



FEDULOVA Iryna,
DSc (Economics), Professor,
Professor of Department of Management,
Kiev National University of Trade and Economics
19, Kyoto str., Kyiv, 02156, Ukraine

E-mail: felina9@ukr.net

ORCID ID: <https://orcid.org/0000-0002-8802-137X>

THE BALANCED INDICATORS SYSTEM IN THE RISK MANAGEMENT

The possibilities of mutual use of concepts of a balanced system of indicators and risks management for ensuring effective strategic development of enterprises are explored. Comparison of the processes of constructing a balanced system of indicators and risk management system is carried out, their main similarities and differences are determined. The analysis of the differences and similarities between key performance indicators (KPI) and key risk indicators (KRI) in the process of performing their functions, respectively, in a balanced system of indicators and risk management. The relationship of approaches to the formation of KPI and KRI is determined. The methodical principles of an effective combination of managerial concepts of a balanced system of indicators and risk management have been developed.

Keywords: balanced indicator system, risk management, key performance indicators, key risk indicators, risk appetite.

Федулова И. *Сбалансированная система показателей в управлении рисками.* Исследованы возможности взаимного использования концепций сбалансированной системы показателей и риск-менеджмента для обеспечения эффективного стратегического развития предприятий. Проведено сравнение процессов построения сбалансированной системы показателей и системы управления рисками, определены их основные сходства и различия. Проанализированы различия и сходства ключевых показателей эффективности (KPI) и ключевых индикаторов риска (KRI) в процессе выполнения ими своих функций, соответственно, в сбалансированной системе показателей и риск-менеджменте. Определена взаимосвязь подходов к формированию KPI и KRI. Разработаны методические основы эффективного сочетания управленческих концепций сбалансированной системы показателей и риск-менеджмента.

Ключевые слова: сбалансированная система показателей, риск-менеджмент, ключевые показатели эффективности, ключевые индикаторы риска, риск-аппетит.

Background. In a modern market economy every management decision, especially strategic in relation to the future development of an organization, is always associated with a degree of uncertainty. In this regard, the problem of

forming a unified strategy, which would provide for an effective management system taking into account the risks associated with the stable economic activity of the organization in the long run, becomes more and more relevant.

Analysis of recent researches and publications. The concept of Balanced Scorecard (BSC), developed by the American economists D. Norton and R. Kaplan in the early 1990's, has become the most popular strategic management in recent years. The authors determined that the main task of building a BSC for enterprise management is to use it to implement an integrated strategy and budget process [1].

Continuing the development of this concept, some researchers studied a balanced system of indicators and determined the main theoretical and methodological peculiarities of its application in practice, in particular: M. Kizim, A. Pylypenko, V. Zinchenko [2], L. Malaretz, A. Shtereverya [3], Yu. Melnyk [4], representatives of the consulting company Horvath & Partners [5], etc. They substantiated the sequence of its implementation, its integration with the existing system of enterprise management, its business processes and providing the necessary tools for developers.

In addition, many scholars considered the possibility of integrating a balanced indicator system and risk management system [6-14]. In these studies, modern concepts of risk planning based on BSC were considered; the necessity and efficiency of their joint use for improving monitoring and control of the activities of enterprises were discussed.

Further research on the ways of combining these two management systems stems from the need to create a methodology for implementing this concept and its application for synergy and strategic unity. This requires a systematic approach to building a strategy for enterprise development taking into account different types of risks in the process of identifying target targets for development, performance indicators responsible for their achievement and developing measures that will help achieve the desired result.

The **aim** of this study is to develop methodological recommendations for combining the managerial concepts of a balanced system of indicators and risk management to improve the process of formalizing enterprise strategy.

Materials and methods. In the process of research methods of analysis and synthesis of scientific information have been used.

Results. Complexity, unstructuredness and unpredictability of the environment stimulated the search for effective tools of strategic analysis and management. There were certain preconditions for this. So, the volume of economic information is growing rapidly, much of it is controversial and belated. The orientation of enterprises to financial indicators in the formation of the strategy allows you to take into account only the past economic situation, that is, the results of earlier decisions. In the economy, the processes of integration are actively developing, which is manifested in increasing the size of enterprises, complicating their organizational structure. There is a desire of management of companies to strengthen the managerial function at the expense of organic coordination of interests of different groups: shareholders, consumers, partners, creditors. Instead, there is no complete information on the

various aspects of entrepreneurial activity which plays an important role in increasing the competitiveness of the enterprise. Traditional performance measurement (profitability, sales volume, etc.) is not enough to make long-term strategic decisions, since they are mostly focused on internal problems of the enterprise rather than on external ones. Factors of the environment are of increasing importance for the future development of the enterprise. Among them are the factors that affect the market situation, namely possible behavior of consumers and competitors in the future, possible changes in the industry and other components of the environment. In strategic management, enterprises increasingly focus on weak signals and cannot predict the main determinants of development.

