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### FORMING COMPANY'S RISK APPETITE

**Urgency of the research.** Adoption of any managerial decision within the company happens in the presence of risks. Against this background, it is vital to determine whether the risk is acceptable is in the process of achieving the objectives.

**Target setting.** From this perspective, it becomes increasingly relevant to develop proposals aimed at helping the companies to form and present risk management process and place of risk appetite in it.

Actual scientific researches and issues analysis. Among scientists engaged in research of risk and risk management were F. Knight (2003), T. Coleman and B. Litterman (2012), D. Kahneman (2014), I. Blank (2005), V. Vitlinsky, P. Verchenko, A. Sigal, Ya. Nakonechny (2002), A. Carol (2008), T. DeMarco and T. Lister (2005). Risk appetite was closely studied by D. Tattam (2015), B. Hassani (2015), L. Rittenberg and F. Martens (2012).

Uninvestigated parts of general matters defining. It becomes increasingly relevant to identify differences in clarification of the essence of capacity risk, risk appetite, and risk tolerance, as well as develop recommendations on how to determine them within the company's risk management system.

**The research objective.** Identifying the essence, relevance and place of risk capacity, risk appetite and risk tolerance formation according to specific stages of the company's risk management process.

The statement of basic materials. Risk appetite reflects the level of losses which the company is willing to accept in order achieve its strategic objectives. In contrast, risk tolerance is associated with acceptance of the outcome of specific identified risk events and is defined as readiness for certain risk event. The article also aims to examine the company's risk management process, in the context of which the place of risk appetite determination, as well as procedure for adoption of decisions on risk appetite and risk tolerance determination are outlined.

**Conclusions.** Breaching the risk tolerance threshold should serve as a red alert for the management. In such a case the risk position has to be reduced.

**Keywords:** risk; risk management; risk appetite; risk capacity; risk tolerance.

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### ФОРМУВАННЯ РИЗИК-АПЕТИТУ ПІДПРИЄМСТВА

Актуальність теми дослідження. Прийняття будь-якого управлінського рішення на підприємстві відбувається в умовах ризику. В цьому контексті важливим є визначення, наскільки ризик є прийнятним в процесі досягненні цілей.

Постановка проблеми. З позиції цього важливим є розроблення пропозицій, які допоможуть організаціям сформувати та представити процес управління ризиком і місце ризик-апетиту в цьому процесі.

Аналіз останніх досліджень і публікацій. Питанням ризику і ризик-менеджменту приділило увагу багато вчених, зокрема Ф. Найт (2003), Т. Колеман і Б. Літтерман (2012), Д. Канеман (2014), І. Бланк (2005), В. Вітлінський, П. Верченко, А. Сігал, Я. Наконечний (2002), А. Карол (2008), Т. ДеМарко, Т. Листер (2005). Питанням ризик-апетиту приділили увагу D. Tattam (2015), В. Hassani (2015), L. Rittenberg and F. Martens (2012).

Виділення недосліджених частин загальної проблеми. Виникає необхідність у визначення відмінностей в уточненні сутності таких понять як ємність ризику, ризик-апетиту, толерантності до ризику і розробленні рекомендацій їх встановлення в системі ризикменеджменту підприємства.

Постановка завдання. Визначення сутності, значення і місця формування ємності до ризику, ризикапетиту і толерантності до ризику на окремих етапах процесу ризик-менеджменту підприємства.

Виклад основного матеріалу. Ризик апетит розглядається як допустимий для компанії рівень шкоди, який вона може собі дозволити для досягнення своїх стратегічних цілей. Толерантність до ризику пов'язана з прийняттям результатів конкретних ідентифікованих ризикових подій і розглядається як готовність до конкретної ризикової події. Розглядається процес ризикменеджменту підприємства, зазначається місце ризикапетиту, процедура ухвалення рішення щодо встановлення ризик-апетиту і толерантності до ризику.

Висновки. Порушення рівня толерантності до ризику має слугувати важливим попередженням щодо управління, в цьому разі позиція ризику повинна бути зменшена.

**Ключові слова:** ризик; ризик-менеджмент; ризикапетит; ємність ризику; толерантність до ризику.

**Urgency of the research.** In pursue of its strategic goals, every business faces risks on a daily basis. All of the profits that it can generate are a manifestation of the risk that the business is willing to accept and consider in the course of its business activities. Therefore, every company indicates the results that it hopes to achieve and which, in turn, serve as the starting point for building a portfolio of



strategic directions of its growth. In this context, it is absolutely essential to determine the level of risk which the company can accept in the process of achieving its operating goals.

