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ACCOUNTING TRUTH OR THE EXTENT TO WHICH FINANCIAL INDICATORS PROVIDE AN ACCURATE REPRESENTATION. A QUANTITATIVE ANALYSIS

Vlad BULĂU
Alexandru Ioan Cuza University, Iași, Romania
vladotb@yahoo.com

Abstract
Financial indicators are used for analysing and determining the financial position and the performance of a company. Most financial ratios rely on the accounting information within financial statements; many are calculated based on the accounts statement and profit and loss account. A company's financial statements are of interest to many people (managers, investors, and creditors, as well as providers, employees, trading partners, or public institutions). Financial analysis may acquire various forms, depending on the interest of each interested party. The utility of the indicators featured below relies on the need to have post-fact, present, and forecasting knowledge regarding the economic activity of an enterprise.

Keywords: *accounting; financial analysis; accounting truth; indicators; liquidity; solvency*

JEL Classification: *M40, M41*

I. INTRODUCTION

Considering that the primary objective of all business companies is to maximise profit and the assets controlled through the efficient and reasonable use of resources, financial analysis accomplishes a dual function: diagnosis and regulation. We can calculate (through elements within the balance sheet and profit and loss account) several indicators allowing the financial analysis of the economic activity of an entity at a certain point. We can also compare them with values obtained in the previous period.

This endeavour concerns the top four companies by turnover that became insolvent in 2020. We have chosen such an approach because the companies subjected to the analysis have local and national relevance.

Hence, the study provides information concerning the degree to which the financial statements reflect *the financial position and performance of entities within this sample accurately.* Naturally, validating the quality of the accounting reports relies on the fundamentals of managerial decisions. Therefore, the primary argument in favour or to the detriment of financial and accounting data quality and honesty is represented by the evolution of the entity over time. It ends up confirming or infirming the information provided by accounting.

My research is based on calculating and interpreting the most relevant financial indicators corresponding to the five years before becoming insolvent, namely 2015 – 2019. *The financial ratios calculated for each entity enable the chronological comparability of the data. The evolution of indicators demonstrates the extent to which accounting information predicted the financial struggles subsequently confirmed by becoming insolvent.*

The outputs to be obtained foreshadow two possible scenarios:

a). the financial indicators highlight the economic struggles of the enterprises within the sample. In this situation, synthesis reports were able to convey the accounting truth to users;

b). the analysis of the indicators points out the financial prosperity of the entities studied. It shows that accounting data fail to depict an accurate image of the financial position and performance of companies within the sample. Consequently, they do not express the accounting truth.

We obtained the data used in this study from various sources: the financial statements of the entities included in the sample, rankings of companies having become insolvent in 2020, their websites, etc.

II. OUTLINING THE INDICATORS

To analyse the financial status of the entities included in this research study, we selected a series of indicators featured in the Table below.

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Table 1. Indicators used in the financial analysis

Indicator type	Indicator name	Calculation formula
Indicators of liquidity	General liquidity	Current assets/Current debts
Indicators of solvency	General solvency	Total assets/Total debts
	Gearing ratio	Total debts/Equity capital
Indicators of profitability	Return on assets (ROA)	Net profit/Total assets x 100
	Return on equity (ROE)	Net profit/Equity capital x 100
	Net profit margin	Net profit/The turnover x 100
	Return on resources ratio	Net profit/Total expenses x 100
Indicators of activity	Total asset turnover	Turnover/Total assets
	Days inventory ratio	Stocks/The turnover x 365 days
	Average days collection period	Debts/The turnover x 365 days

General liquidity represents an entity’s capacity to cover the current debts by valorising current assets. Concerning this indicator, the higher the value, the better the status of the enterprise. Recommended values range between 1.2–2.

General solvency is the ability of a company to meet its medium- and long-term financial obligations by valorising its total assets. This indicator expresses the entity’s guarantees in its relationship with third parties. The existence of a top-heavy value resulted from calculating general solvency proves that the company can honour its debts using its available assets. A subunit value of this relation shows that the enterprise is unable to meets its debts to the creditor based on total assets.

Gearing ratio is an indicator measuring the financial autonomy of an enterprise. By calculating it, one may assess to what extent the activity of an enterprise relies on loans. Investors and creditors can move their capitals only in companies demonstrating the capacity of returning on the capital loaned and the corresponding interests. Hence, in the financial analysis of a company, the ceiling value is 0.6; the values under 0.5 are considered ideal. In the crediting policy, banks accept a value of 2 for this indicator. The very high value of this ratio indicates a strong dependency on external loans. Repeatedly exceeding these ceilings along several financial years may lead a risk of insolvency.

The return on assets (ROA) analyses the rentability of an enterprise in relation to its total assets. ROA calculates the earnings obtained per monetary unit invested in assets. The indicator represents the ratio between net profit and total assets held by the companies. Like ROE, the return on assets measures the efficiency of a company’s administration from the perspective of asset management. The optimal reference intervals may be considered the average ratio for performing companies within developed economies, namely between 5% – 15%.

Return on equity (ROE) represents one of the most used indicators in the financial analysis of an enterprise. It is calculated as a ratio between net profit and equity capitals, thus measuring the efficiency of using the money invested by shareholders. ROE ratio calculates the earnings obtained per asset or capital unit invested. The high values of this indicator show an efficient management of the economic activity and the possibility of providing dividends.

The net profit margin is a profitability indicator showing the return ratio of the economic activity of a company. The indicator analyses a company’s capacity to transform the incomes into net profit. Generally, the indicator should be interpreted in relation with the past periods, but we can also use a comparison with the mean of the activity sector. It is important to note that sometimes entities tend to report a lower profit rate to avoid paying taxes, which leads to lower values of this indicator. The high values of this ratio suggest a positive financial situation of the company, while its decrease expresses the management’s failure to keep under control production costs or obtain an optimal sales price.

The return on resources ratio highlights the efficiency of resource input from the perspective of the outputs obtained. The indicator expresses the ratio between the turnover output and the total costs of sales. Total costs have an essential role within this ratio, thus influencing the value obtained in two distinct ways: first through the numerator (i.e., net profit), which decreases when expenses increase, then through the denominator (i.e., the total expenses). It accentuates the influence of this factor on the indicator, unlike other ratios. Scientific literature shows that the optimal level of this indicator ranges in the interval 9% – 15%.

