Economic risk on the performance of sports organizations

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Abstract: In the economic activity of any organization may appear times difficult to avoid and overcome, which may lead to the insolvency and ultimately bankruptcy. The many factors that generate business risk determines its manifestation in various forms such as market risk, economic risk, financial risk, risk of technological change, currency risk or bankruptcy risk. The purpose of risk analysis in organizations is revealing the factors acting on these types of risks, the size of their influence on the variability of results under the organization structure, reserves and measures to reduce and thus eliminate the risk. Proper financial planning is the key to success of any business presenting risks, and its absence is a key element in the failure of many economic organizations.

Keywords: solvency risk, bankruptcy risk, operational risk, financial risk

1   Introduction

Risk - achieving financial diagnosis can be achieved only by taking into account the profitability, since it mandatory requires consideration of risk, as the risk analysis is dependent on the profitability analysis. In other words, financial stability is assured as long as the profitability released by an entity outweighs risk.

The risk is thus the measure of winning. Risk can be caused by many reasons such as: specific activity of the organization, unfair actions of competitors, the existence of unproper management, the circumstances of force majeure (natural disasters, fires) (Burduț, 2005).

Risks can be generated internally by the activity and externally by economic environment. Identifying the sources of risk can be achieved through: sensitivity analysis, allowing the breakdown of funds on the main risk factors which determine its level (eg size of the market that is competing) and scenario method, which involves making punctually estimates of variation results from economic development opportunities (Vișoiu & Rusu, 2010).

Methods of risk measurement and elimination

Risk analysis it is a complex activity, being the result of the impact of all types of risks acting in the organization. There are a series of methods for determining the impact of risk, depending on the time horizon. Risk assessment as stochastic indicator involves quantification variability of forecasted profit. Estimation of variance and achievable values of profit is a way of determining risk, as in the case of sensitivity analysis (Ceocea, 2010).

Decision tree analysis - conventional or stochastic - not only take into account cash flows obtained at certain points in time, but the feedback that exists between

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economic developments and decisions made by the manager of the organization (Drury, 2008). This implies that for each probable event is provided an action that is appropriate to situation which can be taken by manager and that will influence the size of the cash flows obtained.

The analysis is based on stochastic realization of a tree whose nodes represent probable future events and branches are possible manager decisions taken in those situations. Hertz simulation and Monte Carlo simulation take into account the diversity of risk factors and quantification of their action on the results of the company. This type of analysis involving the following steps:

- Estimate the range of values for each risk factor;
- Estimate within the range determined in step 1, of the probability of occurrence for each possible value of that factor;
- Determining the relationships between risk factors and profit enterprise;
- Selecting a value from the distribution of values for each risk factor;
- Estimate the variable analyzed based on the set of values extracted for determining factors;
- Repeating selection process of the set of values for estimating the size of the variable analyzed.

Financial risk

Each organization has its own capital and borrowed one, for normal activity. Calling borrowed capital generates costs and risks that may affect profitability. This is financial risk which reflects the variability of outcome indicators, due to changes in the financial structure of the company. Financial risk is defined as uncertainty about future income, and it can because significant losses if revenues are not properly managed (Niculescu, 2004).

In economic practice, there are several ways to analyze and evaluate financial risk. Risk analysis is performed:

- based on the breakeven point
- based on leverage
- By factorial explanation of profitability and breakeven point.

Risk of bankruptcy

The primary objective of financial diagnosis is focused on highlighting the risks that could disrupt future work, or even cause bankruptcy of organization. Failure of the company to adapt to changes in the economic environment determines a continuous degradation of economic and financial situation, which ultimately can lead to bankruptcy. According to Bătrâncea, I., 2006, the determinant causes of bankruptcy resulting from management of accounting and how to adapt to changes. Causes of the risk of bankruptcy act chained and eventually converge to insolvency within the enterprise. The first misstep starts from overspending, which diminishes the value added and then generate an insufficient profitability.

Profitability directly affects the ability of self-financing, which is insufficient in relation to the investments. All these have a negative impact on liquidity, which being insufficient, leading the company to indebtedness. In this way, solvency is also affected, which is considered essential for survival of the company, and for

this reason creditors do not provide loans. Next we will analise the diagnostic risk of a sport organization (Niculescu, 1998, Petrescu, 2004).

Financial risk

Breakeven has an important role in assessing the performance and achievements of the organization, but also the choice of solutions for the future. The dead point (DP), linking the economic and financial, will be the one to guide decisions in the sense that a difficult situation should be linked to financing investment from equity, otherwise the breakeven point will increase which will cause an even worse situation for the organization.

