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## UNCERTAINTY AND RISK AS A PREREQUISITE FOR ANTI-CRISIS MANAGEMENT OF ENTERPRISE

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The current state of entrepreneurship development in Ukraine has a high level of uncertainty, reliance on a vast collection of external and internal enterprise variables, and an increasing level of risk. There are a variety of risks in such circumstances, including economic and political instability, high inflation, a lack of clear legislation and frequent changes, the use of outdated technology and worn-out equipment, and low economic culture. Many domestic enterprises are on the edge of extinction in such conditions. As a result, there is a current problem with ensuring effective anti-crisis management for them, which will allow for the early identification of the primary aspects of driving the deterioration of the enterprise's financial state and the design and implementation of appropriate measures. It has been established that economic uncertainty has a direct impact on risk. In doing so, the authors address uncertainty from different perspectives, such as a measure and quality of information, a discrepancy between the economy's expected status and its actual advancement, the opportunity to choose from various options, and a source of risk. The following variables have been discovered to contribute to the occurrence of uncertainty in the operations of enterprise activity entities: uncertainty of environmental factors, a lack of information about the state of the market and economic entities, and insufficient managerial qualification, all of which complicate the process of selecting the best solutions and can lead to unpredictable outcomes. The link between uncertainty, risk, and loss has been proven. It has been identified that risk is inherent in the following characteristics: a property of economic entities; a change in the conditions of their activities due to external environment variables; a result of the outcome's uncertainty. Enterprise managers need to pay attention to risks that can lead to losses, such as systematic, the requirement for economic activity, and temporal variability in the formation of anti-crisis management.

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## НЕВИЗНАЧЕНІСТЬ І РИЗИК ЯК ПЕРЕДУМОВИ АНТИКРИЗОВОГО УПРАВЛІННЯ ПІДПРИЄМСТВОМ

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криза, невизначеність, ризик,  
підприємство,  
антикризове управління,  
банкрутство

Сучасний стан розвитку підприємництва в Україні характеризується високим рівнем невизначеності, залежністю від великої сукупності зовнішніх та внутрішніх чинників діяльності підприємств, а також постійно зростаючим рівнем ризику. У таких умовах виникають ризики, які викликані різноманітними кризовими явищами, нестабільністю економічного і політичного розвитку, значними темпами інфляції, відсутністю чіткої законодавчої бази і частими змінами в ній, використанням застарілої технології та зношеного устаткування, низькою економічною культурою. За таких обставин багато вітчизняних підприємств перебувають на межі виживання. Тому актуальним є питання забезпечення на них ефективного антикризового управління, що дозволить завчасно визначити основні чинники, що впливають на погіршення фінансового стану підприємства

з метою розроблення і реалізації відповідних заходів. Встановлено, що невизначеність економічної ситуації безпосередньо впливає на формування ризику. При цьому невизначеність розглядається з різних боків: як міра і якість інформації; як відхилення між очікуваним станом і фактичним розвитком економіки; як можливість вибору різноманітних альтернатив; як джерело ризику. Виявлено, що причинами виникнення ситуацій невизначеності в діяльності суб'єктів підприємницької діяльності є: невизначеність факторів зовнішнього середовища; брак інформації про стан ринку та суб'єктів господарювання; недостатня кваліфікація менеджерів, що значно ускладнює процес вибору оптимальних рішень і може привести до непередбачуваних результатів. Обґрунтовано взаємозв'язок між невизначеністю, ризиком і втраченою. Встановлено, що ризику притаманні такі особливості: властивість діяльності суб'єктів господарювання; зміна умов їх діяльності під впливом чинників зовнішнього середовища; наслідок невизначеності результату. При організації антикризового управління менеджерам підприємств слід звертати увагу на такі властивості ризиків як системність, необхідність господарської діяльності, мінливість у часі, що можуть призвести до втрат.

### Problem statement

The breakdown of commercial linkages, an overall unfavorable economic condition, and political instability of the state define the external environment of businesses today, all of which have a detrimental impact on the development of economic entities. In such circumstances, ensuring the identification and investigation of the factors influencing the emergence of a crisis, the development of appropriate measures, and their implementation in management practice is a relevant management task and serves as a prerequisite for enterprise protection and efficient management.

In market conditions, enterprises must constantly prevent crisis phenomena and develop and implement measures related to bankruptcy prevention, independently determining the range and volume of production, the nature of relationships with suppliers and consumers, credit, investment, innovation, dividend policy, and so on that is why the establishment of an anti-crisis management system is becoming increasingly vital.

Furthermore, the establishment of such a system will enable the following economic entities: to demonstrate a propensity for financial insolvency promptly; to develop and implement anti-crisis measures; to make efficient use of available resources; to prepare for unexpected changes in the external environment; to determine the basic needs of the market; to identify and exploit favorable environmental conditions; to improve coordination and control.

