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## Management accounting and economic security in corporate management of agricultural company operation

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### ABSTRACT

The article analyzes management accounting and economic security in the corporate governance system of an agricultural organization in an integrated manner, regarding the study of internal and external factors. The objective of the study is to develop an accounting model in business management, taking into account business development and economic security. In accordance with this objective, the main task was determined, to develop a comprehensive mechanism in terms of business development, resource conservation, production, budgeting and economic security. To develop an accounting model in business management, taking into account business development and economic security, the parameterization method was applied by modeling situations under modern conditions. The need to apply a systematic approach is founded, monitoring indicators are proposed to determine the risks and various threats to the operation and development of a business.

KEY WORDS: management; agricultural organization; economic security; integration.

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## Contabilidad de gestión y seguridad económica en la gestión corporativa de operación de empresas agropecuarias

### RESUMEN

El artículo analiza la contabilidad de gestión y la seguridad económica en el sistema de gobierno corporativo de una organización agropecuaria de forma integrada, en cuanto al estudio de los factores internos y externos. El objetivo del estudio consiste en desarrollar un modelo de contabilidad en la gestión empresarial, teniendo en cuenta el desarrollo empresarial y la seguridad económica. De acuerdo con este objetivo, se determinó la tarea principal, desarrollar un mecanismo integral en términos de desarrollo comercial, conservación de recursos, producción, presupuestación y seguridad económica. Para desarrollar un modelo de contabilidad en la gestión empresarial, teniendo en cuenta el desarrollo empresarial y la seguridad económica, se aplicó el método de parametrización mediante el modelado de situaciones en condiciones modernas. Se fundamenta la necesidad de aplicar un enfoque sistemático, se proponen indicadores de seguimiento para determinar los riesgos y diversas amenazas para el funcionamiento y desarrollo de un negocio.

PALABRAS CLAVE: gestión; organización agraria; seguridad económica; integración.

### Introduction

An important aspect of the successful functioning and economic development of agricultural organizations is the internal functional analytical structures of accounting and economic security that register and collect information for further study and corporate business management.

Current competition, generated under modern conditions in Russian market of production and product processing, impacts development and introduction of management accounting into the corporate management system of agricultural companies (Alborov et al., 2017).

Corporate management is a philosophy in modern economic part of all business processes and functioning of a complex for making strategic and important management decisions (Kostyukova and Bobryshev, 2016).

Agricultural company is expected to develop new approaches to improve efficiency of company operation and expand prospects for further development under conditions of some risk in the market (Ivashkevich, 2017).

Economic safety assurance, achieved by establishing analytical centers and decentralization of management system, is an important aspect of successful functioning and economic development of agricultural company and whole business (Molchan, et al., 2020; Frantsisko, et al., 2020).

Management accounting and economic security in the corporate governance of an agricultural company have an important aspect for the functioning of a business.

The problems of management accounting and economic security of an organization are highlighted in many works of economists. Considerable experience has been accumulated in management accounting and economic security of the organization, however, management accounting from the point of view of economic security and corporate governance has its own characteristics, so this methodology requires development.

The aim of the study is to develop a management accounting model in corporate business management, taking into account business development and economic security.

Management accounting in corporate management of a company includes some functions such as business development management (Kontsevoi, et al., 2020).

Management accounting is a method of study and release of data planned by an owner of a business. Distributed by special means and communication channels, this data is intended for definite target users to present and promote business (an idea, final products or services) (Ostaev, et al., 2020).

Being integral part of economic safety system by its very nature, management accounting is an economic framework which gives precise estimation of different indicators influencing business.

Management accounting system comprises data of financial area, tax and management activity, and target, budget and forecast, and conceptualized conditions of business operation. This data takes into account some factors and internal and external threats (Khosiev, et al., 2019).

It should be noted that production cost accounting and output cost determination, being the integral parts of management accounting, combine data fields of financial and management accounting in agricultural company (Ostaev, et al., 2019). Data provision dispatch in rapidly fluctuating internal and external policy and business environment is a

distinctive and principal tool of management accounting in corporate business management (Popper, 2012).

