

## **ASSESSMENT AND MANAGEMENT OF ENTERPRISE LIQUIDITY IN CONDITIONS OF CRISIS**

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### **ABSTRACT**

In conditions of financial and economic crisis, management of the enterprise must react opportunely and adequate to the rapid changes taking place in the business environment. It is necessary to explore different financial indicators and thus to limit the negative effects of the crisis. This report is dedicated to one of the main indicators of the financial standing of enterprise - liquidity. The emphasis is on how the liquidity can be measured and what factors influence on its harm or benefit.

**Key words:** Management, crisis, liquidity, liquidity indicators, solvency.

### **ABSTRAKT**

V podmienkach finančnej a hospodárskej krízy musí vedenie podniku vhodne a primerane reagovať na náhle zmeny, ktoré sa dejú v podnikateľskom prostredí. Je potrebné zaoberať sa finančnými ukazovateľmi, a tým prispieť k obmedzeniu negatívnych dopadov krízy. Tento príspevok je venovaný jednému z hlavných ukazovateľov finančnej situácie podniku - likvidite. Dôraz je kladený na to ako môže byť likvidita meraná a aké faktory majú vplyv na jej vývoj.

**Kľúčové slová:** Manažment, kríza, likvidita, ukazovatele likvidity, solventnosť.

## **1 INTRODUCTION**

Occurred in recent years financial and economic crisis put enterprises in Bulgaria in a unpredictable and difficult controllable environment. Increasingly broad range of issues associated with the correct measurement of the ability of businesses to cover its current liabilities is becoming more important. In this regard, in order to limit the negative effects of the crisis on economic activity of the enterprise, as well as to identify risks and opportunities it is necessary to continuously monitor its financial condition. It is imperative to explore different financial indicators. The information

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they would provide to the enterprise management the opportunity to react in order to adapt to changes in the environment. Ultimately, this will help achieve the planned objectives.

In actual practice, it is possible for an enterprise in the past to accumulate certain capital obtaining positive financial results. In case that the enterprise does not have highly liquid assets and cash it may become insolvent, hence function in state of financial difficulty. In such a situation, it is likely the enterprise future to be decided by external factors, such as unsatisfied creditors or banks whose loan is not repaid. This could lead to enterprise bankruptcy, liquidation or involuntary reorganization.

This report presents a preventive measure to avoid such negative phenomena. One of the main indicators characterizing the enterprise financial position - liquidity is considered. The emphasis is on how we can measure the liquidity and solvency of company and what forces contribute to their detriment or benefit.

## **2 NATURE AND CHARACTERISTICS OF LIQUIDITY AND SOLVENCY**

In general terms, without going into details, liquidity is defined in paragraph 16 of the Framework of International Financial Reporting Standards: "Liquidity refers to the availability of funds in the near future, taking into account the financial commitments during this period" [1].

In the specialized literature, most authors state that liquidity is connected with the possession not only of monetary resources but other assets that will translate into money. Some authors (e.g. [2]) indicate that the liquidity of an undertaking means its ability to meet its current debt with cash and other highly liquid assets.

There are opinions according to which liquidity provides possibility of paying the bills and is also one of the indicators for bankruptcy [3]. These authors identify the liquidity as "current solvency."

There are authors who associate the liquidity with the availability of working capital in amount, theoretically sufficient to cover short-term obligations, even with violations of repayment terms stated in the agreements [4]. It is indicated that corporate liquidity is a conditional concept defining the potential ability of an enterprise to pay its obligations in the future.

Based on the views of different authors about liquidity, it can be concluded that the company's liquidity shows the enterprise potential to cover its current liabilities with its current assets. It could be said that this opportunity is theoretical in nature, since within the cycle of production and business, the probability of transformation of inventories and receivables into cash is influenced by external factors. Market, distribution channels and so on could be such factors. Such an Influence is present especially in time of crisis, when the access of products to the market is very restricted, and distribution channels require additional expenditure by the enterprise. In case of changing economic environment, a change of the degree of liquidity of current assets is normal to occur. It can be said that liquidity is one of the main prerequisites for ensuring the existence of enterprise.