Because uncertainty is an unavoidable part of business situations, the risk is objectively a required component in making any economic decision. It is not always feasible to gain comprehensive and precise knowledge about the environment for the implementation of a decision that is distant in time, about all the internal and external components that are active or capable of manifesting themselves at the time of making the decision. Due to this, there is doubt about achieving the targets, and as a result, the intended target by the solution chosen is not reached to a greater or lesser extent.

### Analysis of recent researches and publications

Domestic scientists such as V.V. Vitlinskyi, H.I. Velykoivanenko [1], P.I. Verchenko [2].

S.M. Klymenko, O.S. Dubrova [3], V.I. Korcheva, N.M. Kriuchkova [4], H.M. Tarasiuk, D.I. Polishchuk [5] and others have paid close attention to the problem of uncertainty and risk.

Scientists point out that uncertainty is regarded from several perspectives: as a measure and quality of information; as a source of risk; and as a result of the diversity of events, and so gives multiple possibilities for the development of events and, as a result, the ambiguity of their consequences. They investigate the sources of uncertainty in the actions of enterprise activity entities in their research. The study of risk qualities as a result of uncertainty receives focus. However, the link between these groups has received insufficient attention.

### Formulating of objectives

The purpose of this article is to study the link between uncertainty and risk, as well as their consideration in the practice of corporate crisis management.

### Presentation of the main research material

In today's turbulent economic climate, where uncertainty and risk abound, anti-crisis management is a vital instrument for ensuring the survival and development of domestic enterprises.

In the scientific literature, there are several meanings for the term "uncertainty". The most acceptable meaning of this phrase, in our opinion, is offered by V.V. Vitlinsky and G.I. Velykoivanenko as a key characteristic of inadequate provision of the process of making economic decisions with knowledge of a specific problem scenario [1].

According to research, the following methods can be separated in terms of the substance of the category of uncertainty:

1. Uncertainty is seen as a sort of information. This is the most typical way of interpreting the characteristics of this group. The availability of sufficient knowledge on the circumstances, limits, and characteristics of socioeconomic systems reflects the certainty of the particular situation. However, even under ideal settings, it is difficult to make proper management judgements about a firm and its surroundings due to the inability to quantify uncertainty.

2. Uncertainty describes the system's status in regard relation to the reference circumstances. Yes, uncertainty is defined as a difference between predicted and actual economic progress. This difference necessitates the creation of planning measures.

3. Uncertainty arises from the option of selecting alternatives. In other words, the nature of uncertainty suggests that there are an endless number of development possibilities to pick from, but without clearly defined criteria for optimality and efficacy.

4. Uncertainty determines the quality of information. This relates to the evaluation of information in terms of its dependability, completeness, and objectivity.

5. Uncertainty is a source of risk since it is impossible to determine its probability.

6. Uncertainty arises from the multivariate implementation of events, which indicates multiple choices for the development of events and, as a result, the ambiguity of their results.

Thus, uncertainty reflects one of the primary aspects of objective reality, which has the following characteristics: the lack of evident boundaries between objects, the dominance of dependence of qualities and states over their relative independence, and the expression of necessity as opportunity and chance rather than inevitability.

The approaches described above emphasize, that the negative side of uncertainty is connected with the potential for unexpected situations with unknown consequences.

It should be noted that there are different causes of the creation's uncertainties in the operations of enterprise activity entities. However, most authors [1; 2; 4] combine them into four main groups:

1. The uncertainty of the processes, such as scientific and technological progress, natural disasters, and competitor and customer behavior occurring in society at large and the economic life;

2. Lack of complete information in organizing and planning the market entity's behavior, or its subjective, low-quality analysis;

3. The influence of subjective factors on the research findings (skill level of employees, withholding of some information by some economic agents).

In this way, under market-economy conditions, all of the above kinds of uncertainty should be considered at each step of the enterprise development strategy.

Uncertainty availability complicates the process of selecting optimal solutions, and it might result in unpredictable outcomes. However, in practice, economic analysis frequently avoids uncertainty and operates based on deterministic models, supposing that the factors influencing decision-making are known exactly. Actuality frequently contradicts these beliefs, and in many cases, the policy of effective decision-making without considering uncertainty can result in several economic and societal consequences.

We have to note that practical significance has differences between risk and uncertainty. Uncertainty refers to a lack of information regarding likely future events, whereas risk refers to a situation in which people never know what will happen but consider the probability

of every available option. Risk, unlike uncertainty, is a quantitative indicator that is expressed as the opportunity of a positive or negative result.

The entrepreneur demonstrates a willingness to take risks in the face of uncertainty because the chance of increased money outweighs the danger of loss.

