

COMPANY'S STANDARDS FOR FINANCIAL SOUNDNESS INDICATORS

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Abstract. The article deals with the problems of defining of company's standards for indicators of financial soundness. The authors have implemented the theoretical analysis of literature and applied analysis of secondary data, purposely requested from Central Statistical Bureau of Latvia. Research methodology is based on the statement that long-term capital should be responsible for company's low liquid assets. On this basis amount of 1) current assets which should be financed by short term capital and 2) owner equity can be expressed in terms of balance sheet items. The authors make comparative quantitative analysis of actual and sufficient ratios for financial soundness indicators. The results of research will enable companies to control the financial soundness and manage capital.

Keywords: financial soundness, sufficient value, sufficient level, owner equity, net working capital.

1. Introduction

After rapid economic growth lasting for several years, economy of Latvia has gone into recession. During the period 2005–2007 the GDP grew annually by an average of 10.9 %, including the 2007th year – by 10.0 %. In 2008 GDP volume decreased by 4.6 %. In the first half of 2009 economic recession continued. GDP volume in the 1 quarter of 2009 was less by 18.0 %, and in the 2 quarter – less by 18.7 % than a year ago (Ministry... 2009).

Liabilities of Latvian companies grew 30 % on average, in the period 2005 to 2007, indicating potential threats of economical overheating and instability (Central... 2009). Rapid influx of investments and easy access to loans encouraged both individuals and enterprises to live on borrowed funds. People became light-minded and too optimistic.

Already in 2008, when economic decrease began, all indices in macroeconomics indicated a very rapid drop in purchasing power which affected the financial situation of enterprises, as well as national budget and undoubtedly to quality of credit portfolios of commercial banks. In the second half of year 2008, the percentage of overdue credits have increased from 11 % to 23.5 % from total credit portfolios of commercial banks, which is an increase of more than two times in a year, this indicated how many borrowers have financial problems.

As the result of financial crisis, not only commercial banks suffer, individuals and enterprises have decrease of their incomes. In addition to decrease of income, enterprises have shortage in liquidity that leads to increase of account receivables.

Working during the period of economical development, entrepreneurs were too focused on making investments, increasing their market shares, boosting inventories etc.; they did it by taking high risk, by not paying enough attention to risk analysis. Engaging in long-term liabilities, the economic justification in long-term was not evaluated thoroughly.

Decrease in turnover and increase of account receivables leads to a sharp decrease of enterprises' financial stability, resulting in a large number of insolvent companies.

The aim of the article is to define company's standards for indicators of financial soundness (paying attention to financial autonomy and liquidity), investigate the impact of size of the enterprise on the degree of the financial autonomy and liquidity of a company in a specific branch, as well as to take into consideration the impact of specific characteristics of the branch on this parameter. The results of research will enable companies to control the financial soundness and manage capital.

2. Defining the Financial Soundness of a Company

Gaining of financial soundness (or stability; authors use these words as synonyms) is of great significance for the development of any company and especially for small business. In the course of operating, investing and financing activities continuous process of circulation of capital is taking place, as well structure of assets and sources of financing, availability and requirement of financial resources are changing, leading to changes in the financial situation of a company.

The financial situation may be classified as stable, unstable and critical. The capability of a company to settle payments timely, to finance its operation on an enlarged scale, to withstand contingencies testify about its sound financial situation and on the contrary, violation of payment terms, development of a company increasing accounts payable and other facts testify about unstable and even critical state. Speaking about a sound financial situation of a company, the analysts first of all think about the solvency. Most part of analysts considers that current solvency is an external factor of the financial condition of a company while financial stability as solvency in a long-term perspective is an internal factor of its financial condition.

Stable financial condition is gained with a sufficient level of owner equity, good quality assets, sufficient level of return on assets and also liquidity, stable income and wide possibilities of attracting debt capital. To a great extent financial stability depends on the structure of financial sources and structure of assets of the enterprise, particularly depending on the balance of long-term and short-term assets.

Financing of the assets of a company at the expense of any part of the capital (own and debt capital) has its advantages and disadvantages. For example, in case the company makes use only of its own capital it reaches the highest degree of financial stability, but in this case the possibilities for the development and rate of return on assets are limited. If debt financing is mainly used the financial potential increases and the possibilities of return on equity increase too, but at the same time the level of financial stability dramatically decreases.