The paradigm of determining the value and efficiency of the enterprise activity was changing. From the DuPont Model and ROIs that were developed in the first half of the last century, the number of tools such as economic value added (EVA), interest income, taxes and dividends (EBITDA), market added cost (MVA), aggregate stock return (TSR), cash flow return on invested capital (CFROI), etc.

The main idea of the concept of BSC is to provide management in concise and structured form as well as in the form of indicators system as the most important information for it. This information, on one hand, should be compact, and on the other, it is to reflect all the main aspects of the company. This information must be applied to four aspects of activity:

- *the financial focus*, considering the effectiveness of the company in terms of return on invested capital, as well as the attractiveness of its shareholders;
- *the development of the internal capacity* of the organization, internal operational efficiency;
- *customer satisfaction* with the utility of goods and services of the company, the image of the company in the eyes of consumers;
- *knowledge, skills, abilities and personnel training* that affects the organization's ability to perceive new ideas, its flexibility and constant improvement.

BSC effectively solves all these problems by managing key processes such as translating vision into strategy; communication and link; business planning; feedback and strengthening the knowledge of strategic management. However, modern science and practice of using balanced indicators do not pay enough attention to information about the various risks that accompany the functioning of any economic system.

At the same time a risk management system is emerging and actively developing. The precondition for the emergence and active introduction of risk management in the activities of enterprises is also the complexity, unstructuredness and unpredictability of the environment. The experience of enterprises that suffer from the crisis of development and bankrupt indicates the need for a preliminary assessment of possible adverse consequences and the development of measures to prevent them.

BSC ensures the integration of financial and non-financial indicators, taking into account the causal relationships between the resulting indicators and the factors under which they are formed. This allows for detailed monitoring of

the company's activities in strategic focus, increasing the efficiency and effectiveness of management decisions, controlling the most important financial and non-financial performance indicators that are targeted for the company and whose degree of achievement determines the company's movement according to a given strategy. The value of these indicators reflects the efficiency of both businesses in general and individually considered business processes, structural units and human resources.

Risk management also contributes to the achievement of key enterprise goals and optimal efficiency of the operation of the risk management system within the framework of corporate governance, optimal efficiency of distribution processes and the use of resources for risk management, forms timely and complete information and analytical support for processes of decision-making and planning of activities, develops processes settlement of the consequences of implemented risks.

BSC and risk management have many similar characteristics, which creates preconditions for their effective integration (*table 1*).

The success of a company is always due to the extent to which the company achieves its goals, which are determined in concrete performance indicators, and the achievement of efficiency is always associated with risk. Thus, there is much in common between the BSC and the risk management system.

It is impossible to talk about getting the result without taking into account the possible deviation from it. In ISO Guide 73, Risk Management – Vocabulary – Guide lines for use in standards, risk is seen as the state of influence of uncertainty factors on goal achievement [15]. That is, relative to the planned result – the goals to which the activity is directed, and determines the possibility of deviation from the foreseen goals for which the chosen alternative is carried out. There is a risk when an event is of practical importance and affects the interests of at least one subject. There is no risk without ownership and therefore requires the appointment of those responsible for the consequences of risk decisions. Risk management is aimed at identifying several alternatives to management decisions, the choice of which is carried out under conditions of use of scarce resources. All this can be seen in the BSC, which integrates into each division of the company and provides operational and strategic plans that cannot be taken without taking risks.

The "Gesetz zur Kontrolle und Transparenz, KonTraG Act", which is in force in Germany, makes joint stock companies implement an early recognition and risk management system. For the most part, the reason for the introduction of a balanced system of indicators is the need to reorganize the existing risk management system. In world practice, the concept of a balanced system of indicators is now recognized as one of the most effective management concepts, which allows you to translate the company's strategy into a balanced set of key indicators, broadcast its goals and objectives to the operational level.

