

## **CHAPTER 2. ECONOMIC SECURITY AS AN INTEGRAL SYSTEM**

### **2.1. External and internal elements of the economic security system**

The problem of economic security is becoming increasingly relevant due to the dynamic trends in the modern world. Economic security is one of the most important components of the national security system. The urgency of this problem is increasing as a result of the acceleration of the world economy globalization and the constant participation of Ukraine in these processes, especially those related to its accession to the associated membership with the European Union.

In today's conditions, the issue of the internal regional economic security of Ukraine is intensifying in connection with the aggravation of the political situation in the country. These problems require revision of economic security existing concepts and improvement of the priority ways of ensuring it.

The solution to the multifaceted problem of economic security is constantly at the center of attention of Ukrainian and foreign scientists. In recent years, there have been numerous publications related to the study of individual issues of the problem, as well as, to the theory and practice of economic security. These include the issue of economic security in the context of the economic category [1,2,3], the conceptual framework of economic security [4,5], entrepreneurship [6], in the context of certain types of economic activity and competitiveness of the country and business entities [7, 8], in the direction of attracting foreign capital [9]; as a result of management activity [10,11]. However, there is a lack of systematic methodological studies of economic security as an integral category with the system's generally accepted conceptual apparatus of this independent branch of economic research.

Issues regarding the definition of the essence of the category of economic security, the list of its structural subsystems and elements that significantly affect its status and determine the country's development prospects remain insufficiently settled. The problem associated with the impact of globalization and regional factors, including transboundary importance on the level of economic security of the country, is not fully explored. The current state of the methodological foundations for ensuring the hierarchy of economic security

(from mega-level to personality) is not perfect, but the accumulation of knowledge, the appearance of official documents and methodological recommendations for calculating the level of economic security in Ukraine, for example [12], testify to the relevance of both theoretical and methodological research, and applied aspects of economic security.

The concept of "economic security" is relatively new for Ukraine, it has entered into use in economic science and official documents in the early 90's of the last century with the acquisition of independence of the country. In general, the term "safety" comes from the Latin word "securitas", which is translated as "without concern, fear". Etymologically, the term "safety" comes from the Greek and means "to have a situation". In the Oxford Explanatory Dictionary, security is interpreted as: "1) freedom or protection from danger or anxiety; 2) measures taken to ensure the security of the country, person, values "[13].

In a relatively short period of time, scientists have proposed specific terminology using the concepts of the new classical economic science ("security threat", "safety indicator", "security threshold", "neutralization of threats, danger", "ensuring national, economic security", "financial security", "regional and international security", "macroeconomic security", etc.). An appropriate methodological toolkit for scientific analysis has been formed, indicating the creation of a separate sub-sector of economic research, a science that studies the theoretical and methodological principles for ensuring the country's economic security and is called "ecosestate". Economic security of the state or ecosestate as a science began to develop in Ukraine since the late 90's of the XX century. The name of science comes from English "economic security of state", abbreviated — ecosestate. Ecosestate as a science should have its own methodology of scientific research, distinguishing it among other sciences. G. Pasternak-Taranushenko, one of the first researchers of this problem, systematically formulated the foundations of modern science of economic security — ecosestate [14].

Subsequently, according to some scholars' approaches, economic security was considered in the narrow sense — only as one of the components of national security, according to other approaches, economic security was treated as an independent subject of scientific research. In our opinion, the truth must be in the middle. We agree with O.S. Vlasyuk [15] that economic security

should really be regarded as an independent subject of scientific analysis, but not to exaggerate its specifics. This means that it is advisable to take into account the existence of links and interdependencies between economic, political, social, environmental, information and other security. At present, the vast majority of foreign scientists consider economic security as an independent subject of scientific research.

In spite of certain achievements in the development of the conceptual apparatus of the ecosestate, the scientific disclosure of certain concepts and definitions of the complex system — economic security, its separate subsystems and elements - that is, the thesaurus — was not fully implemented. Thesaurus (from Greek θησαυρός — treasure), in the general sense, is a special terminology, definition and terms of a special field of knowledge.

