

# The Theoretical Resources and their Selective use to lead an Increase of Company Value

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*Abstract:* Given the current conditions, it is difficult to estimate just how much longer the financial crisis will last, or where it will end. Companies must adapt, identify opportunities and grow in this uncertain economic environment. The need to discuss this subject arises from the fact that, according to statistics, debt has led to many situations where companies cannot reimburse the capital they have borrowed. It is the opinion of this author that this subject should not be seen mainly as a natural consequence of the financial crisis. There are numerous theoretical and practical rules that must be respected in order to avoid negative situations generated by debt. Attention should be drawn towards the knowledge of the theoretical resources and their selective use, in order for debt to lead to an increase in company value.

*Key-words:* companies, debt, long term, finance, debt.

## 1 Introduction

When deciding to finance, the choice may be made from either several sources of funding, some belonging to the company and others being accessed from an increasingly volatile financial market. The criteria for selection used when choosing sources of funding is the cost of procuring capital, in hopes of reducing it. The main sources for long term funding of the company's activity are:

- Proprietary (self-financing, sale of physical and financial assets, new contributions made by shareholders, capitalizing on reserves, conversion of debt);
- Loaned (bank loans, bond loans, leasing).

It is known that there is no strict pattern to follow when acquiring long term funds for a company. The selection of a successful combination represents an internal decision of every company. Bank financing may be resorted to for supporting economic recovery due to the degree of indebtedness that stands below the critical threshold (Figure 1). The average return on equity of companies that had contracted bank loans was above the economy-wide reading (7 percent compared to 6 percent in December 2010).

Companies in the tradable sector having taken bank loans almost doubled their capacity to cover interest costs from earnings (from 123 percent to 225 percent during December 2009-December 2010), while non-tradable companies saw slower developments. Such evolution also had an impact on the debt-servicing capacity, the non-performing loan (NPL) ratio being lower for tradable companies than for those dealing in non-tradable (10.9 percent versus 14.5 percent in June 2011).

A detailed analysis by economic sector points to construction companies posting the highest NPL ratio (18.9 percent in June 2011). The NPL ratios of companies in manufacturing and trade (holding approximately half of the banks' corporate portfolio) amount to 12.3 percent and 16 percent respectively (June 2011). The sharpest rise in the NPL ratio was recorded in real estate (non-performing loans more than quadrupled during December 2009-June 2011, but the overdue loan level is still below the economy-wide average). Net exporting companies in 2010 serviced their debts better, as the NPL ratio reached 3.2 percent in June 2011.

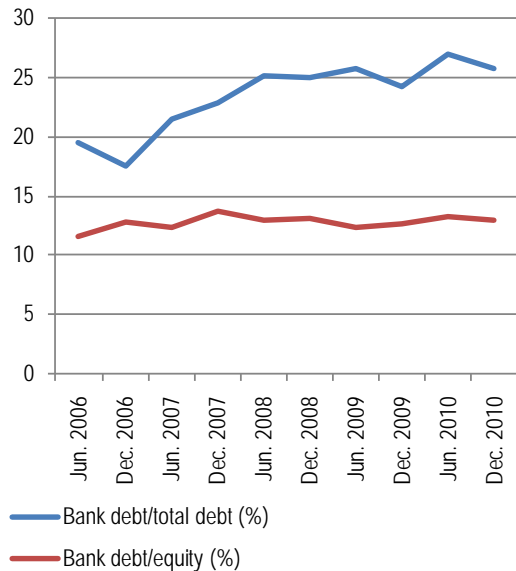


Fig.1 Indebtedness of non-financial corporations.

The quality of the loan portfolio to micro-enterprises witnessed the sharpest worsening (to 24.1 percent from 14 percent December 2009 through June 2011).

