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Instrumenti finansijske analize u oceni boniteta preduzeća na primeru „Metalac“ a.d. Gornji Milanovac

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Apstrakt: Naučni rad nosi naslov instrumenti finansijske analize u oceni boniteta preduzeća. Pisan je sa ciljem da se ispita važnost instrumenata finansijske analize u ocenjivanju boniteta i likvidnosti preduzeća. Dvadeset i prvi vek uneo je velike promene u poslovanju i omogućio finansijskoj analizi da preuzme glavnu ulogu u ispitivanju boniteta i likvidnosti preduzeća. S obzirom na sve veću globalizaciju i na sve nestabilnije tržište, jedno od pitanja koje se postavilo: da li finansijska analiza i njeni instrumenti mogu da daju adekvatan odgovor rukovodstvu zarad poboljšanja finansijskih performansi preduzeća i kako? Metodologija istraživanja se zasnivala na studiranju i analiziranju literature i izvora koja je povezani sa finansijskom analizom, deskripciji, analizi i interpretaciji primarnih izvora koji su korišćeni u ovom radu, a konkretno se odnose na preduzeće „Metalac“ a.d. iz Gornjeg Milanovca. Istraživanjem je utvrđeno i zaključeno da finansijska analiza i njeni instrumenti imaju presudan uticaj na poslovne odluke, kako top menadžmenta „Metalac“ a.d., tako i na odluke investitora. Rezultati ovog istraživanja su primenjivi za top menadžere, finansijske analitičare, druge istraživače, studente i učenike. Rad je značajan za skretanje pažnje na sve veći značaj finansijske analize i njenih instrumenata, jer postoje indicije da nije zastupljena u dovoljnoj meri u privrednim društvima na teritoriji Srbije.

Ključne reči: Finansijska analiza, pokazatelji likvidnosti, pokazatelji aktivnosti, cash flow analiza, funds flow analiza

The Instruments of Financial Analysis and Their Role in the Company Credit Rating – Case Study “Metalac”, Gornji Milanovac

Abstract: The subject of this research are the instruments of financial analysis and their role in the company creditworthiness, i.e. the role of financial analysis in the estimation of a company's liquidity and credit standing. Financial analysis and its instruments are not used enough in Serbia, due to the lack of qualified personnel. The quintessential problem that is discussed in the paper is the testing of importance of financial analysis and its instruments in business decision-making of top management and investors. The aim of the research is in raising awareness on the growing significance of financial analysis and its instruments, because there are signs indicating that it is not applied enough in companies in Serbia. The paper consists of liquidity indicators, activity indicators, cash flow analysis, and funds flow analysis. The research methodology is based on studying and analysing references and resources on financial analysis, describing, analysing and interpreting primary resources used to obtain data, which, in substance, refer to the “Metalac” Holding company. The first part of the paper deals with a short historical overview of “Metalac” Holding company. The second part of the paper analyses in detail and shows the results of the research. The results suggest that financial analysis and its instruments crucially influence business decisions of both the top managers of “Metalac” Holding company and investors. All this matters for top managers, financial analysts, other researchers, students and pupils.

Key words: Financial analysis, liquidity ratios, activity ratios, cash flow analysis, funds flow analysis.

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1. Basic information about the company

Metalac a.d. is a shareholding company with the head office in Gornji Milanovac. Metalac was founded on April 4, 1959 and since 1998 it has been acting as a shareholding company. Ever since January 2006 the Company has operated as a decentralized company, when Metalac a.d. transferred its primary activities to the newly founded enterprises: Metalac Posudje doo for production of cookware, Metalac Inko doo for production of stainless steel and composite kitchen sinks and Granmatrix composite plates, Metalac Bojler doo for production of water heaters and Metalac Print doo for production of carton packing material and transfers for cookware decoration and Metalac Market doo retailer managing a chain of 50 specialized shops throughout Serbia.

Today Metalac a.d. acts as a Group with 14 subsidiaries: four of them are productive, five trading companies in the local market and five companies abroad. The property structure of Metalac shows 60 % held by natural persons, 5% share of legal persons and about 35% custody accounts. The share of foreign entities and investment funds in the total capital is 45%. Metalac a.d. shares are quoted on the B List of the Belgrade Exchange. Exchange analysts say that Metalac is one of the "healthiest" Serbian companies.

In 2012 according to the consolidate account Metalac made 59 million euro turnover and net profit of 5,2 million euro. Cookware production is the core-business and the company Metalac Posudje is one of the major cookware producers in Europe.

Metalac exports its products to 25 countries on all continents. Except traditional presence in the region, products of Metalac go to: Russia, France, Italy, Germany, Spain, Sweden, Finland, Denmark, Czech Republic, Ukraine, Georgia, Bulgaria, etc. and as far as the USA and Australia. Metalac Holding employs about 1700 people, half of them working in Metalac Cookware, every tenth with university degree. There is a trend of continuous education to improve and update knowledge in all fields.