The basic characteristics of economic security as a science (from the standpoint of object, subject, the presence of systematized knowledge, concepts, relations with other sciences) are given in the work of O.S. Vlasyuk [15]. It is noted that the economic security of the state is an important component of national security. At the same time it is a relatively independent system, which has its own structure, internal logic of development and functioning, means of action on all other aspects of the safe existence of the individual, society and the state.

We believe that the object of the study of ecosestate is global security, the security of the state, regions, enterprises, organizations and individuals, conditioned by the state of the economy, which society must maintain and develop on a progressive scale. The subject of the study of economic security is the activity of the individual, society and the state to protect their interests from internal and external threats both in the economy as a whole, and in certain spheres of economic activity, its components; as well as conceptual foundations for the economic security formation; general patterns of its development; principles and basic directions of ensuring economic security.

There were separately presented scientific approaches to the definition of economic security through the construction of the hierarchy of its main types. For example, Z.V. Yakubovich [16], O. Ruda, L. Malyuta [17] propose the following hierarchy of various types of economic security in the context of concepts state, region, enterprise: global economic security, international economic security, national economic security, economic security of the region,

economic and property security of enterprises. The main disadvantage of such a structure is the lack of level of individual economic security.

Thus, O. M. Lyashenko, B. V. Pleskach, V. K. Bantush distinguish six hierarchical levels of economic security: individual, local (micro level), regional (meso level), national security (macro level), international security as a component of global security, global security (mega level). Although scholars consider such hierarchical levels through the system of security creation, they, in our opinion, can also be used to characterize economic security.

There are proposals for the definition of economic security as a vertically integrated three-level (national, regional, local government) system with developed horizontal links at each of these levels [18], which are insufficient due to the fact that the international level of economic security and the level of individual economic security are not taken into account. There are proposals for a broader interpretation of the structural hierarchy of economic security, including the economic security of rural formations [19]: economic security of the state, international economic security, economic security of territories. Here the functional approach to certain types of economic activity prevails rather than the approach of the structural hierarchy. In our view, the hierarchical structure of the system of economic security should include: economic security of the individual (base level); economic safety of the enterprise, organization, institution (micro level); economic security of the regions (including the borderline) (meso level); national economic security (macro level); international economic security as a component of global economic security; global economic security (mega level).

In our opinion, economic security of the person acts as the main object of the economic security system and represents the security state of its vital interests in the economic sphere. The economic security of the individual is expressed in preserving the most important interests of the individual, included in the socio-economic relations and forms the basis for its steady development. The peculiarity of the concept of the economic security of the individual lies in the fact that it acts not only as an object, but also as a real subject of economic relations, which means that it reflects both the condition and the ability of the individual to undertake in certain conditions the natural right to a quality standard of living .

In addition, it must be taken into account that the economic security of the individual acts as a set of economic, social, demographic, environmental, technological, scientific and information relations [20].

The next component of the system of economic security, in our opinion, is "economic security of enterprises, organizations, institutions, farms". The conducted study made it possible to draw a conclusion regarding the versatility of the concept of "economic security of enterprises, organizations, institutions, farms". Scientists suggest to consider it from the standpoint of the state: the efficiency of the use of resources, production system, economic development, protection of activities and interests, harmonization of the latter.

Rational, in our opinion, is the following definition of the concept of economic security of the enterprise (ESE), which clearly and at the same time most fully reflects its essence [21]. In the proposed definition of the economic security of the enterprise, the following was specified:

- the efficiency of the use of resources serves as a means of achieving the ESE;
- the main feature of the status of the ESE is the presence of the company's competitive advantages;
- the definition indicates the limit of reaching the goals — maximum approximation;
- under the terms refers to a constant change in the environment.