Unaccounted-for risks in the Business Plan are a source of both losses and profits. It is feasible to select solutions with lower risk but also lower profit. Higher risk is associated with a greater possibility of getting more income [6].

Uncertainty and risk of entrepreneurial activity play an important role including the discrepancy between the planned and the actual; that is, the cause of entrepreneurial activity development. The external environment combines the objective economic and sociopolitical conditions in which the enterprise operates and to which it is required to adapt. The situation's uncertainty is related to dependence on a profusion of elements, counterparties, and people whose behavior cannot always be foreseen with acceptable precision. There is also a lack of clarity in the definition of objectives, criteria, and indicators for their evaluation. Management decisions are usually forward-looking; thus an element of uncertainty and risk must be considered while making them.

So, decision-making under risk is the decision of a solution option under conditions where each action leads to one of many possible independent outcomes and every possible outcome of an appearance may be identified.

Decision-making under uncertainty is the decision of a solution option when one or more acts have numerous independent outcomes, but their probability are unknown or do not make sense.

Risk, unlike uncertainty, can thus be managed.

It should be noted that uncertainty is the key and must condition for the appearance and development of risk: the existence of risk in an economic entity's activities is absent if there is no uncertainty. In other words, uncertainty is the primary phenomenon, whereas risk is the secondary one.

Scientists H.M. Tarasiuk and D.I. Polishchuk focus on uncertainty as a larger definition than risk and that it means ambiguity and lack of knowledge about the outcomes and conditions of a solution [5]. They also consider developing a way to fully remove uncertainty to be impossible.

According to them, the formation of uncertainty, and thus risk, is due to factors such as:

1) direct factors happening in the enterprise's internal and external environment and having an effect on its functioning, all other things being equal;

2) indirect factors related to the effect of other economic entities on specific business activity (e. g., a change in fuel prices leads to a change in the cost of production).

Furthermore, the enterprise's operations could be adapted to deal with uncertainty by applying a strategic plan. The failure to follow strategic planning as a result of a lack of an effective economic development strategy or its unplanned qualitative changes damages the entity's economic activities.

Uncertainty cannot be measured in advance, so accurately predicting the possibility of future events or

states occurring is impossible. Risk, on the other hand, includes the possibility of determining the outcomes of relevant developments and their consequences in the enterprise with a certain probability of occurrence (non-occurrence). Uncertainty is the ambiguity of the future, and risk indicates the probability of the occurrence of certain dangers (opportunities) caused by this uncertainty, resulting in a deviation of real outcomes from planned ones.

Considering the foregoing, any kind of analysis and assessment of anti-crisis solutions must take risk and uncertainty into account.

Figure 1 illustrates the link between the major categories.

In the scientific literature, there are methods to determine the essence of the risk category that can be combined into three main areas:

1) the first area is dedicated to optimum control theories [7]; they view risk as a characteristic of purposeful human activity carried out under environments of limited resources and the opportunity to choose a method to achieve goals. There is no human aptitude or action to remove risk; only ways to minimize it exist.

According to the literary sources in this area, the risk is the probability of events occurring that cause a change in the equilibrium stability of socioeconomic systems. Special attention is focused on the exploration of risk properties such as:

- consistency. It is reflected as probabilistic uncertainty in the implementation of target functions, the nature, content, direction, and circumstances for attaining which are not fully grasped by the decision-maker;
- the universality principle. It argues that risks are not an accidental consequence of an individual’s determined effort, but rather a fundamental requirement for the existence of a creative person who wishes to improve theirs. The risk is regarded as the probability and possibility of socioeconomic changes in the functioning and development of systems at various levels;

– dynamic probability. That allows risks to be assessed and forecasted under asymmetric information distribution conditions and explored as continually temporal variability;

2) the works [7; 8] demonstrate the second area, in which risk is understood as the accumulation of regressive potential. The primary focus of this research is on negative risk characteristics, such as:

- irreparable loss of monetary and spiritual benefits and many attributes and qualities that were beneficial in the past but are now defunct;
- the formation of new material and spiritual values, attributes, and qualities, the level of which risks and regressive potential are uncertain in the future;
- increasing environmental hazards as a result of industrial development.

The central focus of this approach is on the analysis of risk aspects such as normatively, irreversibility, growing dimension, and qualitative uncertainty. Most of these risks are not possible to quantify, and information about them is probabilistic and not available to many economic entities;

3) the third area concerns authors looking into the risks linked with a particular economic activity known as entrepreneurship [3].

When analyzing risks, differentiate the following concepts: ‘factor (cause),’ ‘type of risk,’ and ‘kind of loss (damage)’ from the occurrence of risk events (Figure 2).