Quite a great number of coefficients exist intended for characterizing the financial soundness of a company (Bernstein, Wild 2000; Central ... 2005; Ross *et al.* 2005; Brealey *et al.* 2007; Савицкая 2005, etc). However, many of them are derivatives of each other, thus not providing additional information for management.

In practice of financial analysis theoretical reference points are often applied for the estimation of sufficiency of financial indicators. For example, the reference point for financial autonomy coefficient (determined by the formula: Financial autonomy coefficient = owner equity / total assets) is 0.5. Though it should be taken into consideration, that the analysts note that these reference points are approximations and can't be identical to different branches and enterprises. The share of owner equity in formation of assets of a company depends on the branch features of

the company. In those branches where the capital turnover is slow and the part of fixed capital is high, the financial autonomy coefficient has to be higher than in the branches where the turnover of the capital is high and part of the fixed capital is comparatively low.

For determining normative value of the financial autonomy coefficient for enterprises with a seasonal character of manufacture Савицкая (2005) suggests to consider the actual structure of assets and standard approaches to their financing. To this purpose current assets are divided into fixed and variable parts. The fixed part of current assets is the minimum required for maintaining the operation of the enterprise and its value does not depend on the seasonal fluctuations of the production volumes and sales. The variable part of the current assets is subject to the fluctuations due to seasonal changes of production volumes. The approaches used by Савицкая (2005) in financing of current assets of an enterprise are presented in Table 1.

Table 1. Approaches to Financing Assets of an Enterprise

Type of assets	Approaches to financing		
	aggressive	moderated	conservative
1. Long-term assets	40 % – LTL 60 % - OE	20 % – LTL 80 % – OE	10 % –LTL 90 % –OE
2. Fixed part of current assets	50 % – LTL 50 % – OE	25 % – LTL 75 % – OE	100 % – OE
3. Variable part of current assets	100 %–STL	100 % STL	50 % – OE 50 % – STL

Note: LTL – long-term liabilities; OE – owner equity; STO – short-term liabilities;

Taking into consideration the information given in Table 1 it is recommended to determine the normative coefficient of autonomy as follows:

– applying aggressive financial policy:

$$a \times 0.6 + b \times 0.5;$$

– applying moderate financial policy:

$$a \times 0.8 + b \times 0.75;$$

– applying conservative financial policy:

$$a \times 0.9 + b \times 1.0 + c \times 0.5;$$

where,

a , b , c – share of assets at the end of the year: a – share of long-term assets; b – share of fixed part of current assets; c – share of variable part of current assets;

$$a + b + c = 1.$$

The authors also pay attention to the concept of evaluation of financial stability suggested by Абрютина and Грачев (2004). This concept is

based on the division of assets of an enterprise into financial and non-financial assets. In its turn, the financial assets are divided into mobile and non-mobile assets. Mobile financial assets are highly liquid financial assets: cash and easily convertible short-term financial assets. Non-mobile assets comprise long-term assets, all kinds of accounts receivable and quick deposits. Non-financial assets are divided into long-term non-financial assets (including fixed assets, intangible assets, incomplete construction) and current non-financial assets (including inventories). Long-term non-financial assets and non-mobile financial assets together comprise non-mobile assets.

According to this concept financial balance and sound stability is reached, in case non-financial assets are financed at the expense of own capital, whereas financial assets at the expense of debt capital. The safety reserve increases to the extent of the excess of own capital over non-financial assets or the same is true of financial assets over debt capital. Opposite deviations from the indicators of balance towards the excess of non-financial assets over own capital indicate to loss of stability.

A number of variants of stability are pointed out taking into consideration the deviations leading away from the parameters of balance sheet (Table 2).

Table 2. Variants of Company's Stability (Абрютина, Грачев 2004)

<i>Characteristics of variants</i>	<i>Name</i>
1. Mobile financial assets exceed other liabilities	Super stability (absolute solvency)
2. Mobile financial assets are less than all the other liabilities, but the amount of all financial assets is bigger than all the other liabilities	Sufficient stability (solvency guaranteed)
3. Owner equity is equal to non-financial assets, but financial assets are equal to all liabilities	Financial balance (solvency guaranteed)
4. Owner equity is more than long-term financial assets, but less than all the amount of non-financial assets	Admissible financial strain (potential solvency)
5. Owner equity is less than long-term non-financial assets	Risk zone (loss of solvency)

Summing it all up we may come to conclusion that there exist different approaches when evaluating the degree of financial soundness (stability), but the classification and structure of assets as well as financial policy of an enterprise are the most essential factors for its evaluating.