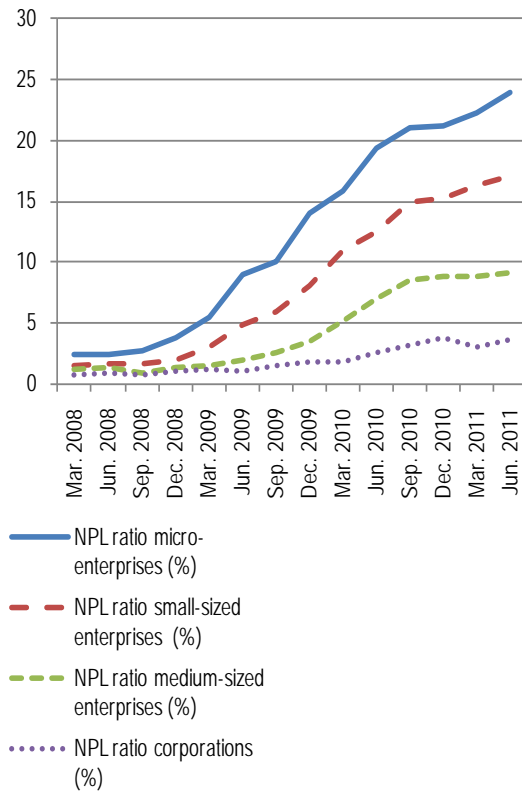


Fig. 2 Non-performing loan ratio by debtor company size.

Developments were of a lower magnitude in case of corporations, with the NPL ratio rising to 3.7 percent from 1.3 percent over the same period (Fig. 2).

## 2. Theoretical part

One of the ways to analyze the economic and financial performance of a company comes from applying the installment method in the financial sector. Installment-based analysis is widely used in the economic environment. One installment represents a ratio between two indicators. Mathematically speaking, any two indicators may be inserted into this ratio; however, economic conditioning states that the result must have meaning, or informational content.

In the case of financial analysis, relative size refers to the result of comparing two absolute indicators. Relative sizes do not generally pose calculation difficulties. These may arise from data incompatibility or regarding the basis for comparison. In general, in order to calculate relative size, three requirements must be met:

- There must be a logical conditioning link, or when possible even a link of causality, which can be expressed through a simple or complex mathematical relationship;
- The terms being compared must be truly compatible regarding sphere of application, calculus methodology etc.;
- The basis for comparison must have a certain significance in the evolution of the studied field;
- Ideally, the economic and financial performance of a company should be expressible using only one ratio. Because this is impossible due to the complexity of performed activities on one hand, and the limitations of this method on the other, a rate system becomes necessary. But in this case as well, certain conditions must be fulfilled;
- The rates must be designed to synthesize all the fundamental aspects of the company's activity;
- There must be no juxtaposition in their informational content;
- They must be delineated with regards to minimum and maximum value;
- A rate does not have intrinsic value, only when relative to the basis for comparison.

Financial analysis done through a rating system aims to measure the economic and financial performance of the company. The rates obtained for this purpose are determined as a ratio between the

economic and financial effects and the effort put into achieving them. Intermediary balances for management purposes or other value indicators are categorized as effects. Advanced capital or owned assets generally represent effort.

A rating system contains the following categories:

- Return rates;
- Financial stability rates;
- Liquidity and solvency rates;
- Rates regarding debt management;
- Active and passive structural rates;
- Capital rotation rates;
- Market value rates.

Debt and solvency rates are of great importance to this article. With the help of data from financial situations, the following rates can be calculated and dynamically compared.

The global solvency rate is determined as a ratio between the total assets and the total debt incurred by the company, regardless of their due date. It monitors the amount of total debt that can be covered by the company's total assets.

$$\text{Global solvency rate} = \frac{\text{Total assets}}{\text{Total debt}} \quad (1)$$

Solvency is the result of efficient activity, and the lack of ability to pay and liquidities may be temporary if the company is based on a global solvency. The global solvency rate expresses the long and short term security enjoyed by creditors, as well as the credit margin of the company. A value which is less than 1.5 signifies that the company is able to pay its immediate and later debts to a third party. A value below this level shows the risk of insolvency assumed by the company's capital providers.