1.1. Analysis of net working capital

In order to determine whether the company has sufficient funds for current operations the value of net working capital should be calculated. The resulting value will greatly assist in the assessment of whether the company has sufficient funds financed from its own resources. If the calculated values are positive it will provide the conclusion that the company Metalac has enough of its own and long-term funds which is a prerequisite that the company may in the future operate normally and develop themselves according to their position in the market.

Table 1. Analysis of net working fund of company Metalac for the period 2014 and 2015 year

	In 000 dinars	2014	2015
1.	Long-term sources of funding	3.069.072	3.078.787
1.a	Long-term liabilities	57.452	12.160
1.b	Capital	3.011.620	3.066.627
2.	Fixed assets	2.538.769	2.574.901
1 – 2	Neto working capital	530.303	503.886

Created by the authors based on APR and "Metalac" data

The positive net working capital is a good signal for creditors of companies „Metalac". So that the entire fixed assets and part of current assets are financed by long-term sources, which means a favorable position and liquidity that has reached the long-term financial balance.

1.2. Analysis using the financial indicators

Table 2. Liquidity indicators of company Metalac for period 2014 and 2015 year

Liquidity indicators	2014.	2015.
Current ratio	3,25	3,02
Ratio of reduced value	3,24	2,99
Neto working capital	638.607	613.621

Created by the authors based on APR and "Metalac" data

- The ratio of overall liquidity in the interval from 3.25 in 2014 to a maximum of 3.02 in 2015. The value of this ratio is above normal but can be preliminarily concluded from the company liquidity. The interpretation of this ratio shows that in 2014 the company with 3.25 pounds of working capital covers 1 dinar short-term obligations and that with 3.02 dinars of working capital in 2015 1 dinar short-term obligations were provided.
- The normal or standard for rigorous liquidity ratio is 1. Metalac has 3.24 value of this ratio in 2014, 2.99 in 2015, which is significantly above the normal range and supports the earlier lend weight for the company liquidity. Based on the calculated value, which can be concluded we then exclude stocks of Metalac company and liquidity. The interpretation of this ratio shows that in 2014 the company with 3.24 pounds of working capital covers 1 dinar liquidity, that is, with 2.99 pounds of working capital in 2015 provided 1 dinar liquidity.
- The value of net working capital in 2014 was 638,607 and it was reduced in 2015 which amounted to 613,621 dinars. This is a positive trend and shows that a significant portion of current assets is financed by long-term sources. Looking at the overall situation in Serbia as well as the global economic crisis can be concluded that the company Metalac is one of the few company in Serbia that has a positive value of net working capital from year to year which poses subsumed under exceptional business results.

Table 3. Indicators activities of company Metalac for 2014 and 2015 year

Indicators activities	2014.	2015.
Coefficient velocity buyers	1,35	1,29
The average collection period	267 days	279 days
Coefficient inventory turnover	2,51	1,69
Average period binding of stock	144 days	213 days
Coefficient turnover ratio supplier	0,28	0,27
Average time of settlements of liabilities	1286 days	1333 days
Coefficient turnover of fixed assets	0,0044	0,0046
Coefficient turnover ratio of total operating	0,0033	0,0034
Coefficient turnover of company funds	0,0037	0,0039

Created by the authors based on APR and "Metalac" data

- The average collection period of trade receivables in 2014 was 1.35 and in 2015 1.29 times during the year. It follows that since the sale of finished goods to customers on credit until the moment of collection of receivables on average 267 days passed in 2014, and in 2015 this amounted to 279 days.
- The value of the coefficient in 2014 amounted to 2.51 whereas in 2015 it was 1.69. The higher the turnover ratio of inventories to better position the company, the more necessary it is that during the year the lower amount of funds will be „trapped“ into the stock. The interpretation of this ratio shows that from the moment we make the purchase of raw materials to the moment we make the sale of finished products 144 days pass on average as was the case in 2014, or 213 days in 2015.
- The value of the coefficient crafts suppliers in 2014 amounted to 1286 days, in 2015, 1,333 days. Accounts payable are paid 0.28 and 0.27 times on average during the year. It follows that from the time of purchase of materials and raw materials from suppliers to the time of payment, there are liabilities for average pass
- The value of the coefficient of fixed assets in 2014 amounted to 0.0044 and in 2015 to 0.0046. When the indicator of fixed assets is higher, it gets better, because it indicates a more efficient use of fixed assets in generating revenue. Based on the calculated value of the coefficient, it can be concluded that for each dinar investment in fixed assets it increases by 0.0044 or 0.0046 dinars net income of realization (sales). The value of this ratio is far below the competition, but the recommendations for management is to pay special attention to the efficient use of resources.
- Turnover ratio of total operating assets in the company Metalac amounts in 2014 and 2015 which was 0.0033 and 0.0034. The interpretation of the value of this ratio indicates that one dinar invested in the assets of companies in 2014 turned over the 0.0033 times for every 360 days, and in 2015 0.0034 times.
- Turnover ratio of own funds in the company Metalac amounts in 2014 to 0.0037 and in 2015 to 0.0039. It follows that for each dinar invested in their own funds or enterprises 0.0037 or 0.0039 pounds of net income are generated for the realization of sales.

