

## **ANTI-CRISIS BUSINESS MANAGEMENT BY ANALYSIS AND ASSESSMEN OF ITS FINANCIAL SUSTAINABILITY**

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### **ABSTRAKT**

V čase celosvetovej hospodárskej a finančnej krízy, je ekonomika každej krajiny nestabilná. To sa týka najmä ekonomiky Bulharska, ktorého prechod k trhovu orientovanej štruktúre nie je stále dokončený. V takýchto situáciách nestability a neistoty, spoločnosti pracujú ťažšie a ešte ťažšie je plánovanie ich budúcnosti. Za takých okolností, sa finančné riziko pre podnikanie výrazne zvyšuje. Posúdenie finančnej stability je jedným z aspektov celkového anti-krízového riadenia. V tomto ohľade je dôležité, aby manažéri predvídali mieru finančnej stability, s prihliadnutím na príslušné ekonomické ukazovatele a kľúčové podmienky.

Tento článok skúma význam a používania niektorých indexov a kľúčových finančných ukazovateľov pre posúdenie finančnej stability spoločnosti.

### **Kľúčové slová:**

Finančné riziko, finančná stabilita, manažment, kríza, ukazovatele analýzy - absolútne a relatívne

### **ABSTRACT**

At a time of global economic and financial crisis, the economy of every country is unstable. This refers even more to the economy of Bulgaria, whose transition to market-oriented structure is still not finished. In such situations of instability and uncertainty, companies work harder and much harder plan their future. In such circumstances, the financial risk to the business increases dramatically. The assessment of financial stability is one aspect of the overall anti-crisis management. In this regard, it is essential managers to predict degree of financial stability, taking into account relevant economic indicators and key conditions.

The present article examines the importance and application of some indices and key financial ratios to assess the financial stability of company.

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**Key words:**

Financial risk, financial stability, management, crisis, indicators analysis – absolute and relative

## 1. INTRODUCTION

The current global economic and financial crisis creates highly unstable and uncertain environment in which companies operate. In such an economic situation of turbulence, companies operate harder and even harder plan their future ahead.

The implementation of company's economic activity is a continuous process of adaptation to the conditions of the external environment, which aims to achieve a balance between company's internal characteristics and those of the dynamically changing environment. The lack of such a balance gives rise organizational, production and financial crises in the company. Basic peculiarity of a company working in harmony with the external environment is its economic sustainability. Economic sustainability expresses the state of economic system within the market conditions and is a kind of guarantee for purposeful movement, both now and in the foreseeable future. As a key condition for company's development, the economic sustainability manifests in several directions – production, organizational, financial and marketing, environmental, and social sustainability.

Analysis and assessment of financial sustainability is one of the aspects of anti-crisis management of business. In this connection, continuous managers' monitoring and prediction of the level of financial sustainability (taking into account relevant economic indicators and key ratios) are of great importance.

The purpose of present article is to present the theoretical and practical aspects for analysis of company's financial sustainability.

## 2. CHARACTERISTICS OF FINANCIAL SUSTAINABILITY

In order to secure effective and non risky management, managers should be granted objective and authentic economic information regarding company's business. The financial sustainability is proven to be the most appropriate and precise measure to determine company's ability to operate within turbulent business environment. It is concretized as a complex indicator to assess quality of business organization.

The concept financial sustainability is defined by many economists and as a consequence of that there are a variety of points of view about its essence. Some accents are connected with working capital of company, others with its liabilities, or with monetary instruments. The reason for that is that the financial sustainability is subject of interest for lots of subjects – owners, potential investors, suppliers, etc. Of course, there is something common between distinct notions for the meaning of this concept – its acceptance as an element of the economic sustainability of company and as a necessary condition for successful development. The low level of financial sustainability is a condition for occurrence of financial risk. The occurrence of this risk can be provoked by utilization of attracted capitals to company's activity. It is

expressed by the probability of company's falling into insolvency and eventual bankruptcy due to impossibility to pay off debts at given moment or in close future.