Along with the concept of liquidity, there are two more concepts - beneath liquidity and above liquidity. The term beneath liquidity defines a state of very little

cash, where there are persistent difficulties in meeting the obligations of payments. The state of above liquidity is a condition within which the company has a greater availability of liquid resources. Both conditions are unwanted. In a state of under liquidity the company stability is threatened. It cannot meet its payments. In illiquidity state, the activity is not efficient. The optimal liquidity is situated between the two states, whereby the available means of payment are in amount by which all solvency requirements are met and there is no any unnecessary freezing of funds.

Sometimes in practice the concepts of "liquidity" and "solvency" are unified but between them there is a significant difference. It is possible that the balance sheet of a company shows good liquidity, but it actually is in a state of insolvency. The reason for this is that the assessed by data from the balance sheet liquidity indicates things in statics. It shows how high-liquid assets of the company cover its short-term debt at a certain date. Available current assets at the balance sheet date may be sufficient to arrange current liabilities, but the company is unable to discharge his obligations at maturity.

The solvency is determined for some time - a week, month, year, etc. It is an indicator of how the company is able to pay its financial obligations in the required time spans and amounts. To determine the solvency of a company, information is needed about monetary resources at the beginning of period, net cash flow during the period, and the amount of obligations that must or should have been paid during the period. Assessment of solvency is related to the calculation of the solvency level (SL), using the following formula:

$$SL = \frac{C_{bp} + NC_{dp}}{L_p}, \quad (1)$$

Where:

$C_{bp}$  - cash at beginning of period;

$NC_{dp}$  - net cash flow during the period;

$L_p$  - payable liabilities.

Net cash flow during the period could be computed as follows:

$$NC_{dp} = C_{in} - C_{out}, \quad (2)$$

where:

$C_{in}$  are cash inflows (receipts) and cash equivalents from operating, investing and financial activities during the period determined in accordance with the accounting legislation;

$C_{out}$  are outflows (payments) of cash and cash equivalents from operating, investing and financial activities for the period determined in accordance with the accounting legislation.

To be a company solvent, its level of solvency should be equal or greater than one. Solvency is particularly important for the company, because it creates conditions for continuous implementation of the action. Lack of solvency could lead to declaring company bankrupt and hence to liquidation.

From all said above it can be concluded that the two concepts "liquidity" and "solvency" are not identical. For example, liquidity indicators may indicate that the

financial situation is good, but this is possible not to be true because part of current assets may be illiquid or there are arrears.

### 3. INDICATORS FOR ASSESSMENT OF LIQUIDITY

The degree of liquidity is defined as the ability of assets to be converted into cash without significant loss of value. The money has the highest liquidity (index 1), government bonds are also with high liquidity, particularly in countries with developed market economies (index between 0.9 and 0.95), [5]. For Bulgaria it can be said that because of poorly developed capital market, the liquidity of securities is low in comparison with well-developed market securities in advanced economies.

The calculation of various liquidity ratios is performed in comparison of certain current assets to current liabilities of enterprise. The main liquidity indicators are:

- Ratio of current liquidity = Current assets / Current liabilities

This indicator compares assets that are expected to be converted into cash in the next 12 months with the obligations maturing during this period. The literature states that the value of this indicator is better to be on the order of 1 to 3. Indicator of current liquidity with high value is a good sign in terms of creditors. From company's perspective, however, this can mean a slow turnover of current assets. It is good when the indicator is above 1, since otherwise there would be a negative working capital (Working Capital = Current Assets - Current Liabilities), which is unusual for a company in good financial condition. The value of indicator is affected by the duration of technological cycle in the enterprise, its industry affiliation, stage of its life cycle, previous results. For example, total liquidity of 1.2 can be fully acceptable for companies dealing in FMCG. According to K. Uolsh rate coefficient of current liquidity in the pharmaceutical industry in the USA and the EU is 1.5, Japan - 2.1, trade sector - in the US - 1.1, EU and Japan - 0.9 [6].

