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LIQUIDITY ANALYSIS OF ENGINEERING COMPANIES USING CASH FLOW RATIO IN THE ASSESSMENT OF THEIR FINANCIAL CONDITION

The main source of the risk of bankruptcy and liquidation is the insolvency of the enterprise. Solvency is an opportunity of the enterprise to pay all its current liabilities at a particular time. Solvency must be analyzed on short-term (it is liquidity), and also on long-term perspective. Engineering industry is the priority sector of the Ukrainian economy and requires greater attention to the liquidity and constant monitoring of liquidity ratios that enables to engineering plants to react to signs of crisis. In this case the liquidity analysis is very important and topical.

Financial analysis of the liquidity of companies in Ukraine due to its importance always attracts the attention of scientists. The question of financial performance and features financial analysis of agricultural enterprises covered in the works of such scientists as: Halsey R.F., Kirkham R., Muntean M., Pacurari D., Shapurova A.A., Stanko B., Subramanyam K.R., Wild J.J., Zeller T., [1-8]. However, very little attention is paid to liquidity, which determines the need for further research.

The purpose of this article is to analyze the liquidity enterprises of mechanical engineering in the assessment of their financial condition.

In international and domestic practice uses the following liquidity ratios which called as: «acid test» (acid test ratio) is also known as the quick ratio (quick ratio), ratio of absolute liquidity (cash ratio), ratio of total liquidity or coverage ratio (current ratio) and rate of working capital (net working capital), which in domestic practice often overlooked when analyzing liquidity [1-8]. Foreign scientists are encouraged to use for the analysis of liquidity Cash flow ratio. This indicator is the ratio of net cash flow from operating activities to current liabilities of the enterprise. How to offer scientists and we agree with them, it can be calculated as follows: $\text{Cash flow ratio} = \text{Operating cash flow} / \text{Current liabilities}$. Net operating cash flow expresses the degree of liquidity operations of machine building enterprise, ie as the main activity of the company generates sufficient cash to meet the obligations without attracting for this purpose external sources of financing, such as loans.

The research involved the comparison between the ratios of companies in the machinery industry over a four year period. For the study data were drawn public financial statements of such companies: Joint stock company «Kharkiv Machine Building Plant «SVET SHAKHTYORA, Open joint stock company «Kharkiv Tractor Plant named after S. Ordzhonikidze» Kharkiv region and Deere & Company (brand name John Deere) is an American corporation that

manufactures agricultural, construction, and forestry machinery, diesel engines and lawn care equipment.

Acid test JSC «Kharkiv Machine Building Plant «Svet Shakhtyora» (table 1) investigated enterprise shows that in 2014 most liquid and completely liquid assets in the company can cover 2.59 times its current liabilities.

Table 1

The liquidity ratios engineering enterprises for the years 2011-2014

Period Ending:	Joint stock company «Kharkiv Machine Building Plant «SVET SHAKHTYORA»				
	Current Ratio	Quick Ratio ("Acid test")	Cash Ratio	Net working capital	Cash Flow ratio
31.12.2011	4,165	2,354	0,800	257044	-0,607
31.12.2012	3,393	2,707	0,016	386353	-0,305
31.12.2013	4,452	3,761	0,009	489616	-3,641
31.12.2014	3,028	2,590	0,025	580179	-0,421
	Open joint stock company "Kharkiv Tractor Plant named after S. Ordzhonikidze				
31.12.2011	0,613	0,209	0,030	-169050	0,613
31.12.2012	0,546	0,160	0,012	-205852	0,546
31.12.2013	0,707	0,392	0,001	-132059	0,707
31.12.2014	0,428	0,107	0,006	-273232	0,428

Source: Calculated by the author based on information Stock market infrastructure development agency of Ukraine. – Available at: <http://smida.gov.ua/>

Current ratio shows the excess of current assets over short-term obligations during the study period in 3-4,5 times. Absolute liquidity ratio was above the recommended value only in 2011 In 2014 it is low – only 0,025. The working capital of the enterprise is large, the company has enough current assets. Liquidity ratio, calculated on the basis of net cash flow from operating activities shows a negative value, and therefore the company needs to pay attention to the management of their cash flow.