Table 4. Indicators funding structure of Metalac company for 2014 and 2015 year

Indicators funding structure	2014.	2015.
A. Indicators cover		
Coverage ratio of expenditure on behalf of interest	9,63	11,41
B. Indicators funding structure		
The ratio of debt	12%	9%
The ratio of capital structure	34%	23%
The ratio of long-term debt to long-term resources	24%	18%

Created by the authors based on APR and "Metalac" data

- Value ratios for interest coverage show how operating profit companies are burdened by interest costs. On the basis of calculated value it can be concluded that increasing coverage of interest costs for business income, which is a positive trend for the company and opens up the possibility, it may further incur in the event of an investment. The interpretation of this indicator is that every penny of expenditure on behalf of the interest is covered with 9.63 dinars in 2014, or 11.41 dinars in 2015 of operating profit.
- The ratio of debt Metalac had in 2014 was 12% in 2015 it was 9%. It follows that 12% and 9% of the total transactions of funds are financed from foreign sources.
- The ratio of capital structure in the company Metalac was in 2014 34% and in 2015 23%. Consequently, the long-term resources participate in the financing of companies with 34% or 23% in relation to their own funds.
- The ratio of long-term debt to long-term resources for the company Metalac were in 2014 24% and in 2015 18%. It follows that the total of long-term sources of finance companies was 24% and 18% of the company which was purchased from long-term debt.

Table 5. Indicators of profitability in Metalac for 2014 and 2015 years

Indicators of profitability	2014.	2015.
A. Indicators rate gain		
Gross profit	56%	59%
Rate of business profit	9,5%	12,4%
Rate of net income	57%	59%
B. Indicators yields rates		
Net rate of return on commercial property	7,12%	7,32%
Rate of return on equity	7,98%	8,37%
Rate of return on commercial property	1,18%	1,54%

Created by the authors based on APR and "Metalac" data

- Gross profit in net sales revenue accounted for 56% and 59%.
- The rate of business profit shows that for every 100 pounds disclosed in operating income the company achieved operating profit of 9.5 dinars in 2014, and in 2015, 12.4 dinars. The value of this indicator of profitability is very important because it indicates that the company Metalac has sufficient margin and a sufficient amount of business income to cover total operating expenses. The value of this trend has stood at 9.5% in 2014, and in 2015 12.4%
- The rate of net income in 2014 is 57% and in 2015 59%. The increase in the share of net income to operating income is a positive trend because it leads to increased profitability. In 2014, and in 2015, for every 100 Dinars disclosed in operating income, the company had a net profit of 57 dinars, or 59 dinars.
- The interpretation of the net rate of return on commercial property shows that the company Metalac on every penny invested in total assets achieved 7.12% in 2014 and 7.32% in 2015 of the net income.

- The interpretation of the rate of return on equity shows that the company Metalac on average used every dinar of its own capital so they achieved 7.98% in 2014, and 8.37% in 2015 of the neto income.
- The interpretation of the rate of return on commercial property shows that the company Metalac on average used every penny for business assets to achieve 1.18% in 2014 and 1.54% in 2015 on operating profit.

Table 6. Value relations market price for Metalac in 2014 and 2015 year

Value relations market price	2014.	2015.
Neto profit per share	0,1181	0,1247
The ratio of market prices per share and neto income per share	10.158	9.621
Divident payment ratio	0,05%	0,05%
Dividend rate	/	/
Book value per share	1,48	1,50

Created by the authors based on APR and "Metalac" data

- 0.1181 dinars in 2014, i.e. 0.1247 dinars in 2015 is the amount of the neto profit per share that may be paid in the form of dividends to shareholders or accumulated.
- Value relations market price per share and neto income per share for the company Rad in 2014 amounted to 5.08 in 2015 to 4.82 dinars. This means that the amount of 5.08 and 4.82 dinars potential shareholders have to pay for the purchase of shares in order to ensure future annual earnings per share is 1 dinar.
- 0.05% of neto income amounts to 2014 and 2015 and this amount is paid out to shareholders in the form of dividends, and the rest is accumulated.
- After fulfilling all its obligations, in the case of liquidation, each shareholder would be for each ordinary share, which has received the amount of 1,463, or 1.5032 dinars.

