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**Pyramidal Management of Risk Control-  
Case Study in Agro-food Enterprises in Iasi County, Romania**

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# Pyramidal Management of Risk Control- Case Study in Agro-food Enterprises in Iasi County, Romania

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## **Abstract**

*In agro-food enterprises from Romania, management of risk control is seen as a dynamic process that, in order to work involves a cycle that incorporates risk identification, assessment, administering and verification.*

*Risk management is closely related to the performance management, so that it has been set establishing key indicators of the performance. The pyramid of risk management provides to the managers a model of effective approach of risk and the ability to manage them, thus increasing consolidation capacity of added value.*

*Risk management is necessary because all agro-food enterprises face uncertainty and the management team must determine the acceptable level of risk*

*The paper presents a case study on the pyramidal management of risk control for two major agro-food enterprises from Iasi County.*

*The authors have established as main goals in this paper identifying the objectives of the audit, assessment and measuring risk according to the probability of impact occurrence and the period of events consequences, prioritizing risks, risks analyzing and reporting.*

**Keywords:** risk, management, financial statements

## **Résumé**

Dans les entreprises alimentaires en Roumanie, la gestion des risques est considérée comme un processus dynamique qui suppose d'exécuter un cycle qui comprend l'identification, l'évaluation, la gestion des risques et de vérification. La gestion des risques est étroitement liée à la gestion de la performance, de sorte que a été mis en IRC Gestion des risques pyramide fournit aux gestionnaires une approche efficace pour modéliser le risque et la capacité de les gérer, augmentant ainsi le renforcement des capacités valeur ajoutée.

La gestion des risques est nécessaire parce que toutes les entreprises agro-alimentaires face à l'incertitude et l'équipe de gestion doivent déterminer le niveau de risque acceptable Normes d'audit interne recommandent évaluation périodique du processus de gestion des risques et le traitement systématique, qui doit représenter la principale préoccupation de la gestion de la ligne Cet article présente une étude de cas sur la pyramide de gestion des risques à deux grandes entreprises agro-alimentaire Iasi.

Les auteurs ont établi que l'objectif principal de cet article identifier les objectifs de la mesure de vérification, d'évaluation et de risque en fonction de la probabilité d'un impact et les conséquences de la durée des événements, risques ordre de priorité, l'analyse et la communication des risques

**Mots-clés:** risqué, la gestion, les états financiers

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# 1. Introduction

The notion of risk management is widespread, often misunderstood, and has got different meanings for different companies. The process of risk management begins with identifying the potential risks faced by the company, establishing their impact upon the performance of the organization and the evaluation of its capacity to face inherent risks. Integrating the activity of risk management within current activities supports the successful exploitation of business opportunities. The total cost for risk reduction often exceeds the profit brought by the company. The cost of lost business opportunities threatens the survival of the business. Resorting to a longterm risk management system can provide the following benefits: A broader view on the risk profile of the business, improved response through clearly stated and distributed responsibilities, value added through taking risks, better quality of the entire process, as well as an improved level of trust in reaching objectives.

Risk management is not an activity isolated from all the others related to management. Assessing and approaching risk must be realized for all fields of activity of the organization (ensuring the quality of production, economic, financial, information management, project development, environmental protection, human resources etc.). For an efficient system of risk management, the identification of the risks has to become a permanent concern. The permanent identification of risks is a necessary condition for agro-foods companies to adapt to change.

## 2. Research methodology

For this research, the authors have used various methods, beginning with collecting data from various sources and ending with processing, analysing and interpreting the information.

In Romania, risk management systems are implemented in all organizations of the public sector, within the regulatory framework in use (Official Gazette No 946/2005), but entities in the other sectors are also preoccupied with implementing risk management systems and the principles of corporate governing. Within an agro-food company, risk management can be defined as the management of uncertain events en route to success.

Risk management is characterized by the totality of methods and means through which risk is being managed for the purpose of fulfilling the objectives stated in the established technical, social, human or political event, having uncertainty as the major fundament of risk factors. A successful business means an investment in a successful project, with

predictable, planned activities. In this case, the investment has to be made with partners that have predictable activities on a predictable market, with assessing and minimizing risks.