Table 1

Comparison of Balanced Scorecard and ERM construction processes (enterprise risk management systems)

Balanced Scorecard	ERM
	Goal targeting
A vision is developed as a set of strategies for achieving long-term goals of the company. Transform vision and goals into strategies as perspectives and ways of organization development. Considered as a consensus among the top management of the company	Considered relative to the planned result - the goals to achieve which activities are directed, and determines the possibility of deviation from the foreseen goals, for which the chosen alternative is carried out. Considered as a consensus among the top management of the company.
	Interaction and counseling
Linking common goals with the objectives of the structural units and the functions of individual employees, involving all departments and employees in the process of developing strategies and balanced indicators assessing its achievements.	Conducting consultations with external as well as with internal participants in the risk management process. Identification of managers (owners, stakeholders) of risks, involvement of all departments and employees in the process of risk management
	Defining context
The external and internal characteristics of the company's activities, which to be assigned to the development of the strategy, are determined. Diagnosis and assessment of the current state of development	The external and internal characteristics of the company's activity, which will be assigned to the development of the risk management strategy, the conditions in which the process will be implemented, are determined. Diagnosis and assessment of the current state of development, conditions and requirements for activities.
	Identification
The key characteristics of the adopted strategies are revealed and indicators are developed that characterize their effectiveness. Performance indicators are also used as resource allocation criteria	It is determined where, when, why and how risky situations can prevent, weaken, delay or promote the achievement of planned results (goals) in all areas of the enterprise activity and indicators that it is possible to estimate
	Analysis
There are links of financial, investment, marketing and production plans of the company with the system of key indicators of the company's activities.	The consequences, the probability of their occurrence and, consequently, the level of risk, as well as the causes and factors of occurrence of risk situations are determined. Available tools (models and methods) for risk control are identified and evaluated
	Assessment
Evaluate and compare actual benchmarks with each BSC component or perspective. Measured results achieved and indicators reflecting the processes that ensure the achievement of these results	Quantitative estimates of the values of identified risks. Comparison of the results of the risk analysis (presented as risk levels) with the risk criteria for determining the acceptability of these risks
	Balance
The balance between financial and non-financial performance of the company, the balance of interests of shareholders and clients (external components of the system), and employees and business processes of the company (internal components of the system), the establishment of parity in the needs of all stewards	Balance between potential benefits and negative consequences. Balance of interests of shareholders and clients (external components of the system) and employees and business processes of the company (internal components of the system), establishment of parity in the needs of all stakeholders
	Management
Formation of a strategic plan for the implementation of selected strategies. Construction of a system of motivation and rewards based on key indicators	Formation of a strategic plan for increasing the potential benefits and reducing the number of potential risks. Construction of a system of motivation and rewards based on key indicators
	Monitoring and internal control
Constant monitoring of the implementation of the adopted strategies and achievement of the set goals by analyzing the deviations of the actual results from the planned indicators	Continuous monitoring of the effectiveness of all phases of the risk management process for continuous improvement of activities

Source: developed by the author

The use of BSC as an integrative basis for embedding risk management into the corporate governance system implies that its four projections reflecting strategic objectives and key performance indicators form the basis for systematic identification, classification and risk management of the company, accounting for company-relevant risks and their identification multiplier effect on BSC indicators. Such consolidation of key indicators of company efficiency and associated risks ensures synergy of financial and economic potential of the company and its risk potential, their influence on achievement of strategic goals of the company. Correlation of the objectives of the BSC and its key indicators with specific risks and their indicators will allow determining in advance the impact of risks on the achievement of strategic goals, which in turn will be timely taken into account and ensured by measures to reduce them.

The synthesis of special literature [5–15] and the practice of a number of firms has allowed to identify four fundamentally different approaches to the integration of risk management and a balanced system of indicators, the use of which allows for more reasonable management decisions:

- supplement of the classical BSC with the "Risks" unit;
- inclusion of risk related aspects in the system of strategic goals and indicators of the BSC;
- development of a special system "risk – BSC";
- BSC modification, based on the success factors of the company, – "expansion of the classical BSC".

The first version of integration implies the immutability of the four blocks of classical perspective of a balanced system of indicators. To do this all risk-management objectives, key indicators, their acceptable and target values as well as measures for their achievement are made in a special supplementary block. This approach violates the general logic of the division of all key performance indicators in separate perspectives that do not overlap, although they have cause-and-effect relationships. The risks identified in a separate perspective, in fact, are to be related to each of these perspectives and duplicate the possibilities of achieving their goals.