3. Research methodology

3.1. Defining the company's standards for financial soundness indicators

The research includes not only calculations of the actual level of financial autonomy and liquidity by different groups of enterprises, but also the sufficient level of the coefficients to achieve the financial balance and sustained financing of enterprises. The logic of identifying the sufficient level of indicators consists in the following. For providing sound financial stability long-term capital of the company should not be less than the sum of low liquid assets. Taking into consideration the information available about the structure and value of assets of enterprises of different branches, long-term assets and inventories could be referred to as the low liquid assets.

In this case the sufficient value of owner equity is identified according to the equation 1 given below:

$$\begin{aligned} \text{Sufficient value of owner equity} = \\ \text{Long-term assets} + \text{Inventories} - \\ \text{Provisions} - \text{Long-term liabilities} \end{aligned} \quad (1)$$

In this case it is considered that to gain financial balance the low liquid assets have to, by all means, be financed at the expense of owner equity and long-term liabilities. Pursuant to „Law on annual reports” the equity and liabilities include provisions that at the same time are liabilities being classified as liabilities of uncertain timing or amount. Their share in the liabilities of the presented branches in 2007 ranged from 0.38 % to 2.42 %, whereas the higher shares are characteristic for big enterprises, but for small enterprises of all branches is less than 1.

For building the equation 1 the method of calculating was used described in (АЛТ-ИНВЕСТ 2005). However, in our opinion it is necessary to reduce the sufficient value of owner equity by sum of provisions and long-term liabilities that is not taken into consideration in the method mentioned in (АЛТ-ИНВЕСТ 2005). The authors included all inventories into the structure of low liquid current assets, not only the production inventories and incomplete production since the object of the research is focused on all branches of national economy, namely, production and service industries.

The sufficient level of the coefficient of financial autonomy is calculated by the equation 2:

$$\begin{aligned} \text{Sufficient level of owner equity} \\ \text{to total assets ratio} = \text{Sufficient} \\ \text{value of owner equity} / \text{Total assets} \end{aligned} \quad (2)$$

In that case sufficient short-term liabilities should be expressed by the equation 3:

$$\text{Sufficient short-term liabilities} = \text{Current assets} - \text{low liquid assets} \quad (3)$$

And sufficient level of company's liquidity (current ratio) can be calculated as following:

$$\text{Sufficient level of liquidity} = \frac{\text{Current assets}}{\text{Sufficient short-term liabilities}} \quad (4)$$

Comparing actual and sufficient value of analysed indicators of financial soundness, it is possible to approve, that both excess, and decrease of actual values against sufficient value has certain negative consequences. Thus, the growth of financial stability at the expense of the growth of owner equity should not take place uncontrolled because due to the growth of the share of owner equity its profitability may decrease, i.e., profit per unit of owner equity decreases.

Concerning liquidity two situations are possible: 1) actual values do not reach a sufficient value then the enterprises should pay attention on ability to cover short-term liabilities; 2) actual values considerably exceed a sufficient value, it testifies to inefficient use of means, freezing means in in-ventures or granting a loan to buyers. In this case use of term "sufficient" is correct.

In relation to liabilities and to the net working capital, authors apply the term "permissible". Using above mentioned substantiation of sufficiency of owner equity, the permissible external capital and minimally permissible net working capital are defined using formulas:

$$\text{Permissible value of liabilities} = \text{Total assets (actual)} - \text{low liquid assets that should be financed at the expense of owner equity} \quad (5)$$

$$\text{Minimally permissible net working capital} = \text{low liquid current assets} \quad (6)$$

For the analysis of dynamics of financial stability the ratio of actual level of financial coefficient to sufficient should be calculated. For example, in case the actual value of autonomy coefficient decreases, but the ratio mentioned remains unchanged, the level of financial stability may be classified as sustaining. In case the actual level of autonomy coefficient and the ratio mentioned decreases, the level of financial stability also decreases.