Let's analyze the OJSC "Kharkiv Tractor Plant named after S. Ordzhonikidze". Quick ratio for the years 2011-2014 is very low in 2014 was the lowest and amounted to 0.107. This means that the most liquid assets the company is able to pay only 10.7% of current liabilities. Quick ratio lower than one enterprise, which means that the serious financial difficulties. Working capital is negative and has a large size. So the current debts of the company far exceed its current assets. This dynamic continues studied for four years and is threatening for the company. Cash Flow ratio indicates the presence of positive net operating cash flow. Thus, the company has a little opportunity to repay their debts.

So, studying the liquidity ratios and cash flows of the corporation Deere & Company for the years 2011-2014, we found that they are on a high level (Table 2).

Table 2

The liquidity ratios and Cash Flow Corporation Deere & Company

Period Ending:	10/31/2014	10/31/2013	10/31/2012	10/31/2011
Current Assets				
Cash and Cash Equivalents	\$3,787,000	\$3,504,000	\$4,652,200	\$3,647,200
Short-Term Investments	\$1,215,100	\$1,624,800	\$1,470,400	\$787,300
Net Receivables	\$36,832,600	\$35,039,200	\$31,426,400	\$27,501,600
Inventory	\$4,209,700	\$4,934,700	\$5,170,000	\$4,370,600
Other Current Assets	\$0	\$0	\$0	\$0
Total Current Assets	\$46,044,400	\$45,102,700	\$42,719,000	\$36,306,700
Current Liabilities				
Accounts Payable	\$8,816,000	\$9,240,800	\$9,288,500	\$8,090,800
Short-Term Debt / Current Portion of Long-Term Debt	\$12,577,700	\$12,898,000	\$9,967,300	\$9,629,700
Other Current Liabilities	\$0	\$0	\$0	\$0
Total Current Liabilities	\$21,393,700	\$22,138,800	\$19,255,800	\$17,720,500
Liquidity Ratios				
Current Ratio	215%	204%	222%	205%
Quick Ratio	196%	181%	195%	180%
Cash Ratio	23%	23%	32%	25%
Cash Flow				
Net Cash Flow-Operating	\$3,525,900	\$3,254,300	\$1,167,700	\$2,326,300
Net Cash Flows-Investing	(\$2,881,000)	(\$4,820,700)	(\$4,004,100)	(\$2,620,700)
Net Cash Flows-Financing	(\$288,300)	\$406,500	\$3,880,200	\$139,600
Net Cash Flow	\$283,000	(\$1,148,200)	\$1,005,000	(\$143,400)

Source: Web-site The NASDAQ OMX Group. – Available at: <http://www.nasdaq.com/>

Liquidity ratios corporation Deere & Company expressed as a percentage, but essentially it does not change. Quick ratio in 2011-2014 years higher than 1 and was within 180-196%. It shows sustained high level of quick liquidity. Current ratio in 2014 was 215%, so the company can meet its current debt by more than 2 times. Absolute liquidity ratio is in the recommended range (0.2-0.3). Net Cash Flow-Operating consistently high and shows the effectiveness of core activities. In 2014 Net Cash Flows-Investing and Net Cash Flows-Financing were negative, but the Net Cash Flow was \$ 283,000. Thus, the corporation Deere & Company has a high level of liquidity, which ensures high solvency. Domestic enterprises of machine building industry necessary to introduce the experience liquidity management of foreign companies taking into account the specifics of your business in Ukraine.

During the research made the calculation and analysis of liquidity engineering companies through a system of liquidity ratios. They characterize the short-term solvency of the company, ie its ability to generate sufficient cash to meet its obligations. Liquidity ratios were calculated on the basis of the financial statements: balance sheet, income statement, statement of cash flows and notes. In implementing the liquidity analysis of machine building enterprise must take into account all available information, including data the administrative account. If the analysis is carried out external users of financial statements that do not have access to inside information of the investigated enterprise to analyze data should be used all forms of financial statements. Liquidity ratios are important, but they are calculated only on the basis of the balance sheet and do not allow of objective findings. Thus, the information offered by the liquidity ratio must be supplemented by other coefficients mentioned in this article.

