

## **SOME OPTIONS FOR APPLYING THE MANAGEMENT ACCOUNTING TOOLS DURING AN ECONOMIC CRISIS (on the basis of a study carried in the Republic of Bulgaria)**

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### **ABSTRACT**

By means of applying the management accounting tools in the business of separate companies during crises we have the opportunity to make strategies for optimal use of resources, for avoiding different risks and for ensuring opportunities for protection of entity as a business subject. The present paper tackles the options for applying the management accounting tools during an economic crisis. The aim of this report is to describe the options for applying some of the management accounting tools and their benefits for the company.

**Key words:** management accounting, economic crises, management accounting tools.

### **1. PROTECTING THE COMPANY AS BUSINESS SUBJECT – MAIN OBJECTIVE DURING AN ECONOMIC CRISIS**

#### **1.1. APPLYING THE “COST-VOLUME-PROFIT” ANALYSIS DURING THE ECONOMIC CRISIS**

Under the conditions of economic crisis, many companies have to change their strategy directed to expanding their operations (development strategy). Their strategic objective in this case is to protect the company as a business subject. This is really the case, since usually due to the crisis the consumption of goods and services becomes low, which is thus increasing the competition. This makes the incomes of most companies less and thus deteriorates their financial and economic position in general. In case of a crisis, it can turn out to be that the companies need to implement a survival strategy because the development strategy, relevant to market and sales expansion, usually is not effective due to the restrictive crisis conditions. In this particular case the

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company's management may implement in practice the "Cost-Volume-Profit" analysis [3,2], also known as the "Break Even Point" analysis.

The "Cost-Volume-Profit" analysis during economic crisis is significant since it presents information about the critical operating level – at which income cover costs without resulting in any gain or loss. Thus it gives opportunity to keep the volume of operations at the break even point level or slightly above at the time of the most severe adverse effects of the crisis, without the need to liquidate the company as a business subject. We must have in mind however, that the management should strive to overcoming the break even point condition and going to the section of profit upon first indications for the end of the crisis. This is because by continuously maintaining operations at the break even point level and by failing to realize profits we cannot ensure prosperity to any company. This means that the company must go to a stabilization strategy at the first chance, and then to a development strategy.

## **1.2. MAKING DECISION FOR CURTAILING A SEGMENT**

In order to achieve the strategic objective – to preserve the company as a business subject, we may need to make decision for curtailing a business or geographic segment. This is a matter faced only by companies that have different segments. Under the conditions of crisis, due to the generally reduced consumption some of these entities must answer the question whether to preserve all segments or to close some of them. Such decision should be made very carefully since usually part of nonmanufacturing costs, which are fixed costs in most of the cases, are covered by different segments. In this way, by curtailing a given segment, we can actually increase the nonmanufacturing costs of the whole company and the final effect would be reduction of profit. The management accounting textbooks usually read that fixed costs referring to the curtailed segments are allocated among the others and do not specify whether these costs are manufacturing or nonmanufacturing ones [3]. Below we will present our view about this case, whereas the conclusions are based on real operating companies in Bulgaria, which have to (or have had to) make decision for curtailing a segment.

It is well known that fixed costs may be both manufacturing and nonmanufacturing costs. In some cases by curtailing a segment we can reduce (totally eliminate) either one or the other. In other cases, however, by curtailing a segment we may not affect the amount of fixed manufacturing costs, but to reduce the nonmanufacturing ones or vice versa. This is why we must find out how curtailing a segment affects the fixed manufacturing and fixed nonmanufacturing costs.

We all know the fact that fixed costs are fixed only under specific conditions and/or for specific period of time. Therefore, curtailing of segment may cause a change in the amount of fixed manufacturing costs. For example, if leased manufacturing premises become vacant upon curtailing a segment. Thus the fixed cost for monthly rental is curtailed. And if a company's own manufacturing building, or any part thereof, whose maintenance costs do not change, becomes unusable due to the

segment curtailing, their amount will not be changed but rather allocated among other segments and as a result the company's profit becomes less in general. Yet, even when the company uses its own manufacturing building fixed manufacturing costs may become less due to a segment curtailing. For example, the electricity and heating supply costs (if these are fixed costs). For example, if the entire building remains unusable, it would not be heated and lighted and these relevantly fixed costs would not exist. But the tax expenses for this building payable by the owner according to the Bulgarian legislation exist regardless of the fact the building is being used or not. Therefore, in this case by curtailing the segment the fixed manufacturing costs will not be totally eliminated but only reduced.

The question of what happens with nonmanufacturing costs is very important upon making the decision for curtailing a segment. We will have a look at the changes in administrative expenses, which are, as we have already mentioned, fixed under specific conditions and/or for specific period of time. The case of fixed sales expenses will not be considered since their behaviour is analogical.

From practical point of view, curtailing a segment leads to reduction in the volume of work at the company's administration and thus we can expect that the expenses there will become less. Or we can make the conclusion that it is totally reasonable to curtail a segment when it realizes loss or insufficient profit and by curtailing it, at the same time, we can reduce the administrative expenses. If we analyse the case of curtailing a segment more comprehensively, the following events may be observed in relation to the administrative expenses:

I. Due to the organizational structure of the company, curtailing a segment will not result to curtailing of administrative expenses and they will be allocated to the expense of other segments;

This is the option we already know about from the management accounting textbooks [3]. If such alternative exists, we should very carefully analyze whether to proceed to curtailing the segment because it is possible to have adverse effect on the company's profit in general due to the segment curtailing.