Economic and Management Office and Accounting Office (financial, production and management) as well is expected to make reliable calculation of production cost for the sake of resource saving and providing production process. Being integral part of the corporate management structure, Accounting Office should be clearly differentiated by functions and operational tasks. The structure of accounting department in case of corporate management of agricultural company operation is presented in Table 1.

Table 1 – The structure of accounting department in corporate management of agricultural company operation

№ п/п	Accounting department	Management of company operation
1	Financial Accounting Department	In case of corporate management of company operation this department executes observing financial discipline and sustainable utilization of resources.
2	Production Accounting Department	In case of corporate management of company operation this department makes cost-information reports on production (works and services) costs, reveals fund-drainers and sources of non-manufacturing costs, prepares loss prevention measures.
3	Management accounting department	In case of corporate management of company operation researches on business development. Information is structured by significance in order to make strategic decisions.

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Nowadays management accounting should become the integral information part of well-organized corporate management system of agricultural company operation. Efficiency of management of production operation is provided and supported by information about operation of structural departments and administrative and management departments and offices.

Choice and detailing of cost-accounting objects in corporate management of agricultural company operation is determined by specificities of production process and need and demand in accounting data from the side of business management (Kondratiev, et al., 2020).

Suggested model of management accounting in corporate business management regarding business development and economic safety is presented on Fig. 1.