All these characteristics can be disseminated to other entities — organizations, institutions, farms. Therefore, under the economic security of enterprises, organizations, institutions, farms we should understand the state of enterprises themselves, organizations, institutions, farms characterized by the existence of competitive advantages achieved by the effective use of existing own and borrowed resources, timely implementation of a set of measures to protect their activities for maximum achievement of the set goals in the short-term and long-term period in conditions of constant environmental changes.

In the early 90's of the XX century. the power-saving approach was used, according to which the company's economic security was to protect the commercial secret of the enterprise, and "the degree of reliability of the entire information storage system is determined by the level of security of the weakest

link that is the personnel of the organization". The authors of this approach are: V. Yarochkin, A. Shavaev, V. Barsukov and others [22].

The growth of the crisis in the country's economy, increased competition gave a boost to consider the economic security of enterprises wider and understand that the preservation of information, of course, is very important, but this is just one aspect of economic security.

Destructive factors of the environment have led to the definition of the company's economic security as a defense against internal and external threats and the negative impact of the environment. Among the supporters of this approach are D. Kovalev, T. Sukhorukova [23].

There was another approach to the enterprise economic security with the further market relations development, according to which this concept is considered from the standpoint of the availability and necessity of ensuring the competitive advantages of the enterprise. Proponents of this approach [24] characterize the enterprise economic security essence in the context of competitive advantages, conditioned by the correspondence of material, financial, personnel, technical and technological potential and organizational structure of the enterprise, its strategic goals and objectives will provide it with a certain level of economic security.

Well-known scientists Y. Oleynikov and S. Pokropivny are the founders of the resource-functional approach to the definition of "enterprise economic security", according to which economic security is defined as "the state of the most effective using of corporate resources to prevent the threats occurrence and ensure the enterprise stable operation in present and in the future "[25].

The advantages of this approach is complex and comprehensive study, within which an analytical assessment of the external and internal environment is conducted, a mechanism for ensuring the enterprise security as a whole is provided, taking into account the time interval.

There is an approach that identifies the company's economic security with its sustainability and development. The founders of this approach, G. Kleiner, V. Tambovtsev, R. Kachalov [26] disclose the economic security essence only in the sustainable development context of the enterprise without providing deep identification for protection against internal and external threats and the negative impact of the external environment.

The next approach combines several key positions at the same time. For example: V. Gusev, V. Demin, B. Kuzin determine the economic security of the enterprise as "a state of resources effective usage and existing market opportunities of the enterprise, enabling to prevent internal and external threats, ensure long-term survival and market sustainable development under his chosen missions "[27]. This definition is the most complex, due to the fact that it reveals various aspects of economic security, the impact on its state of the external and internal factors in the context of strategic development of an enterprise.

In modern studies, there is also a tendency to consider this concept from a wider perspective. We can distinguish the following common features during the work analysis [28] in the definitions herein economic security: economic security coupled with the need to protect them from internal and external threats; the economic security level depends on the effectiveness of the enterprise potential usage and market opportunities; the task of forming and maintaining a certain level of economic security is associated with the objective need to ensure the stable functioning and development of business entities.

Regarding regional economic security, there is no single position among scientists to determine its essence, its components and its place in the structure of economic security. At the same time, the peculiarities of cross-border cooperation as an element of regional economic security are not given enough attention. The S. Naumenko's work [29] indicates that the economic security of the region is a complex polystructural category that describes the level of protection against potential threats, the independence and capacity for self-development of all economic sectors, social services and their relationship with the features of regional development.

In the context of cross-border cooperation, each of the components of economic security becomes of particular importance, since the level of security affects the intensity of business relations between the border areas. Strengthening economic security of border regions is possible if the implementation of a coherent set of measures which are necessary in different fields: foreign trade, manufacturing, finance, food and commodity and resource security, investment processes, environmental protection.