II. Due to the organizational structure of the company, curtailing a segment will result to curtailing of administrative expenses.

If such alternative exists the following three specific events might occur:

- Segment curtailing will decrease administrative expenses with an amount equal to the administrative expenses pertaining to the curtailed segment;
- Segment curtailing will decrease administrative expenses with an amount less than the administrative expenses pertaining to the curtailed segment;
- Segment curtailing will decrease administrative expenses with an amount bigger than the administrative expenses pertaining to the curtailed segment.

In this case we must quite precisely analyze how much administrative expenses will decrease, and if they decrease with an amount less than the amount of expenses pertaining to the curtailed segment whether such curtailing will result in increasing the company's profit.

### 1.3 RISKS DURING A CRISIS

The impact of different risks on the company's operations increases during economic crisis. This is absolutely natural having in mind that risk is a possible threat, a chance event or loss from business transaction. Risk is considered measurable when it can be measured through determining the possibility for unfavorable outcome. In relation to an economic system, in the narrow sense, the term "risk" means the measurable possibility not to obtain gains, incomes or to reduce the value of specific group of assets. This means that in its nature, risk is the possibility or potential probability to suffer losses (damages) due to an action or omission.

Under the conditions of economic crisis, different companies increase the possibilities to suffer adverse effects of different risks – business risk, sectoral risk, regional risk, statutory risk, inflation risk, currency risk, financial risk, etc. Business risk is relevant to the possibility that the company may fail to achieve the objectives it has set. Business risks are relevant to the strategy, to the organization, and have financial and information aspect. We may say that under the conditions of crisis, the adverse effects of the business risk occur for many business subjects. We have already addressed some of the main points relevant to the options for applying the management accounting tools in relation to the changes of the company's strategy during crisis. Business risk may be relevant to the need to change the organization, capital structure, liquidity, the need from information.

It is well known that usually the economic crisis' adverse effects are to a greater extent occurring in some sectors in comparison to others. For example, the construction sector has been mainly affected by the last economic crisis as per different official data [4]. This requires the managers of the companies in this sector to cope with more negatives than those of other companies.

The regional risk during crisis is expressed in the crisis' restrictions within specific geographic region. The last economic crisis is considered not to be regional since it has affected all countries under the conditions of globalization.

We may say that the occurrence of statutory risk, comprising the amendment of a regulation, is typical for Bulgaria not only during economic crisis. It appears that such risk proves to be stronger during the crisis. We can prove this fact, for example, with the effective Law of Accounting effected on 01.01.2002, which has been amended sixteen times as of November 2011, whereas there have been seven amendments since the beginning of 2008 (the first year of the economic crisis). Unfortunately, this risk has quite adverse impact on the investments in the country. We may say that in most cases the company may not foresee this risk and thus it can be hardly managed.

Inflation risk may also occur during economic crisis. The consumer inflation accumulated in Bulgaria for 2010 is 4,5% as per the information from the National Institute of Statistics, which is 3,9% increase in comparison to the inflation at the end

of 2009 [5]. However, if we review the same data for a period of ten years, we can come to the conclusion that, according to the official information on the National Institute of Statistics website, the 2009 and 2010 data do not significantly differ from the data for previous years. This means that no increased inflation risk occurs for the current economic crisis and its expression in Bulgaria.

We can not assess currency risk simply from one aspect. It directly depends on the exchange rates at the international exchange markets and on the currencies of the company's cash, on the currencies in which payments with counterparties are settled, etc. The companies operating with US dollars not only in Bulgaria but also in other countries suffered significant losses due to the changes in the US dollar exchange rate.

The financial risk is also more severely expressed during an economic crisis. It occurs when the company is financed not only with its own, but also with attracted funds. In practice, most of the companies are financed like this. Financial risk may be relevant to the risk of loan interest rates increase, which on the other hand increases the loan service expenses – something very specific for Bulgaria, which adversely affects companies.

The occurrence of the above risks during crisis requires the manager of the company to pay attention not only to identifying and measuring these risks but also to minimizing their impact. The risk impact may be reduced by applying the well known methods. Some of these methods are universal – they can be applied regardless of the sector specific characteristics of the company's operations, and others are specific – they depend on the specific features of the company's operations and may not be applied in other sectors. Both types of methods may be applied under crisis conditions.

Many researchers work on the risk problems and the role of management accounting in the process of risk management. The risk management process, however, is a very difficult process and to the greatest extent it depends on the specific economic situation and the specificity of the company's operations. The role and importance of management accounting in risk management during crisis is to supply the company's manager with the timely information (information during crisis may be changed more often than usual) required for making the respective decision about reducing the adverse effect of specific risk on time. This may be done by comprehensively analyzing the information supplied by the management accounting and subsequently using it for planning process of the company whereas at the same time continuously controlling these processes.

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