

DRUŽBENA ODGOVORNOST IN PLAČILNA SPOSOBNOST PODJETJA

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Povzetek: Družbeno odgovorno podjetje uravnava svoja razmerja do lastnikov, zaposlencev, poslovnih partnerjev, ožjega in širšega poslovnega ter družbenega okolja in narave skladno z načeli trajnostnega razvoja. Posledice morebitnega neustreznega ravnanja se v končni fazi kažejo zlasti v plačilni nesposobnosti podjetja. Zato so bistvenega pomena informacije o tveganju v zvezi s plačilno sposobnostjo v okviru sistema notranjega poročanja podjetja. Pri tem je na dolgi rok najpomembnejša struktura financiranja podjetja. Sodobne teorije o optimalni strukturi financiranja sicer pojasnjujejo pretekla dogajanja, vendar ne dajejo zadostne podlage za oblikovanje informacij za odločanje o plačilni sposobnosti. V prispevku je podana zamisel o celovitem modelu financiranja podjetja, ki temelji na družbeni odgovornosti podjetij.

Ključne besede: družbena odgovornost, trajnostni razvoj, plačilna sposobnost, struktura financiranja podjetja, kapitalska ustreznost podjetja.

SOCIAL RESPONSIBILITY AND CORPORATE'S SOLVENCY

Abstract: A socially responsible company adjusts its relationship to its owners, employees, business partners, narrower and broader business and social environment and nature in accordance with the principles of sustainable development. The consequences of any misconduct is ultimately reflected in particular in the insolvency of the company. Information on the risk related to solvency within the internal reporting system of the company is therefore vital. In the long run there the most important is the financing structure of the company. Modern theories of optimal financing structure successfully explain the past events, but do not provide a sufficient basis for the creation of information for decision-making on solvency. In this paper an idea of an integrated model of funding the company based on CSR is presented.

Keywords: social responsibility, solvency, sustainable development, financing structure of the company, capital adequacy of the company.

1 Introduction

A socially responsible company adjusts its relationship to its owners, employees, business partners, narrower and broader business and social environment and nature in accordance with the principles of sustainable development. The solvency of the company is of vital importance to achieve such goals. It requires a comprehensive treatment from a theoretical point of view, in terms of both internal users (management) as well as external users of information. This treatment is also important from the perspective of insolvency legislation that requires firms' proper behavior and if it is not provided, anticipates also certain sanctions.

The consequences of any misconduct is ultimately reflected in the insolvency of the company. It adversely affects the business and social environment. Recent literature (e.g., Smart, 2004, 17) emphasizes the long-term perspective in understanding this principle, which includes social responsibility and the protection and preservation of the value of the company for stakeholders. In recent times, especially the high-profile bankruptcies of large business systems

(Enron, WorldCom, Parmalat and many others) have highlighted the ethical dimension of financial management of the companies.

Insolvency risk management is required to cope not only on the basis of professional principles, but also on the basis of ethical principles. Insolvency of the company as a result of failure of management in terms of due diligence (at a reasonable corporate risk) is unethical fact. Ethical dilemmas related to solvency emerge in all three areas of ethics:

- in relation to the company environment (business ethics) in order to understand the relationship to other business entities and the state and its institutions;
- in relation to corporate finance and management profession to the goals of the company (professional ethics);
- in relation to individual performance to oneself (personal ethics), because "my word is my bond".

It is therefore surprising that the concern for the ability to pay is not elevated to the level of general principles in practice. Addressing the solvency in the literature on the one hand is often limited to "liquidity ratios", on the other hand it is indirectly covered in some topics as: short term financial management, cash management, management of working capital, capital structure, financial planning, budgeting and other areas of corporate finance.

The main question is how to combine the principle of profitability with the principle of ability to pay. Above all, how to comply with both principles in the design of information for decision-making. For decision-makers is therefore vital information about the risk related to solvency within the internal reporting system of the company. In this paper we'll show that the fundamental theory of modern corporate finance, which examines the optimal financing structure of the company, is inadequate. We shall present a different view, which allows for further development and designing of information for decision-making.

There are numerous definitions of solvency in the literature. We shall define solvency here as a principle and also as the ability of the company to dispose adequate liquid assets when they are needed (Bergant, 2012, 19). The basic condition for maintaining solvency in the long term is the appropriate financing structure of the company.