To make an accurate assessment of financial stability, it is imperative to outline its tangent points with the financial situation. On the question about connections between these two concepts, there are lots of contradictory opinions in economic literature.

According to some authors [1], financial sustainability is a wider concept compared to financial situation. Other economists [2], [3], [4] have contrary view on this issue. According to them, financial sustainability is an element of financial situation. In other words, financial situation is a wider concept than financial sustainability. In this sense, financial situation can be determined into two aspects – its external manifestation as company's solvency and its internal manifestation as financial sustainability. The last one expresses the balance of monetary and commodity flows, incomes and outcomes, resources and sources of their formation.

For the purpose of the present paper, the financial sustainability is considered as a part of company's financial situation.

### **3. INDICATORS FOR ANALYSIS OF THE FINANCIAL SUSTAINABILITY**

As already mentioned, the level of financial stability determines the presence or absence of financial risk. When a company operates in a business environment, characterized by the presence of the economic and financial crisis, then the financial risk increases significantly. Similar facts now require managers to continuously explore and predict the degree of financial stability.

Examination of financial sustainability can be achieved by two types of indicators - *absolute and relative*. The main source of information for both indicators is balance sheet (statement of financial situation within the terminology of international standards).

*Absolute indicators* are also known as *conditions for financial stability*. These conditions are as follows:

#### **1. $E > 0$**

The first condition requires that the company's capital equity ( $E$ ) must be a positive magnitude. Sometimes there may be companies with negative capital equity. This means that the accumulated losses of the business exceed the value of reserves and fixed capital. In this case, the financial obligations of the company are higher than the carrying amount, and often than the market value of its assets.

#### **2. $E > TL$**

The second condition requires that the capital equity must exceed the value of Total Liabilities (Total liabilities ( $TL$ ) do not include grants and unearned finance income). This condition refers to the capital structure of company. Financing activities with loan capital increased financial risk. The presence of financial risk within

acceptable borders, the capital equity should exceed borrowed capital. This is not always necessary and depends on the type of business.

### 3. $E + NCL > NCA$

According to this condition, the sum of capital equity and Non-current liabilities ( $NCL$ ) must be greater than the value of Non-current Assets ( $NCA$ ). It is reasonable when fixed assets are financed with long-term financial sources, such as capital equity and long-term liabilities. If Non-current Assets are financed by current liabilities, a problem with the solvency of company may arise, because the Non-current Assets are slowly liquid assets.

### 4. $NWC > 0$

This condition prescribes the need net working capital ( $NWC$ ), which is the subtraction between current assets ( $CA$ ) and current liabilities ( $CL$ ), to be positive magnitude. In practice this means that a part of current assets are financed with long-term capital - own and borrowed. If net working capital is negative, this indicates that the working capital of company is financed by current liabilities. Such a situation gives rise to some issues with the solvency of company, e.g. arrears to suppliers, banks, employees, etc.

### 5. $NWC > I$

This condition requires that the net working capital must exceed the value of inventories ( $I$ ). Given that the condition is not met, the logical conclusion is that some *inventories* are financed by interest-free current liabilities to suppliers, employees and others. This is a sign of financial troubles, i.e. shortage of circulating means to finance the business.

Given the discussed conditions for financial stability and the level of their implementation there are several degrees of financial sustainability:

- ☞ *Absolute financial sustainability* - all conditions are met;
- ☞ *Normal financial sustainability* - the second or fifth conditions are not met;
- ☞ *Unstable financial status* – the second and fifth conditions are not met or the third, fourth and fifth conditions are not met;
- ☞ *Crisis financial status* – only first condition is met.

**Example:** Table 1 presents data from the balance sheets of company "ABC" for a period of four years. Based on these data, let us analyze the absolute indicators and determine the type of financial sustainability.