Total asset turnover is an indicator measuring the efficient management of assets within the exploitation of the enterprise through the turnover. It expresses the turnovers made in a period, provided by the assets of the society to

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achieve the turnover. A great number of turnovers is the sign of high efficiency because these assets can provide a higher turnover.

Days inventory ratio expresses the number of their stock days, showing the efficiency of their use. One must analyse the indicator compared to the values within past periods to act on stock volume in order to increase turnover speed. A higher ratio produces positive effects on profitability and profit.

Average days collection period is a ratio measuring the efficiency of sales by analysing receipts for the entity to cash in the debts from clients. If the period is long, the company records difficulties in controlling debts. The shorter the cashing in periods, the better treasury flows for the company.

III. Analysis of the Financial Position and Performance of Companies Based on Indicators

Midocar SRL

One of the most relevant car dealers in Romania, Midocar began recording significant decreases of the profit from 2011, despite an ascending turnover in most periods studied. The financial statements of December 31, 2019 shows that the company has recorded a loss of Lei 541,142 and total debts of Lei 78,044,818. The Table below highlights the values of the financial ratios calculated using data within the financial statements of the company.

Table 2. Determining the financial ratios for Midocar SRL

No.	Indicator	Output				
		2015	2016	2017	2018	2019
1	Turnover	135,505,393	152,591,646	151,053,541	158.,202,631	155,755,178
2	Net profit/net loss	-8,595,332	-4,958,297	-4,173,607	-1,251,474	-541,142
3	General liquidity	0.17	0.16	0.17	0.19	0.23
4	General solvency	1.08	0.94	0.89	0.87	0.87
5	Gearing ratio	13.17	-16.68	-8.74	-7.70	-7.48
6	Return on assets or economic (ROA)	0%	0%	0%	0%	0%
7	Return on equity or financial (ROE)	0%	0%	0%	0%	0%
8	Net profit margin	0%	0%	0%	0%	0%
9	Return on resources ratio	0%	0%	0%	0%	0%
10	Total asset turnover	1.64	2.17	2.25	2.38	2.29
11	Days inventory ratio	15.70	15.70	17.89	16.79	17.89
12	Average days collection period	11.68	9.13	8.03	8.03	13.87

Dan Steel Group Beclean SA

Dan Steel Group Beclean SA is the greatest manufacturer of wire and wire products in Romania: the maximum turnover was recorded in 2011, with receipts of Lei 278,347,307. In the subsequent years, the turnover decreased slightly down to a historic low of 2019, with receipts of only Lei 117,436,524. The last financial year with profit was the one ending in 2017. Since then, the company recorded a loss of Lei 17,384,641 in 2018 and Lei 30,293,873 in 2019. In the following Table, we highlight the values of the financial ratios calculated using data within the financial statements of the company.

Table 3. Determining the financial ratios for Dan Steel Group Beclean SA

No.	Indicator	Output				
		2015	2016	2017	2018	2019
1	Turnover	242.139.710	192.239.053	188.082.291	138.653.430	117.436.524
2	Net profit/net loss	2,462,755	2,027,508	1,143,966	-17,384,641	-30,293,873
3	General liquidity	0.49	0.48	0.42	0.48	0.17
4	General solvency	1.71	1.71	1.75	1.503	1.33
5	Gearing ratio	1.41	1.41	1.34	2.01	3.07

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6	Return on assets or economic (ROA)	1.05%	0.85%	0.49%	0%	0%
7	Return on equity or financial (ROE)	2.5%	2%	1.1%	0%	0%
8	Net profit margin	1%	1.1%	0.6%	0%	0%
9	Return on resources ratio	1%	0.7%	0.70%	0%	0%
10	Total asset turnover	1.03	0.80	0.80	0.55	0.55
11	Days inventory ratio	87.60	114.98	88.70	116.44	55.48
12	Average days collection period	8.76	6.57	19.71	92.71	31.03

Bunmet Engineering SRL

Bunmet Engineering is a major building company with an ascending turnover from 2013, recording a peak in 2019, with sales of over Lei 107,631,583. Concerning the profit, it was under Lei 90,000 throughout the entire existence of the company except for 2019, when it recorded a loss of Lei 6,971,256. The enterprise accumulated greater debts over time, reaching a maximum debt of Lei 52,812,194 in 2019. We illustrate in the Table below the values of the financial ratios calculate using data within the financial statements of the company.

Table 4. Determining the financial ratios for Bunmet Engineering SRL

No.	**Indicator**	**Output**				
		2015	**2016**	**2017**	**2018**	**2019**
1	Turnover	39,223,972	55,599,106	82,362,841	107,631,583	71,954,756
2	Net profit/net loss	58,814	65,853	89,357	32,911	-6,971,256
3	General liquidity	1.23	1.28	1.26	1.00	0.87
4	General solvency	1.25	1.29	1.26	1.00	0.87
5	Gearing ratio	4.03	3.50	3.88	541.42	-7.65
6	Return on assets or economic (ROA)	19.85%	11.72	12.34%	0.10%	0%
7	Return on equity or financial (ROE)	99.50%	52.70%	60.20%	35.80%	0%
8	Net profit margin	0.15%	0.12%	0.10%	0.0003%	0%
9	Return on resources ratio	0.15%	0.12%	0.10%	0.0004%	0%
10	Total asset turnover	131.95	98.94	113.70	2.16	1.57
11	Days inventory ratio	0.05	0.09	0.18	0.03	0.04
12	Average days collection period	2.56	2.92	1.83	169.36	232.87

Totalgaz Industrie SRL

Totalgaz Industrie is one of the largest producers and distributors of measurement equipment in the industry of natural gas exploitation and transport in Romania. The company recorded a maximum turnover in 2014, with a turnover of 70 million lei. In the past three years, the company recorded a loss of Lei 7,817,241. Over time, the entity recorded increasing debts, culminating with Lei 134,191,859 in 2019. We illustrate in the Table below the values of the financial ratios calculated using data within the financial statements of the company.