2 Financing structure of the company

The structure of the financing of the company in modern finance is addressed through a variety of theories, among them are: the theory of the costs of financial distress (*trade-off theory*), pecking order theory, signaling theory and market timing theory.¹ None of them has so far not received unequivocal confirmation of the empirical research, however a number of critical comments. At the heart of the debate is still trade-off theory. Its positive sides can be see particularly in:

- principled explanation of the company's behavior regarding it's fundamental objective;
- interpretation of the impact of borrowing (financial leverage) on the value of the company;
- theoretical proof of the existence of an optimal financing structure;
- ability to unravel the recent developments related to the borrowing company;
- promotion new research in the field of optimization of financing structure and generation of new theories.

Good financial theory should be primarily the basis for the formulation of appropriate information for business decision-making. Trade-off theory does not satisfy this criterion because it is not able to create a user-friendly model for decision-making in companies. On the one hand it shows the positive impact of borrowing ("tax shield effect"), on the other hand it warns against excessive borrowing and provides a "penalty" in the form of high costs of financial distress. It therefore primarily interprets past events and remains less useful for decision making. Experiments to design information for decisions on the optimal structure of financing companies on such a basis usually remain at the level of bachelor's or master's thesis. A general form for the optimal financing structure determination does not exist. The root cause of this "impotence" is in a numerous important shortcomings of the theory:

1. For each company the estimation of the costs of financial distress is extremely risky because these costs of a company are very difficult to calculate. The most difficult is it to estimate indirect costs which are generally higher than the direct costs of financial distress (Arnold, 1998, 797).
2. The summing up the different types of probability distributions about occurrence of costs and revenues when estimating the costs of financial distress, is professionally unacceptable. This is reflected in the fact that the

¹ More on those theories in: Smart *et al.* (2003), Samuels *et al.* (1995), Arnold (1998), Bessler *et al.* (2011) and Brigham *et al.* (1999).

companies which very likely get very small gains, are exposed to very high (although highly unlikely) risks whose likelihood cannot be reliably estimated.²

3. There is the question, on whose behalf? The complexity of the calculations (in particular the large number of assumptions and subjective assessments in the calculations) is the cause of relatively unreliable results (e.g. the recommended intervals for borrowing from 20 % to 40 % of total liabilities).
4. The theory is based on a "cost - benefit" approach which is a basic principle of economics. Such a view on the financial policy of the company could be in direct conflict with business ethics. Decision-making, information and implementation in the field of solvency is to be assessed through an ethical point of view as well. Long-term sustainable development of the company and individual performance depend not only on the legality and narrow professionalism of action, but also on ethical and moral decision-making activities.³
5. The assumption of long-term growth of the value of a common equity includes also satisfied interests of other stakeholders. The company that operates immoral to internal and external stakeholders cannot be successful in the long term. Such an assumption is theoretically necessary for compliance and integrity of the model, but does not provide proper basis for the creation of information for decision-making. The common practice confirms such a statement.⁴
6. Entrepreneurial risk in relation to solvency significantly changes depending on the maturity structure of the debt, despite the unchanged ratio between foreign and own sources of financing. The risk increases if the share of short-term debt in all the company's debts increases and vice versa. The idea of the costs of financial distress does not take this fact into account. This significantly reduces the expressive power of information based only on the relationship between foreign and own liabilities (financial leverage). Management can not sufficiently well decide about the company's solvency on such a basis.

The principles of managing current assets ("current asset management") and the principles of short-term financing try to reduce the disadvantage of trade-off theory regarding maturity. Both types of principles are covered in the literature with working capital management. The authors derive from the basic principles of finance, which requires consistency in maturity of liabilities with maturities of available sources of financing.

In the literature, this principle is known as the "maturity matching principle" or "maturity matching approach" (eg. Walsh, 1996, 148; Brigham et al., 1999, 635) or the "matching policy" (Rao, 1987: 528). The simplification of this principle from an accounting perspective means a rule that permanent working capital (permanent current assets) should be financed on the long term basis.

Deviations from this principle imply aggressive policy ("aggressive approach") which means that also part of the permanent current assets is financed on the short term basis. Aggressive policy takes a greater risk of insolvency, but has lower financing costs due to cheaper short-term loans. Deviation in the other direction is conservative policy ("conservative approach"), which means that also a part of periodical current assets is financed on long-term basis. Conservative policy takes a lower risk of insolvency, but higher financing costs due to more expensive long-term liabilities (loans and equity).

