

THE USE OF ACCOUNTING INFORMATION FOR RISK ANALYSIS - OPTIONS IN CENTRAL REGION ENTITIES

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Abstract: Every decision poses risks, and it is necessary for them to be known. Some may be avoided, others may be diminished, and with others the management will need to become accustomed and avoided and are predominantly related to the external environment. For this reason, the risk can be approached as a variation of the results under the pressure of the environment of the activity. Based on these considerations, the paper addresses the risk in terms of its definition based on the literature and presents some essential aspects regarding the fundamental categories of risks from the point of view of managerial utility. Based on a selective scientific research carried out on a sample of entities in the Centre Region, the paper captures the degree to which managers are interested in capitalizing the accounting information for knowing the risks.

Keywords: risk, accounting information, performance, bankruptcy, management

1. Introduction

A Harvard Business Review Analytic Services study found that only 1 in 10 respondents said their executive management was extremely effective in creating a risk awareness culture, and only 40% considered there was proactive management of integrated risk at all organizational levels [1]. Thus, there is a need for risk management, the primary purpose of which is to give an organization the opportunity to achieve its objectives [2], as the unexpected part of income, resulting from unforeseen events, quantifies the real risk of the business. After all, if we get what we expect without doing anything, we would no longer talk about risk, uncertainty and performance.

2. Risk in literature review

Mihalcea R. and Androniceanu A. [3] define the risk as “a measure of the mismatch between different possible outcomes obtained in more or less favourable or unfavourable

conditions.”

In addressing International Standards on Auditing (see ISA No. 315 [4]), the business risk results from “significant circumstances, events, acts or omissions that can affect the entity in pursuing its objectives and pursuing the strategy, or setting out inappropriate goals and strategies.” Referring to the importance of risk awareness, Rusu C. and Vişoiu I [5] said that “we take risks not to avoid dangers, but to gain benefits and win and by taking controlled and known risks, we live the beautiful and essential part of life every day.” By studying the bibliographic references (see [6], [7], [8], [9], [10]), we identified without limitation the following risk categories: internal risk, external risk, financial risk, market risk, commercial risk (price risk, sale, transport risk), cost risk, technical risk, investment risk, contractual risk, business risk, portfolio risk, foreign exchange risk, natural risk, transfer risk, insurable risk, legal risk, business risk, political risk, country risk

etc. Because, as it can be seen from the bibliographical references used, the literature deals thoroughly with the various categories of risks, we will present some essential aspects regarding the fundamental categories of risks from the perspective of the utility offered in management.

Economic risk is an expression of the flexibility of operating result influenced by fluctuations of elements such as electricity or gas charges, fuel prices, wages, raw material and material prices, competition, consumer purchasing power, items that are later reflected on the cost, the sales price and the quantities sold. The main indicator of analysis available to management is the profitability threshold. In order to assess the economic risk and the sensitivity of the factors, in management, on the basis of the accounting information, it is possible to carry out: analysis of the profit rate sensitivity in relation to the variation of the utilization rate of the production capacity; analysis of the sensitivity of the profit rate in relation to the change in the sale price of the product; the analysis of the sensitivity of the profit rate to the variation in the company's economic life; sensitivity analysis using the profitability threshold or the equilibrium point. Economic risk analysis is mainly driven by operating leverage. Depending on the values obtained, the conclusions show whether the entity is in an unstable situation (CA is higher than the ROI of less than 10%), stable (10-20%), comfortable (over 20%).

The use of accounting information to determine *financial risk* by determining the financial leverage gives the management the opportunity to characterize the evolution of the result indicators according to the financial structure and the degree of indebtedness. Financial risk can also be appreciated through the BCG (Boston Consulting Group) and ADL (Arthur D. Little) models [11], linking profitability and financial needs with the product portfolio – most commonly known, dilemmas, cash sources, millstones - or life stages.

Risk of bankruptcy (insolvency). Under Law 85/2014, “insolvency is the situation ... characterized by the insufficiency of cash resources necessary for the payment of certain, liquid and enforceable against the company debts...” [12]. If the insolvency regulation was necessary, we consider that the use of accounting information for knowing the risk of insolvency is at least equally necessary, given that the studies in the field (see for example www.coface.ro) made by specialists based on the data published in BPI is the basis for this statement. For example, the number of companies that interrupted operations in the first half of 2018 is 74,442, up 12% over the same period in 2017, with effects being reflected in creditor losses, unemployment and further repercussions at macroeconomic level [13], [14]. In the simplest form, from a financial perspective, insolvency, potentially followed by bankruptcy, is manifested by a high degree of indebtedness at the same time as a low solvency rate. This type of risk denotes the incapacity to pay outstanding debts, a result generated by the losses incurred through the activity that led to the full use of equity [15]. The risk of bankruptcy involves a multitude of factors, which is why a mere analysis of the net situation, indebtedness, solvency and results is not enough. As a response to the shortcomings of self-standing indicators, specialists have developed the Score Method, also known as Score Z, a linear function based on various variables. Based on this method, economic theory identifies several models such as: Altman, Alexandru Gheorghiu, BCR, Canon & Holder, Rolland-Berger.