The second option for integration suggests that for each perspective, the BSC further develops additional indicators that analyze risks. In this version of integration there are preventive indicators which in advance reflect the dynamics of the development of strategic factors of success. Within this approach it is useful each prospect BSC determines its risks and their acceptable level, which is determined by the risk appetite for each sphere of activity.

The third variant of integration is based on the BSC modification, in which the structural blocks in the classical BSC are replaced by strategic success factors, which may vary depending on the specifics and needs of a particular company. For each strategic success factor, your own BSC is being developed. For strategic success factors, key indicators reflecting the potential of the company are being developed. For the risks there was specially formed the BSC that is consistent with these strategic success factors. The risks from the external environment are taken into account in a separate block of this BSC

"external environment". The hypothesis on which this concept is based is that the successful implementation of a company's strategy means its concretization and effective implementation at lower levels of management, which depends on more or less limited number of strategic factors of success. In this approach, success factors are associated with the strategic goals of the company and the BSC. This concept can be useful for enterprises with a certain market and technological specificity, where it is advisable to replace the classic BSC perspectives with key success factors. At the same time, the goals of enterprise development and risk management will take into account the specifics of the company's external and internal environment. Clarifying the context of risk will most fully determine the internal and external parameters that will be taken into account when identifying key success factors and potential development trends. Risk can have negative and positive effects that can, respectively, improve or worsen the results of activities, that is, achieving goals is considered simultaneously as opportunities and risks. In the "risk – BSC" system, an analysis of the capabilities, on one hand, and risk analysis on the other hand carried out. Thus, strategic success factors are opportunities for a company that is opposed to one or more risks.

The fourth integration option involves identifying strategic success factors for which each BSC is built. Special BSC is being developed for risks. For each strategic goal, not only the indicators but their target value is determined; also the risks that can affect the achievement of the goal. "Extended BSC" is developed both for the enterprise as a whole and for its individual strategic units, while each of the BSC units is supplemented by indicators of risks and factors of their influence. The advantage of this approach is that it defines the relationship between the company's strategic goals, key performance indicators and possible risks, and specifies the firm's strategy that promotes the effective implementation of the strategy.

Consideration is also given to the use of the BSC matrix together with the SWOT analysis. At the same time, for each prospect BSC analyzes opportunities, threats, advantages and disadvantages. This is useful in terms of a thorough analysis of effectiveness and risk, but does not define indicators for strategy formation and risk indicators.

Integrating risks into the system of key success factors BSC provides a clear understanding of the relationship of risks with the processes of operation and development of the company and increases the efficiency of risk management based on their productive differentiation and system integration. The control and responsibility for the achievement of individual goals is fixed by the specific employees of the company. Integration of BSC and risk management should be ensured in such a way that the benefits of both approaches persist, and the potential for integration is used most fully.

One of the key principles of risk management is *the principle of matching the strategy*. Corporate risk management functions as part of the overall decision support system for management in the process of achieving strategic goals

and aims at identifying events and factors that influence the achievement of the objectives. Risk analysis is used in the design and development of a development strategy, while the latter includes the definition of risk appetite of the company at the stage of choosing strategic alternatives and when setting goals. Risk management takes place in such a way that they do not exceed the company's readiness to take risks. All this allows for effective strategic management.

The risk management system as well as a balanced system of indicators is based on the use of indicators (so-called *early indicators*). In both systems, measures are needed to achieve the goals of reducing risks. Integrating a risk management system into a general management system is most effective if it is directly related to the strategic objectives of the enterprise. Establishing the link between measures developed within the framework of a balanced system of indicators and measures of the risk management system is carried out on the basis of analysis of measures that promote the achievement of strategic objectives with an acceptable level of risk.

The BSC authors conceptually distinguish indicators with target values within verbally formulated strategic goals, as well as strategic maps and strategic measures. It should be determined which aspects of the prospects of "Finance", "Clients", "Processes" and "Potential" will focus on the management's attention, where the main resources will be directed and how individual goals are interlinked. Causal chains ("strategic map") represent an important form of description of the strategy, through which it is possible to quickly inform employees about the measures necessary for implementation of the strategy. Identification of risks also involves a causal analysis with the definition of symptoms, causes and their consequences. Thus, the BSC can be considered as an organizational structure that enables to expand the capabilities of measurement, assessment and control at the level of strategic and operational management of a company with risk taking into account.