The modern theory of corporate finance therefore (in view of the selection of those policies) proposes trade-off approach between costs and benefits, in order to determine the best level of short-term financing (Smart et al., 2004, 798). Estimated costs of financial distress however remain an unsolved problem also in these cases.

There is the lack of a definition of permanent working capital in various authors' texts. Brigham understand it as current assets at the lower end of the cycle (Brigham et al., 1999, 635). Smart (2004, 777) speaks only of a constant part of current assets. Arnold adds also cash to the minimum inventories and receivables (Arnold, 1998, 549). Samuels defines permanent working capital indirectly through seasonal, fluctuating current assets (Samuels et al., 1995, 721). Rodić assumes that short-term assets of the entity are only long-term bonded stocks (Rodić, 1990, 433). Cohen (1990, 146) and Kilig (2006, 366) understand as a long-term working capital inventories and trade receivables (*cycliques employments* or *employments temporaires*). Numerous and vague definitions of the permanent working capital are the cause of huge difficulties in designing useful information for decision-making on the solvency of the company.

² More about the empirical problems of small probability in Taleb (2009, 748) and Taleb *et al.*, 2009, 78).

³ Response that the costs of non-ethical conducting are included in the cost of financial distress, is the "shoot in the foot". Ethics does not allow weighting the cost-benefit as the sole criteria. The decision cannot be "half-ethical."

⁴ Entrepreneurs and management are too often opt for short-term criteria and narrow interests.

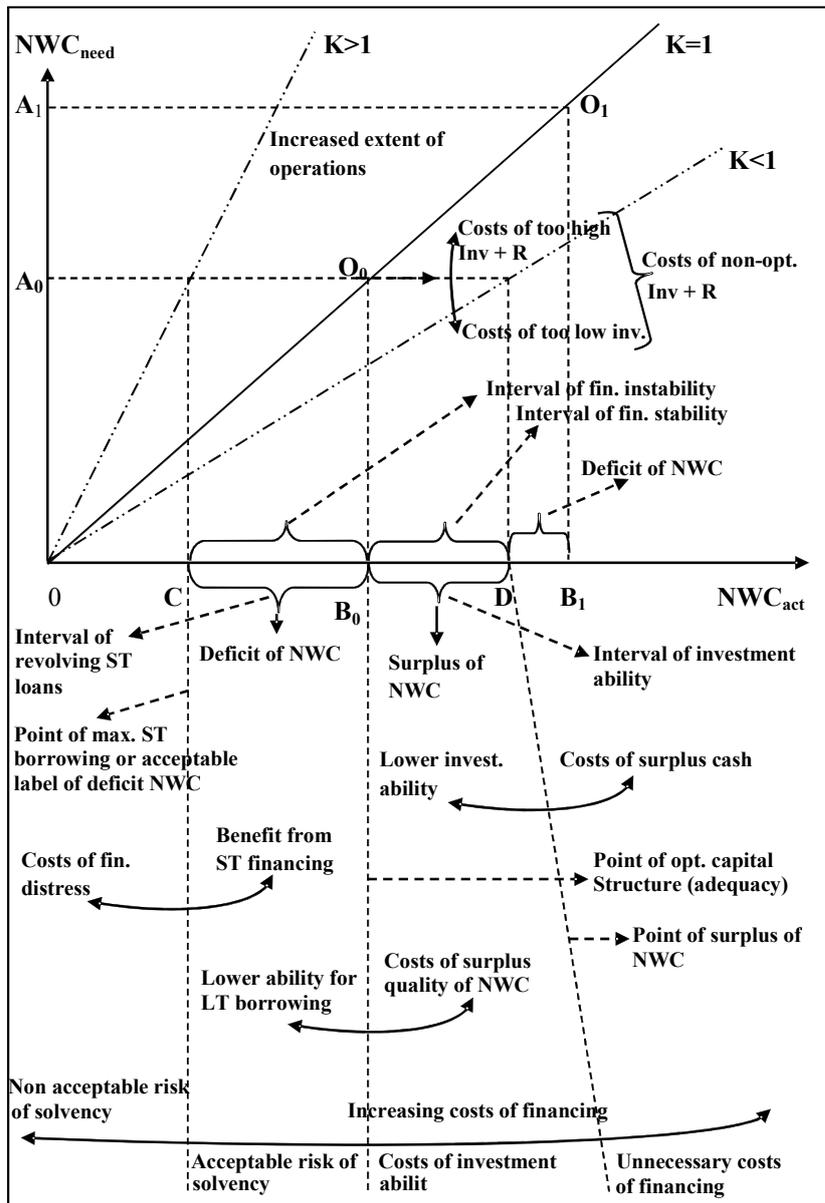
We estimate that this weakness is reduced with a different approach, which is typical for the idea of capital adequacy, but should apply to non-financial organizations.

