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Financial Statements Analysis

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This article focuses on analyzing of a consolidated financial statements of a hypothetically SME. The interpretation of the financial position and performances is based on the more than 40 financial key ratios computed by using financial data from consolidated income statement, consolidated financial position and cash flow. However additional data from notes to financial statements are provided.

Keywords: *Financial gearing, Sales per person, EBITDA per person, Sales margin, DSO, DPO, Quick ratio, Cash ratio, DOH, Cash conversion cycle, ROE, ROI, Earnings per share, Dividend payout ratio, Financial leverage index.*

JEL Classification: *G32 – Financing Policy, Financial Risk and Risk Management, Capital and Ownership Structure, H32 - Firm M41 – Accounting*

Introduction

Calotă (2013, pag. 13) considers accounting as "the main source of knowledge by the management of the real state of economic organization, the one who, through analyzes performed and documents (reports) prepared provide a real and legal decision support". The analyzing of financial statements of SME is an important issue for actual shareholders or new investors and also for the management of SME. This is the reason I write this article which is focused on analyze of 47 financial key ratios split in five categories. This is the second article focused on financial key ratios. The first one is based on computed methodology starting from a trail balance of a SME. This present article is referring both on computing the key ratios - starting from financial statements- and analyzing their evolution during four year.

Description of the analyses company

This point of article is split in 3 parts:

1. Short description and financial statements;
2. Computing the financial ratios;
3. Interpretation of key ratios and conclusions.

1. Short description and financial statements

The “ABC” company is included in the category of small and medium sized enterprises because the values from individual financial statements and also the values from consolidated financial statements are falling in thresholds mentioned in Article 2 of the Annex of Recommendation 2003/361/EC:

Enterprise category	Headcount: Annual Work Unit	Annual turnover	OR	Annual balance sheet total
Medium-sized	50 -249	≤ 50.000.000 Euro		≤ 43.000.000 Euro
Small	10 – 49	≤ 10.000.000 Euro		≤ 10.000.000 Euro
Micro	≤ 9	≤ 2.000.000 Euro		≤ 2.000.000 Euro

The company has two subsidiaries and it prepares consolidated financial statements. Additional information is also provided. The computing of key ratios is based on the values included in consolidated financial statements:

Consolidated Income Statement **‘000**

Description	**2010**	**2011**	**2012**	**2013**
Revenue	20.681	21.889	22.890	22.919

Cost of sales	-9.981	-10.947	-11.651	-11.579
Gross profit	10.700	10.942	11.239	11.340
Other operating income	78	86	79	6
Administrative expenses	-1.391	-1.344	-1.441	-1.550
Distribution expenses	-5.909	-6.365	-6.513	-6.446
Other expenses	-86	-92	0	-160
Profit from operations	3.393	3.226	3.365	3.190
Finance expense	-1.116	-912	-920	-776
Finance income	374	217	310	248
Share of post-tax profits of associates	51	62	37	40
Profit before tax	2.702	2.593	2.792	2.702
Tax expense	-649	-633	-641	-652
Profit from continuing operations	2.052	1.960	2.151	2.049
Profit attributable to:				
Non-controlling interests	210	187	220	165
Shareholders in Entity ABC	1.843	1.773	1.931	1.884

Additional data related to Consolidated Income Statement

Depreciation and amortization	***2010***	***2011***	***2012***	***2013***
Property, plant and equipment	*1.266*	*1.211*	*1.292*	*1.286*
Intangible assets	*107*	*91*	*82*	*86*
Interest expense	*746*	*666*	*656*	*594*
Dividend per share (proposed)	*30*	*32*	*33*	*35*
Market price per share	*658*	*482*	*667*	*719*
Staff costs	*3.289*	*3.733*	*3.533*	*3.729*