Analysis of indicators by years:

↳ For 2009 year

- The first condition is met –  $E > 0$  ( $61\ 000 > 0$ )
- The second condition is met –  $E > TL$  ( $61\ 000 > 37646$ )
- The third condition is met –  $E + NCL > NCA$  ( $61000+26995=87995>55079$ )
- The fourth condition is met –  $NWC > 0$  ( $43567-10651=32916 > 0$ )
- The fifth condition is met –  $NWC > I$  ( $32916 > 9087$ )

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**Table 1: Balance of "ABC"**

№	Assets and Liabilities	2009	2010	2011	2012
1	Non-current assets	55 079	49893	58412	56947
2	Current assets, including	43567	44512	54609	55196
	Inventories	9087	21005	20997	24836
	<b>Total assets</b>	<b>98 646</b>	<b>94 405</b>	<b>113 021</b>	<b>112 143</b>
3	Equity	61000	59324	55964	55057
4	Non-current liabilities	26995	10403	24601	23975
5	Current liabilities	10651	24678	32456	33111
	<b>Total liabilities</b>	<b>98 646</b>	<b>94 405</b>	<b>113 021</b>	<b>112 143</b>

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- The second condition is met –  $E > TL$  ( $61\ 000 > 37646$ )
- The third condition is met –  $E + NCL > NCA$  ( $61000 + 26995 = 87995 > 55079$ )
- The fourth condition is met –  $NWC > 0$  ( $43567 - 10651 = 32916 > 0$ )
- The fifth condition is met –  $NWC > I$  ( $32916 > 9087$ )

The analysis can be summarized that the financial sustainability of company in 2009 is absolute type - all conditions are met.

↳ For 2010 year

- The first condition is met –  $E > 0$  ( $59324 > 0$ )
- The second condition is met –  $E > TL$  ( $59324 > 35081$ )
- The third condition is met –  $E + NCL > NCA$  ( $59324 + 10403 = 69727 > 49893$ )
- The fourth condition is met –  $NWC > 0$  ( $44512 - 24678 = 19834 > 0$ )
- *The fifth condition is not met* –  $NWC > I$  ( $19834 < 21005$ )

The analysis can be summarized that the financial sustainability of company in 2010 is normal type – only the fifth condition is not met

↳ For 2011 year

- The first condition is met –  $E > 0$  ( $55964 > 0$ )
- *The second condition is not met* –  $E > TL$  ( $55964 < 57057$ )
- The third condition is met –  $E + NCL > NCA$  ( $55964 + 24601 = 80565 > 58412$ )
- The fourth condition is met –  $NWC > 0$  ( $54609 - 32456 = 22153 > 9087$ )
- The fifth condition is met –  $NWC > I$  ( $22153 > 20997$ )

On the basis of analysis for 2011 year, it can be seen that only the second condition is not met. The financial sustainability is normal.

↳ For 2012 year

- The first condition is met –  $E > 0$  ( $55057 > 0$ )
- *The second condition is not met* –  $E > TL$  ( $55057 < 57086$ )
- The third condition is met –  $E + NCL > NCA$  ( $55057 + 23975 = 79032 > 56947$ )
- The fourth condition is met –  $NWC > 0$  ( $55196 - 33111 = 22085 > 0$ )
- *The fifth condition is not met* –  $NWC > I$  ( $22085 < 24836$ )

Analysis by absolute indicators for 2012 year shows that the second and fifth conditions are not met. Practically, this means that there is an unstable financial situation.