Partial solvency rate is used mainly in bank rate systems. This solvency is determined when substantiating a decision to offer credit. If this rate is higher than 0.5 the situation is considered normal, and the minimal value is estimated at 0.3.

$$\text{Partial solvency rate} = \frac{\text{Equities}}{\text{Equities} + \text{bank loans}} \quad (2)$$

The financial autonomy rate represents a comparison between equities and permanent capital.

$$\text{Partial solvency rate} = \frac{\text{Equities}}{\text{Permanent capital}} \quad (3)$$

It indicates how much of the company's own resources contribute to the financing of the company's economic means. It registers various values, according to the company's return and its financial policy. It is recommended that this value be above 0.5. Besides solvency rates, other significant

ratios may be determined regarding debt management. Generally these rates are determined as a ratio between a debt and a larger category of debt or equity. Their role is to measure the effect of debt on managing finances.

The financial debt rate describes the company's level of medium and long term debt.

$$\text{Financial debt rate} = \frac{\text{Financial debt}}{\text{Permanent capital}} \quad (4)$$

Bank regulations require a value lower than 0.5 in order to grant medium and long term credit with the assurance of reimbursement. The coefficient indicates the percentage of invested capital represented by long term debt, and shows the company's method of financing its capital. The rate can be determined by only taking equities into account as the denominator.

$$\text{Financial debt rate} = \frac{\text{Financial debt}}{\text{Equities}} \quad (5)$$

In this form, it measures the volume of external finance compared to the sources provided by shareholders. The higher this value reaches, the more dependent is the company towards its creditors.

The reimbursement capacity rate expresses, in years, the company's ability to pay its financial debt (medium and long term) through sources which come from self-financing.

$$\text{Reimbursement capacity rate} = \frac{\text{Financial debt}}{\text{Self-financing capacity}} \quad (6)$$

Bank regulations require a value of 3 years for the theoretical reimbursement of financial debt. When considering the total debt incurred by the company, the value is raised to 4 years.

$$\text{Reimbursement capacity rate} = \frac{\text{Total debt}}{\text{Self-financing capacity}} \quad (7)$$

The financial expense sampling rate measures the ability to pay expenses using gross surplus originating from service.

$$\text{Financial expense sampling rate} = \frac{\text{Financial expenses}}{\text{Gross surplus from service}} \quad (8)$$

This rate separates a healthy company from a failing one. If the value of the ratio is above 0.6, the company has serious management issues and is risking insolvency.

Among the many different rates can be made about relationships. Some of these some have a rich informational content. Below is the link between interest rates, economic and financial profitability. Return on equity can be written as:

$$R_f = \frac{RE-D}{C_{pr}} (1-i) = \frac{(R_e \cdot A_t - R_d \cdot C_d)}{C_{pr}} (1-i) = \left[ R_e + (R_e - R_d) \cdot \frac{D}{C_{pr}} \right] (1-i) \quad (9)$$

where  $R_f$  financial rate of return on equity;

RE is the result of operation activities (before deducting interest and income taxes);

D Interest on borrowed capital D;

$C_{pr}$  Equity;

i profit tax;

$R_e$  economic rate of return;

$A_t$  total asset;

$R_d$  interest rate;

$C_d$  interest expense rate.

Can be identified the following situations:

- $R_e > R_d \Rightarrow R_f > R_e$  indebtedness has beneficial effects on the financial profitability. It speaks in this case about leverage. The name comes from the fact that loans are a lever affecting the level of financial return. The leverage is even higher as the economic return of capital is high interest rate loan.
- $R_e = R_d \Rightarrow R_f = R_e$  loans does not affect the return on equity.
- $R_e < R_d \Rightarrow R_f < R_e$  debt has a negative effect on the financial profitability causing a corresponding decrease in financial profitability per unit borrowed money.

