

RETROSPECTIVE ANALYSIS OF LIQUIDITY OF THE COMPANY

Ing. Jaroslava Janeková, PhD.

Technical University of Kosice
Faculty of Mechanical Engineering
Department of Industrial Engineering and
Management
Nemcovej 32, 042 00 Kosice
Slovakia
e-mail: jaroslava.janekova@tuke.sk

Abstract

The paper provides a comprehensive view of the retrospective analysis of liquidity of the company, which is derived from application of methods based on the balance sheet and cash flow items. The state variables analysis is focused on consideration of relations between items of short term assets and short term liabilities of the balance sheet, i.e. components of net working capital. In liquidity analysis by means of cash flow methods, different types of cash inflows and cash outflows are considered in terms of resources and purpose they were spent.

Key words: Liquidity, liquidity indicators, balance sheet, cash flow.

INTRODUCTION

Liquidity analysis allows us to determine the company's ability to pay its current liabilities. This ability covers several problems. The first problem concerns the period during which the measurement of liquidity is being performed. In practice, it is performed from a retrospective point of view, when assessing whether the company was or is liquid, and from a perspective point of view when assessing whether the company will at some future time period be liquid. The second problem is the interpretation of term "have available" some resources. In this case, availability is a relative term because cash on hand and in bank accounts can be used to pay obligations at any time, but the conversion of inventories, receivables and term deposit of money to cash may take some time. The third problem is connected with the term of maturity of obligations. The obligations are payable always on a certain date which is determined by contract terms or legal regulations, and the company has to have enough cash ready to pay this date. Given the above facts, the liquidity analysis should focus not only on the structure of assets and financial resources, but also to analyze cash inflows and cash outflows.

PROCEDURE OF RETROSPECTIVE LIQUIDITY ANALYSIS

To make high-quality financial analysis, which includes analysis of liquidity, it is necessary to use an appropriate methodology and model

apparatus. It is necessary to use approaches and methods to facilitate the analyst to track defined targets in terms of realized analysis. One of the possible approaches of retrospective liquidity analysis is presented in the following steps.

1. Liquidity analysis by means of balance sheet items

a) *Vertical balance sheet analysis.*

The aim is to determine the proportional relationship between selected balance sheet items on both, the assets and liabilities side to total assets value. On the assets side, individual components of assets according to their ability to convert into cash are distinguished and evaluated, i.e. according to their liquidity during the reported period. Respective items of assets are classified in the balance sheet from least liquid to most liquid. For the company the overview of assets by its liquidity has only informative character. In the event of bottlenecks in liquidity it is necessary the less liquid assets to sort on assets necessary and unnecessary, and assets for sale and lease, by which we get a quantitative overview of the amount, that can help to improve liquidity. On the liabilities sides the relationship between external and own resources is important. The fact is that the growth of external resources directly affects the liquidity, because it signals the need to create more resources for their repayment in the future. When solving bottlenecks in liquidity, it is useful to split liabilities to liabilities at which it is possible to prolong their maturity, and liabilities at which it is not possible. Such breakdown of liabilities can be realized only if the company is thoroughly familiar with its suppliers [1].

b) *Calculation of liquidity indicators by means of state variables.*

The aim is to quantify the liquidity indicators differentially (e.g. Net working capital), proportional (e.g. Cash ratio, Quick ratio and Current ratio), and so called "atypical" (e.g. Insolvency indicator, Indicators of turnaround of asset components, etc.) for assessed time periods.

Information about the time of the conversion of individual asset components into cash is appropriate to supplement with indicators of turnover (e.g., Inventory turnover, Short-term receivables collection period, etc.).

2. Liquidity analysis by means of cash flow items

a) *Cash flow analysis.*

The aim is to quantify consequences of past decisions on cash flow. Cash flow statement is a tool to identify factors affecting overall corporate

liquidity. These factors fall within areas of operation, investing and financing. The key factors in the operation area are profit and net working capital. Profitability of the company, particularly in terms of profit from operation means, that the company is able to produce revenues that are higher than their costs and it is favourably reflected in the payment balance of the company. The basic factor in the investment area (the area of long-term liquidity) is effective investments in long-term assets of the company, which have a direct impact on the success of products in the market and the reasonable cost of production and capital. In financial activities in practise two groups of factors are known affecting liquidity, namely a measure of long-term debt and issue of utilization of profit.

b) The calculation of liquidity ratios using cash flow.

The construction of proportional indicators based on cash flow is very similar to profitability indicators. The difference is that instead of profit (or adjusted profit) cash flow is used and specifically for the following indicators cash flow from operating activities (e.g. Cash flow from operation to sales of products, Cash flow from operation to own capital, Cash flow from operation to external capital, Liquidity from cash flow from operation etc.). The purpose of these indicators is to express the financial potential of the company, i.e. ability from its own operating activities to create a surplus to finance the company's investment and financial needs.