Table 5. Determining the financial ratios for Totalgaz Industrie SRL

No.	**Indicator**	**Output**				
		2015	**2016**	**2017**	**2018**	**2019**

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1	Turnover	64,663,451	35,005,736	49,748,377	45,937,314	58,876,818
2	Net profit/net loss	1,760,695	745,393	1,496,144	869,702	-7,817,241
3	General liquidity	0.60	0.62	0.75	0.82	0.76
4	General solvency	1.78	1.58	1.44	1.37	1.28
5	Gearing ratio	1.29	1.70	2.21	2.64	3.18
6	Return on assets or economic (ROA)	1.47%	0.58%	0.95%	0.48%	0%
7	Return on equity or financial (ROE)	3.42%	1.62%	3.00%	1.70%	0%
8	Net profit margin	2.71%	2.14%	3.00%	1.90%	0%
9	Return on resources ratio	1.93%	1.14%	1.70%	0.80%	0%
10	Total asset turnover	0.54	0.27	0.32	0.25	0.17
11	Days inventory ratio	135.42	370.48	398.21	655.17	494.58
12	Average days collection period	83.22	129.58	184.69	177.39	105.49

IV. INTERPRETING THE EVOLUTION OF INDICATORS

Midocar SRL

The five years before becoming insolvent were financially challenging for Midocar. Whereas the net loss decreased in the last three years, the total debts increased, while the turnover remained constant in the period 2016 – 2019, as shown by analysing the Figures 1 and 2. Burdened by significant debts at the local and state budgets and the providers, the company declared bankruptcy in 2020.

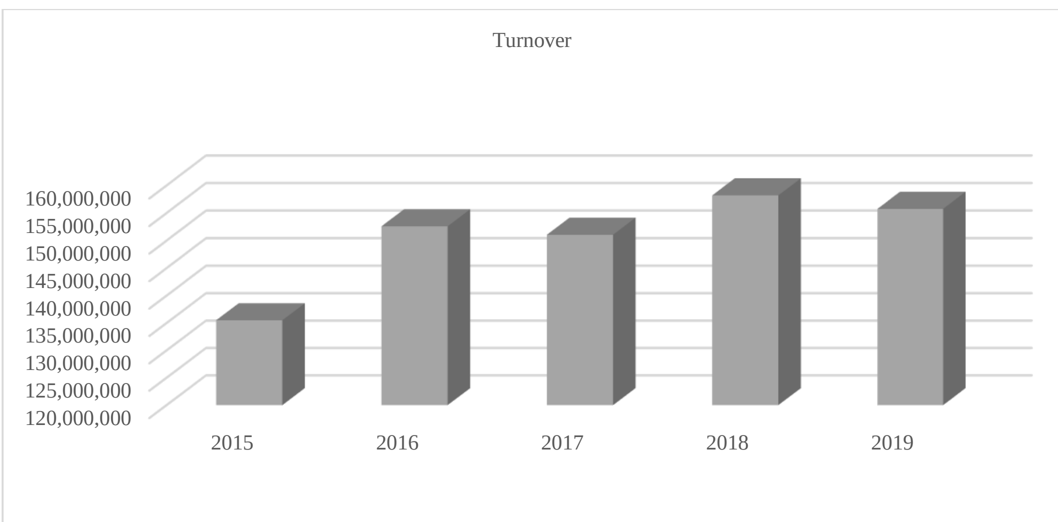

Figure 1 – Turnover evolution in the period 2015 – 2019

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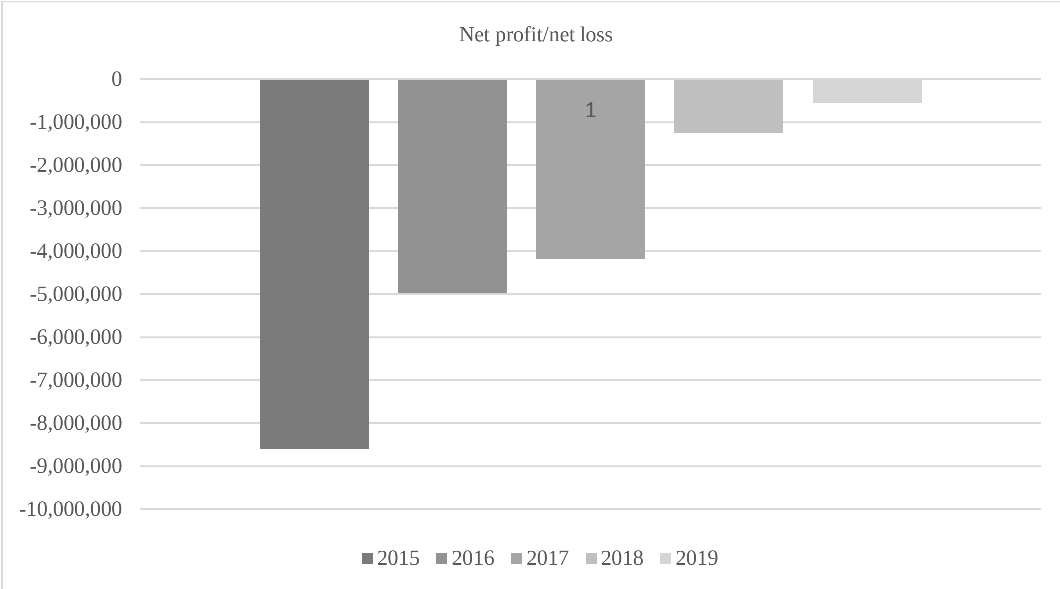

Figure 2 – Evolution of net profit/loss recorded in the period 2015 – 2019

General liquidity recorded subunit values throughout the entire period investigated, caused by the rapid increase in debts and by the disproportionate ratio between debts and current assets. The indicator improved slightly, but the values remained very low. The high values of fixed assets led to a solvency indicator much higher than the liquidity rate, but the ratio remained subunit for the last four years.

External financial sources and the existence of a negative equity capital are the reasons why the gearing ratio of the company was negative for the last four years studied. The negative equity capital reflects the deeply negative situation of assets within the company. It was unable to pay its debts from the equity capital, thus making it hard to make the business going.

We did not manage to calculate the return on equity (and economic) because the company recorded losses throughout the entire period investigated. It denotes the faulty management of the enterprise: despite the increasing assets, it failed to make profit in this timeframe.