Consolidated Statement of Financial Position ‘000 CU

	2010	**2011**	**2012**	**2013**
Assets				

Non-current assets				
Property, plant and equipment	11.185	10.968	11.017	11.530
Intangible assets	30.226	30.663	31.413	31.646
Investments in equity-accounted associates	1.680	1.739	2.149	812
Other receivables	647	616	760	721
Deferred tax assets	448	413	403	405
Total Non-current assets	***44.186***	***44.400***	***45.742***	***45.115***
Current assets				
Inventories	1.443	1.498	1.564	1.640
Trade and other receivables	2.723	3.545	3.417	3.406
Tax receivables	59	44	21	70
Prepayments	323	299	294	539
Cash and cash equivalents	942	1.083	1.984	1.279
Total Current assets	***5.490***	***6.469***	***7.278***	***6.934***
TOTAL ASSETS	***49.676***	***50.869***	***53.020***	***52.048***
Liabilities				
Current liabilities				
Trade and other payables	7.652	8.138	7.930	8.198
Loans and borrowings	1.363	646	1.154	3.280
Corporation tax liability	184	181	185	183
Provisions	176	176	213	183
Total Current liabilities	**9.376**	**9.141**	**9.482**	**11.843**
Non-current liabilities	0	0	0	0
Loans and borrowings	11.222	11.834	12.641	10.567
Employee benefits	838	1.124	1.363	1.065
Provisions and other liabilities	836	779	837	906
Deferred tax liability	3.425	3.324	3.334	3.043
Total Non-current liabilities	***16.322***	***17.061***	***18.175***	***15.582***
Total Liabilities	***25.698***	***26.202***	***27.657***	***27.426***
NET ASSETS	***23.978***	***24.667***	***25.363***	***24.622***

Issued capital and reserves attributable to owners of the parent				
Share capital	1.051	1.051	1.051	1.051
Reserves	-2.430	-3.010	-2.230	-4.737
Retained earnings	23.505	24.642	25.376	27.039
Equity, shareholders in Entity ABC	**22.125**	**22.683**	**24.196**	**23.352**
Non-controlling interest	1.853	1.985	1.167	1.270
TOTAL EQUITY	**23.978**	**24.667**	**25.363**	**24.622**

Additional data related to Consolidated Financial Position 'ooo CU

Additional data:	***2010***	***2011***	***2012***	***2013***
Trade and other receivables, from which	***3.370***	***4.161***	***4.177***	***4.126***
Sales of goods and services	*1.742*	*2.450*	*2.451*	*2.499*
On - trade loans	*711*	*711*	*696*	*660*
Loans, fair value of hedging instruments and other receivables	*917*	*1.000*	*1.030*	*967*
Trade and other payables	***7.652***	***8.138***	***7.930***	***8.198***
Trade payables	*3.232*	*3.795*	*4.085*	*4.452*
Deposits on returnable packaging	*440*	*445*	*476*	*561*
Other liabilities	*3.980*	*3.898*	*3.369*	*3.185*
Average number of employees	*240*	*230*	*200*	*175*
Depreciation and amortization				
Property, plant and equipment	*8.992*	*9.383*	*10.401*	*10.340*
Intangible assets	*731*	*1.096*	*1.153*	*1.212*
Interest-bearing debt	*1.573*	*1.560*	*1.724*	*1.731*

Number of shares *(average, excl. treasury shares if any)*	*16.250*	*16.200*	*16.200*	*16.200*

Note: All the above amounts - except dividend per share, market price, no. of employees and number of shares – are shown in '000 CU.

2. Computing the financial ratios

For analyzing the data of this hypothetic company ABC the financial key ratios computed are split into 5 categories as follow (see the table no. 1 to 5):

1) Asset Utilization ratios
2) Operating Performance ratios
3) Cash Flow ratios
4) Liquidity and Profitability ratios
5) Return on Investment ratios

Key ratios computed based on the above data are presented in the following tables:

Table no. 1 Asset Utilization ratios

	Financial key ratio	*2010*	*2011*	*2012*	*2013*
1.1	Working Capital to Sales Ratio	1.08%	1.92%	0.66%	-0.93%
1.2	Sales to Fixed Assets Ratio	42%	43%	43%	44%
1.3	Sales to Administrative Expenses Ratio	14,86	16,29	15,88	14,78
1.4	Sales to Equity Ratio	86%	89%	90%	93%
1.5	Sales per Person	86.172	95.169	114.450	130.965
1.6	Personnel productivity	6,29	5,86	6,48	6,15
1.7	EBITDA per Person	19.858	19.688	23.693	26.063
1.8	Accumulated Depreciation to Fixed Assets Ratio	18,04%	19,09%	20,17%	20,39%
1.9	Distribution Expenses to Sales Ratio	28,57%	29,08%	28,45%	28,12%
1.10	Investment Turnover	51,32%	52,46%	52,57%	57,01%
1.11	Interest Expense To Debt Ratio	5,92%	5,34%	4,76%	4,29%
1.12	Financial Gearing	52,49%	50,59%	54,39%	56,24%

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Table no. 2 Operating Performance ratios

	Financial key ratio	2010	2011	2012	2013
2.1	Sales margin	23,17%	20,91%	20,65%	21,36%
2.2	Gross margin	51,74%	49,99%	49,10%	49,48%
2.3	Operating profit percentage	16,44%	14,77%	14,35%	14,59%
2.4	Net income percentage (Return on sales)	9,92%	8,96%	9,40%	8,94%
2.5	Consolidated profit for the year per person	8,552	8,523	10,753	11,711
2.6	Operating margin	16,41%	14,74%	14,70%	13,92%