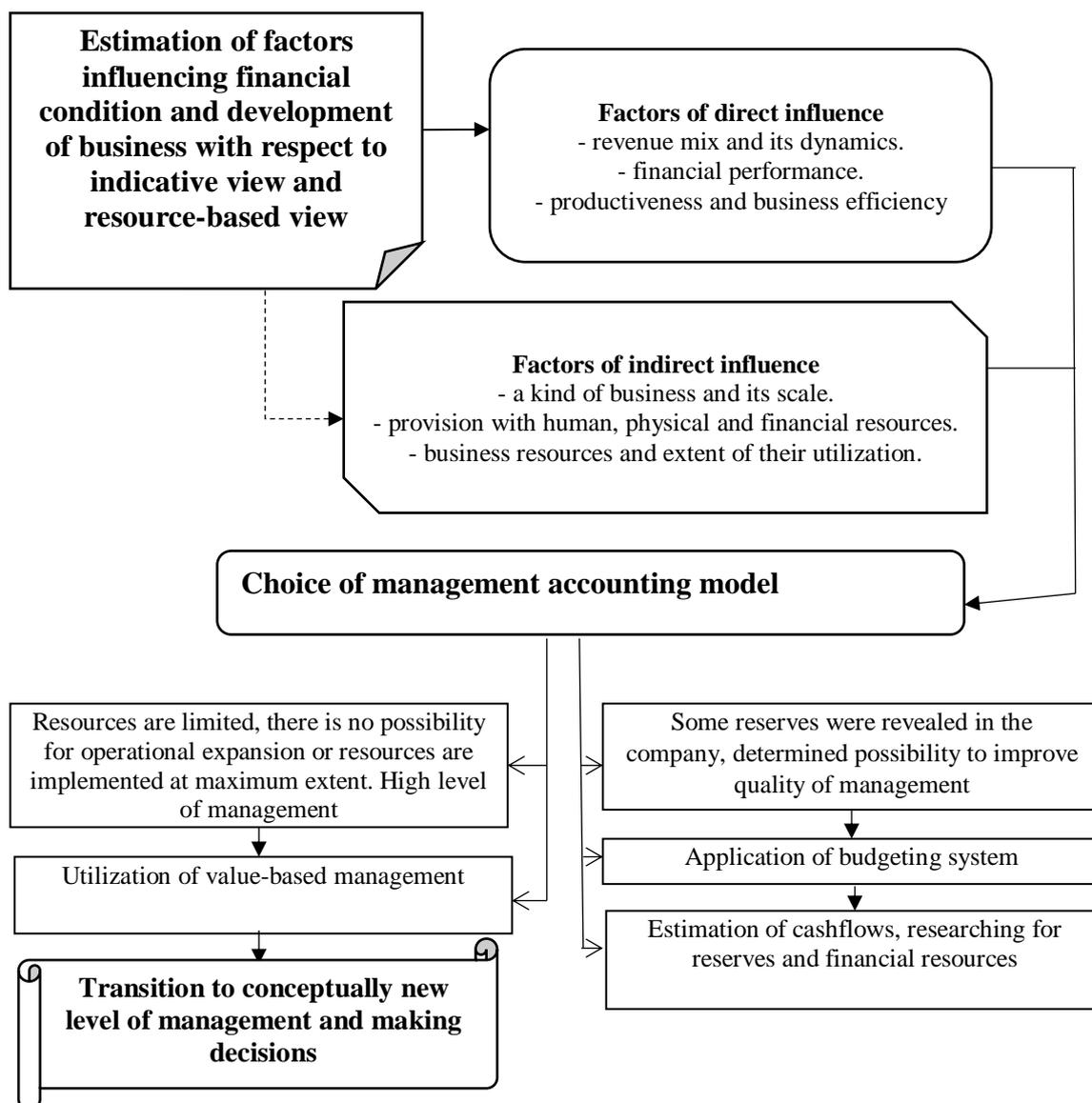


Fig. 1 – Recommended flowchart of determining model of management accounting in corporate business management (developed by the author)

Foremost technical and organizational characteristics of core production influence methodology and arrangement of management accounting in corporate business management. It is caused by the fact that specificity of industry is mostly expressed at the production stage. Hence, arrangement of the efficient information system of corporate business management depends on technical and organizational characteristics of production and processing of raw materials.

The more comprehensive description of business characteristics and more detailed information, the more efficient decision of management to increase production profitability (Khoruzhy, et al., 2019).

Agricultural and processing companies can achieve targets set earlier in planning of business by means of reliable provision with information, analytical tools and reasonable management decisions. Any taken management decision should be based upon duly analyzed information with respect to economic efficiency, practicability, rate of return and efficiency. In a similar vein, development of a company requires long term outlook estimation of business with respect to management efficiency of company operation.

Considering the role of management accounting in company operation, it should be noted that management accounting is estimated insufficiently in Russia (Mukhina, et al., 2014).

It is caused by the fact that management accounting as a sub-system of bookkeeping accounting appeared quite recently in Russia. However, increasing scale of business, technological improvement and need for improvement of business management under crisis conditions make management accounting more important and cause its extensive use in management system.

### 1. Methodology

The theoretical and methodological basis of the research is the specific application of the theory of scientific knowledge to the subject of research. The research is based on the dialectical method, which determines the study of economic phenomena and processes in interrelation and continuous development. During the research, both general scientific research methods (dialectics, analysis, synthesis, consistency, complexity, analogy, optimization, etc.) and special techniques and procedures (comparison, grouping, generalization, etc.) were used.

The new provisions are substantiated by the results of research and observations obtained by comparative-historical, dialectical-synthetic and abstract-logical methods. The theoretical basis of the research is the works of domestic and foreign scientists on the problems of theory and methodology of management accounting. The methodological basis of the study was formed by the theory of economic development and related theoretical and practical aspects of the methodology and organization of management accounting.

The significance of the study lies in substantiating the nature of the relationship between the effectiveness of the development of management accounting and economic security in the corporate governance of an agricultural organization.

## 2. Results and discussion

Achievement of developmental aims of an object and introduction of these aims into definite business processes are linked with great labor in management accounting and forecasting of condition of a managed object. Reasonable planned model in management accounting is always developed with use of monitoring and forecast data which basically contain analytical results of operation of an economic object over prior periods and other significant internal and external trends. Consequently, the following functions are observed at the initial stage of management process:

- multivariable economic analysis as a set of works in estimation of obtained results (detecting and identification of reserves for further development).
- strategic forecasting as a set of business models of economic actions, which might take place in future.
- adoption of necessary plans and budgets in order to define actions in further economic development of an object.

Management accounting in corporate business management is expected to solve long term outlook problems (Table 2). Development of the model of management accounting in agricultural company assumes that there are some ways of economic future and economic condition is variable one.

Agricultural company should stay capable to keep progressive development and assign its resources to support stable condition under effect of big number of factors of internal and external environment and impact of instability and uncertainty. Hence, management and minimization of risks, appearing during operation activity, should be paid special attention.