For a number of purposes, both in risk management and in the overall management of the organization, indicators *key indicators* are used. The differences between risk indicators, control and effectiveness of the strategy are often insignificant and may coincide.

The basis for the BSC is the so-called *key performance indicators*, or KPI. The main difference between the balanced system of performance indicators from an arbitrary set of indicators is that all KPIs that are part of a balanced system are, firstly, oriented towards the strategic objectives of the enterprise and, secondly, are interconnected and grouped according to certain features. KPIs should be easy to measure and have qualitative or quantitative expressions.

Key Risk Indicators (KRI) are quantitative indicators of risk sources (factors). They play an important role in the concept of risk management, act as a monitoring and risk control tool and help identify potential risk events. KRIs cover various types of performance indicators of the organization, provide useful information about potential risks that may affect the organization's goals.

The selection and development of the KRI begins with an analysis of the goals and the identification of the risks that may affect these goals, they act as early indicators of the dangers. KRIs allow monitoring of the dynamics of changes in the level of risk events for the reporting period, which is a signal for management to take the necessary risk management measures, and also outline the risk appetite of the organization.

Table 2 shows the differences and similarities between KPI and KRI indices in the process of performing their functions in management.

Table 2

Comparison of KPI and KRI

KPI в BSC (Stretch-Targets)	KRI in risk-management
All the participants in the business concern the matter	
Determine the possibilities and the level of achievement of the determined goal	Determine the possibilities and degree of deviation from the defined goal
Completely reflect the goal	Determine the current level of exposure and risk exposure in the future
Must be quantitatively measured	
Depending on the results of benchmarking, customer and employee surveys past performance data and business evaluation	
Determined by the team of senior management of the relevant unit	Leading specialists and top managers can be involved in the determination
It is the basis for identifying strategic measures and projects that contribute to the achievement of the targets	It is the basis for determining the measures that contribute to the achievement of the target indicators taking into account the established risk appetite
Adjustment of indicators and measures takes place taking into account available resources; is the basis of the budget	Must be simple in interpreting and controlling
Must correlate with already existing indicators (within the causal relationships)	Responsible for achieving the goal should be able to influence the value of the proposed indicator
Must have a time interval of achievement	Regulated by the concept of acceptable risk and determined risk appetite of the organization

Source: developed by the author.

There are lots of common features between KPI and KRI, because the risks and strategies of the company are interconnected. One does not exist without the other; they need to be considered in the complex. The essential difference between them is the establishment of risk appetite by the company's top management towards the targets. Risk appetite is: a strategic factor associated with the achievement of the goals of the organization; an integral part of corporate governance; multidimensional parameter, including the achievement of goals in the short and long term strategic planning prospects, promotes efficient allocation of resources, provides control over the level of risk, and determines the organization's attitude to risk.

After identifying the risks and identifying key risk indicators, they are assessed. To assess KRI, the probability of occurrence of a risk situation and its impact on the activity of an enterprise are determined.

Significance is an assessment of the seriousness of the consequences of a potential failure for the system, the subsystem, or for the consumer. This is applicable only for the consequences of this risky event (refusal, discrepancy). It is possible to evaluate on a scale from 1 to 10, where 10 is rank of the worst consequences.

Probability of occurrence is a quantitative measure of the probability of occurrence of an event, which is determined by the number in the range from 0 to 1, where "0" means the impossibility of the event, where "1" is obligatory.

In some techniques, the probability of occurrence is also defined as the ability to detect or establish presence, presence, fact of danger or its cause by the available methods of control. This is an assessment of the potential of proposed management actions to identify potential causes or to identify the next type of failure. A list of all applicable control measures is drawn up to prevent the occurrence of each outcome, and a rank is assessed that characterizes the possibility of preventing this effect.

The result of such an assessment is the risk assessment, namely the comparison of the results of the risk analysis (presented as risk levels) with the risk criteria to determine the acceptability of these risks in general and/or their values in particular. Risk assessment is necessary for further decision-making on the development of risk management measures. As a result of such a mapping, risks are mapped.