Risks can be caused by unanticipated occurrences that could develop and disrupt the planned goal of anti-crisis management, or situations that cause uncertainty about the situation’s outcome. At the same time, some of these occurrences may be predicted, while others cannot.

As a result, the definition of risk includes both losses, the probability of which is linked to uncertainty (lack of information, unreliability), and gains and profits, which can only be acquired through risky acts. The definition of ‘risk’ in management is related to the nature and complexity of problems, the circumstances for making managerial decisions, and projecting the outcome. The amount of the enterprise’s losses under uncertain

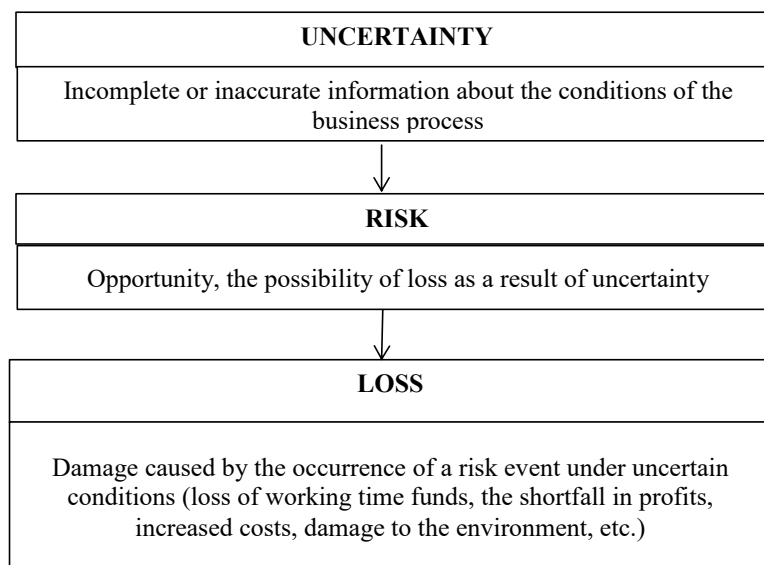


Fig. 1 – Category connection: «uncertainty» – «risk» – «loss»

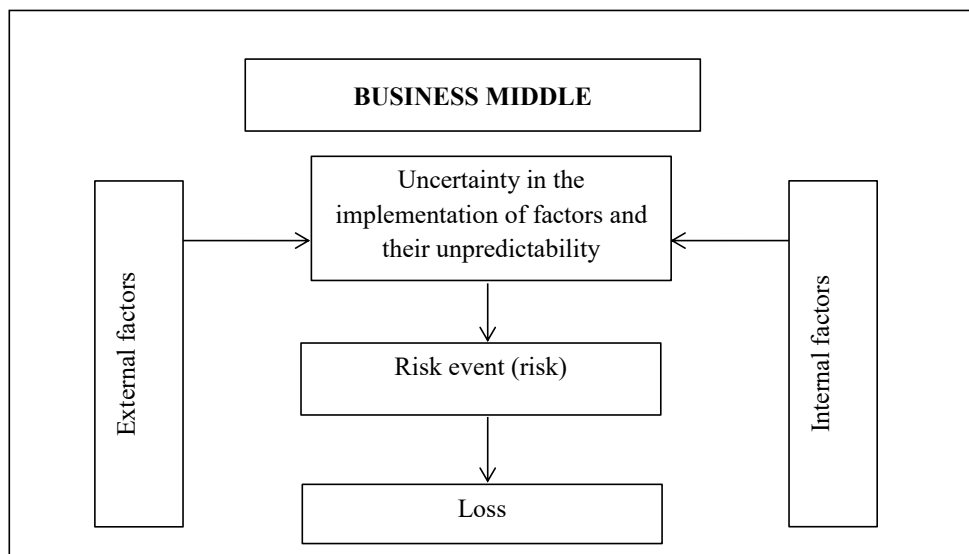


Fig. 2 – Interrelationship of the primary risk characteristics

conditions is the price of risk, and the amount of success (extra profit) is the risk payment.

### Conclusions

External and internal uncertainties relating to the opportunity of events and phenomena affecting the firm's operations are the key sources of entrepreneurial risk. Uncertainty and the probability of losses are risk indicators. Before making any decision, every entrepreneur must remember the logical link between likelihood, uncertainty, and risk. In other words, probability breeds uncertainty, which leads to risk. It is feasible to diminish the level of

uncertainty and, as a result, risk by taking proper measures. However, in the face of uncertainty, the entrepreneur is usually willing to take risks because the chance of higher profits outweighs the danger of losses.

Business managers should identify and examine external and internal elements that influence the establishment of risk qualities such as systemic, the need for economic activity, and unpredictability over time, resulting in losses when planning crisis management.

Simultaneously, the anti-crisis management system can be included in the enterprise's general management concept to prevent the impact and incidence of risk situations.

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