In order to define top-priority ways of development, monitoring should be carried out and financial and other indicators of activity should be estimated for budgeting aims as well (Dalkey and Helmer-Hirschberg, 1962).

There are indicators defining quality of budgeting, which characterizes quality of management activity, i.e. statistical and dynamic stability (Rokotyanskaya, et al., 2018).

Statistical stability keeps indicators at the same definite level, and dynamic stability identifies positive changes characterized by development of indicators.

Management decentralization requires arrangement of management accounting by responsibility centers, that helps estimate results and efficiency of activity of each business

segment and its share in total result of operation activity of a company.

Table 2– Management accounting in corporate business management as a guarantee of solving long term outlook problems

No.	Parameter	Planned level	Forecasted level
1	Time slot	Time period for which a company has or can make detailed plans of development of business	Time period which is out of detailed plans and budgets.
<i>Nota bene: Distance, space between equally spaced positions is time period</i>			
2	Risks	Plans with respect to indicative specificities do not comprise big faults and their forming is not related to unacceptable costs for business	Formation of plans and budgets is related to high extent of unreliability and/or big costs.
<i>Nota bene: Risk analysis considers internal and external threats.</i>			
3	Information	Utmost detailed and reliable information concerns future business process in a company.	Information is generalized and often has high extent of uncertainty.
<i>Nota bene: Detailed elaboration of information is a primary target.</i>			
4	Limits	Opportunity of forming detailed budget is directed from business operation plans.	Indicators of business activity should be modeled in aggregative view or they should have probabilistic nature.
<i>Nota bene: Limits provide answers on questions about given criteria.</i>			

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Arrangement of management accounting by responsibility centers comprises:

- Development of appropriate budgets defining short-term prospects of activity of these centers.

- Arrangement of accounting of costs, incomes and financial results of activity.

Responsibility center defines objects of accounting.

- Arrangement of control of planned and descendent facts of business activity of these responsibility centers.

- Formation of internal reporting by responsibility centers in conformance with established system of controlled indicators.

– Analysis of results of activity of responsibility centers and definition of their impact on results of business activity of a company.

Specific conditions of activity of appropriate responsibility centers that is their resource and production capacity, environmental and economic factors of activity, their margin of discretion and responsibility should be considered during development of budgets.

Variation of structure of budget and its expenditure depends on individual, social, economic, environmental, resource and other specificities of a business unit.

Development of budgeting framework defining quality of management of activity is presented on Fig. 2.

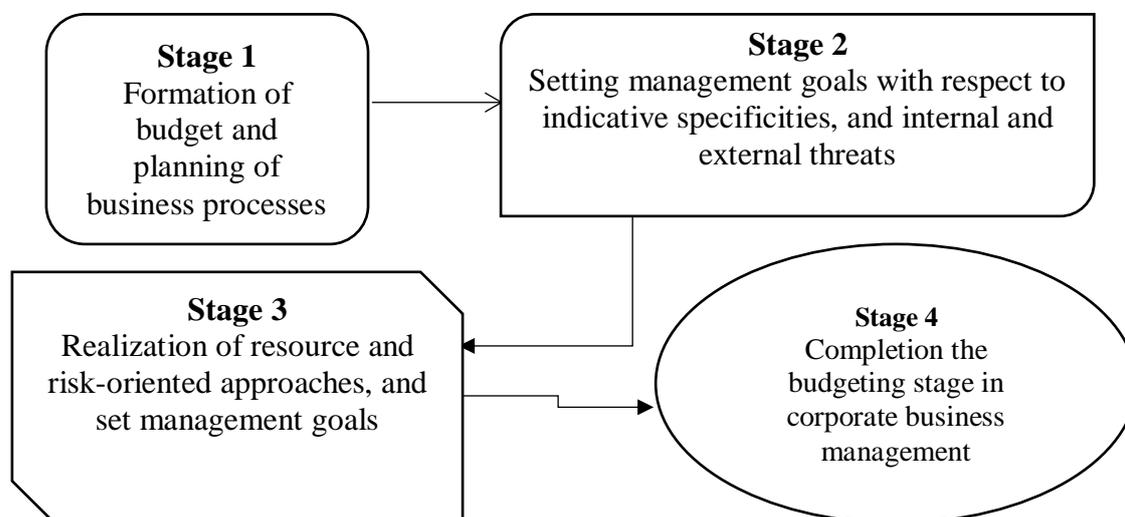


Fig 2 – Flowchart of development of budgeting framework defining quality of management activity (author's development)