3.2. Branches and Timing Scope of Research

Central Statistical Bureau of Latvia provides statistics on financial indicators for the branches of the whole national economy. Therefore Central

Statistical Bureau was requested by authors to prepare currently available data about assets and equity and liabilities of enterprises within branches, taking into account the number of employees: 1) from 1 to 49 employees; 2) from 50 to 249 employees; 3) 250 employees and more.

Six different branches (according to NACE classification), which in 2007 contributed 69.3 % in Gross Value Added, were chosen for analysis: 1) wholesale, retail trade; repair of motor vehicles, motorcycles, personal and household goods (G) – 20.3 %; 2) real estate, renting and business activities (K) – 15.8 %; 3) transport, storage and communication (I) – 10.8 %; 4) manufacturing (D) – 10.8 %; 5) construction (F) – 8.4 %; 6) agriculture, hunting and forestry (A) – 3.2 % (Ministry... 2008).

The choice of branches was substantiated by their contribution both in Gross Value Added as well as by the existence of enterprises of different sizes. The analysis covers the period from 2002 to 2007, which is the base for conclusions to current economic situation in Latvia.

4. Result of Research

The authors have analyzed financial soundness indicators by applying techniques mentioned in sub-chapter 3.1. Results have highlighted the certain tendencies which are formulated separately for current liquidity ratio and owner equity to total assets ratio.

Current liquidity ratio:

– In all branches, excepting branch 'G' (wholesale and other activities) the actual value of ratio increases with increase of the size of the enterprise. Especially this tendency is obvious to branch 'A' (agriculture, hunting and forestry) and 'D' (manufacturing).

– Above mentioned tendency is no relevant for sufficient value of ratio, excepting branch 'D' (manufacturing).

– For all branches, excepting 'G' (wholesale and other activities) the ratio of actual value to sufficient value of current liquidity of small enterprises is less, than that ratio for large companies. At the same time the level of liquidity for large companies exceeds necessary level for branches 'A' (agriculture, hunting and forestry), 'I' (transport, storage and communication) and 'K' (real estate and other activities). Authors consider that it is necessary to study more deeply kinds of low liquid assets for these branches.

– Considering the ratio of actual value to sufficient, the optimum level of the general liquidity, was observed for branch 'A' (agriculture, hunting

and forestry) - 94.5 %, minimal for branch 'G' (wholesale and other activities) – 67.2 % and excessive for branch 'I' (transport, storage and communication) – 106.3 %.

The results are shown in the Table 3.

Table 3. Average Value of Actual and Sufficient Current Liquidity Ratio According to Branches in 2002–2007

Indicators	Name of the branches according to NACE classification					
	A	D	F	G	I	K
<i>Small business: number of workers 0–49</i>						
Actual ratio	1.34	1.10	1.18	1.23	1.12	1.11
Sufficient ratio	1.84	1.54	1.44	1.88	1.10	1.23
Actual to sufficient ratio, %	72.8	71.4	81.9	65.4	101.8	90.2
<i>Middle sized business: number of workers 50–249</i>						
Actual ratio	1.90	1.27	1.17	1.22	1.00	1.42
Sufficient ratio	2.40	1.73	1.46	1.85	1.10	1.24
Actual to sufficient ratio, %	79.2	73.4	80.1	65.9	90.9	114.5
<i>Large companies: number of workers over 250</i>						
Actual ratio	2.73	1.52	1.25	1.07	1.34	1.46
Sufficient ratio	1.39	1.87	1.31	1.88	1.14	1.06
Actual to sufficient ratio, %	196.4	81.3	95.4	56.9	117.5	137.7
<i>Total by branch</i>						
Actual ratio	1.71	1.30	1.19	1.21	1.19	1.18
Sufficient ratio	1.81	1.72	1.42	1.80	1.12	1.40
Actual to sufficient ratio, %	94.5	75.6	83.8	67.2	106.3	84.3

The results in relation to owner equity to total assets ratio are shown in the Table 4.

The main tendencies are:

– The value of both actual and sufficient value of coefficients of financial autonomy increases with the size of the enterprises. Besides, for different branches the degree of increase may be quite different. So, for 'G' (wholesale and other activities) the sufficient value of the coefficient for a large enterprise in comparison with a small or medium-size enterprise on the average increases by 25 %, at the same time for 'I' (transport, storage and communication) – by 143 %.