Table 1 – Financial breakeven point method

No	Indicators	Analyzed period		
		2008	2009	2010
1.	Turnover (To)	199.945.306	156.160.170	156.160.170
2.	Variable expenditures (Ex$_{var}$)	140.425.625	102.149.218	131.132.705
3.	The share of variable expenditures (a)	70,23%	65,41%	83,97%
4.	Fixed expenditures (Ex$_{fix}$)	50.935.587	48.789.253	58.357.082
5.	Operating result (R$_{op}$)	12.196.999	8.302.347	2.288.566
6.	Interests (I)	2.628.194	2.247.645	2.200.032
7.	Current profit after interest payments (CP)	9.568.805	6.054.702	88.534
8.	Breakeven point BP=(Ex$_{fix}$ +I)/1-a	179.925.364	141.699.965	377.773.636

Source: Calculation by the authors based on data from the annual financial statements

From the presentation of breakeven point method in table 1 it shows that loans generates financial costs and increases breakeven and consequently decreases the flexibility of the organization. This leads to degradation of the firm's position, which is reinforced by decrease variability of current profit. Financial leverage calculation is done in table 2 and it highlighted the impact of financial leverage on the risk of the organization analyze in this paper.

The interpretation of quantities determined in table 2 leads to the following conclusions: it is noted that during the analyzed period, the leverage is subunitary and exercise a positive financial leverage, as long as economic profitability exceeds the average interest rate.

In the three financial years is observed that under the influence of economic profitability, higher then average interest rate, leverage shows the following values: 0.736 in 2008, 0.4494 in 2009 and 0.096 in 2010.

Leverage showed a decrease of approximately 78.63% in 2010 compared to 2009, mainly due to declining profitability and increasing economic leverage, which causes an increase of interest rate.

Table 2 Impact of financial leverage on the risk

Indicators	Financial year		
	2008	2009	2010
Operating result (R_{op})	12.196.999	8.302.347	2.288.566
Financial expenses (Ex_{fin})	10.119.851	8.821.664	9.113.482
Equity (Eq)	292.820.153	299.094.680	301.341.201
Financial profitability $P_{fin} = (R_{op} - Ex_{fin}) / Eq *100$	0,70	-0,17	-2,26
Total assets (TA)	364.330.856	365.700.005	365.415.043
Economic profitability $P_{econ} = R_{op} / TA *100$	3,34	2,27	0,62
Liabilities (L)	69.003.577	64.112.532	61.393.604
Average interest rate $IR_{av} = Ex_{fin} / L$	0,14	0,13	0,14
Financial lever (FL) = L/ Eq	0,23	0,21	0,20
Financial lever effect $FLE = (P_{econ} - IR_{av})*FL$	0,736	0,4494	0,096

Source: Calculation by the authors based on data from the annual financial statements

In this case we see a positive leverage, because the economic profitability rate is higher than the average interest rate. This implies that equity remuneration is higher then debts remuneration, an issue which highlights the right relationship between cost of capital and the level of risk associated.

The difference between the rate of economic profitability and the average interest rate, positive one, allows the indebtedness to increase financial profitability rate, meaning financial profitability is an increasing function of leverage. In this case, an increasing debt will favorably influence the rate of financial profitability, but this should not be followed by the use of excessive loans because the organization's treasury implications can be significant.

A determinant of leverage is the ratio of borrowed capital and equity capital available to the organization. Meanwhile, indebtedness is a risky method as to the borrower but also to the lender.

In terms of loaned organization, negative aspect of debt can lead to not deal with payment obligations, leading to insolvency and bankruptcy and thus loss of equity.

Risk of bankruptcy

The last type of risk presented in this paper is the risk of bankruptcy, which will be analyzed based on data from annual financial statements by the methods presented.

Table 3 – Determination of bankruptcy risk by scoring method

No	Model name	Financial year		
		2008	**2009**	**2010**
1.	Score Function - Model of Altman	1,72725	1,69389	1,67285
		Z<1,8	Z<1,8	Z<1,8
2.	Score Function - Model of Conan & Holder	0,371509	0,324980	0,361981
		probability of bankruptcy < 10%	probability of bankruptcy < 10%	probability of bankruptcy < 10%

Source: Calculation by the authors based on data from the annual financial statements

According to Altman model from the table above would deduce that sport structure is close to bankruptcy, namely that it is likely to become bankrupt within a year. Therefore it is absolutely necessary to relaunch activity and find appropriate strategies to improve its financial position.

We note that during the analyzed period, scoring function valuesfor Conan and Holder model shows a fluctuating trend with positive values from 0.371509 in 2008; 0.324980 in 2009 to 0.361981 in 2010. In 2009 the value of the function Z recorded a decrease, but this does not cause classification in the next interval for the probability of bankruptcy of 30%.

Therefore the organization manages to overcome the difficult period of crisis that affected the entire economy in 2009 and manages to not get in the unlikely event that its potential may lead to reduced profits.

However, the error can be very close to the truth. Score functions have many failures which led some economists to improve models by using cash flow indicators. Both studies reached the same conclusion: per assembly, there is not a considerable improvement in discrimination.