Besides, management accounting in corporate business management secures economic safety and it is expressed in protection of interests of agricultural company from appearing threats and providing condition for steady development of a business unit. Reliable and efficient system of economic safety can secure stable social and economic development of a business unit.

Management Accounting Office and Economic Safety Office of a business unit should act as a single entity in the system of monitoring, identification of risks and some threats for operation and development of business.

Being integrated they help define those parameters which should be decided for making reasonable management decisions (Fig.3).

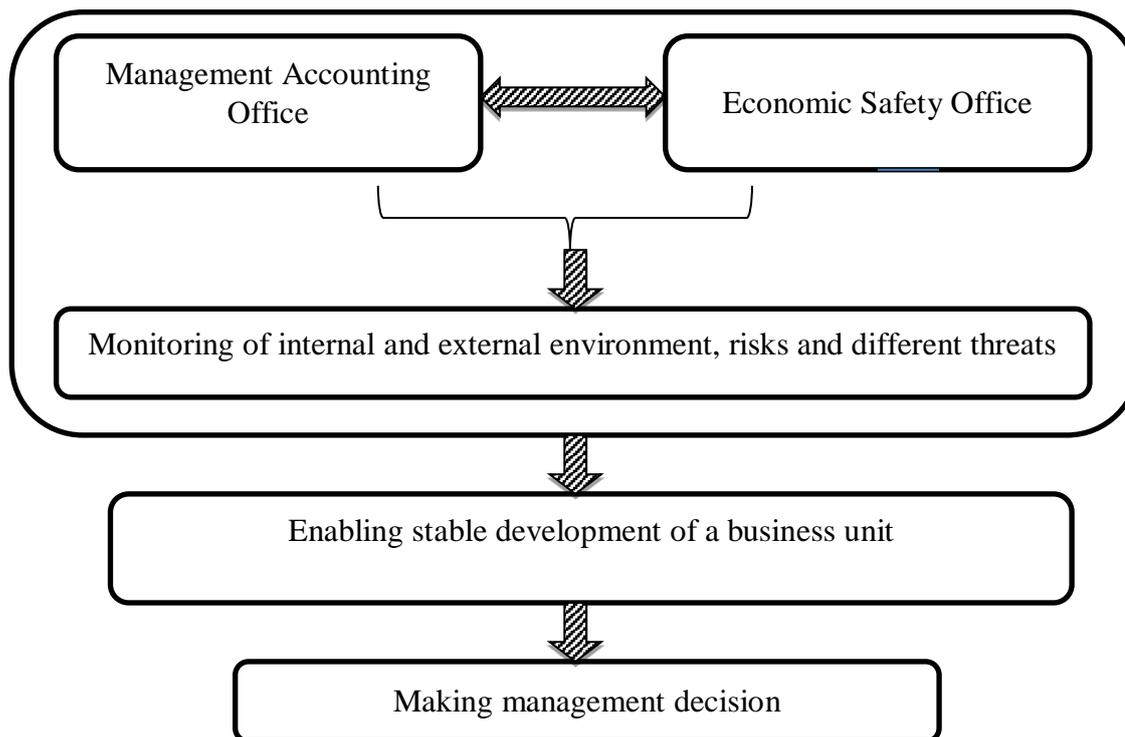


Fig. 3 – Management Accounting Office and Economic Safety Office in the corporate management system of company operation (author's development)

In management accounting some indicators are chosen and subdivided into groups depending on the objects of indicative analysis in order to define criteria of economic safety.

In this research the indicators presented in Table 3 were taken as the universal indicators of economic safety. They define efficiency of agricultural company operation.

