DE GRUYTER
OPEN

Przedsiębiorczość i Zarządzanie
(Entrepreneurship and Management)
University of Social Sciences Publishing House
ISSN 1733-2486
Volume XV, Issue 1, pp. 83–92
DOI 10.2478/eam-2014-0006

Łukasz Prysiniński
University of Social Sciences

Wiktor Kołysko
University of Social Sciences, Clark University

The use of accounting tools in the assessment of enterprise financing policy – debt and liquidity

Abstract: The article is devoted to the use of accounting tools in the assessment of financial policy of enterprises in the financial crisis. The purpose of the article was to show the impact of financial structure on the financial liquidity of chosen similar firms.

The study hypothesized that during financial crisis, a better financial position in terms of liquidity have firms, which limit the level of short – term liabilities in financing short – term assets. To verify the hypotheses, the analysis of documents (financial statements) and debt and liquidity ratios were used¹.

Key-words: accounting, debt, liquidity, financial crisis.

Introduction

This study is devoted to the use of accounting tools in the assessment of financial policy of companies operating in the economic downturn. Selecting the structure of financing the business carries significant consequences for financial strength, especially in times of crisis. The article focuses on the evaluation of selected approaches to financing, specifically the consequences of a specific policy of financing fixed and current assets for financial liquidity

The article aims to show the impact of financing fixed and current assets on the financial liquidity of the studies entities. The objective is achieved by the analysis of three companies. The selected entities are medium-sized manufacturing and trading enterprises in a similar line of business and a similar balance sheet total.

¹ Current Ratio = Current assets/Current liabilities; Quick Ratio = (Current assets – Inventories)/Current liabilities; Money Ratio= Cash and equivalents/Current liabilities; Debt Ratio = Total debt/ Total passives; Debt to equity ratio = Total liabilities / Total equity; Long-term debt ratio = Long-term debt / Total equity.

Each company uses a different policy of financing the assets, which is reflected in their different financial situation.

The study hypothesizes that units which limit funding of current assets with borrowed capital in times of crisis, are in a better financial position in terms of liquidity.

To verify the hypothesis, analysis of documents (financial statements) of the studies companies was used. The reasoning used accounting tools such as debt ratios and liquidity. Literature on the subject was also used.

Negative consequences for companies in times of crisis

The economic slowdown adversely affects the company, which is evident in most industries. It is particularly important that in times of economic crisis companies keep previously worked out financial condition [Woroniecki, Prysiński 2012, pp. 329–334].

Most often a number of negative factors occur during crisis, among which are: low level of cash in companies, unfavorable currency conversion, increasing level of overdue receivables, limited access to external financing, decreased revenue, and consequently decrease of liquidity and often a need for excessive indebtedness.

The above-mentioned phenomena are often cited by entrepreneurs as major negative consequences of the crisis. The following reflections focus only on the relationship between the structure of financing and liquidity, but this structure is often forced by the factors listed above.

There are many factors that cause crisis and its consequences, but despite some positive effects, crisis is rather clearly recognized as a negative phenomenon. The following table summarizes the types of crises and the criteria for their formation.

Table 1. Types of crisis and the criteria for their formation

Criteria	Type of crisis
According to the pace of its course and duration	<ul style="list-style-type: none"> – immediate crisis – characterized by lack of time for research and planning. Decisions must be made very quickly, – sustained crisis – it may last for months or even years. A long duration is not conducive to taking effective actions to deal with the crisis. Typically, the boards and directors of companies take a position of passive waiting, hoping that the crisis will pass by itself. It is caused by gossip, rumors, speculations communicated mouth-to-mouth or publicized by the media.

According to its source	<ul style="list-style-type: none"> – internal crisis is caused by factors occurring within the company, such as poor management and wrong financial policy of a company, – External crisis is caused by factors outside of the organization that reflect the economic situation of the state or may be related to natural environment.
According to its effects	<ul style="list-style-type: none"> – destructive crisis causes destruction of the organization, such as its collapse. – creative crisis leads to the further development of enterprises.
According to the factors causing it	<ul style="list-style-type: none"> – real crisis is caused by various factors and usually leads to many problems in the company, – virtual crisis is created artificially in order to bring change and, consequently, to develop and increase the enterprise's revenues.

Source: Based on: [Barczak, Bartusik, p 15].

The importance of liquidity during the crisis

The concept of liquidity is the ability of the company to cover its current liabilities on time [Czekaj, Dresler 2005, pp. 210]. Liquidity can be measured both statically and dynamically, and the basic tools to be used are indicators of current liquidity (Current Ratio), quick liquidity (Quick Ratio) and cash liquidity (Money Ratio) [Golaszewski, Urbanek, Walińska 2001, p 43]. Current Ratio is calculated as the ratio of current assets to current liabilities and should be in the range of 1.2–2.0 [Libertowska 2010, p 85]. Quick Ratio is the ratio of current assets, less average inventory, to current liabilities. The default value of this ratio should be between 0.8–1.0.