- Quick liquidity ratio = Current Assets - Inventory / Current liabilities

Some authors call this indicator "litmus" or coefficient of excess liquidity. This indicator expresses the ratio between money, short-term receivables and short-term financial assets on the one hand and short-term liabilities on the other hand, i.e. it expresses the ratio of the most liquid part of current assets to current liabilities

The conventional value of this indicator is in the range of 0.5 to 1.00, which means that the high-liquid assets should cover from 50 to 100% of the current short-term liabilities

The reason for this rapid decrease of the value of high liquidity coefficient compared to the coefficient of current liquidity is that it eliminates the impact of inventories, which have a significant proportion of the amount of current assets. Thus, by the usage of this factor a clearer picture of the actual liquidity of company and its ability to repay its obligations is obtained.

These two indicators have the greatest weight and importance in regulating the relations between suppliers and customers, between creditors and debtors. But in terms of financial and economic crisis, this analytical tool is not as reliable. In such an economic environment there is an increase in the share of receivables, which practically makes them less liquid. In such a situation, it is more reasonable and

analytically justified to use the ratio of crisis liquidity which can be computed as follows:

- Ratio of crisis liquidity =  $\text{Current Assets-Receivables} / \text{Current Liabilities}$   
Interpretation of the ratio is in the direction of real opportunity for the enterprise to cover its current liabilities with available liquid assets. Empirical researches show that there is a correlation between the decrease of value of the ratio of crisis liquidity and decrease of sales revenues and profits. In other words, low ratio may indicate an imminent decline in revenues and profits.

## **4 LIQUIDITY MANAGEMENT IN TERMS OF CRISIS**

The most severe consequence of the liquidity crisis is related to insolvency. In that crisis, the enterprise is unable to meet the deadlines of indisputable obligations to counterparties, creditors and budget. In this regard, liquidity management aims to reduce or completely eliminate the risk of insolvency.

If indicators of liquidity of enterprise are getting worse, this means that management does not manage assets and liabilities effectively, which may lead to sell long-term assets, insolvency, and later to bankruptcy. Reduction of liquidity is essentially reduced profitability, increased losses, loss of control over the management of capital.

Liquidity management can be achieved by acting on the main elements of which it depends - inventories, receivables and payables.

In terms of inventory, there are two directions of impact:

Firstly - reduction of the period of their turnover through: increasing the productivity of labor; improving work organization; introduction of new techniques and technologies, etc.

Secondly - shortening of the period of turnover of inventories by: reduction in the average level of inventories; optimization of inventory supply and others.

As for the second part - the claims, the aim is also reducing the period of their turnover. This is achieved by: providing better conditions for payment from customers; as short as possible terms of payment contracts; incentives in the form of attractive discounts to customers paying off their debts on time; strict contracts that penalize customers in case of delay.

The third element which is influenced within the management of liquidity is the obligations. In this case, the objective is to increase the period of their turnover. There are several options that can be used: renegotiation of the old conditions, arrears, delayed wages, lying off workers, arrears on loans to the budget and so on.

## **5 CONCLUSION**

The operation of business organization is a continuous process of adaptation to the conditions of the external environment to maintain a balance between its internal characteristics and those of the dynamically changing economic environment. The absence of such a balance poses risk of occurrence of various types of crises - organizational, industrial and financial.

Through a set of financial ratios, the management of company is able to monitor and manage the overall state of the business at any time. In this connection, it could be claimed that the major financial ratios are those of liquidity (Liquidity Ratios).

Because they provide information about the company's ability to meet its short-term obligations, financial liquidity ratios focus on current assets and current liabilities, indicating whether and how many of company's assets are liquid, i.e. they can be converted into cash without difficulty. This is one of the reasons because of which these ratios are of particular interest to representatives of banks and other short-term creditors.

Not unreasonable to argue that one of the main uses of financial liquidity ratios is to hold the attention of managers focused on the relationship between current assets and current liabilities. In this regard it could be argued that it is imperative that managers have to strive to continuously improve the management of liquidity in the enterprise as a major and vital financial indicator in the context of financial and economic crisis.

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