This is the result of ignoring the organization's ability to survive by the score functions, for example by rescheduling the payment terms or by restructuring their business. However, the fact that the company has got into this state is not encouraging for owners and its creditors, even if finally not go bankrupt. Bankruptcy is a legal matter more than economic. It is a mechanism disrupted by political considerations, sometimes unrelated to competitive market laws. Score functions have no way to include such items in their analysis. For the evaluation of Romanian organizations is necessary to develop appropriate models of economic conditions in Romania.

Score models can be self-correcting in so far as it introduces new observations on the Romanian economy organizations. In the Academy of Economic Studies are outstanding concerns on this line "forms of recognition" of organizations performing and nonperforming. Efforts and results are outstanding belonging to teachers and researchers Ion Smeureanu and Ruxandra Gheorghe from ASE, which can be a reliable econometric and information support to consultancy in "classification" of organizations.

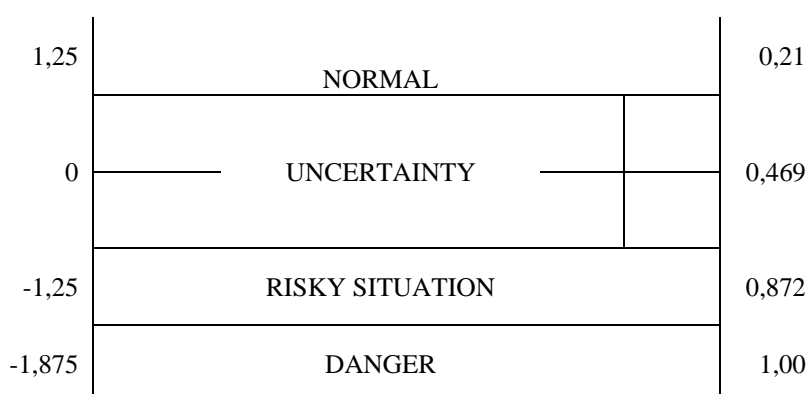| 1,25 | NORMAL | 0,21 |
0	UNCERTAINTY	0,469
-1,25	RISKY SITUATION	0,872
-1,875	DANGER	1,00

Figure 1 - Enterprise situation from the Romanian economy relative to value of score and probability of bankruptcy, *Source: Stancu, I., 1996, pp.389*

According to figure 1, the enterprise is in the area of uncertainty, based on data obtained at the two score functions previously calculated. Therefore the two models must be adapted to the conditions of the Romanian economy because it does not reflect the real situation of the organizations analyzed.

In conclusion in the economic activity of any organization, there are many moments difficult to avoid and overcome, which may lead the organization to insolvency and ultimately bankruptcy.

The many factors that generate business risk determines its manifestation in various forms such as market risk, economic risk, financial risk, risk of technological changes, currency risk and bankruptcy risk. The purpose of risk analysis is to reveal the factors that act on these types of risks, the size of their influence on the variability of results under incidence of organization structure, reserves and measures to reduce and eliminate the risk. Proper financial planning is the key to success of any business presenting risks, and its absence is a key element in the failure of many organizations.

2   Conclusion

Thus, the recommendations on improving the profitability and economic competitiveness can be analyzed:

Promoting financial policy aimed at: the investment policy - deepening profits in new technologies; in funding policy, decision alternatives can be - internal sources (resulting from self-financing, ie depreciation and profit from divestments of fixed assets and current assets); external sources namely attract capital from outside the organization.

In the case of the financial leverage, it is a useful tool for optimizing the financial structure and therefore to prevent financial risk. The purpose of proposed analysis is to reveal the factors that act on financial risk, the extent of their influence on the variability of results under incidence of financial policy; the causes; how to determine the reserves and measures to reduce or eliminate financial risk.

Another type of risk that confronts sport organization is the risk of bankruptcy, which can be analyzed by score method. Information value of the score should not be overstated because the enterprise is a social and economic system that operates

in a complex environment with many more variables to determine its health or weakness. The score is a tool for "early detection" of bankruptcy risk, but the information should be used with great caution. Therefore, it is recommended that score analysis to be used along with conventional diagnostic methods - analysis of financial balance, profitability analysis and finally analysis of the organization's overall risk.

Due to their specificity, the score equations can not be used for Romanian organizations. Their presentation was made to highlight the efforts of financial theory and practice, for performance evaluation based on a complex indicator, like SCORE.

From the above analysis, it appears that sports structure encountering difficulties that can cause bankruptcy, so the organization administrator must consider these issues and adopt certain strategies to avoid bankruptcy risk.

Finally, we conclude that the activity of an organization should be generating positive effects that lead to support the going concern assumption. So it is necessary to have a financial balance, during the duration of operation between resources and its needs.

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