The ratios should not be too high or low in relation to those values, otherwise it proves inefficient use of resources [Czekaj, Dresler 2005, pp. 211].

The level and stability of liquidity determines the position of the company in the short term and on the possibilities of growth and surviving in the longer term. To prevent the loss of liquidity, companies must properly control the flow of money and choose the cheapest ways to restore balance in financial resources. [Sierpińska, Jachna 2004, pp. 162–163].

The consequence of loss of liquidity is less flexibility in making financial decisions and the ability to control the financial result. The negative effect is also a decline in sales and an increase in operating and financial expenses, resulting in a decrease of financial results. The drop in financial results of the company causes lower ability to service existing debt and incur new obligations. On the other hand, the company with high liquidity have full access to borrowed capi-

tal, which reduces financial costs. There is also a possibility of widespread crediting and flexibility in the use of instruments of crediting policy.

Financing structure

This is another matter that in times of economic downturn can have a strong impact on companies. The financial structure presented in the balance sheet liabilities shows the relationship between own and borrowed sources of financing the resources. There should be a correct proportion between those values, as a sudden fall in equity in relation to external sources of financing may cause payment difficulties, and thus cause the risk of insolvency. Analysis of the capital condition includes [Nowak 2008, p 92]:

- assessment of the dynamics of individual components of capital,
- assessing the capital structure,
- assessing the capital-asset structure.

Financial leverage ratios, also called debt indicators, are used to identify sources of financing the business. The most important indicators are [Ostaszewski (ed.) 2008, pp. 404]:

- debt ratio,
- debt to equity ratio,
- long-term debt ratio.

Debt ratio is the ratio of total debt to total liabilities, which equals the value of assets. The higher this ratio, the higher the share of borrowed capital in the financing of the company. Creditors expect that this ratio be not higher than 50%, because the assets of the company can reduce its value to half, before they threaten the safety of external capital. Value greater than 0,50 may result in failure to repay debt. This ratio should fluctuate in the range of 0,57–0,67.

Debt to equity ratio is measured as the ratio of liabilities to equity and shows the share of debt in relation to equity. This ratio is always higher than the total debt ratio, since equity is always less than the sum of liabilities, unless the level of obligations is equal to zero, which is a very rare situation, for example because of obligations to employees. Consequently, a smaller base gives a higher ratio. It is important that the debt to equity ratio does not exceed 100%, then the overall debt does not exceed 50%.

Long-term debt ratio shows the relationship of long-term debt to equity and indicates the amount of long-term debt per every currency unit of equity in the company. Long-term liabilities are long-term loans, issued bonds and other debts whose payback period is longer than one financial year. The satisfying level of this ratio should be no greater than 0,5. A reasonable value of this indicator should be in the range of 0,5–1,0. Companies with a higher ratio of long-term debt to equity are considered to be overindebted [Sierpińska, Jachna 2004, p 168].

Strategies for business financing

It should be noted that although there are a number of financing strategies, certainly two main ones are considered to be leading. These are:

- conservative strategy,
- aggressive strategy.

Conservative strategy means reducing the share of short-term debt in the structure of financing to less than 50% of total liabilities. This means minimizing the short-term credit. Often, it also resignation of long-term credit and replacing it with own funds. This reduces the threat of insolvency, but instead requires a high rate of return, which will compensate for the cost of own equity involvement.

Aggressive strategy means increasing the participation of borrowed capital at the cost of equity, which is reflected in more than 50% share of liabilities. This leads to increased risk of insolvency, which in turn affects the higher expected rate of return [Jaworski 2013, pp. 6–7].

As it is generally known, each of these financing strategies has as many supporters as opponents. However, the practice shows that companies using aggressive financing strategy can expect additional benefits resulting from the reduction of the tax base, which is due to increased costs, primarily financial (leasing, interest on loans, etc.). The higher the tax rate, the greater the tendency for borrowing. These companies, however, are characterized by a high degree of risk of insolvency; it is a source of rising credit costs.

It should be noted that companies, despite the adoption of general financing strategies, often have a different approach to the policy of financing fixed and current assets. The key distinction here is the expected useful life of assets.

Debt and liquidity of the studied units

The following is a brief description of debt and liquidity of the three analyzed companies. Each of the companies have a separate policy of financing fixed assets and current assets, which is reflected in the level of liquidity.

