	132403.81	362	47930180	-821864	5899059	6720923	3.4%	3.0%
18.00	138841.59	314	43596260	-338349	16416646	16754995	3.1%	2.6%
21.00	31614.08	478	15111531	-382964	5177576	5560540	1.1%	4.0%
Total	117058.67	11945	1398265851	-193667158	102072991	295740149	100.0%	100.0%

Source: Data obtained by processing the information from the financial accounting balance sheets of active companies in Constanța city

Table 3 Statistical description of the turnover in 2016 for the companies in Constanta city per activity field

2016	Net Turnover							
CAEN	Mean	N	Sum	Minimum	Maximum	Range	% of Total Sum	% of Total N
1.00	3745032.10	194	726536228	200	155190165	155189965	3.3%	1.7%
2.00	3246462.30	23	74668633	4000	15639177	15635177	.3%	.2%
3.00	2398942.00	797	1911956771	383	192835391	192835008	8.6%	7.1%
4.00	61693587.83	23	1418952520	407	499393440	499393033	6.4%	.2%

5.00	9981606.09	54	539006729	750	270803067	270802317	2.4%	.5%
6.00	1332030.54	836	1113577534	6	57775593	57775587	5.0%	7.5%
7.00	3195563.40	3277	10471861260	4	2647748817	2647748813	47.1%	29.3%
8.00	2237638.31	1451	3246813194	17	289799598	289799581	14.6%	13.0%
9.00	846355.69	727	615300589	10	39326641	39326631	2.8%	6.5%
10.00	380467.35	350	133163574	118	8282850	8282732	.6%	3.1%
11.00	291292.97	191	55636958	500	6255477	6254977	.3%	1.7%
12.00	409437.19	457	187112797	42	17064062	17064020	.8%	4.1%
13.00	392782.61	1414	555394605	29	138744625	138744596	2.5%	12.6%
14.00	1027242.29	574	589637074	12	68663185	68663173	2.7%	5.1%
15.00	10532.00	1	10532	10532	10532	0	.0%	.0%
16.00	538450.18	125	67306272	1187	45674623	45673436	.3%	1.1%
17.00	711857.92	314	223523387	2	21595537	21595535	1.0%	2.8%
18.00	851772.46	265	225719701	309	77691513	77691204	1.0%	2.4%
21.00	582288.67	113	65798620	121	14813415	14813294	.3%	1.0%
Total	1986588.32	11186	22221976978	2	2647748817	2647748815	100.0%	100.0%

Source: Data obtained by processing the information from the financial accounting balance sheets of active companies in Constanţa city

Table 4 Statistical description of the turnover in 2017 for the companies in Constanta city per activity field

2017 Net Turnover								
CAEN	**Mean**	**N**	**Sum**	**Minimum**	**Maximum**	**Range**	**% of Total Sum**	**% of Total N**
1.00	3440062.20	205	705212751	117	182026465	182026348	3.1%	1.7%
2.00	8088091.89	18	145585654	3816	58088740	58084924	.6%	.2%
3.00	2573109.87	798	2053341679	14	229830865	229830851	9.0%	6.7%
4.00	61477629.73	22	1352507854	103	481901551	481901448	5.9%	.2%
5.00	11495457.30	46	528791036	2000	284206630	284204630	2.3%	.4%
6.00	1242802.55	860	1068810197	54	62939159	62939105	4.7%	7.2%
7.00	3304663.98	3282	10845907168	17	2961385659	2961385642	47.3%	27.5%
8.00	2427783.42	1474	3578552768	8	302472694	302472686	15.6%	12.3%
9.00	904398.61	742	671063770	42	28134885	28134843	2.9%	6.2%
10.00	361689.45	393	142143952	245	9033209	9032964	.6%	3.3%
11.00	296017.92	175	51803136	30	5788888	5788858	.2%	1.5%
12.00	409166.42	538	220131535	163	28349962	28349799	1.0%	4.5%
13.00	307639.38	1498	460843793	1	22407331	22407330	2.0%	12.5%
14.00	846908.31	597	505604263	12	39530076	39530064	2.2%	5.0%
15.00	623381.00	2	1246762	21094	1225668	1204574	.0%	.0%
16.00	149441.87	141	21071304	700	2038600	2037900	.1%	1.2%
17.00	727821.40	362	263471346	100	26331395	26331295	1.1%	3.0%
18.00	580434.88	314	182256553	100	38380759	38380659	.8%	2.6%
21.00	269838.56	478	128982830	142	14377185	14377043	.6%	4.0%
Total	1919407.98	11945	22927328351	1	2961385659	2961385658	100.0%	100.0%