**Target setting.** Determining the risk appetite in the overall risk management process of the company will allow to have the expected rewards and relevant risks balanced out efficiently.

Actual scientific researches and issues analysis. Risk and risk management were closely studied by many scientists, in particular F. Knight [1], T. Coleman and B. Litterman (2012) [2], D. Kahneman who was awarded the Nobel Prize in Economic Sciences [3], I. Blank [4], V. Vitlinsky, P. Verchenko, A. Sigal, Ya. Nakonechny [5-6], A. Carol (2008) [7], T. DeMarco, and T. Lister [8].

Certain scientific papers focus on definition of the essence, classification, methods of risk analysis and building risk management system in the companies. Risk appetite was examined by D.Tattam (2015) [9], B. Hassani (2015) [10], L. Rittenberg and F.Martens (2012) [11].

Applied aspects of risk management in certain business activities of the companies are studied in the papers by V. V. Lukianova, A. V. Sviderska [12], V. A. Nekhai, K. V. Hnedina [13], and H. T. Karcheva [14].

**Uninvestigated parts of general matter defining.** It becomes increasingly relevant to clarify the essence of risk appetite and develop recommendations on how to determine it within the company's risk management system.

**The research objective.** This article aims to develop proposals which will help companies to develop and present risk management process in order to determine which tasks need to be accomplished within the scope of company's risk appetite determination and consideration.

The statement of basic materials. Risk appetite is the aggregate risk level that the company is ready to accept from the perspective of keeping its KPIs at a specific level. In other words, the risk appetite is the acceptable level of losses that the company is able to afford in order to achieve its strategic goals.

Larry Rittenberg and Frank Martens (2012) define risk appetite as the amount of risk that the organization is willing to accept in pursuit of the desired value [11].

As follows from recommendations of the COSO (Committee of Sponsoring Organizations of the Treadway Commission), company's risk appetite is the starting point for its strategy development and serves as an acceptable ratio between risk level and return, or as a risk-adjusted increase in value of the company [12].

In accordance with FERMA (European Federation of European Risk Management Associations) standard, risk appetite is considered at the stage of assessing the strategic options, then at the stage of setting objectives that correspond to the chosen strategy, and later on when developing relevant risk management mechanisms [13]. In view of the above, risk appetite includes the assessment and selection of those options which are going to help achieve the desired goals in the best possible way in the process of strategic decision-making with due consideration for associated risks.

According to ISO 31000:2009, risk appetite means the levels and types of risks, implications of their acceptance or retention which the organization deems to be acceptable [14].

Appetite for risk determines the balance between the risk and reward in the context of company's development strategy. As can be seen from the above, it is possible to establish the balance between the risk and achievement of the desired result through implementation of development strategies, in which case the risk appetite is used to back up the risk treatment i.e. conscious influence over the risk.

In ISO 31000:2009 standard, a careful consideration is also given to similar concepts, namely, risk attitude which is company's behavior in relation to the risk that manifests itself in its approach to risk assessment, pursuit, retention, acceptance or non-acceptance thereof [14].

Another notion, namely risk tolerance is defined as the willingness of the company or the stakeholders to accept a certain range of risk deviation upon its treatment. This may result from legal or regulatory requirements. In contrast, risk non-acceptance implies the risk attitude which lies in complete refusal to accept it [14].

In accordance with the Draft Regulation on Organization of Risk Management System in Ukrainian Banks (2017) [15], risk appetite is explained as limitation and economic feasibility to be complied with by the banks in the course of their strategy implementation. Risk Exposure Statement of the banks is



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considered to be the key risk management instrument which shall include the overall level of risk appetite; risk appetite for each type of risk to serve as the basis for establishing thresholds for each type of risk; bank's calculation aimed at determining the risk appetite and a list of assumptions used in the process of the said calculation; risks with respect to which the bank has determined zero tolerance; limitation and economic feasibility to be complied with by the banks in the course of their strategy implementation.

Some scientific opinions suggest that the risk appetite and risk tolerance are considered identical; however, these two notions should not be confused. For a greater understanding of the company's risk appetite, additional concepts, such as risk capacity and risk tolerance have been introduced.

To determine the risk appetite, first and foremost, the company needs to identify its capacity risk. This is the absolute threshold or limit, within which the company wishes to operate without going bankrupt. In accordance with this concept, the risk appetite needs to be determined within the limits of its own risk capacity. Based on this, the company is able to decide on the amount of losses it can potentially afford. Once the company has figured out its risk capacity and appetite, it can establish risk tolerance, i.e. actual level of risk that it is able to handle with due consideration for specific economic environment. In view of this, the amount of risk within the risk tolerance category shall not exceed the company's overall risk appetite.