Total asset turnover did not record great variations (i.e., a value of 1.64 in 2015 and 2.17 – 2.38 in the period 2016 – 2019), which shows the inefficiency of exploiting the fixed and current assets. For instance, Renault Commercial Roumanie SRL, authorised dealer and importer of Renault, which reported profit in the last 10 financial years, recorded, in this timeframe, an asset turnover of 6.8 – 7.25. Sandra Automobile SRL, an Audi and Volkswagen dealer in Iași; this company also reported profit and it recorded a total assets turnover of 4.12 – 4.39.

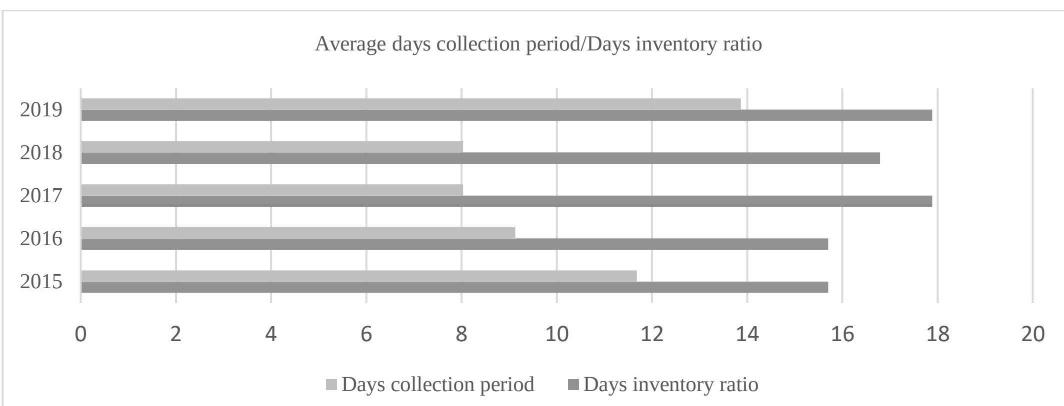

Figure 3 – Evolution of days inventory ratio and average days collection period

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Days inventory ratio had a value of 15.70 – 17.89 days, which is a low value (caused mainly by the structure of goods as stocks). Most of them are spare parts and car components, ordered as cars entered service and installed under 14 days, thus exiting the accounting books rapidly. Average days collection period is low, too (it increased from 8 to 13 days in 2019). However, the indicator has a positive value; brief average days collection period has a positive impact on the company's treasury flows.

Dan Steel Group Beclean SA

The data featured in Figure 4 show that 2018 and particularly 2019 were economically challenging for Dan Steel Group Beclean. The turnover had a descending trend since 2015, recording a historic low in 2019. The year 2018 was the first with a negative output recorded by the entity. The same went on in 2019; losses doubled during this interval, as illustrated in Figure 5.

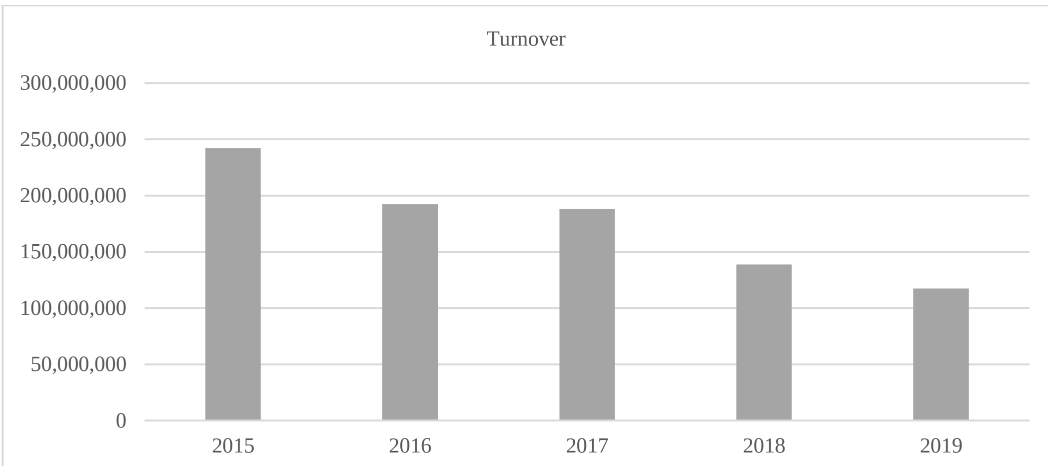

Figure 4 - Turnover evolution in the period 2015 – 2019

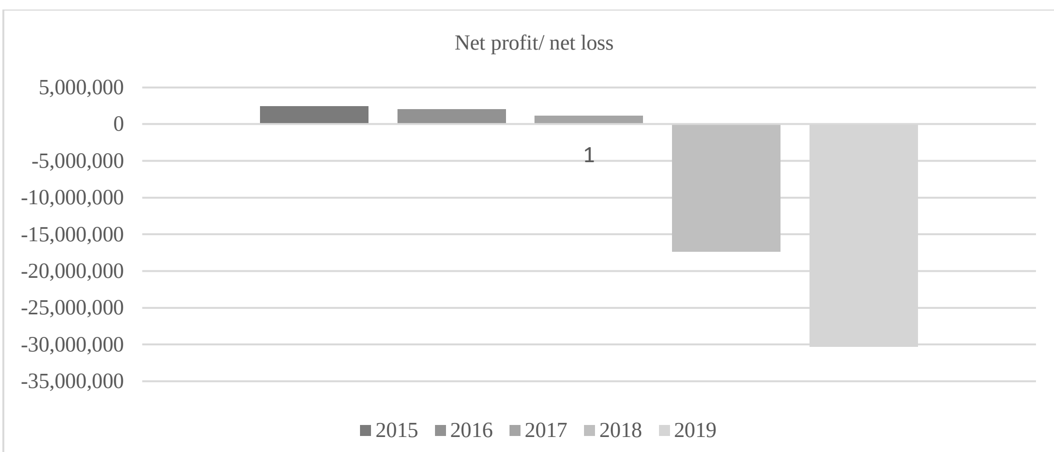

Figure 5 – Evolution of net profit/loss recorded in the period 2015 – 2019

General or current liquidity features descending and subunit values in the period analysed, due to a decrease in the value of current assets from one year to another in the context of business volume increase, certified by the lower turnover. Furthermore, the total debts augmented and the company began relying on external loans to carry out activities. All the aspects above depict a negative image of the entity: medium- and long-term reimbursement of credits began being questioned. The solvency indicator shows a positive financial position, but the trend is negative.