Company A

The following table shows the debt ratios of Company A based on the financial statements (see Table 2).

Table 2. Debt indicators of Company A in the years 2009–2011

Specification	2009	2010	2011
Debt ratio	0,37	0,47	0,51
Debt to equity ratio	0,59	0,95	1,02
Long-term debt ratio	0,17	0,46	0,44

Source: Own calculations based on financial statements.

Debt ratio in the analyzed company increases in value every year, which means a higher share of borrowed capital in total liabilities. It can be said that a large part of the business assets is covered by borrowed capital. In the first year, the ratio was 0,37, and it increased in the following years until it exceeded 50% in 2011 (0,51).

Debt to equity ratio, also showed an upward trend, which is standard, and in 2011 it was at 102%. It is a limit for this indicator and means that the company has a level of obligations equal to its equity capital.

Long-term debt ratio showed an upward trend over the analyzed period, but in the last two periods it increased significantly, from 17% in 2009, to 46% in the following year. In the last year, the rate was 44%.

Liquidity ratios calculated on the basis of financial statements of Company A are presented in the table below (see Table 3).

Table 3. Liquidity ratios of Company A in the years 2009–2011

Specification	2009	2010	2011
Current Ratio	1,56	1,55	1,50
Quick Ratio	1,41	1,40	1,40
Money Ratio	0,15	0,20	0,22

Source: Own calculations based on financial statements.

In the analyzed period, the current liquidity ratio is slowly reduced. This is not a significant decrease, however, proceeds from year to year. This is not the situation with the Quick Ratio, which still remains at the same level. This means that the analyzed company reduces inventory levels.

The money ratio acts yet differently as it which increases year by year. This means that the company has growing cash resources.

Overall, the entity has improved liquidity as the Money Ratio increases, and the Quick Ratio remains unchanged. Decreasing Current Ratio comes from the reduction in the level of inventories.

Conclusions for Company A:

- Analysis of the financing structure shows an increase in total debt,
- Long-term debt increases because the company finances its non-current assets,
- Quick Ratio remains at the same level, and the Current Ratio is reduced, which means a decrease in inventories,
- Reduction in inventory frees up cash, which is reflected in the growth rate of cash liquidity,
- The company does not finance operations with borrowed capital.

Company B

The following table shows the debt ratios of Company B calculated on the basis of the financial statements (see Table 4).

Table 4. Debt indicators of Company B in the years 2009–2011

Specification	2009	2010	2011
Debt ratio	0,13	0,07	0,04
Debt to equity ratio	0,15	0,08	0,04
Long-term debt ratio	0,06	0,05	0,05

Source: Own calculations based on financial statements.

Company B, as shown in the above table, does not use nearly any borrowed capital. Facing the financial crisis, the company decided to limit the use of credit from 13% in 2009 to only 4% in 2011. Debt to equity ratio has also been automatically reduced. Long-term debt remains at the same low level of 5%.

Liquidity ratios calculated on the basis of audited financial statements of Company B are shown in the table below (see Table 5).

Table 5. Liquidity ratios of Company B in the years 2009–2011

Specification	2009	2010	2011
Current Ratio	1,56	1,98	1,87
Quick Ratio	1,23	1,49	1,25
Money Ratio	0,82	1,2	1,2

Source: Own calculations based on financial statements.

Current Ratio and Quick Ratio of Company B remains quite high in the whole analyzed period. In 2010 there was a slight increase in both indicators, but at other times they remain at a similar level. Cash liquidity, in turn, hit a surprisingly high value, surpassing the liquidity not only other companies, but also exceeding the typical values for this indicator. Company B even has excess cash liquidity.

Conclusions for Company B:

- Analysis of the financial structure indicates a minimum share of total debt,
- Long-term debt remains at a very low level and is only used to finance fixed assets,
- Current Ratio and Quick Ratio remain at a similar level, and cash flow indicates excess cash,
- Inventory levels remain at a similar level,
- The company does not finance operations with borrowed capital.

Company C

The following table shows the debt ratios of Company C calculated on the basis of the financial statements (see Table 6).

Table 6. Debt indicators of Company C in the years 2009–2011

Specification	2009	2010	2011
Debt ratio	0,6	0,6	0,7
Debt to equity ratio	1,5	1,5	2,3
Long-term debt ratio	0,1	0,1	0,1

Source: Own calculations based on financial statements.

Debt ratio is very high in the years 2009–2010, and in 2011 it exceeds the standards described above, reflecting the increasing financial risk. Company C continuously runs into debt.

As a result, debt to equity ratio shows that in the first two years the company covered the debt with only two-thirds of equity, and in 2011, the debt level is more than twice the equity. In terms of the financing structure, the analyzed company is moving towards bankruptcy.