Risk appetite is a regulator of the highest level of corporate governance, a wide level of risk that top management deems to be acceptable in terms of its desires, precautions and the level of comfort of business operations. Owners and other supervisory authorities shall promote formalization of described risk management processes of the companies, including control by the board of directors. Risk appetite is closely linked to internal control, monitoring and advising within the company. It follows from the foregoing that risk appetite is the ability and willingness of the business entity to accept, retain and effectively manage the expected losses resulting from the risk events in pursuits of its strategic goals.

The level of risk appetite will be affected by the business strategy, whereas the risk appetite, in turn, will have an impact on the degree of development of other risk management elements. Therefore, the higher the risk appetite, the less detailed and reliable risk management will be.

Implementation of risk tolerance in the risk management practices will allow taking into consideration specific nature of business of individual companies and certain risks within the company. Risk tolerance is tied to acceptance of the outcome of specific identified risk events, if any, the availability of necessary resources and control over this risk management, i.e. readiness for a particular risk event and is established for particular risk categories, including strategic, operational, financial, human risks etc. It implies a certain operational maximum risk that the company is willing to accept regarding each specific type of risk, often in quantitative terms.

To understand the place and the essence of risk appetite in the overall risk management process of the company, let's examine risk management procedure itself.

The risk management implies the extensive use of managerial mechanisms - policies, decisions, procedures etc. - and best practices, when establishing the context, identifying, analyzing, certifying, treating, monitoring, and auditing risks, as well as in the course of advising and exchange of information [14].

At the most basic level, the risk management is quite simple. It involves identification and assessment of critical risks throughout the organization, identification of the best possible way to address these risks, relevant notification of the stakeholders and control over the outcome.

Risk appetite comes in at the stage of risk evaluation which involves assessment of the risk level according to company's high-priority characteristics, namely, probability, impact, and relevance. At this very stage, the level of risk appetite is determined in terms of the most dangerous scenarios.

In certain circumstances, in order to determine the actual risk appetite, it is recommended to examine the reactions within and outside the company, as well as recent risk events. It would also make sense to check the risk appetite of both the administrative board and executive management using scenario games focusing on possible risk events.

When identifying the risk appetite for each risk category, the board of directors shall take into consideration the company's risk potential. This consists of the number and type of risks that the organization can



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sustain in order to achieve its objectives with due account for their capital structure, access to financial markets, as well as professional expertise and competencies of the company's human capital assets.

Tab. 1 below provides a clear insight into the content, object, methods and tasks of individual stages of risk management procedure in the company.

Table 1

Description	of stages of the ri	isk management	procedure in the company

Stages	Subject	Methods	Tasks	
1. Context Determination	Company's informa- tional environment: macro, micro and internal environment	Structural and logical analysis, induction, deduction, analog method	<ol> <li>Collection and systematization of necessary data concerning state of company's environment;</li> <li>Assessment of macro and microeconomic situation;</li> <li>Assessment of the state of organization' inter- nal environment;</li> <li>Risk capacity determination.</li> </ol>	
2. Risk Assessment:				
2.1. Risk Identification	Sources (tangible and intangible fac- tors) of the risks, events, their causes and potential impact	Expert methods, ana- log method, statistical methods, quantitative and qualitative risk assessment methods	<ol> <li>Identification of parameters of the risk-related situation (what can happen, where, when, how and why?);</li> <li>Risk elements search, listing and description;</li> <li>Risk appetite determination.</li> </ol>	
2.2. Risk Analysis	Sources (factors) of risks obtained in the course of identifica- tion, their features, results of expert polls	Financial performance analysis; analysis of economic activities; quantitative and quali- tative risk assessment methods;	<ol> <li>Degree (scope) of impact on the company;</li> <li>Probability of risk event occurrence;</li> <li>Direction of impact of the risk-related situation on the company;</li> <li>Possible extent of losses or positive outcome resulting from the use of opportunities;</li> <li>Available possibility to treat the risk-related situation.</li> </ol>	
2.3. Risk Level Determination	Risk analysis outcome	Desired outcome as- sessment; cost value; assessment of the rate of reaction to the ex- ternal environment; quantitative and quali- tative risk assessment methods;	<ol> <li>Generalized risk assessment;</li> <li>Risk rating based on probability of their occurrence and scope of impact on the company;</li> <li>Determination of risk tolerance for each individual risk of the company (indicators, threshold, etc.).</li> </ol>	
3. Risk Treatment	Purpose of the risk- related situation; desired risk level; risk appetite	Formalized and non- formalized (expert) methods. Methods of risk acceptance, aver- sion, localization, di- versification, transfer, compensation, andre- duction (mitigation).	<ul><li>Process of conscious risk change, namely:</li><li>1. Risk aversion;</li><li>2. Risk layering;</li><li>3. Risk financing;</li><li>4. Risk retention.</li></ul>	
4. Communication and Advising	Nature, form, proba- bility, relevance, as- sessment, and ap- plicability of risks.	Impact on the process and outcome of deci- sion-making through a specific influence.	Procedures implemented by the company and aimed at obtaining, distributing and exchanging information between the company and the stake- holders, as well as maintaining an ongoing dia- logue with the latter leading up to adoption of a specific decision.	
5. Monitoring and Analysis	Risk management, actual risk or risk modifiers.	Methods for effective- ness determination of the object being ana- lyzed within the context of achieving the set goal.	Continuous routine control and monitoring, criti- cal supervision and determination of the state aimed at identifying changes in required or ex- pected indices.	