Risk management requires the utilization and synthesis of information from different fields, such as economy, technology, law, politics, psychology and social issues. British theorists (like Phil Griffiths – Risk-based auditing) believe that the most commonly met risk categories are the strategic risks (the ones affecting medium- and long-term objectives, as well as the general objectives of the organization), operational risks (risks that the management will encounter throughout daily activities), financial risks (risks that remain permanently at the foreground of management's focus and can lead to failures in financial planning), risks concerning reputation or the brand name, informational risks, IT-related risks, and personnel-related risks.

The activities occurring within agro-food companies are subjected to various risks, more or less known, easy or difficult to avoid, with the potential of leading to more or less severe consequences. A pyramid risk management allows for taking adequate decisions under the circumstances of risk and uncertainty, while insufficient knowledge of risks, their erroneous assessment could directly affect the final result of activities.

Our research was focused on two agro-food companies in Iasi county, one facing difficulties and the other profitable, both companies with experience in the field. The data was extracted, analyzed and interpreted for a period of 3 years (2010 – 2012).

For the company facing difficulties, the following risks were analyzed: economic risk, financial risk and bankruptcy risk.

The analysis revealed the following:

As far as the economic risk is concerned: the turnover for 2012 is situated below the level of economic productivity. The value of the security index is fairly small for 2011 and 2012, which indicates the fact that the security margin of the company is also insignificant, close to zero. The value of the absolute turnover, compared to the break-even level, shows a relatively stable situation in 2011, which indicates that the company was at the time in a relatively stable situation, but in 2012 the indicator dropped with approx. 9%, meaning that the situation of the company became unstable.

The elasticity coefficient indicated that, in 2012, the risk of exploitation is high, even though in 2011 the company generated profit as a result of having improved its turnover.

For the evaluation of the financial risk, we started from the data for 2011, showing that the company's

turnover had exceeded the break-even point, but dropped below this level in 2012.

For 2011 the rate of the company's financial autonomy was high, its business plans being sufficiently guaranteed by its own capital. For the year 2012 the value of the financial leverage is 0,00 because the company had no financial liabilities.

The companies that do not have financial liabilities do not face financial risks, but do not benefit from the leverage effect of debt, either, since the value of the company cannot be increased.

The financial profitability of its own capital for 2011 and 2012 indicated that the company only succeeded in making a small net profit, compared to its activities.

The value of financial profitability for 2011 and 2012 is situated below the inflation rate; in order to achieve a real increase, the company has to raise this value above the inflation rate. The financial leverage effect of debt (the efficiency of debt on financial profitability) was negative for 2011. In this case, financial profitability decreases according to the degree of debt, and the debt of the company negatively affects its performance, calling for a minimization of the ration financial debt/ capital. For 2012, the effect of financial leverage was 0, 00 because the company had no debt.

Starting from the analysis of the working capital and the liquidity rate, the analysis got to the evaluation of bankruptcy risk. The values of the working capital for 2011 and 2012 indicated that the agro-food company recorded a surplus of short-term liquidities, compared to the short-term debt.

For 2011, as well as for 2012, the rate of general liquidity is above one, which shows that, at least in short-term, the company can pay its contingent liabilities. The rate of partial liquidity reflected a favorable situation as far as solvency is concerned, the company being able to pay its debts from receivables and availability.

The rate of immediate liquidity (the ability to pay immediately) has a high value, but, even though in theory it indicates a good level of liquidity, it could also indicate towards an inefficient use of available financial resources.

For the second model, we searched for – and consequently analyzed – a profitable agro-food company. Starting from the annual financial statements, the turnover was analyzed, concluding that this was way above break-even, the company being profitable. The value of the security index indicated the fact that the company's security margin is relatively good.

The value of absolute turnover indicator, compared with the break-even level, shows that the company's flexibility is fairly high, so the

exploitation risk is reduced, the company being able to adapt to the demands of the market.

The turnover of the company is rather far from the profitability margin, which makes the elasticity indicator have a low value, so the exploitation risk is reduced.

The indicator of the relative position of the turnover, compared with the break-even level, shows that the company is in a comfortable position, with the turnover exceeding with 87,30% the profitability margin.