3. Comparison of indicators

a) Comparison of indicators in time.

The aim is to identify development of indicators, which is monitored by an absolute increase/decrease and rate of increase/decrease of the monitored indicator. Calculated values of individual indicators are useful to demonstrate with a suitably chosen chart (column, bar, etc.).

b) Comparison of indicators with average values in the industry.

The aim is to identify strengths and weaknesses in the field of liquidity of the analysed company compared with the situation in the sector in which the company operates. We utilize median financial ratios for industry allocated by SK NACE. It is advisable to display the benchmarking results using a spider graph. To be able to compare the graphs for the analysed period, the values of indicators are expressed as a percentage. One hundred percent represents the mean value of the financial indicator of the industry sector. The value of the analysed indicator of the company is expressed depending on whether it is an indicator of maximum (the higher value of the indicator reflects the improved financial position of the company) or an indicator of minimum (the lower value of the

indicator reflects the improved financial position of the company) [2]. Thus, expressed values of compared indicators shown in spider graph for the analysed year will show in which evaluated indicators the company is better compared to the industry sector (value higher than one hundred percent), or worse (values below one hundred percent).

4. Proposed measures

The aim is to propose measures leading to the desired level of liquidity in the company. Unsatisfactory liquidity or insolvency can be caused either by a company operation (primary insolvency) or as a result of insolvency of its business partners (secondary insolvency). In order to the company's achievement of the required level of liquidity, it may combine the implementation of the following measures: [4]

- Increase sales by changing assortment, price adjustments, improving the efficiency of its marketing mix. These measures apply long term and in short term they practically do not contribute to an increase in liquidity.
- Speed up the collection of receivables and to slow down the pace of payment of payables. If these measures are effective, they rapidly improve liquidity.
- Increase the amount of cash by sale of part of assets. This action is transparent and does not harm relations of the company with its business partners.
- Utilize external resources to increase equity by issuing bonds, issuing additional shares or by obtaining a bank loan. By these actions, the company takes on additional liabilities that will have to repay in the future.

Part of the above mentioned steps of liquidity analysis is always a formal and logical control of data and results, interpretation of results and graphical data and results processing in form of tables and graphs.

CONCLUSION

Based on practical experience, it can be concluded that measurement of liquidity using balance sheet items has both, its advantages and disadvantages. The advantages are simple and quick calculation of liquidity indicators, which results from the fact that the input data (respective balance sheet items) are in companies known at any time of their economic development. The disadvantage is that the focus of these liquidity indicators is only at the field of Net working capital, i.e. the area of current assets and current liabilities. In practise, the financial management of companies is much more complex and therefore it is necessary to supplement the analysis of Net working capital with cash flow analysis. Especially, the cash flow statement allows

evaluating not only the current balance of cash and its change, but also revenue, expenditure and their structure, which gives a complete view of liquidity and financial management of the company in general. For management purposes of the company, cash flow represents in quantitative form effects of past management decisions on cash flow. For internal financial management purposes cash flow statement reflects the fact, whether cash flow from operating activities were sufficient for financing of investment needs, or from which sources were the investment activities financed. For external users cash flow statement provides an overview to obtain information about the company's ability to generate positive future cash flow, the ability of the company to pay its obligations, the ability of the company to pay dividends and other forms of profit sharing, and the needs of the company in terms of external financing.

References

- [1] Alexy, J.: Finančná a ekonomická analýza. Bratislava: IRIS, 2005. 121 s. ISBN 80-89018-90-4.
- [2] Janeková, J., Valigurová, T.: Analýza likvidity pomocou stavových veličín. In: Znalosti pro tržní praxi: Nová generace pracovníků (Generace Y): sborník z mezinárodní vědecké konference: 24. - 25. listopadu 2011, Olomouc, ČR, 2011 p. 1-10. ISBN 978-80-87533-02-4.
- [3] Kotulič, R., Király, P., Rajčániová, M.: Finančná analýza podniku. Bratislava: Iura Edition, 2010. 238 s. ISBN 978-80-8078-342-6.
- [4] Landa, M.: Finanční plánování a likvidita. Brno: COMPUTER PRESS, 2007. 180 s. ISBN 978-80-251-1492-6.
- [5] Zalai, K. et al.: Finančno-ekonomická analýza podniku. 4. vyd. Bratislava: Sprint vfra, 2002, 305 s. ISBN 80-88848-94-6.

This contribution is the result of the grant project VEGA č. 1/0669/13 Proactive crises management of industrial enterprises based on the controlling concept.