A set of indicators used for estimation of economic safety by means of analysis of values of these indicators helps reveal the factors which impact positively and negatively economic safety of a business unit. Consequently, negative impact should be minimized, and positive impact should be strengthened.

The factors of negative impact might cause the following risks for an economic safety system: marketable and material, spatial and time, monetary and cost, intellectual, reference and information, capacity and labor, and special kinds of losses.

The economic safety system in corporate business management is presented on Fig. 4.

Table 3 – Indicators for economic safety estimation in agricultural company

Indicator	Description	Quality scoring (indicators)			
		4	3	2	1
<i>Indicators of production activity</i>					
Dynamics of revenue	Profitability indicator is the main one for estimation of a company. There is direct dependence of this indicator and internal control system, the more efficient operation of internal control system the more successfully the main goal can be achieved. The main goal of a company is getting profit and increasing prosperity of owners.	> 100	51-99	10 - 50	< 0
Dynamics of sales profit		> 100	51-99	10 - 50	< 0
<i>Indicators of financial condition estimation</i>					
Total Debt to Equity	The indicator identifies degree of financial independence of a company from the point of arrangement of total capital.	> 0,8	0,5 - 0,8	0,1 - 0,5	< 0
Current liquidity ratio	The indicator identifies the most of financial solvency of a company.	> 2	1,7 - 2	1 - 1,7	< 1
Degree of solvency on current liabilities	One of the main indicators used for estimation of financial solvency of a company. It helps define the terms when a company can pay off current liabilities under the condition of saving average monthly revenue at the level of accounting period. Recommended value is $K_{\text{ПТО}} \leq 3$ .	$\leq 3$	1,1 - 2,99	0,1 - 1	< 0
<i>Indicators of efficient utilization of resources, capital and costs</i>					
Return on Sales	The indicator gives a comprehensive view of level of efficiency of utilization of company's resources.	> 3	1 - 3	0,1 - 1	< 0
Return on Assets		> 3	1 - 3	0,1 - 1	< 0
Return on Equity		> 3	1 - 3	0,1 - 1	< 0
Yield of capital investments	The indicator identifies level of efficiency of utilization of basic production assets of a company.	> 5	3 - 5	1 - 3	< 0

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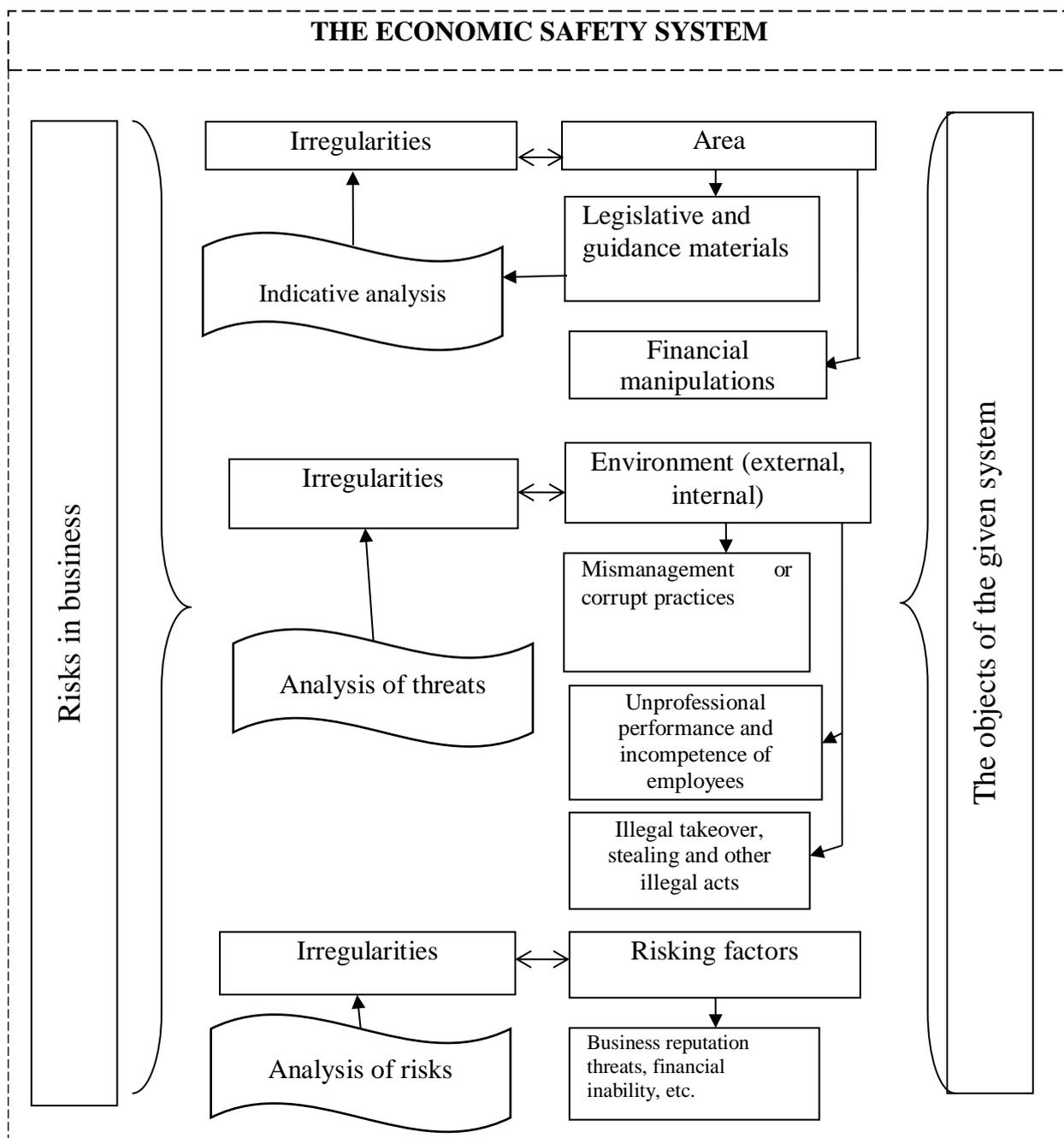