– For small enterprises of all branches the actual value of coefficient of financial autonomy is less than sufficient value, besides the most financial instability occurs in such branches as 'G' (wholesale and other activities) and 'F' (construction), where the ratio of actual to sufficient value on the average constitutes 50 %.

– The ratio of the actual to sufficient value increases for both medium-sized and large enter-

prises in all branches. The exception is the branch 'G' (wholesale and other activities).

Table 4. Average Value of Actual and Sufficient Owner Equity to Total Assets Ratio According to Branches in 2002–2007

Indicators	Name of the branches according to NACE classification					
	A	D	F	G	I	K
<i>Small business: number of workers 0–49</i>						
Actual ratio	0.30	0.25	0.15	0.18	0.26	0.35
Sufficient ratio	0.38	0.38	0.30	0.36	0.28	0.37
Actual to sufficient ratio, %	78.9	65.8	50.0	50.0	92.9	94.6
<i>Middle sized business: number of workers 50–249</i>						
Actual ratio	0.54	0.37	0.31	0.25	0.43	0.59
Sufficient ratio	0.58	0.46	0.43	0.43	0.46	0.54
Actual to sufficient ratio, %	93.1	80.4	72.1	58.1	93.5	109.3
<i>Large companies: number of workers over 250</i>						
Actual ratio	0.70	0.55	0.39	0.22	0.71	0.69
Sufficient ratio	0.54	0.61	0.42	0.45	0.68	0.65
Actual to sufficient ratio, %	129.6	90.2	92.9	48.9	104.4	106.2
<i>Total by branch</i>						
Actual ratio	0.45	0.41	0.28	0.21	0.57	0.46
Sufficient ratio	0.47	0.50	0.38	0.39	0.55	0.46
Actual to sufficient ratio, %	95.7	82.0	73.7	53.8	103.6	100.0

– The excess level of coefficients of financial autonomy, but only for large enterprises of some branches, is also observed. So, in 'K' (real estate and other activities) the mean excess constitutes 7 %, but in 'A' (agriculture, hunting and forestry) – 29 %.

– In total, over the period under analysis, taking into account ratio of actual to sufficient indicator value, optimal level of long-terms solvency was provided by branch 'A' (agriculture, hunting and forestry) and branch 'K' (real estate and other activities), the worse – by branch 'G' (wholesale and other activities), excessive – by branch 'I' (transport, storage and communication).

The first results and some additional conclusions were presented by authors in 2008 (Lace, Sundukova 2008). The methodology offered by authors was additionally tested on: 1) 36 companies quoted on the Baltic stock exchanges; the time period was: August 2007 till February 2008 (Lace, Grigorjeva 2008); 2) 40 CEE companies and 30 companies quoted on the Baltic stock exchanges; the time period was: September 2007 - December 2008 (Lace, Bistrova 2009).

The companies with the sufficient equity capital tend to demonstrate higher performance in the

conditions of normal economic environment. However, during the times of abnormal equity market volatility and uncertain macroeconomic situation equity investors seek for a hedge and, therefore, favour more those companies, which have equity capital that exceeds necessary level to ensure that the company would not lack funds and would be able to develop further despite adverse market conditions.

5. Conclusions

To assess both current and long-term solvency companies have 1) to define amount of low liquid assets, 2) to compute sufficient value of current liquidity ratio and of autonomy coefficient, 3) to compare sufficient values of coefficients with actual.

For providing the sufficient level of current liquidity ratio it is necessary that growth of long-term assets and low liquid current assets would not be greater than the growth of long-term capital plus difference between actual and permissible value of net working capital of the previous year.

For providing the sufficient level of financial autonomy coefficient it is necessary to reach a condition when the growth of low liquid assets would not be greater than the growth of owner equity plus difference between the actual and permissible value of liabilities of the previous period.

The calculated values of sufficient level of current liquidity ratio and financial autonomy ratio at a level of branches of a national economy can be used by company's stakeholders, making decision on cooperation and estimating company's financial stability.

Value of the findings also is what they give the information separately on branches of national economy, and on the size of the company.

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