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Gearing ratio is significantly above the ceiling-level of 0.6, which underscores the entity's dependence on external loans, given that equity capital failed to fund current activity. Repeatedly exceeding these limits, increasing debts, and decreasing equity capital in the last financial years endangered the continuity of business activity.

Return on assets and return on equity may be calculated only for the period 2015 – 2017 because in the two subsequent years, the company recorded losses. ROA had values of 0.5% - 1.05%, significantly below the lower limit of 5%, thus expressing the inefficiency of the management that administered, for instance, in 2017, total assets of over 278 million lei, obtaining a profit decreased by almost 1.15 million lei.

The net profit margin shows that the entity did not manage to keep under control the expenses and production costs to turn the incomes into profit. In addition, the company failed to obtain an optimal price for the production sold. The return on resources ratio has a value of 0.70% - 1%, which highlights once again the inefficiency of the company's management in decreasing total expenses and carrying out a profitable activity.

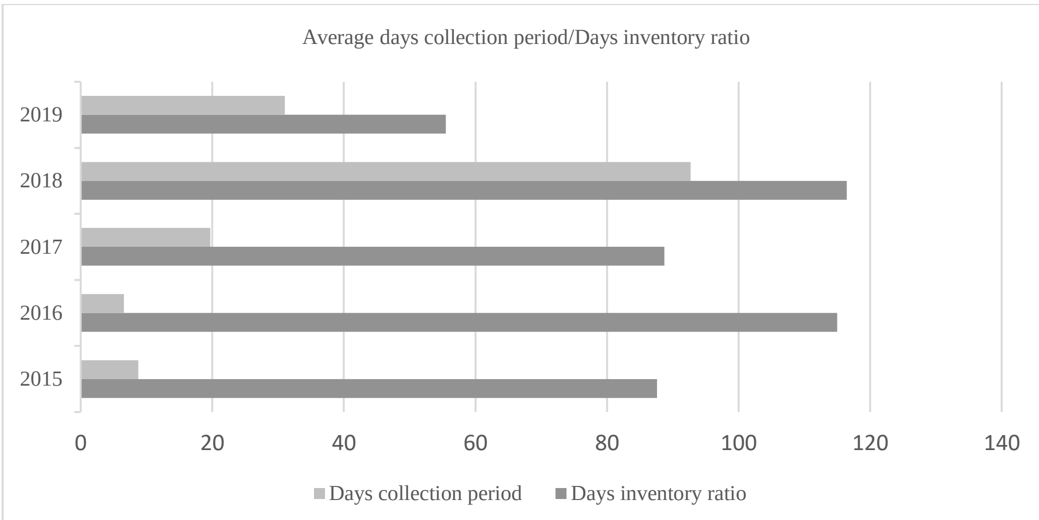

Figure 6 – Evolution of days inventory ratio and average days collection period

Total asset turnover was low (i.e., around 1 in 2015 and below 1 in the subsequent years), which highlights again the inefficient management of resources. The value of days inventory ratio is high; they were blocked in the company for long period: 89 days in 2017 and 116 days in 2018. The situation improved in 2019, reducing to around 55 days, favourable to the increase in liquidity within the company. Considering the company's field of activity, higher average days collection period is not something unusual; it is not a decisive factor in the financial success of the company. There are companies with excellent financial outputs for long periods, such as ASO Cromsteel S.A. that records a value of the indicator of 110 – 142 days or Erdemir-Romania SRL with a value of 75 – 104 days. On the contrary, we must mention that other similar companies record an average days inventory ratio of 41 – 54 days, such as Ductil Steel SA or Hoeganaes Corporation Europe SA. Average days collection period rate recorded high variations in the period analysed, increasing from 9 days in 2015 to 93 days in 2018 and decreasing to 31 days in 2019. Generally, the indicator has a positive value; cashing in the debts in time has a positive impact on the company's treasury flows.

Bunmet Engineering SRL

The data featured in Figure 7 show that, despite a significant turnover throughout five years, the profit obtained was very low. In 2019, the company reported a loss of almost 7 million lei. In 2018, the company recorded the highest turnover since its constitution (i.e., around 108 million lei), but in the subsequent year, it dropped dramatically to 72 million lei, with the expenses not decreasing to the same extent.

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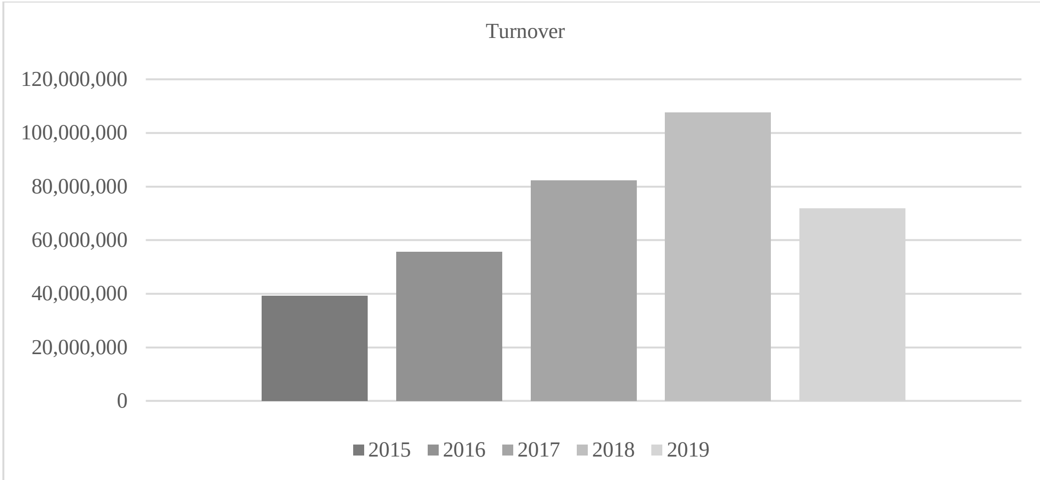