At the same time, long-term debt ratio is very low, which means that most of the debt is short-term. This situation clearly indicates the difficulties in financing current assets.

Liquidity ratios calculated on the basis of audited financial statements of Company C are presented in the table below (see Table 7).

Table 7. Liquidity ratios of Company C in the years 2009–2011

Specification	2009	2010	2011
Current Ratio	1,2	1,4	1,5
Quick Ratio	0,74	0,54	0,42
Money Ratio	0,01	0,01	0,01

Source: Own calculations based on financial statements.

Current Ratio of Company C increases throughout the analyzed period, so apparently the payment situation seems to be stable, but the Quick Ratio indicates that the company is unable to pay its obligations. This is connected with the discussed above state of financing of the company. Additionally, a confirmation of this is a disastrously low level of cash liquidity, as throughout the whole period it indicates that the unit is able to handle only 1% of its current liabilities using cash resources.

Liquidity analysis indicates that Company C has low liquidity, which is caused by surplus inventories (this can be seen in the discrepancy between the current liquidity and quick liquidity in all years).

Conclusions for Company C:

- Analysis of the financial structure shows an increase in total debt, while in the last period its level is so high (70%) that it threatens the financial stability,
- Long-term debt remains at a minimum level, and the total debt is increasing, which means that the current assets are financed by borrowed capital,
- Quick Ratio decreases, and the Current Ratio increases, which means the increase in inventories,
- Increase in inventories freezes funds, which is reflected in a very low level of cash liquidity,
- The company finances its operations with borrowed capital.

Conclusions

The conducted study shows that the application of accounting tools mentioned above allows not only to assess the financial situation of the analyzed companies, but also to work out conclusions for them for the future. The study hypothesized that units which limit funding of current assets with borrowed capital in times of crisis, are in a better financial position in terms of liquidity. From the conducted study it can be concluded that Company B is in the best situation, as it practically does not use external capital financing in crisis. This company has the highest liquidity ratios, even cumulating excess cash, which it justifies with the crisis. In the case of the other two entities, there are clear differences in the financial position, as Company A, although quite heavily in debt, does not finance current operations with borrowed capital, only fixed assets. This results in stability in term of liquidity. On the other hand, Company C is even more indebted, but it is mostly short-term debt, resulting in a continuous lack of cash.

Companies selected for analysis represent a typical behavior of a larger study group, so there is the possibility of drawing conclusions for a larger number of companies in the following studies. The choice of subjects was carried out so that the selected entities were similar in terms of activity, industry and total assets.

In conclusion, during the economic downturn a greater stability can be seen in companies limiting debt, especially short-term debt.

Bibliography:

Barczak B., Bartusik K., *Kryzys w przedsiębiorstwie w kontekście aktualnych uwarunkowań gospodarczych*, <http://wydawnictwo.mfiles.pl/files/2ZwK/2ZwK-r.pdf>.

Czekaj J., Dresler Z. (2005), *Zarządzanie finansami przedsiębiorstw*, PWN, Warszawa.

Gabruszewicz W. (2007), *Podstawy analizy finansowej*, PWE, Warszawa.

Gołaszewski P., Urbanek P., Walińska E. (2001), *Analiza sprawozdań finansowych*, FRRwP, Łódź.

Jaworski J., *O istocie i strukturze strategii finansowej przedsiębiorstwa*, http://www.academia.edu/2469429/O_istocie_i_strukturze_strategii_finansowej_przedsiębiorstwa.

Libertowska A. (2010), *Analiza finansowa a rodzaj działalności gospodarczej*, w: *Ekonomika i organizacja przedsiębiorstw*, ORGMASZ, Warszawa, nr 6 (725).

Nowak E. (2008), *Analiza sprawozdań finansowych*, PWE, Warszawa.

Ostaszewski J. (red.) (2008), *Finanse*, DIFIN, Warszawa.

Sierpińska M., Jachna T. (2004), *Ocena przedsiębiorstwa według standardów światowych*, PWN, Warszawa.

Walczak M. (2008) (red.), *Sprawozdawczość i analiza finansowa w zarządzaniu przedsiębiorstwem*, SWSPIZ, Łódź.

Woroniecki J., Prysiński Ł. (2012), *Szanse i zagrożenia rozwoju przedsiębiorczości – aspekty rachunkowe, finansowe i organizacyjne*, „Przedsiębiorczość i Zarządzanie”, wyd. Społecznej Akademii Nauk w Łodzi, T XII, Garwolin–Łódź.

Sprawozdania finansowe badanych przedsiębiorstw.