Matrix risk map is a graphical and textual description of a limited number of organizational risks located in a rectangular table, one "axis" of which indicates the force of influence or significance of risk, and the other – the probability or frequency of its occurrence. In cases where the qualitative-quantitative scale of probabilities and consequences is used to measure the risks, then the whole range of risks is divided into cells. Thus, the identification of key risk indicators that may be the cause or the risk or the best opportunity is being identified.

Conclusion. The practice of introducing a balanced system of indicators proves its effectiveness. The use of a balanced system of indicators, in addition to its direct task of evaluating efficiency, opens up the opportunities for strategic management of the company in conditions of instability and variability of results, as it allows the company to understand its goals and objectives. Allocation of indicators is impossible without a clear presentation of the strategy and course of the company. That is why management needs to prioritize strategic and operational goals. Then revisit them and choose the ones that most accurately reflect the requirements and expectations of all stakeholders. The part of a balanced system is, firstly, oriented towards the strategic objectives of the enterprise and, secondly, it is interconnected and grouped according to certain features. KPIs should be easy to measure and have qualitative or quantitative expressions.

The BSC and the risk management system together allow for constant monitoring. Such control will be very useful for the enterprise, since control processes are optimized with the control obligation. Accordingly, each interested participant contributes to the overall result, and the common goals correspond with the individual.

BSC and a combination of risk management systems make it possible for businesses to be more transparent and understandable for each employee. Building a strategic BSC map within the framework of risk management in details the activities allow to identify problem areas and prevent losses.

Despite all the difficulties, when implementing the project of creating a balanced system of indicators in combination with the system of risk management, the company achieves its goals: employees are introduced to the strategy, a mechanism for monitoring its implementation; there is motivation for both efficiency and prevention of hazards. The main benefit lies in the fact that all components of the company begin to work in a coherent way, as there is a unified understanding of the strategy at all levels of management, indicators are identified that are convenient for operational management, the basis for other development programs and reorganization of the management system.

REFERENCES

1. Kaplan, R. S., & Norton, D. P. (2008). *Sbalansirovannaja sistema pokazatelej: ot strategii k dejstviju* [Balanced Scorecard: From Strategy to Action]. (M. Pavlova, Trans). Moscow: Olimp-Biznes [in Russian].
2. Kyzym, M. O., Pylypenko, A. A., & Zinchenko, V. A. (2007). *Zbalansovana sistema pokaznykiv* [Balanced Scorecard]. Harkiv: INZhEK [in Ukrainian].
3. Maljarec', L. M., & Shtereverja, A. V. (2008). *Zbalansovana sistema pokaznykiv v ocinci dijaj'nosti pidpryjemstva* [Balanced system of indicators in the assessment of enterprise activity]. Harkiv: Vyd. HNEU [in Ukrainian].
4. Mel'nyk, Ju. M., & Savchenko, O. S. (2011). Problemy zastosuvannja zbalansovanoi' systemy pokaznykiv na vitchyznjanyh pidpryjemstvah [Problems of Balanced Scorecard Implementation on Ukrainian Enterprises]. *Marketynh i menedzhment innovacij – Marketing and management of innovations, 1*, 192-203 [in Ukrainian].
5. *Vnedrenie sbalansirovannoj sistemy pokazatelej. Horvath&Partners* [Implementing a Balanced Scorecard. Horvath & Partners]. (2005). (Trans). Moscow: Al'pina Biznes Buks [in Russian].
6. Krylov, S.I. (2014). Sbalansirovannaja sistema pokazatelej v upravlenii riskami [Balanced Risk Management Indicators]. *Mezhdunarodnyj buhgalterskij uchet – International Accounting, 42 (336)*, 13-22. Retrieved from <http://www.fin-izdat.ru/journal/interbuh/detail.php?ID=64379> [in Russian].
7. Kurinov, S.M. (2014). Sistema sbalansirovannyh pokazatelej s ispol'zovaniem Key performance indicators kak sredstvo povyshenija jeffektivnosti sistemy jekonomicheskoj bezopasnosti [Balanced Scorecard with Key Performance Indicators as a Tool for Enhancing the Effectiveness of the Economic Security System]. *Nalogi – Taxes, 5*, 27-32. Retrieved from <http://www.fa.ru/projects/mknrsa/skireports> [in Russian].
8. Ostrovs'ka, G. (2015). Nova paradygma ryzyk-menedzhmentu v konteksti zrostantnja vartosti korporacii' [New Risk Management Paradigm in the Context of Cost Growth of the Corporation]. *Svit finansiv – The World of Finance, 3*, 118-129. Retrieved from http://nbuv.gov.ua/UJRN/svitfin_2015_3_12 [in Ukrainian].
9. Sanzhieva, T. V. (2013). Formirovanie integrirovannoj sistemy risk-menedzhmenta sudohodnoj kompanii [Formation of an integrated risk management system for a shipping company]. *Zhurnal Universiteta vodnyh kommunikacij – Journal of the University of Water Communications, 2*, 143-150 [in Russian].
10. Skakal's'kyj, Ju. S. (2015). Strategichne planuvannja ryzykiv na osnovi zbalansovanoi' systemy pokaznykiv (BSC) [Strategic Risk Planning Based on Balan-