When assessing financial risk we took into consideration a series of indicators, such as turnover, financial leverages, financial profitability of the company's capital, economic profitability, as well as the leverage effect of debt.

The turnover of the company is situated above the breakeven level that is why we consider that the company is suited to obtain profit from the financial activity.

The value of the financial leverage, for both 2011 and 2012, is 0.00, because the company has no debt. The companies that have debts are not confronted with financial risks, but they also do not benefit from the leverage effect of debt, and the value of the company cannot be increased based on this.

The financial profitability of the capital shows the fact that the company makes a net profit from the capital used in its own activities; but in 2012 this profitability was 19,25% lower than 2011.

The value of economic profitability is above the inflation rate, which makes the company to record a real growth.

The leverage effect of debt is 0.00 for 2011 as well as 2012, since the company has got no financial debt.

For evaluating the bankruptcy risk we have taken into account the static patrimonial evaluation, as well as the evaluation of the bankruptcy risk through the scores-method.

For the static patrimonial evaluation of bankruptcy risk we have analyzed the working capital, the general liquidity rate and the immediate liquidity rate.

The working capital shows that the company records a surplus of short-term potential liquidity, compared with the short-term debt; consequently, the company is in a favourable situation in what concerns solvency, being able to pay its due debts, holding additional potential liquidities.

The rate of general liquidity is above one, which signifies the existence of supplementary resources, more precisely a working capital which allows the company to face unpredictable developments. This rate indicates that, at least on short-term, the company can pay its liabilities.

The liquidity rate has a high value for both 2011 and 2012, between 0,4 and 0,5.

As resulted from applying the score function, the company was not threatened by bankruptcy.

Based on Conan and Holder model, we have calculated the score function, which indicated that the situation of the company was good, the bankruptcy risk being below 10%. Consequent to risk assessment, for the company taken into consideration, we have reached the conclusion that the economic risk and the financial risk are low as well.

However, the company's management is aware of the unpredictable risks, especially against the background of the current global economic crisis.

### 3. Conclusions and recommendations

In the market economy, any business faces higher or lower risks, and it is necessary, for all those involved, that these risks be adequately comprehended, otherwise the possibilities to get profit could be diminished. But, in taking risks, one has to keep in mind one essential condition, that of knowing the risks specific to each business; these risks have to be identified, analyzed and assessed, and then one has to elaborate strategies to prevent all potential negative consequences of these risks.

In the last decade companies have made substantial investments in personnel, processes and technology to help them manage and control business risks more rigorously. These investments have focused on financial controls and compliance standards and regulations. Now, they have a strategic role in business financial development (Ernst & Young, Turning Risks into results); the authors show that the investment in risk management can have a direct impact on the financial performance of the organization and highlighted 5 elements to be taken into account.

1. Elaborating a risk management strategy (crucial for effective management involving accountability by the governing board and executive committee alike. This involves taking the strategic orientation of risks across the organization - managers and executives play a key role in risk assessment and management.

2. Integrating a risk management business plan - organizations that include risk management practices in their business plans and performance management can better achieve strategic and operational objectives.

3. Optimizing risk management functions - Aligning and coordinating unit activities on risk control and compliance functions, organizations can reduce the cost of risk management (eliminating

duplication and redundancy) and thus the total cost generating efficiency.

4. Improving controls and processes - organizations can improve performance and reduce costs by organizing optimized control activity of the control key processes in their work, using control predilection automated tools and monitoring of critical processes and key performance indicators with software tools and programs such as LRMC (literally: Leadership, Risk Management and Compliance).

5. Constant communication on risk management - Moving an organization from the state "ready - for - situations - of - risk" requires leaders to lead by example and help to create an atmosphere of work ethic throughout the organization . For maximum benefit, you need constant and open communication to all audiences, offering insurance to third parties and use the advantages that technology offers. Organizations that transform risks into results have to create competitive advantage through the implementation of resource efficiency through improved decision-making process and, ultimately, through reduced exposure to negative events "(Ernst & Young). Organizations which convert risks into results have to focus on three main areas: reducing risks, increasing efficiency by reducing the costs of control and value creation by combining risk reduction and reducing their corresponding costs.

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