### 3 Experimental part

The behavioral analysis of companies which have chosen debt for periods larger than one year, regardless of their size, shows that the statistics presented in item 1 are not at random. The maximum level of debt is often exceeded and in many companies there is no justification of the debt's participation in the growth of the shareholders' wealth. In order to establish this, an analytical study was created, using a sample of 100 Romanian companies. The study was based on the following premises:

- Companies with different fields of activity were taken into consideration;
- Companies from all geographical areas of Romania were chosen;
- Debt levels were monitored, as well as the effect of loaning on financial return;
- Determination was done using financial situations;
- Small, medium and large enterprises were chosen;
- The period analyzed was 2007-2010;

- Short, medium and long term loans were taken into consideration.

As a result of the calculations it may be seen that the examined companies had different ways of managing borrowed capital. The conclusions of the analysis may be summed up as follows:

- Companies which did not have debt issues for the whole period of examination;
- Companies which registered difficulties in managing borrowed amounts during the period of analysis;
- Companies that had problems from the beginning of the analysis period.

In many cases, the proper procedures were undertaken in correctly completing one's own sources of finance, in order to obtain greater capital, which would then allow for more consistent investment. For the rest of the companies, debt has caused problems related to:

- The size of borrowed sums;
- The reimbursement deadline;
- Complying to reimbursement conditions;
- The use of borrowed sums;
- The guarantees required by the creditor;
- The effects of loans on financial return.

The analysis was completed by identifying the causes which led to these results. It was concluded that debt management issues are caused by:

- The lack of theoretical resources in order to evaluate debt level and the situation in which it leads to a higher financial return;
- Not using specific elements, instruments, procedures or techniques to plan short, medium or long term future activity (cash-flow, financing plan, budget system etc.);
- Making loans while lacking inherent sources. Such a case was possible especially during 2005-2009, when the Romanian banking system would easily offer loans;
- The deterioration of economic conditions. Long term loans, correctly justified before the start of the financial crisis, were affected by the decrease in activity. The decrease in orders affected companies' incomes, thus lowering them. This is why analysis and reduction of material, human and financial resources is needed. Financial expenses with contract-based interest rates have affected the economic results of companies because of difficulty in covering them;

- The apparition of additional guarantees determined by the decrease of asset values initially brought forward as guarantees. As prices went down in the real estate market, banks have requested that debtors augment their guarantees or pay a part of their debt in advance. In some cases, the companies did not have additional guarantees, which led to conflicting situations;
- Certain companies falling under the protection of the insolvency law. The insolvency procedure is a solution for debtors because, from the moment of its initiation, debt growth is stopped and the company's assets are preserved, thanks to the most important effect of the procedure, namely the interdiction of interest flow, payment delay penalties and unwarranted claim increases;
- The inadequate use of borrowed capital. Used for complementing a company's own resources, capital which is borrowed with favorable price conditions, deadlines and reimbursement conditions allow for a faster development;
- The wrong choice of banking product. Short term bank loans were used for long terms or vice versa, contrary to fundamental financing principles;
- Incompletion of investment. In some cases, investments financed correctly before the financial crisis were never finalized due to lack of financial resources, failure to renew them, rising prices etc.;
- Making long term investments without guaranteed financing. Investments which were based on the renewal of long term financing resources, conditioned by delays or cessations, were not finalized. Because they were destined to increase or to diversify production, the cash flow which should have been generated by their proper usage never occurred. This was the starting point of some financial problems.

#### 4 Conclusions

Cases where economic return is lower than the interest rate are frequently encountered in practice. Companies that have fallen under such debt may make a profit, but usually part or even all of it becomes profit for creditors. In order to evaluate negative situations determined by long term financial loans, the author insists on the correct acquirement of theoretical elements regarding debt management. To this end, it is recommended to determine the opportunity of using borrowed capital, to make a multi-criteria choice given favorable pricing

conditions, to reimburse and guarantee banking products and to exploit borrowed sums so as to lead to increasing the company's value.

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