Economic security of the region (mesoeconomics security) has its own peculiarities in the formation and functioning of regional systems for ensuring

economic security, that is, those institutions and mechanisms that are designed to protect the economic interests and property of the individual, population, region economic entities. The special role of the meso levels is that they act as buffers when the threats to stability become more acute for the main levels of the economic system and serve as reserves for the surplus or lack of factors, resources and conditions for sustainable development [30].

From the point of view of regional economic security, the region's economy acts as an object of protection, and for meso level it is a set of regional economies. At this level, regions' interaction problems within the framework of a unified economic system, cooperation with subjects of foreign states can be solved, lobbying of interests at the state level can be implemented.

The specific factor of the threats emergence to the economic security of the Ukraine regions is their place in the general economic space, the concentration of natural raw material resources, production potential, transport corridors, linking regional economies on their territory. The regional system formation of an economic security should be based on the justification of the system region economic interests of the interacting and flows, practically, from the national economic interests system [31].

The variability of international political and economic situations, as well as increasing the intensity of cross-border processes, necessitates the search for new instruments for stabilization and cooperation at the level of neighboring countries in the framework of regional economic security. Ukraine is a state that borders on 7 countries, meaning that it is important to determine the basic means dependence degree of the Ukraine's economic security on the implementation specifics of the foreign economic policy and cross-border cooperation with these countries. At this stage, relations between neighboring countries are specific, as they can be divided into three main directions of implementation: 1) cooperation that takes place on the border of Ukraine with the EU member states; 2) cooperation in the post-Soviet border with the former Soviet republics; 3) Coastal cooperation between Ukraine and Turkey [32]. At present, there has been an increase in the risk of cross-border processes with the Russian Federation associated with military actions in the state.

In this context, economic development of these regions and cross-border cooperation, as well as the protection of Ukrainian borders from hostile encum-



branches, are an important factor in ensuring the economic regions security. The basis of cross-border cooperation is the process of establishing ties and contractual relations in the border areas in order to find solutions to common problems.

National economic security of the state is a state of the economy and institutions of power, providing guaranteed national interests protection, harmonious, socially oriented development of the country as a whole, sufficient economic and defense potential, even for the most unfavorable variants of internal and external development processes. Firstly, the general state of Ukraine's national economic security in the context of developing a market economy and civil society is an integrated macroeconomic indicator of socio-economic development of the country; secondly, the basis for the development of a strategic state policy and concrete measures for its implementation, and thirdly, a decisive condition for the harmonization and implementation of the entire system of economic interests of the country [33].

International economic security as a global security can be defined as the world economy state the based on mutually beneficial cooperation of countries in solving national and international economical problems, with free choice and implementation of their planned social and economic growth. The international community has established a system of international economic organizations: WTO, IMF, IBRD to ensure international economic security.