As the research showed the domestic engineering enterprises, liquidity ratios necessary to complement the analysis of data from the statement of cash flows. OJSC "Kharkiv Tractor Plant named after S. Ordzhonikidze" although it has low liquidity, but the net operating cash flow of enterprise is positive. In JSC «Kharkiv Machine Building Plant "Svet Shakhtyora" liquidity ratios are high but net operating cash flow is negative.

The study showed that the use of the classic ratios, which are based only on data from the Statement of Financial Position (the Balance Sheet), does not give full information on the liquidity of the machine-building enterprises. The big disadvantage is that the liquidity ratios do not reflect the temporal correlation between the inflow and outflow of cash caused by changes in payments. In order to avoid erroneous conclusions about the liquidity is necessary alongside with the classic liquidity ratio must be take the parameters that take into account changes in the inflow and outflow of cash (such as net operating cash flow), using the relevant data from: the Statement of Cash Flows (especially when the net cash flow are prepared through the direct method); Notes on the financial statements (for example, the turnover of accounts receivable, accounts payable turnover, inventory turnover, which show the rate of inflow and outflow of cash an enterprise).

References:

1. Shapurova O.O. Polityka antykryzovoho upravlinnia pry zahrozi bankrutstva [Policy of anticrisis management at bankruptcy threat] / O.O. Shapurova // Aktualni problemy ekonomiky. – 2008. – № 8. – P. 147-154.
2. Pacurari D. Analysis of a company's liquidity based on its financial statements [Electronic resource] / D. Pacurari, M. Muntean. – 2008. – Available at: <http://steconomice.uoradea.ro/anale/volume/2008/v3-finances-banks-accountancy/248.pdf>
3. Kirkham R. Liquidity Analysis Using Cash Flow Ratios and Traditional Ratios: The Telecommunications Sector in Australia / R. Kirkham // Journal of New Business Ideas & Trends. – 2012. – Vol. 10. – Iss. 1. – P. 1-13.
4. Wild J.J. Financial Statement Analysis / J.J. Wild, K.R. Subramanyam, R.F. Halsey. – 9th edition. – McGraw-Hill, 2007.
6. Web-site The Ready Ratios. – Available at: <http://www.readyratios.com/>

7. Zeller T. Operating Cash Flow Ratios Measure a Retail Firm's «ability to pay» / T. Zeller, B. Stanko // Journal of Applied Business Research. – 1994. – Vol. 10. – no. 4. – P. 51.

8. Web-site The NASDAQ OMX Group. – Available at: <http://www.nasdaq.com>

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THE DEFINITION OF STRATEGIC ALTERNATIVES AS AN ELEMENT OF INTERNAL COMMUNICATIONS MANAGEMENT AT THE ENTERPRISE

In general, the essence of communication management is the implementation of purposeful influence on the employees to ensure the acceptance, processing, stockpiling, transfer timely and unbiased information to appropriate levels of management (responsibility) to ensure the efficiency of enterprises business processes.

Accordingly, the process is carried out according to the results of diagnosis and involves the formation (modernization) of the enterprise communication processes systems. Therefore, on the basis of the conducted system analysis of existing approaches to the assessment and diagnosis of the state of enterprise internal communications (IC) [1; 3-6] the advantages and disadvantages of existing methods were identified and a system of indicators for internal communications measurement was developed. This system is based on authors approach to the allocation four components in the system of internal communications: organizational, social-psychological, informational and technological. For each structural element it is proposed to use selected indicators: quantitative and qualitative.

The improvement of the management of the enterprise system of the IC involves the formulation of an adequate strategy, which is [2]:

- built in terms and taking into account unpredictability of events development;

- must be related to the future prospects;