1.2.2. Cash flow analysis

Metalac in 2014 and 2015 had a positive cash flow from operating activities, which points to the fact that from the base of its activities, the company creates cashflow. Positive cash flow from operating activities shows that the company owns its earning ability and the ability to charge their goods or services on the market. The trend in the net cash flow from operating activities was positive and it says that every year more and more money Metalac created from the core business. Net cash flow from investment activities was positive, while neto cash flow from financial activities is negative.

Table 7. Analysis of cash flow of the company Metalac 2014 and 2015 year

Cash flow statement	AO R	2014	2015
I. Cash flow from operating activities	301	874.516	964.898
II. Cash outflows from operating activities	305	826.414	897.975
III. Neto cash flow from operating activities	311	48.102	66.923
I. Cash flow from investing activities	313	438.988	592.005
II. Cash outflows from investing activities	319	371.365	472.516
III. Neto cash flow from investing activities	323	67.623	119.489
I. Cash flow from finacing activities	325	111.371	0
II. Cash outflows from financing activities	329	244.897	220.565
III. Neto cash outflows from financing activities	334	133.526	220.565
TOTAL CASH FLOW	336	1.424.872	1.556.903
TOTAL CASH OUTFLOWS	337	1.442.673	1.551.056
NETO CASH FLOW (336 - 337)	338	/	0
NETO CASH OUTFLOWS	339	17.801	34.153

Created by the authors based on APR and "Metalac" data

Table 8. Cash flow concept for the period 2014 and 2015 year

Sign	Position	2014	2015
	Annual neto profit	240.986	254.427
+	The increase in reserves	29.340	- 29.335
-	Depreciations	4.810	27.023
=	Cash flow I	265.516	198.069
+	Increase in long – term provisions (cover)	24.644	983
=	Cash flow II	290.160	199.052
+	Other expenses	6.954	-5.424
-	Other profits	91.697	54.896
=	Cash flow III	205.417	138.732
-	Dividends paid	3.971	21.533
=	Cash flow IV	209.388	117.199

Created by the authors based on APR and "Metalac" data

The most important value of cash flow indicators is the value of cash flow III and IV. Cash flow III estimates a yield strength of the company. After the values of this indicator is calculated by years it can be seen that in the company Metalac there's growth, which has a positive trend and indicates that the company is strengthening its yield power. Cash flow IV is used to assess the financial strength of the company. During the observed period of

extension there is a cyclical movement of this indicator. The value of this indicator in 2014 compared to 2015 is increased by observations of 92,189 dinars, which indicates the decreased financial strength of the company.

1.2.3. Funds flow analysis

Funds flow analysis for the period 2014 to 2015 is shown in table number 9.

Table 9. Funds flow concept for the period 2014 and 2015:

	FUNDS flow concept	2014.	2015.
	Neto profit	236.006	254.935
+	Depreciations	125.551	81.063
-	The increase in neto working capital	638.607	613.621
+	Equity	441.899	441.899
=	Available financial flow	164.849	164.276

Created by the authors based on APR and "Metalac" data

Funds flow analysis can follow any increases or reductions i.e. the net difference of balance sheet items or segments of two or more successive balance sheet. This analysis is used for the dynamic analysis of the balance i.e. analysis, development, and supplements the analysis of the viability of using the income statement and cash flow analysis.

Funds flow analysis of company Metalac can conclude that in 2014 and 2015, the available financial flow is less than the net profit. In 2014, depreciation costs amounted to 125,551 dinars, which means that the available cash flow increased by this amount. This year the company has reduced neto working capital of 638,607 dinars, which led to a reduction in available financial flow. In 2015 depreciation expense was 81,063 dinars. Net current assets have decreased and amounted to 613,621 dinars. For this reason, in 2015 available cash flow is less than neto income.

2. Conclusion

Based on the due diligence Metalac can conclude the following:

- Operations of the company during the period took place under the influence of the financial crisis and deteriorating economic conditions.
- It is expected that the company will operate in more difficult and uncertain economic conditions in the future. The analysis so far of the measures implemented by the management believes that the continuity of business operations during the next period will not be compromised, even in extremely turbulent conditions because the company owns brand strength i.e. Metalac products are recognized not only in Serbia but in the region.
- Deteriorating economic situation in the country has affected the position of the company primarily through the danger that some clients (customers) will be able to meet their obligations as they fall due, which may impact the depreciation and provisions for potential losses of the company in 2016.
- Based on the analysis of all indicators, we can say that the company Metalac is one of the few in Serbia which has a long-term perspective and business strategy, as well as being in possession of the market beyond the borders of Serbia, which provides that in the future the company becomes a leader in the region and exports the power of Serbia.

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