Fig. 4 – The economic safety system in corporate business management (author’s development).

Economic safety is provided by Security Office and specialists of Management Accounting Office who perform monitoring of all activity areas of agricultural company.

Management accounting is a such tool of economic safety of business which protects against impact of internal and external derogative factors and provides (reveals) reserves of appropriate resources and management methods.

In order to improve economic safety at business level, management accounting mostly contains aspects of budget formation and distribution of economic resources. Hence, the

matter of costs, control and improvement of fiscal capacity execution should be resolved in management accounting.

Under conditions of digitalization cooperation of management accounting offices in corporate management system of agricultural company is arranged by posting objectives and making tasks within processes and beyond processes with respect to risk management. The task is given to one or more specialists, the terms of performance and the aim of the task is defined, and necessary documents are attached to this task.

The risk management system in agricultural company should be aimed to provide reasonable assurance in performance of the tasks given to a business unit (Table 4).

Table 4 – Targets of risk management in agricultural company

No.	Target of corporate management	Target area
1.	Strategic targets	Providing financial stability and improvement of financial condition of business
2.	Operation targets	Providing efficiency of financial and operational activity, resource saving, and preservation of company's assets.
3	Targets in reporting preparation	Providing completeness and reliability of accounting reports, statistical, management and other accountings.
4	Targets in law observation	Observing of applicable legislation and local regulations

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The objectives of the risk management system are development of risk-based corporate culture, improvement of the process of making decisions and choosing the way of response risk in favor of providing economic efficiency of actions on risk management and economic expediency, reduction of unexpected events and losses in operation activity by extending detection of potential events and taking appropriate actions (response risks), and identification and management total risks in operation activity in favor of more efficient responding different impacts with help of integrative approach.

## Conclusion

The results of this research can be used for development theoretical and practical issues of management accounting for the sake of economic safety in any company. So it can

be concluded that companies are expected to collect and process accounting and management information together with accounting and analytical information in order to obtain impartial assessment of internal and external environment in spite of difficulties and specific nature of management accounting for economic safety. Companies should also analyze their operation activity in order to decrease risks. Issues of management accounting and economic safety in corporate management are acute ones and need constant and active research.

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