Source: Data obtained by processing the information from the financial accounting balance sheets of active companies in Constanţa city

The profit rate shows the efficiency of the economic activity of the activity field or of the company, ensuring the connection between profit and net turnover (Vasilescu and Robu, 2005). In the literature, there are several ways of calculating this rate of return; in this paper, we opted for the following:

$$\text{Gross profit rate} = \frac{net\ profit}{turnover} x100$$

Activity field	Gross profit rate 2016 (%)	Gross profit rate 2017 (%)	Dynamics of the profit rate (%)
1. Agriculture, Forestry and Fishing	14.29	13.09	91.57
3. Manufacturing industry	6.94	4.66	67.14
5 Water distribution; sanitation, waste management, decontamination activities	10.4	4.46	42.82
6. Construction	9.36	11.56	123.48
7. Wholesale and retail trade; repair of motor vehicles and motorcycles	3.32	3.67	110.63
8. Transport and storage	15.16	13.90	91.67
9. Hotels and restaurants	11.65	18.03	154.67
11. Financial and insurance intermediation	29.43	30.93	105.08
12. Real estate transactions	27.85	25.18	90.42
13. Professional, scientific and technical activities	13.44	26.52	197.32
14. Administrative services and support service activities	10.71	11.30	105.49
16. Education	4.88	18.09	370.64
17. Health and social services	16.13	18.19	112.74
18. Performing activities, cultural and recreational activities	3.38	23.92	707.13
21. Other service activities	8.25	11.71	141.89
Total	6.00	6.09	101.57

Source: Data obtained by processing the information from the financial accounting balance sheets of active companies in Constanța city

5. Conclusions

Performance is a permanent concern for all businesses regardless of their activity field. Performance assessment is based on the use of indicators that result from the performance of all activities in order to meet the set objectives, and the tools for assessing performance are the indicators. These indicators should provide information that would support two types of activities, i.e. action management and assessment of results (Valceanu, Robu and Georgescu, 2004).

The case study conducted in this paper, which focused on the analysis of the economic and financial performance of companies in Constanta municipality, per activity field, recorded the following results:

✓ Out of 21 activity fields, 15 are efficient in terms of profit rate; the fields where losses were recorded are: Extractive industry; Production and supply of electric and thermal energy, gas, hot water and air conditioning; Information and communications; Public administration and defense;

✓ Out of 15 activity fields that recorded a dynamic profit in 2017 compared to 2016, 5 recorded a decrease in the profit rate, namely: Agriculture, Forestry and Fishing; Manufacturing industry; Water distribution; sanitation, waste management, decontamination activities; Transportation and storage; Real estate transactions.

✓ The highest increase of the profit rate (in 2017 compared to 2016) was recorded by the field "Performing activities, cultural and recreational activities" (607.13%), Education (by 270.64%), Professional, scientific and technical activities (by 94.32%), followed by Hotels and restaurants (by 54.67%) and Construction (by 23.48%).

This short radiography of the results from each activity field, and beyond, from each company operating in these fields, can lead to three strategic orientations, i.e. development strategies, maintenance strategies and activity diminishing strategies. The strategy shows how the entity can create value for the society. The strategy is not a mere speech; it guides behaviors, knowledge and decisions towards a common goal: creating value. We live in a competitive economic system where value is acquired only if the organization finds customers on the market. Therefore, the strategy should aim not only to create this value, but also to recognize it on the market, for the superiority of its own value compared to other results in the competitive environment (Juganaru, 1998, 2000).

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