Table no. 3 Cash Flow ratios

	Financial key ratio	2010	2011	2012	2013
3.1	Cash flow from operating activities per share (CFPS)	225	178	209	166
3.2	Free cash flow per share (FCFPS)	110	83	125	5
3.3	Share price to cash flow ratio	2,24	1,72	2,28	2,55

Table no. 4 Liquidity and solvability ratios

	Financial key ratio	2010	2011	2012	2013
4.1	Accounts receivable Turnover	11,88	10,44	9,34	9,26
4.2	Days sales outstanding (DSO) (in days)	31	35	39	39
4.3	Inventory to sales ratio	14	15	15	14
4.4	Inventory turnover	6,92	7,31	7,45	7,06
4.5	Inventory to working capital	6,46	3,57	10,39	-7,67
4.7	Days payables outstanding (DPO) (in days)	118	117	123	135
4.6	Payables turnover	2,72	2,77	2,65	2,42
4.8	Current ratio (Golden financing rule)	0,59	0,71	0,77	0,59
4.9	Quick ratio	0,43	0,54	0,60	0,45
4.10	Cash ratio	0,10	0,12	0,21	0,11
4.11	Current assets turnover	3,77	3,66	3,33	3,23
4.12	Days of inventory on hand (DOH) (in days)	53	50	49	52
4.13	Current liability ratio (Leverage structure)	36,48 %	34,89 %	34,29 %	43,18 %

4.14	Noncurrent Assets To Noncurrent Liabilities Ratio	2,71	2,60	2,52	2,90
4.15	Short-Term Debt To Long-Term Debt Ratio	12,15%	5,46%	9,13%	31,04 %
4.16	Interest cover	6,39	6,80	7,22	7,67
4.17	Cash conversion cycle (net operating cycle)	-34	-32	-35	-44

Table no. 5 Return on Investment ratios

	Financial key ratio	***2010***	***2011***	***2012***	***2013***
5.1	Book value per share	1.476	1.523	1.566	1.520
5.2	Return on total assets	4,13%	3,85%	4,06%	3,94%
5.3	Return on equity (ROE)	8,56%	7,95%	8,48%	8,32%
5.4	Return on equity (ROE) - *excluding NCI*	8,33%	7,82%	7,98%	8,07%
5.5	Return on investment (ROI)	4,13%	3,85%	4,06%	3,94%
5.6	Financial leverage index	2,07	2,06	2,09	2,11
5.7	Earnings per share	113,40	109,46	119,19	116,30
5.8	Dividend payout ratio	26,46%	29,24%	27,69%	30,09%
5.9	Dividend yield ratio	17,24%	22,72%	17,87%	16,18%

3. Interpretation of key ratios and conclusions

Comments based on above financial key ratios and focused specially for the last two years. The purpose of computing and analyzing of key ratios is to understand the past evolution of SME and to establish the future measures for achieving the shareholders expectation. "If the performance goals were not achieved, then the causes will be established and the required measures will be configured, based on them a new strategy will be configured, according to the new elements." (Calotă, April 2014, page no. 9).

» For the first time during the analyzed period (2010-2013) the working capital is negative caused by significant increase of trade payables of 10 % in 2013 vs. 2012 (insignificant increase of accounts receivables and a slight increase – less than 5 % - of inventory). The impact of trade payable's increase can be noticed when DPO for 2013 is computed: no. of days increased from 123 days (2012) to 135 days (2013).

» There are no significant changes in evolution of Sales to Fixed Assets Ratio (1% small increase 2013 vs. 2012) this means that the 5% increase of tangible fixed assets 2013 vs. 2012 is not a significant one related to the revenue. Also there are no significant changes in evolution of Accumulated Depreciation to Fixed Assets Ratio during 2010-2013.

» The negative evolution of Sales to Administrative Expenses Ratio is clearly generated by 7% increase of administrative expense (2013 vs. 2012). Generally, this kind of increase should be carefully checked by using additional data. Based on the additional data it can be notice two issues as follow:

- a significant de decrease of number of employees (200 employees in 2012 vs. 175 employees in 2013) but in the same time
- a significant increase of staff costs (‘ 000 CU) included in income statements (3.533 in 2012 vs. 3.729 in 2013)

Apparently there is a contradiction but – in fact- the increase of staff costs is generated by compensation wages granted for laid off employees. These compensation wages are included in administrative expenses. The significant decrease of employees positively influences the evolution of three key ratios:

- Sales per Person (114.450 in 2012 vs. 130.965 in 2013),
- EBITDA per Person (23.693 in 2012 vs. 26.063 in 2013), and
- Consolidated profit for the year per person (10.753 in 2012 vs. 11.711 in 2013)

The lowest Profit from operations amount from the analyzed period (2010-2013) is recorded in 2013 when is recorded the highest value of EBITDA per Person. At first glance it may seem an unusual situation but number of employees has decreased much faster in 2013 vs. 2012 (12 %) than Profit from operations (5 % decreases in 2013 vs. 2012).