Source: created by the author

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The criteria to be set when determining risk appetite and risk tolerance need to be separated not only according to the strategic and tactical level of acceptance, but also based on the content itself. Thus, determination of risk appetite requires application of a criterion that will determine how much the company is willing to invest into its business goals. In contrast, when establishing risk tolerance, the applied criteria need to provide an answer as to how much the company is ready to lose as a result of carrying out specific risk-related activities.

To achieve their goals, the companies choose the strategy and develop indicators which will show how close they are to that. Relevant rewards and bonuses resulting from program implementation encourage the managers to achieve the goals. After that, the strategy turns into implementation of decisions adopted within the entire company. Decisions are made in order to achieve the objectives, such as increase in the market share, profitability etc. However, this depends on risk identification and determination of whether it is within the limits of risk appetite of the company.

The process of risk appetite formation can be elaborated as shown in Fig. 1 bellow.

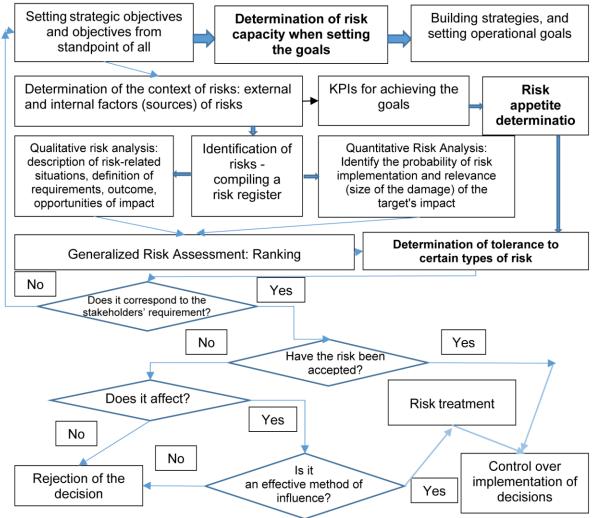


Fig. 3. Adoption of decisions on risk management by determining risk appetite *Source:* created by the author

If the company fails to prepare its Formal Risk Appetite Statement, it is likely to eventually encounter problems when exercising control. In the absence of the said statement, the managers will not be able to direct the business effectively at the accepted level of risk and seize important opportunities



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#### where needed.

Formalizing risk appetite means its execution in writing which is done for the avoidance of misunderstanding about directors and top management's opinion on the risk. Risk appetite formalization facilitates communication with all parties involved in exchange of information.

When the risk appetite is being discussed, it normally involves various matters such as liquidity, unsteady profits and profitability, credit score, reputation and brand, launch of new products, customer circle expansion, supply chain management, mergers and takeovers, environmental change or adaptation, corporate governance, human resources etc.

**Conclusions.** Breaching the risk tolerance threshold should serve as a red alert for the top management, in which case the risk position needs be reduced. The flexibility in responding to this is explained by the fact that risks are in the process of constant change. Hence, risk appetite and risk tolerance cannot be determined on a one-off basis. They have to be continuously updated in accordance with any changes in the company's operating environment.

The desired risk appetite allows to simplify the process of making business portfolio decisions based on risk profile and profit comparison. By having a clearly defined risk appetite, the company is pushed to include the risk factor in any important strategic or tactical decision in order to determine whether it complies with the risk requirements.

Further research will cover the methods for determination of risk appetite and risk tolerance to ensure optimization of the process of achieving corporate goals in ever-changing business climate.

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