**Relative indicators** for analysis of financial sustainability are more popular even with the name of *key financial ratios* (coefficients). They help to summarize a remarkable amount of information, but also serve as a cross-company comparison. In combination with absolute indicators, they contribute to refine the analysis of financial sustainability. Some of these indicators are:

1. *Equity Ratio* -  $ER = \frac{E}{TA}$

The coefficient is calculated as a ratio of capital equity and the value of all assets ( $TA$ ), which the company owns. It shows the share of capital owners in the company and its independence on external creditors. The recommended value of the coefficient is 0.5. The reciprocal value of this coefficient is known as coefficient of gearing. Applied to the data of the example above, the values of the coefficient by years are as follows:

- For 2009 year –0,62; For 2010 year –0,63; For 2011 year –0,50; For 2012 year –0,49.

It is obvious, that for all years this indicator is within the recommended values. It can be concluded that the company is independent on external creditors for the whole period.

2. *Financial Leverage Ratio* -  $LR = \frac{TL}{E}$

This indicator expresses the ratio between company's debt and capital equity. In practice, the recommended value of this indicator is 0.5. For more debt the size of the net profit is less, as a result of interest expenses. With an increase of the indicator, the dependence on the creditors also increases, suggesting greater financial risks. The values of coefficient about the examples are:

- For 2009 year –0,62; For 2010 year –0,59; For 2011 year –1,02; For 2012 year –1,04.

Based on these values, the next summary follows:

In 2009 year and 2010 year, the value of the financial leverage ratio is well below one, indicating a weak dependence on the creditors. Over the next two years of the period, this ratio is slightly more than one (borrowed capital exceeds capital equity, although

slightly). In general, it may be concluded that the company is not dependent on external creditors for the whole period.

$$3. \text{ Working Capital to Current Assets Ratio - } WCAR = \frac{NWC}{CA}$$

This ratio shows what portion of current assets is financed by long-term capital sources. The value of coefficient is recommended to be within the range from 0.1 to 0.5. If the ratio is greater than 0.1 then the company has enough capital equity. The values of coefficient calculated on the basis of sample data are:

- For 2009 year –0,76; For 2010 year –0,45; For 2011 year –0,41; For 2012 year –0,40.

The data show a high value of coefficient in 2009 year and value within the recommended borders for the remaining three years. In 2009, the largest part of current assets is financed by long-term capital sources.

$$4. \text{ Investment Ratio - } IR = \frac{E + NCL}{TA}$$

This is an indicator that expresses the proportion of assets financed by long-term capital sources (fixed capital). Its acceptable value moves within the range  $0.5 \div 0.7$ . This means that it is good when the fixed assets are fully financed with fixed capital. The coefficient has the following values (calculated with sample data):

- For 2009 year –0,89; For 2010 year –0,74; For 2011 year –0,71; For 2012 year –0,70.

Only in 2009 year the company's assets are almost entirely financed with fixed capital. In general, the situation for the remaining three years is that two thirds of all assets are financed by fixed capital, i.e. it is within the acceptable range.

$$5. \text{ Current Assets Liquidity Ratio - } CALR = \frac{Cash}{CA}$$

The coefficient shows the relative proportion of the most liquid asset (cash) in the mass of current assets. The higher values of this indicator show greater financial stability - less financial risk in short term. It is good that indicator to be calculated on the basis of average values of cash and current assets.

## CONCLUSION

The presented indicators (without claiming that all possible are covered) for analysis and assessment of the financial sustainability of a company as a whole are appropriate tools for the implementation of such activities. The implementation of such an analysis is necessary especially in periods of global economic and financial crisis. Typical of these periods is the overall sales decline. As a result, the positive cash flows are shrinking; payments are delaying, intercompany indebtedness is increasing. Most companies suffer huge losses and are facing with real danger of bankruptcy.

In such circumstances, managers must constantly monitor and predict the level of financial sustainability. This allows taking timely actions to prevent undesirable consequences. The anti-crisis management involves implementing a number of measures, some of which can be:

- identification of reserves to reduce the price of products or services;
- sale of unused assets;
- closure of unprofitable activities;

- updating of marketing, advertising and pricing company's policy to increase sales;
- optimization of staff number and others.

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Článok recenzovali dvaja nezávislí recenzenti.