Figure 7 - Turnover evolution in the period 2015 – 2019

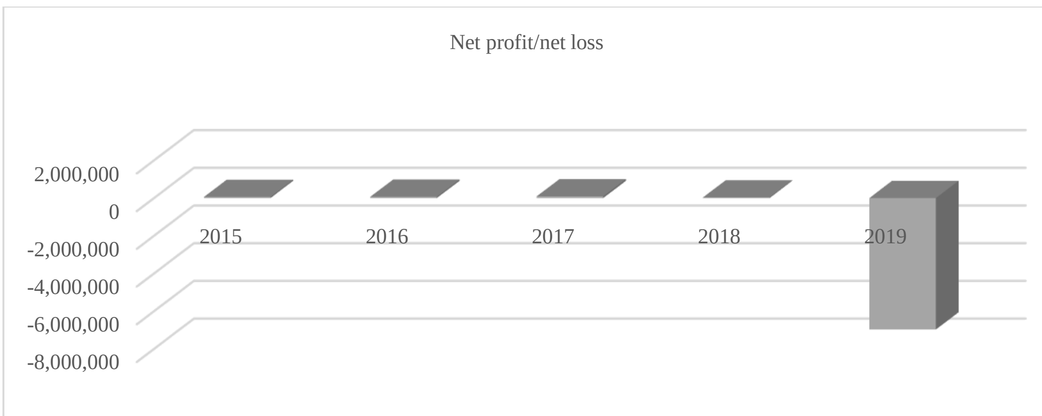

Figure 8 – Evolution of net profit/loss in the period 2015 – 2019

For the first four financial years analysed, the current liquidity has top-heavy values, with a low level of current assets and total debts in 2017, managing to maintain a balance between the two throughout 2018, despite an exponential growth recorded by both. In 2019, the ratio had a subunit value due to the increase in debts and the decrease in current assets. The solvency recorded an almost identical evolution because the weighting of fixed assets within total assets is very low. All the aspects above forecast a negative imagine of the company: it was at risk of a liquidity crisis, thus not being able to reimburse loans.

The gearing ratio throughout the five years has a top-heavy value, depicting a dependence on external loans, given that equity capital failed to fund the current activity. The unusually high value of the ratio in 2018 is due to the low level of net profit, the lack of reserves and the determination of minimum equity capital. As it recorded losses of almost 7 million lei in 2019, equity capitals became negative, and the indicator also had a negative value. Hence, the accelerated increase in debts and the dependence on external loans represent a negative signal concerning the future profitability of the company.

We calculated the return on assets and return on equity for the four periods analysed: in 2019, the company recorded losses. The ROA recorded in the period 2015 – 2017 a positive value of over 12%, ranging within the interval mentioned in the literature. In the subsequent year, it dropped dramatically to 0.10% (a very low value), which shows that the administration of the company failed to manage assets of almost 50 million lei, thus obtaining a net profit of only 32 thousand lei. The return on equity had high values in the period studied, which indicates a positive situation. However, due to the very low level of the profit and of equity capital related to the very high value of the turnover, the indicator is not relevant for the financial position and the performance of the enterprise.

The net profit margin shows that the company failed to control the level of the expenses: in the first four years, they accounted for 100% of the turnover; furthermore, in the fifth year, they represented 109.70% of the turnover. The faulty management is shown by the incapacity of turning incomes into profit to a greater extent. The return on resources

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ratio had very low values, of less than 0.15% and even less in the periods for which we could calculate it, which shows that the company failed to obtain an optimal price for the products and services sold.

Total asset turnover has a distinct feature in the case of this enterprise. It had a very high value in the first three years (reaching a peak of 131.95 in 2015), indicating a favourable situation, given that the company generated a turnover exceeding 39 million lei using total assets of around 300 thousand lei. In the last two financial years, due to the increase in the value of current assets from 723 thousand lei in 2017 to almost 50 million lei in 2018 and 2019, the value of average days collection period decreased to 2.16 and 1.57, respectively. It shows that the efficiency of exploiting the resources available lowered, the assets making less than two turnovers in the last year analysed. However, a low stock turnover (under 2) is not unusual for the economic field of this company. An analysis for each period concerning 3 competitive companies within the same county and with turnovers between 10 – 50 million lei, all of them reporting profit throughout the entire period studied (Brialbet SRL, Pellegrini SRL and Nomis 2003 SRL), the mean of the sector is between 1.2 – 2 turnovers.

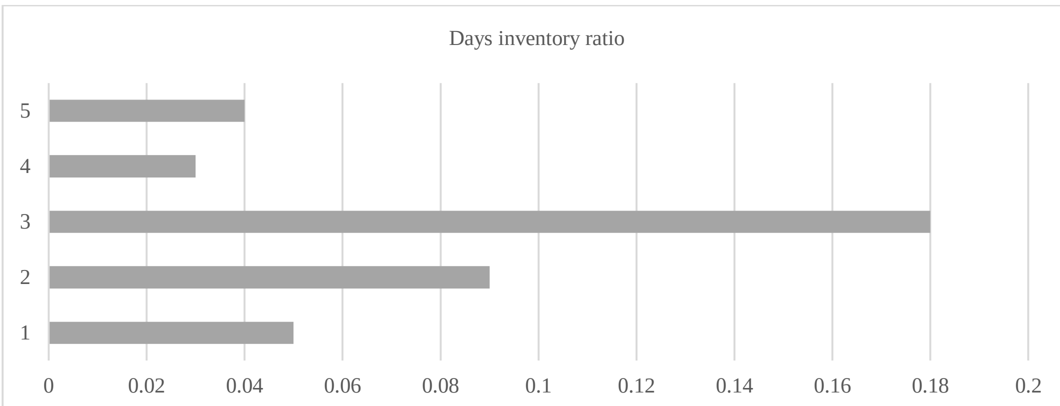

Figure 9 – Evolution of days inventory ratio

Days inventory ratio is very low (under 1), which shows that the stocks are not blocked in the company for long periods, but the indicator is not relevant, given that the value of the stocks throughout all the five periods is very low compared to the turnover.

Average days collection period ratio, in addition, presents an unusual particularity. Its values are very low: 2.56 days in 2015, 2.92 days in 2016, and 1.83 days in 2017; subsequently, it rose to 169.36 days in 2018 and 232.87 days in 2019. Such a long period affects the treasury flows of the company, which becomes short of cash for current expenses.