3. Objectives and Hypotheses of the Selective Research

The selective research, based on which the results are presented below, was elaborated on a sample of 301 entities from the Centre Region. The research objectives and hypotheses are presented in table no. 1.

Table 1 Objectives and hypotheses of research

Central objective	Main hypotheses	Secondary objectives	Secondary hypotheses
Q₁ Knowing the entity's choices on the capitalization of accounting information for risk analysis	IP₁ – Managers are less interested in the use of accounting information to identify risks and most often financial risk is being assessed.	Q_{1.1} Analysing the extent to which management is interested in knowing the risks according to the category and field of activity of the entities.	IS₁ – There is a direct relationship between the category of entities and the interest in knowing the risks. IS₂ – Industry entities are most interested in knowing the risks.
		Q_{1.2} Identifying risks assessed by entity category.	IS₃ – Recognition of risk information is dependent on the category of entities.

4. Research Results and Conclusions

In order to identify the extent to which the managers of the entities are interested in the knowing the risks, we have formulated variable v₆₂ in the questionnaire used for the operationalization of the research. For detailed analysis, we used the secondary objective Q_{1.1} -Analysing the extent to which

management is interested in knowing the risks according to the category and field of activity of the entities, making the associations v₆₂with v₂ and v₆₂with v₁. The processed responses are presented in Tables 2, 3 and 4.

Table 2. Managers are interested in knowing the risks

		Frequency	Percentage	Valid percentage
Valid	301			
	to a very small extent	41	13,62	13,62
	to a small extent	63	20,93	20,93
	neither to a small, nor a large extent	112	37,21	37,21
	to a large extent	47	15,61	15,61
	to a great extent	38	12,62	12,62
	Total	301	100	100
Score	2,93			

Source: statistical processing

The data collected to identify interest in knowing the risks that may affect the continuity of activity reveals that the highest share of responses (37.21%) is neutral, while only 12.62% and 15.61% of the respondents say that are very much and very interested in identifying the risks that can affect their business. The calculated

score (2.93) reveals a general average interest of managers to identify risks as an opportunity to capitalize on accounting information.

Table 3. Managers are interested in knowing the risks - analysis by category

Opinion	Category				Total %
	micro	small company	middle-sized company	big company	
to a very small extent%	37	4	0	0	41
	25,00	4,76	0,00	0,00	13,62
to a small extent %	43	17	3	0	63
	29,05	20,24	5,77	0,00	20,93
neither to a small, nor a large extent %	58	37	13	4	112
	39,19	44,05	25,00	23,53	37,21
to a large extent %	8	18	15	6	47
	5,41	21,43	28,85	35,29	15,61
to a great extent %	2	8	21	7	38
	1,35	9,52	40,38	41,18	12,62
Score	2,29	3,11	4,04	4,18	2,93
Total %	148	84	52	17	301
	100	100	100	100	100

Source: statistical processing

Based on the combined “risk awareness”/ “entity category” analysis, we conclude that no category of companies has a majority percentage in the option “to a great extent”, but again it is obvious that large entities (76.47%) and medium-sized (69.23%) are most interested in such opportunities in capitalizing accounting information. For

medium-sized entities (69.05%) and micro (93.24%), most options fall into the “neither-nor – to a very small extent” range. Following processing, the *IS₁* secondary hypothesis - *There is a direct relationship between the category of entities and the interest in knowing the risks is confirmed.*

Table 4. Managers are interested in knowing the risks - analysis by field of activity

Opinion	Field of activity				Total %
	commerce	industry	services	agriculture	
to a very small extent %	7	1	28	5	41
	11,48	1,33	18,06	50,00	13,62
to a small extent %	19	11	31	2	63
	31,15	14,67	20,00	20,00	20,93
neither to a small, nor a large extent %	20	22	69	1	112
	32,79	29,33	44,52	10,00	37,21
to a large extent %	7	23	15	2	47
	11,48	30,67	9,68	20,00	15,61
to a great extent %	8	18	12	0	38
	13,11	24,00	7,74	0,00	12,62
Score	2,84	3,61	2,69	2,00	2,93
Total %	61	75	155	10	301
	100	100	100	100	100

Source: statistical processing

From the analysis of the field of activity, we note that industry entities are most interested in identifying their risks, most of them (54.67%) being very and very much interested, while service entities appear to

be being the most disinterested, the majority share of 82.58% being distributed in the “neither-nor – to a very small extent” range. Most respondents in the agricultural sector are totally uninterested in this aspect.

Conclusions lead to confirmation of the *IS*₂ secondary hypothesis - *industry entities are most interested in knowing the risks*.