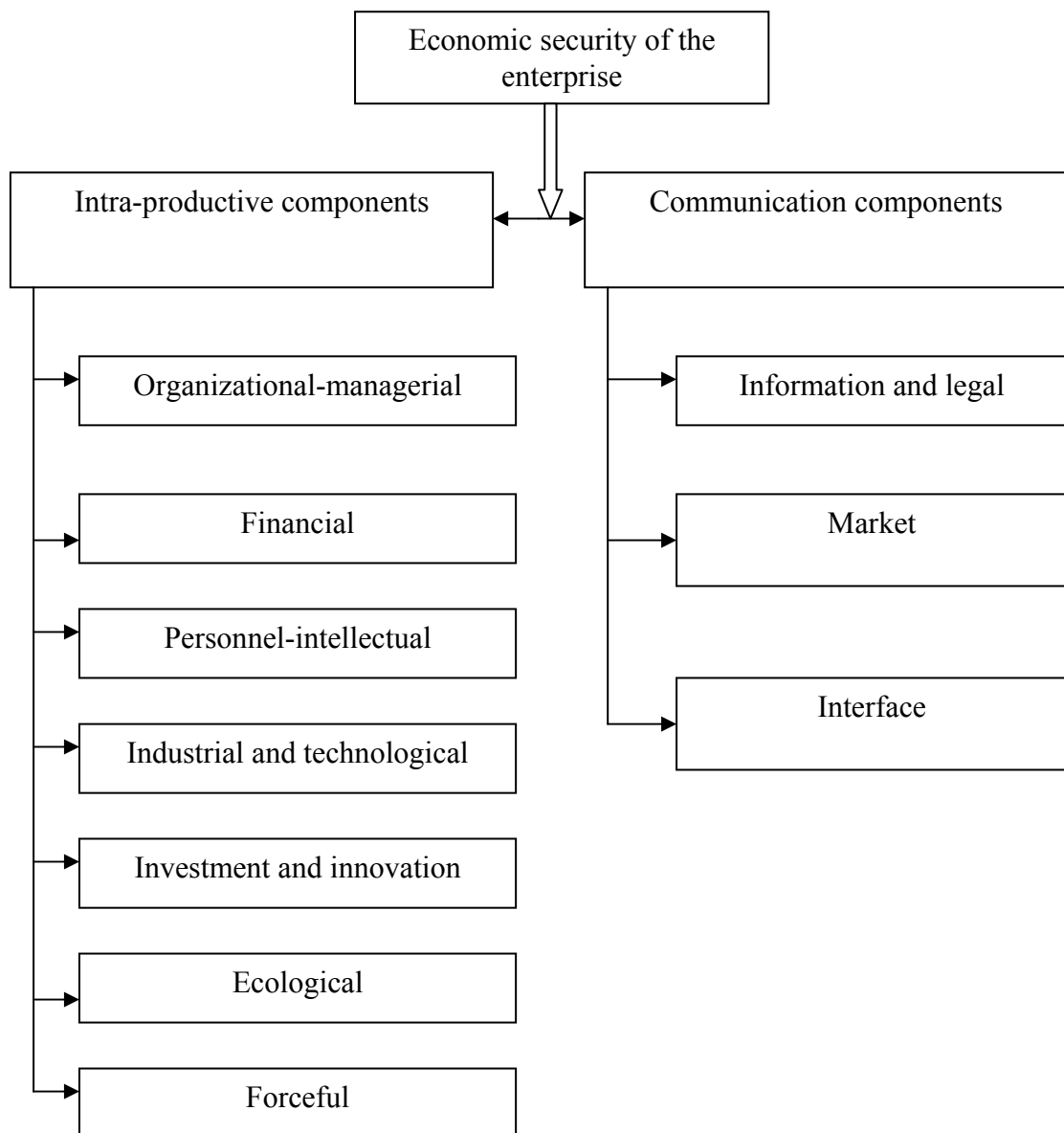
The most common interpretations of global economic security are those that provide for the establishment and maintenance of the world economic relations system functioning, the world economic system, the efficient interaction of economic blocs and national economies. The process of economic globalization involves creating new opportunities for economic development and at the same time contributing to the aging of the old and the formation of new contradictions in the global economy, which some authors categorize as global threats to humanity.

Economic globalization is an objective stage in the development of the world economy. It has both positive and negative consequences, collectively forming the source of the threat to the economic systems balance security. In this regard, the threats presence and risks leads to the expediency of introducing a relatively new category of "global economic security" into scientific circula-

tion, the models development, and practical measures that contribute to ensuring this economic security system component.

Global economic security is a set of measures aimed at ensuring sustainable global economic development, whose goal is to achieve maximum security and a high standard of living for each individual, regardless of nation or nationality, provided that the world is preserved for future generations [34].

In addition to the economic security definition through its hierarchical structure, a significant amount of scientific research was conducted on the basis of its functional components (Fig. 2.1).