Totalgaz Industrie SRL

The data featured in Figure 9 point out the precarious financial situation of the entity, characterised by a significant increase in the turnover in the last four financial years and by a reduction of the profit and the report of a significant loss in 2019. In 2019, the company recorded the highest turnover from 2015 to the present; however, unlike four years prior (when it recorded a profit of almost 1.8 million lei), the company recorded a loss of approximately 8 million lei. The main cause is the reduction of the incomes by over 9.5 million lei, while the expenses decreased only by 119 thousand lei.

The entity made in the financial year 2019 an operational profit (EBITDA) of only Lei 1,357,086, much lower than the operational profit of 2018, of Lei 9,993,350. It is worth noting that, in the last year analysed, the operational profit was significantly affected by the high value of the financial expenses that recorded a 32% increase in 2019 due to excessive gearing ratio.

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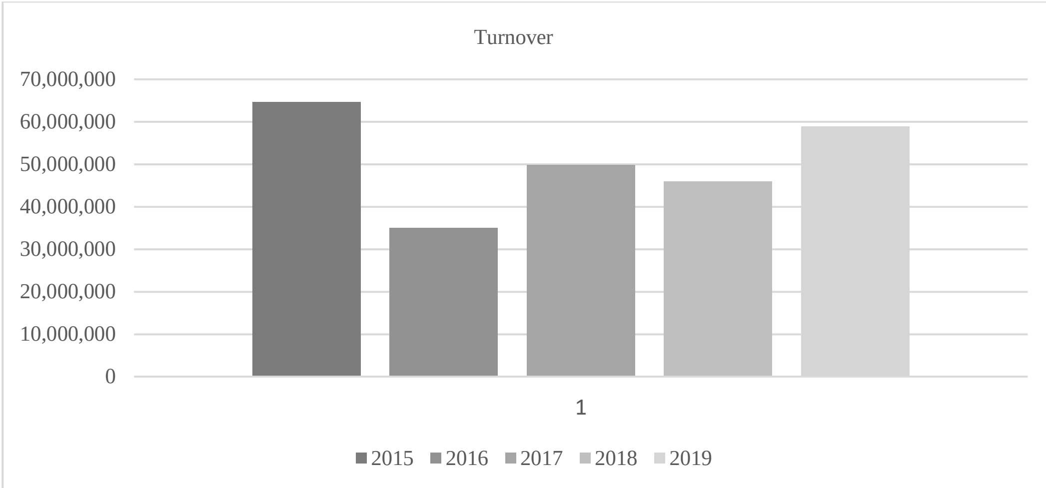

Figure 10 - Turnover evolution in the period 2017 – 2019

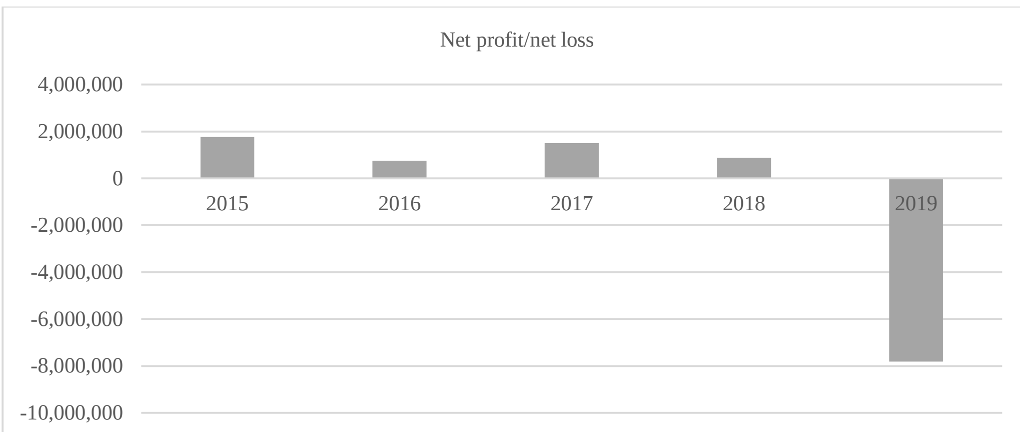

Figure 11 - Evolution of net profit/loss in the period 2017 – 2019

Current liquidity records subunit values in the period analysed, reaching a peak of 0.82 in 2018. The ratio did not incur great variations in the timeframe studied because the increased current assets were accompanied permanently by an increase in current debts. General solvency has values of over 1, whereas the trend is descending, dropping in 2019 to the minimum of the last 10 years. The decrease may have been caused by the greater increase in the total debts, unlike total assets. If the ratio keeps on decreasing, the reimbursement of loans to banks and credits to providers becomes difficult.

Gearing ratio is still above the threshold-value of 0.6 of over 10 years, reaching the highest values in the last three financial years. The financial autonomy of the company is strongly affected, as it is totally dependent on external loans for the unfolding of its current activities. We note that, despite the significant increase in the turnover in the last year, equity capitals dropped, especially due to lower profit and to reporting a loss of almost 8 million lei in 2019.

We calculated the return on assets and the return on equity for 2015 – 2018, given that in 2019, the company made no profit. The ROA recorded a significant decrease from 1.47% to 0.48%, both below the limit of 5%. This value highlights the failure to manage, for instance, in 2017, total assets of Lei 157,039,995, obtaining a net profit of only Lei 1,496,144. The situation worsened in 2018, when the total assets of Lei 180,586,637 made a net profit of Lei 869,702. In addition, the ROE recorded net profit and increased equity capitals. The low value of the ROE indicates a faulty management of the company’s resources, underlined mostly by a modest profit.

Net profit margin shows that the entity did not reduce the expenses down to an acceptable level allowing the company to turn incomes into profit. In addition, it did not manage to sell the goods and services for an optimal price. The return on resources ratio dropped in the period analysed to 0.80% in 2018, far from the optimal level of 9% – 15% for this indicator, which highlights the financial struggles characterising the economic activity of the company.