Another aspect surprised by the research was the highlighting of risks assessed by entities. Even if they are not in a position to assess any risk that may arise during the course of the business, we believe that they should at least address the main risks of

accounting information: economic, financial or bankruptcy risk. By formulating the operational variable *v63*, we sought to identify *the types of risks we assessed in the entities*. The secondary objective formulated *Q_{1.2}—Identifying the risks assessed by the entity category* was achieved by associating *v63* with *v2*. The answers are given in Tables 5 and 6.

Table 5. Risks assessed on the basis of accounting information

	Mentioned	Not mentioned	Percentage	Valid percentage	Total %
- economic risk	84	217	27,91	27,91	100
- financial risk	102	199	33,89	33,89	100
- bankruptcy risk	60	241	19,93	19,93	100
- others, which?	37	264	12,29	12,29	100
- none and we do not intend to, why ?	128	173	42,52	42,52	100
- none, but we intend to, why?	61	240	20,27	20,27	100

Source: statistical processing

Table 6. Risks based on accounting information by entity category

Risk	Category				Total %
	micro	small company	middle-sized company	big company	
Economic risk	1	14	52	17	84
%	0,68	16,67	100,00	100,00	27,91
Financial risk	3	30	52	17	102
%	2,03	35,71	100,00	100,00	33,89
Bankruptcy risk	0	4	41	15	60
%	0,00	4,76	78,85	88,24	19,93
Others	4	3	22	8	37
%	2,70	3,57	42,31	47,06	12,29
None and we do not intend to	108	20	0	0	128
%	72,97	23,81	0,00	0,00	42,52
None, but we intend to	34	27	0	0	61
%	22,97	32,14	0,00	0,00	20,27
Total	148	84	52	17	301

Source: statistical processing

The processing of collected data highlights, first of all, that a majority of 62.79% of respondents say they do not assess any type of risk. Of these, a 20.27% figure indicates that they intend to use the accounting information to identify the risks because they help identify the weaknesses of the

business, allow for decisions before being too late, they are aware of the importance of this research tool, it is possible to improve the activity for the future development (the respondents have pointed out the necessity to obtain financing) etc. A share of 42.52% of those who say they do not assess the

risks highlights that they will not do it, mainly because they consider it not useful (the negative influences come from the external environment and there is no control over them), the business goes well focused on areas where there is no competition (and we would add, for the time being), it entails additional costs, difficulty in analysing etc.

Concerning those who use the accounting information for risk analysis, 33.89% are interested in financial risk, 27.91% seek to know the economic risk and 19.93% consider that knowledge of the bankruptcy risk is opportune for management. It is also worth mentioning the percentage of 12.29% of those who mentioned that they are assessing other risks, which include the risk of price changes, the risk of insolvency, contractual risk, investment risk, exchange rate risk.

An analysis made according to the company's category reveals that all large and medium-sized entities assess the economic and financial risk and most of them are also interested in the bankruptcy risk. As we have already experienced before, unfortunately, to the opposite side there are the micro-entities, which, in a percentage of 72.97% declare they are not evaluating any kind of risk and are not interested in doing so in the future. With regard to small entities, the situation is somewhat better, 32.14% of them saying they do not yet value the accounting information for the risk assessment but have the intention of realizing it in the future, 35.71% declare that they assess the financial risk and a share of 16.67% channel their efforts to assess the economic risk. The data obtained leads to the validation of the secondary hypothesis *IS₃ - Valuation of the accounting information for knowing the risks are dependent on the category of entities*.

Consequently, the hypothesis formulated before the research (*IP₁ - Managers are*

less interested in the use of accounting information to identify risks and most often assess financial risk) is partially validated because, in view of the interest shown for the general knowledge of the risks, the score obtained was of 2.93 which places the general opinion in the neutral zone.

5. Final Conclusions

The assessment of the potential impact of the risk may be limited by both the range of possible effects and the likelihood of recurrence of risk over a given period. Such complications must be provided by managers and a management attitude, but also permanent attention is needed. Unfortunately, from the selective research carried out, we have found that these are also evaluated to a small extent. Regarding the managers' interest in knowing the risks that may affect the continuity of the activity, we concluded that it manifests itself at an average level, emphasizing the direct relationship with the category of entities. The reality of using information for risk analysis is sad, with a majority of 62.79% of respondents saying they do not assess any risk. However, we have also noticed the 20.27% share of those who say they intend because it helps identify the weaknesses of the activity, it allows making decisions before it is too late, they are aware of the importance of this research tool, it allows to improve the activity for future development etc. A share of 42.52% of those who say they do not assess the risks highlights that they will not even do it, mainly because it feels not useful, the business goes well, focusing on areas where there is no competition (and we would add, for the time being), it entails additional costs, difficulty in analysing etc. of those who assess risk, most often focus on the financial one.

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