*Fig. 2.1. System of functional components of economic entities security*

Indeed, the economic entities' security essence is most fully disclosed through the system of its functional components (subsystems), which we divide into internal production and communication. Under the economic security functional components of economic entities are understood as a set of basic directions, in order to ensure their economic security, which differ significantly in their content and purpose. The internal components of economic security are related to the main spheres of their activities, while the communication components provide both external and internal connections between the individual elements of the economic security of enterprises, organizations and institutions.

Each of these components is a peculiar block (subsystem) with the aim of achieving the appropriate level of entities economic security, and we think it is necessary to characterize each of them individually.

A significant component is *the organizational and managerial component*, it is due to the fact that the organization of the enterprises establishment, organizations, institutions precedes all the processes of their functioning. But the most important in the functioning process of the enterprise, organization, institution is a financial subsystem (component) of economic security, since under finance management market conditions is the basis of the functioning of any economic system.

The essence of *the financial component* lies in the activities of an enterprise, institution, organization, aimed at ensuring an adequate level of their liquidity, profitability, solvency, provides timeliness of monetary payments and repayment of loans, effective monetary provision of production processes. The main threats to this component are unstable monetary and tax policies of the state, rising inflation, unprofessional financial management.

*Personnel and intellectual component* is characterized by the development of intellectual potential of economic entities and effective staff management. The proper level of economic security depends to a large extent on the staffing, their intelligence and professionalism, the motivation system, selection and training of personnel. The main threats to this component are insufficiently qualified personnel, poor intellectual potential development, inefficient personnel management, lack of social security and career prospects, the highly skilled personnel transfer to competitors, and the inadequate protection of the rights totality to intellectual property.

*The production-technological component* is characterized by timely updating of the main production assets, by the advanced technologies implementation level and energy-saving technologies in the process of activity, by the utilization efficiency of production capacities and materials and by the ability to produce competitive products (services).

The main threats to this component are violations of technological discipline, the lack or limitation of innovation activity, investment unattractiveness, significant energy intensity of production and technological processes, inefficient organization of production processes and logistics.

The main feature of the innovation activity of an enterprise, organization, institution is its excessive risk. So, the application of high technologies and the introduction of a new high-quality product into the range of services does not necessarily cause excessive demand, and may negatively affect both the financial condition of enterprises, organizations, institutions and their corporate image. Therefore, it is important not only to create conditions for increasing the possibilities of using innovations at the enterprise: food, technological, economic, organizational at the level of world standards; but also to conduct a comprehensive study of their perception on the market.

A significant type of enterprise activity is the investment activity. The investment implementation, and especially innovative projects, is, in return, associated with the external and internal factors' influence, which is accompanied by an increased risk degree. In order to minimize the negative risk factors' impact and their neutralization, it is advisable to consider the risk management system of investment projects. In turn, such a system will make a contribution into enterprise's financial sustainability growth and economic security insurance of business entities. Therefore, we consider it expedient to allocate a separate component of economic security — investment-innovative, which is accomplished through the investment activities implementation of enterprises, organizations, institutions.

*The ecological component* is associated with minimization of enterprise losses from environmental pollution and the enterprise itself, compliance with ecological requirements for products. Negative influences on economic security belonging to this component appear in the health threat of the enterprise's employees; loss of profit due to the high level of environmental fines and pay-

ments; competitiveness reduction of the enterprise and manufactured products; image undermining.

*Forceful component* is to provide physical security to employees of economic entities, preserve their property, capital, which should be included into security service's functions of the enterprise, organization, institution. The main threats to this component are: raider hijacking, criminal actions, ineffective security or lack of security.

As part of the *communication component*, the leading place belongs to informational and legal security. The informational and legal component provides all aspects of the business entities's activities. Information is the most valuable and expensive resource. Information allows the enterprise, organization, institution to respond adequately to any changes in the external and internal business environment, to plan effectively and carry out their business activities.