3 Model of comprehensive financial policy

Backgrounds of the model are as follows:

1. Management in its decisions should not take into account the company's insolvency as a useful option. Such an alternative is unethical assumption of the potential benefits of the company's insolvency. It follows that the short-term spontaneous liabilities (*SL*) in a given volume of business are relatively easy identifiable from payment deadlines in a particular industry known or contractually agreed. The company should respect them. A possible extension of payment deadlines in the best case represents a hidden liquidity reserve in case of force majeure.
2. If the company wants to timely meet its business obligations, it is necessary to take into account the maturity of debts, which means that it is not enough just to monitor the leverage factor (the vertical structure of financing).

Figure 1: Model of comprehensive financial policy



- It should be ensured that the long-term tied current assets are financed by long-term sources. Deviations must be carefully considered. This means that information for decision-making is based primarily on estimates of the actual and of the required working capital of the company.

The principles cited above is relatively easy to implement in the companies, however they require deep changes first in the conciseness and then in practice, considering different approach which is learned at the universities.

Figure 1 on the basis of the above model presents a comprehensive financial policy, which is based on the capital adequacy of the company as a starting point. Management is able to manage the risks of insolvency in the long run by providing capital adequacy. The capital adequacy of the company is defined as the consistency between the actual net working capital (NWC_{act}) and the corresponding net working capital, which is needed for financing permanent current assets (NWC_{need}). The actual net working capital is the surplus of long-term companies' financing over the long-term investments. The need for net working capital is defined as current assets tied to the long-term (in the form of trade receivables and inventories, including long-term reserve for risk management in the business) less trade payables.

Any increase in the deficit of the actual *NWC* compared with the needed amount, means a greater need for a continuous renewal of short-term resources, which poses a greater risk of solvency, however lower financing costs. By contrast, a company with surplus has higher financing costs, but less risk with regard to solvency.⁵

The main characteristics of the elements in the Figure 1 are:

1. The upper part of the image on the abscissa and the ordinate shows the net working capital which is actual and net working capital which is needed. Capital adequacy is shown with a straight line with the inclination of 45° . The points on this line show equality between actual net working capital and net working capital which is needed ($K = NWC_{need} / NWC_{act} = 1$) at different volume of operations (sales revenue).
2. It is understood that the line represents a theoretical starting point, because it is merely incidental for a company to be on this line. Deviations are therefore normal, the most important is to create information on their movements in relation to the line. The ratio *K* may be greater or less than one, as shown in two dotted lines with a larger or smaller inclination.
3. Point A_0 shows the optimal stock level (*Inv*) and spontaneous trade receivables (*R*), i.e. permanent current assets minus current liabilities according the volume of business. This is a rough estimation of net working capital which is needed.⁶
4. Point B_0 shows the volume of the actual net working capital, which is equal to the net working capital needed, which shows O_0 point on the line that represents $K = 1$.
5. Point A_1 shows the need for net working capital, if the volume of business increases from point O_0 to point O_1 .
6. Point *C* shows a situation in which the actual net working capital is less than adequate, but the deficit still can be replaced by revolving short-term loans. Therefore, point *C* represents the limit of short-term borrowing company or interval of financial instability (lability) in relation to the point B_0 .
7. Point *D* shows a situation in which the actual net working capital is higher than adequate. The company has surplus, which means its ability to do long-term investments which could be financed with short-term loans. This is the interval of financial stability in relation to the point B_0 .
8. Point B_1 with the distance to the point *D* shows a deficit of net working capital for the case, when the actual net working capital would not increase albeit required because of an increase in the volume of business to the point O_1 .

Based on the identified elements in the Figure 1 the following areas can be summarized in particular analysis and business decisions that affect the optimal financing, and hence the solvency of companies.