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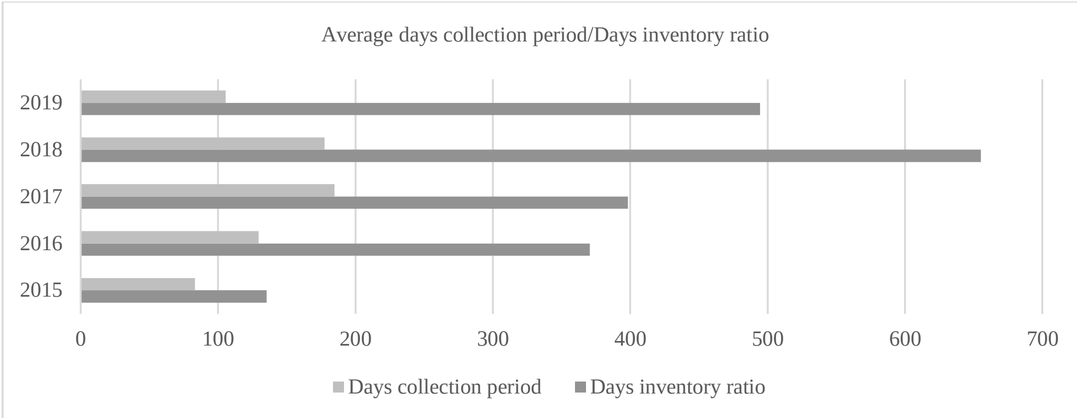

Figure 12 – Evolution of days inventory ratio and average days collection period

Total asset turnover was very low throughout the period studied, recording values between 0.17 – 0.54, with an ascending trend. It indicates the inefficiency of exploiting fixed and current assets held by the enterprise. On the contrary, two other profitable competitors with similar fields of activity (Fluid Group Hagen SRL and Honeywell Elster Romania SRL) recorded in the same period a significantly higher turnover of total assets: 1.79 and 2.14, respectively.

The value of days inventory ratio had significant variations in this timeframe, recording 135.42 days in 2015, 370.48 days in 2016, 398.21 days in 2017, 655.17 days in 2018, and 494.58 days in 2019. The high days inventory ratio had negative effects on liquidity and cash flows of the enterprise, which had to use external funds to carry out its activity. The ratio of average days collection period, whereas improved in the timeframe analysed, still had high values of over 100 days. This aspect also has a negative effect on the company's treasury flows, leading to debts and outstanding payments for providers and creditors; it became impossible for the company to contract new works.

V. OUTPUT ANALYSIS AND RESEARCH CONCLUSIONS

By analysing the values of the financial indicators calculated for the four companies within the sample, we will determine if they match the initial assumption: *The evolution of indicators demonstrates the extent to which accounting information predicted the financial struggles subsequently confirmed by becoming insolvent.* We present the situation of each entity in the following lines.

Midocar SRL

- the company reported losses throughout the entire period investigated, with a maximum in 2015;
- liquidity and solvency record subunit values almost throughout the entire period investigated, indicating a difficult financial situation for the company;
- gearing ratio was negative for the last four years, demonstrating the deep negative effect of the accelerated and increasing accumulation of debts of the enterprise;
- low total asset turnover indicates the inefficiency of managing the company assets by the administration.

Dan Steel Group Beclean SA

- the turnover decreased significantly in the five years analysed; the company's activity reduced by almost 125 million lei in this timeframe;
- the last year with a profit was 2017, the two subsequent financial years ending with major losses, of 17 million lei and 30 million lei, respectively;
- the liquidity indicator confirms the negative perspective of the company activity continuity;
- the high gearing ratio indicates the entity's dependence on external loans, given that the equity capital became unable to fund the current activity;
- ROA and ROE show that the company's administration failed to manage the activity of the enterprise.

Bunmet Engineering SRL

- the net profit was low throughout the entire existence of the company, the financial year 2019 ending with a loss of almost 7 million lei;

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- the liquidity and solvency indicators had top-heavy values in the first four years analysed, but the trend was descending; in the fifth year, the values were subunit;
- the gearing ratio has very high values, recording a maximum of 541 in 2018; in 2019, it had negative values because equity capitals are negative;
- net profit margin and return on resources ratio have very low values, highlighting that the company management failed to reduce total expenses and conduct a profitable activity.

Totalgaz Industrie SRL

- net profit dropped almost throughout the entire period investigated, despite an increasing turnover in 2019 compared to 2017 and 2018. The result of the year 2019 was a loss of almost 8 mil. lei;
- general liquidity has a subunit value, which denotes that the enterprise depends on external loans;
- gearing ratio exceeds by far the limit of 0.6, a situation caused by dropping equity capitals;
- the lowered values of ROA and ROE in the period 2015 – 2019 indicate a faulty resource management of the enterprise highlighted mostly by obtaining a modest profit;
- the high days sale outstanding ratio has negative effects on the liquidity and cash flows of the enterprise.

The analysis above shows that all entities within the sample featured financial statements revealing significant financial struggles in daily activities. Hence, they are part of the first scenario within the study, namely, if *financial indicators highlight the economic difficulties of the enterprises within the sample.*

The financial analysis of accounting statements and the interpretation of performance indicators for the four companies made it possible to forecast bankruptcy. The underlying causes were the low degree of liquidity and solvency and the high gearing ratio. Upon relying on them, the economic performances of the enterprises studied feature values denoting significant difficulties in activity management. The economic reality concerning the current state and the perspective of indicator evolution. *Hence, we believe that the fundamental hypothesis was confirmed.*

Based on the accounting data provided and the financial analysis performed, users of financial statements can easily forecast the high probability of insolvency and even bankruptcy for each of the four entities. Finally, it may be concluded that the financial statements analysed were elaborated by observing the true and fair view principle, and they express accounting truth concerning *the financial position and performance of these companies.*

REFERENCES

1. Brown, J., S., Elton, E., J., Goetzmann, W., M., & Gruber, M., J., (2010). Modern Portfolio Theory and Investment Analysis, John Wiley and Sons Ltd, London, England.
2. Kaplan, S., N., & Ruback, R., S., (1995). The Valuation of Cash Flow Forecasts: An Empirical Analysis, The Journal of Finance, 50(4), 1059 – 1093.
3. Ohlson, J., & Gao, Z., (2006). Earnings, Earnings Growth and Value, Foundations and Trends in Accounting, 1(1), 15-28.
4. Pratt, S., P., & Niculita, A., (2008). Valuing a Business. The Analysis and Appraisal of Closely Held Companies, 5th edition, The McGraw – Hill Companies, New York.
5. White, G., Sandhi, A., & Fred. D., (2002). The analysis and use of financial statements, 3rd edition, Wiley Publishing, New Jersey.

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