The significant increase of staff costs negatively influences the evolution of Personnel productivity (6.48 in 2012 vs. 6.15 in 2013). Anyway the lowest value of Personnel productivity has been recorded in 2011 (5.86 in 2011). It can be notice that the personnel costs is almost the same in 2011 v. 2013 but the value of revenue for 2011 is 4.5 % less than revenue for 2013.

» In the last two years there is a positive evolution - but without significant impact - of Distribution Expenses to Sales Ratio (0.13 % revenue increase vs. 1 % distribution expense decrease).

» There is a positive evolution during 2010 – 2013 for Finance expense and Interest Expense To Debt Ratio. SME has borrowed money at lower interest rates. The total balance amount of short and long term interest – bearing debt increased during the last 3 years. This increase has generated the evolution of Financial Gearing. Anyway the SME has preferred to borrow money from banks instead of borrow money from shareholders by increasing the share capital.

» The evolution of Sales margin and Gross margin indicate that SME has maintained its profitability. The same conclusion can be notice from evolution of Operating profit percentage. During 2010-2013 there is a slight decrease for all these three key ratios; the lowest value is recorded in 2012. This decrease can be considered to be normal due to the fact that – in the analyzed period – the revenue increased (5.84 % in 2011 vs. 2010; 4.75 % in 2012 vs. 2011) and it is possible that the SME offered better conditions (e.g. increasing of commercial discounts) to its customers or to record higher distribution expenses.

» The above mentioned administrative expense increase (7% in 2013 vs. 2012) has a notable negative impact regarding the evolution of Operating margin and a slightly negative influence of Return on sales because the negative influence is diminished by the positive evolution of financial costs (decrease 15.6 % in 2013 vs. 2012).

"The solvency ratio expresses the degree to which the company copes with total liabilities, the way its assets are able to deal with the liabilities incurred. A solvent entity is able to pay its creditors." (Calotă & Vintilescu, October 2013, page no. 10).

» The evolution of cash flow key ratios is not good and suggests a lack of liquidity, especially from operating activities. This lack of liquidity can be noticed more clearly when the value of Quick ratio and Cash Ratio are analyzed. These two ratios are less than 1. As a common rule, if these ratios are less than 1 it indicates that SME can have significant difficulties regarding the payments for current liabilities. Even Current ratio – also known as Golden financial rule - is less than 1. It expresses the relationship between current assets and current liabilities. Generally, if this ratio is:

a) 1:1 is considered to be the absolute minimum level of acceptable liquidity;
b) Less than 1 it indicates that SME might have significant difficulties regarding the payments for current liabilities.

» Likewise, it can be notice that the amount of short term liabilities increased in 2013 vs. 2012. The total of short and long term liabilities remained constant in 2013 vs. 2012 but there is an important increase of proportion of the total liabilities which must be paid in a period less than one year. However this ratio doesn't indicate the ability of SME to pay its current liabilities. In the same time can be notice that there is a significant switch from long term category to short term category. This is clearly indicated by evolution of Short-Term Debt to Long-Term Debt Ratio (5.46 % in 2011, 9.13% in 2012 and 31% in 2013). Days sales outstanding is the same in 2012 and 2013 (39 days) but Days payables outstanding increase in 2013 with 11 days vs. 2012 and this may be a sign of lack of liquidity.

» The evolution of Return on Investments Key ratios indicates that the SME has a constant evolution. There are no significant changes. It is important to notice that Dividend payout ratio increased in 2013. The highest value has been recorded in 2013. There is a constant dividend policy.

ABC is a stabile enterprise. The evolution for the last 4 years is good, especially regarding the increase of revenue. The future fixed costs, especially staff costs, will be low in the next years due to the significant reduction of employees. It is a good sign the fact that this decreasing of employees didn’t affect the sales increasing. The evolution of market share price is good (the prices are constantly increasing). This is a good sign for shareholders. However the enterprises have a poor liquidity. This part must be carefully motorized by management. It can be noticed a constant policy for distribution of dividends. This is also a good sign for investors.

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