1. It should be stated, what amount of net working capital is needed at a given volume of business. This means to find the point A_0 on the ordinate axis.
2. Furthermore, it is necessary to determine where the company is on the abscissa, and how much net working capital in relation to the needed *NWC* it has. It means, we have to analyze the capital adequacy of the company.
3. In accordance with the above point, after estimating the deficit of the net working capital, the ability of the company about revolving short-term loans in the future and risks in this regard must be analyzed. In this way, we can estimate the distance between points *C* and B_0 .
4. Any increase in the deficit (moving to the left of point *C*) means an over-indebtedness of the company (too much short-term loans). The costs of revolving short-term financing are too high and exceed the benefit in comparison with long-term financing. The solvency risk is unacceptable and unethical, and also requires appropriate actions according to the law of insolvency.
5. Any movement from point B_0 to the left (within the interval CB_0) still represents an acceptable liquidity risk. Among other things, it is necessary to consider the direction of movement of the net working capital deficit in the past and in the business plan for the future.
6. Any movement from point B_0 to the right (within the interval B_0D) represents the ability of investing and the ability to increase the volume of business, which would increase the need for net working capital in the amount of such surplus. At the same time the deviation means higher costs of funding, which represent the cost of the investment capability of the company.
7. Any movement from point *D* to the right means high (excessive) solvency and represents the surplus of net working capital, which is commercially unnecessary. It causes unnecessary costs of funding the cost of excessive solvency and/or excessive investment capabilities.

⁵ More on the capital adequacy of the company and its empirical testing in Bergant (2012, 54-246).

⁶ For reasons of simplification, we assume that this is also the assessment of adequate working capital, which includes appropriate reserves for risk management.

8. Company has optimal structure of net working capital (it means quality of NWC)⁷ in point B_0 , i.e. the ratio between long-term debt and equity. A higher proportion of long-term debt to total long-term liabilities means less ability to long-term borrowing (with the assumption of unchanged profitability of assets). By contrast, a smaller proportion of long-term debt leads to higher financing costs (which include cost of equity), which represent the costs of too high quality of net working capital and mean costs of the ability for long-term borrowing.
9. When moving from point C to the right (it means increasing the actual NWC), financing costs are constantly increasing. Management must analyze the indicated intervals to get information for decision making.
10. Interval CB_0 is named interval of financial instability, because the company does not have a reserve to maintain solvency. Instability increases with movement toward point C . Increased attention is required in this interval, particularly monitoring and control of solvency and constant monitoring of the movement of point C .
11. Interval B_0D is named interval of financial stability, because the company has a reserve to the extent of excess net working capital. Therefore, in this interval (and of course, also in the interval from point D to the right) it is useful to decide about development projects and increasing business volume (or reducing long-term sources).
12. In point A_0 , an entity may decide on an alternative policy in managing current assets such as: relaxed, moderate and restricted (Brigham, 1999, 594). Restricted policy causes the reduction of the need for net working capital while increasing costs because of too low inventories. Relaxed policy causes the increase of the need for net working capital while increasing the costs of higher inventories (Inv) and also costs of higher trade receivables (R). In the figure 1 this is shown with an interval from excessive permanent current assets to too low inventories, where are the costs of non-optimal volume of current assets which are tied on long-term basis.

4 Conclusion

The exposed model covers all the main areas of financial and operating policy decisions relating to the provision of solvency and connects them with the impact of such policies on the costs and profitability of equity. At the same time the model takes into account the fundamental starting point about ethical decision-making, as it does not permit the costs of financial distress as an alternative in decision-making.

It should be recognized that the limit (point C in Figure 1) is equally soft like a border of too high financial distress costs. However, there is a big difference, especially in:

- 1 the criterion of how to define the point (ethical or unethical approach);
- 2 the methodology of how to find this limit;
- 3 the risk assessment at this point.

Ad 1) Based on the trade-off theory, point C is estimated in relation to the anticipated costs and benefits. In the model in Figure 1, this point has a clear objective: the company should not be insolvent at no time (such a goal requires corporate social responsibility). This objective cannot be achieved in all circumstances, but it is important to be able to determine whether management has acted professionally (due diligence) or not.

Ad 2) Determining the costs of financial distress requires a wide range of information, which are not or are not always readily available. In contrast, model in Figure 1 uses as a start point mainly accounting (*balance sheet*) information. The company can complement them with off-balance sheet information and other internal and external information.

Ad 3) We have already emphasized that the assessment of the costs of financial distress does not provide adequate information for deciding on the solvency of the company. The assessment of the risk of insolvency in accordance with the model in Figure 1 is more reliable because it is focused on estimating the risk about the ability of the company to maintain revolving short-term loans.

It is very important that the model in Figure 1 enhances the further development of information on the solvency of the company. It is hard to say that trade-off theory has the same characteristic.

⁷ From the professional point of view capital of the company must be adequate not only in size but also in structure.

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