- ced Scorecard (BSC)]. *Biznes Inform – Business Inform*, 8, 277-281. Retrieved from http://nbuv.gov.ua/UJRN/binf_2015_8_44 [in Ukrainian].
11. Burger, A., & Buchart, A. (2002). Risiko-Controlling. München [in English].
 12. Mayer, J. H. (2000). Erfolgsfaktoren-basierte Balanced Scorecard – Ein neuer Ansatz der Performance Management zur Unternehmensplanung, steuerung und kontrolle, in: Reichmann, Th. Tagungsband zum 15. Deutschen Controlling Congress, (pp. 224-238) [in English].
 13. Reichmann, T., & Form, S. (2000). Balanced Chance and Risk Management. *Controlling*, 12, 189-198 [in English].
 14. Wurl, H.J., & Mayer, J.H. (2001). Balanced Scorecards und industrielles Risikomanagement. Möglichkeiten zur Integration. *Performance Measurement & Balanced Scorecard*. München [in Douche].
 15. ISO 31000:2009. Risk Management – Principles and Guidelines [ISO 31000: 2009. Risk Management – Principles and Guidelines] (2009). Retrieved from <http://metrology.com.ua/download/iso-iec-ohsas-i-dr/61-iso/1139-iso-31000-2009> [in Ukrainian].

The article submitted to editor's office on 28.11.2018.

Федулова І. Збалансована система показників в управлінні ризиками.

Постановка проблеми. В умовах невизначеності функціонування підприємств дедалі більшої актуальності набуває проблема формування стратегії, яка б передбачала обґрунтування напрямів розвитку, ефективну систему управління і врахування ризиків.

Аналіз останніх досліджень і публікацій показав, що найбільшу популярність у стратегічному управлінні останніми роками набула концепція збалансованої системи показників (Balanced Scorecard – BSC). У деяких публікаціях розглянуто можливість інтеграції системи збалансованих показників і ризик-менеджменту. Існує необхідність розроблення методичних засад їх сумісного використання для покращання моніторингу і контролю діяльності підприємств в умовах ризику і зростання їх ефективності.

Мета статті полягає в розробленні методичних рекомендацій щодо поєднання управлінських концепцій збалансованої системи показників і ризик-менеджменту для покращання процесу формалізації стратегії підприємства.

Матеріали та методи. В процесі дослідження використано методи аналізу і синтезу наукової інформації.

Результати дослідження. BSC і ризик-менеджмент мають багато схожих характеристик, що створює передумови для їх ефективної інтеграції. Досягнення успіху компанії завжди пов'язано з тим, наскільки компанія досягає своїх цілей, які визначені у конкретних показниках ефективності її діяльності, а досягнення ефективності – з ризиком. Таким чином, між BSC і системою ризик-менеджменту є багато спільного. В основу BSC покладено так звані ключові показники ефективності, або KPI (Key Performance Indicators). Ключові індикатори ризику (KRI – Key Risk Indicators) – кількісні показники джерел (факторів) ризику. Між KPI і KRI існує багато спільного, так як ризик і стратегії компанії взаємопов'язані. Суттєвою відмінністю між ними є встановлення ризик-апетиту вищим керівництвом компанії до цільових показників.

Висновки. BSC і система управління ризиком у поєднанні надають можливість зробити бізнес більш прозорим і зрозумілим для кожного співробітника. Побудова стратегічно карти BSC в рамках управління ризиками деталізує діяльність, дає змогу виявити проблемні місця і усунути втрати.

Ключові слова: збалансована система показників, ризик-менеджмент, ключові показники ефективності, ключові індикатори ризику, ризик-апетит.