The legal support of the company's activity is related to the current legislation observance both in the production field and marketing activities, as well as in the field of right for patent usage, licenses and quotas for natural resources usage, export quota and common. The main threats to the informational and legal component are unstable legal and regulatory framework, law norms violation, obtaining illegal profits, obtaining shadow revenues, as well as open access to confidential information of enterprises, organizations, institutions, industrial espionage, disinformation, destruction of information, positive information absence on business subjects.

*Market component.* According to the methodology of Ilyashenko S. M., a market component analysis of economic security is proposed based on an assessment of the compliance degree of the economic entities' internal capabilities with the development of external factors in the market environment. Analogously with SWOT analysis, factors of the environment are divided into opportunities and threats, and internal ones — into the strengths and weaknesses of the enterprises, organizations, institutions activities [35].

The main threats to this component are increased competition on the market and the competitive positions weakening of business entities and their ability to counteract competitive pressure; adaptability reduction of the enterprise, organization, institution to market changes, lagging behind market requirements, weak marketing management.

*Interface component* characterizes the reliability of enterprises, organizations and institutions interaction with economic contractors. An important sign of the entity reliability with its counterparties is the risky operations minimization based on the assessment of the incoming supplies' management quality and the reliability of its own counterparties, including the supplier's choice and the buyers solvency assessment. The threat to this economic security component of the enterprise is the possible unforeseen changes in the interaction conditions (up to the break of relations) with economic contractors: suppliers, trading and sales intermediaries, investors, consumers, etc. [35, p. 14].

However, generally agreeing with such a position, we believe that the interface component of enterprises, organizations and institutions economic security should be considered not only in the context of ensuring the connection with external environmental factors, but also as the reliability of the interaction between all its functional components. Such a conclusion is based on the definition of the concept of "interface" (from the English "interface" is the partition surface partition, closure) as a set of tools, methods and rules of interaction (management, control, etc.) between the elements of the system.

It should be noted that the list of economic security components is not exhaustive. Separate scholars offer greater detailing, which leads to duplication and will not facilitate the concentration of resources to provide functional components of the business entities' economic security.

In particular, it is proposed to consider a retrospective component of the enterprise, organization and institution economic security. It characterizes a retrospective efficiency assessment of the resources usage in business entities. The need to study the dynamics of resources profitability indicators of the enterprise, organization and institution is determined by the fact that, having identified the tendency of their dynamics in previous years, it is possible to define respectively what is expected of them at present and in the future [36].

We believe that the strategic development of business entities is the basis for their successful activities, ensuring their competitiveness, a sufficient level of both economic security and all functional components, which should be formed taking into account the strategic decisions taken rather than retrospective indicators.

It is expedient to include such a system of functional components in the economic safety composition of the industrial enterprise: internal production (organizational, managerial, financial, personnel and intellectual, industrial and technological, investment-innovative, environmental, and forceful) and communication (informational, legal, market, interface). The proposed list of functional components and the impact directions definition of the internal and external threats on each of them is the basis for the effective mechanism formation for managing the economic entities' security.

Further development of research is related to the structure's definition and mechanism economic security ensuring of the enterprise, the direction assessment and the influence force on each of its functional components.

## **2.2. Functional approach to the definition of subsystems and economic security elements**

We believe that a more systematic approach to the definition of the economic security essence is being considered not only from the point of view of its substantiality and polystructural hierarchical system, but rather as a complex system, in the interrelationships and interdependencies of its components [15]. Economic security has a vertical (external and internal components) hierarchical structure and an internal-functional (horizontal) structure.

The notion of "system" is etymologically derived from the ancient Greek language and means "connection". Proceeding from the classical views on the concept essence of "system" (in particular, according to R. Descartes and B. Spinoza), the economic security system will be defined as the complex integrity and simultaneously the separation of various interconnected subsystems and elements, interacting with the environment as a whole and separated from it .

The element of the system is the simplest indivisible component of the system, while the indivisibility factor is conditional and depends on the specific tasks of the study. The subsystem acts as an integral part of the system, in which other components can be distinguished. Cumulative elements from a subsystem are often called system components. Each system is characterized by