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ECONOMICS OF ENTERPRISE TEXTBOOK

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The theoretical, methodological and practical aspects of economics are provided in the teaching resource; the modern economic mechanism of efficient management and the enterprice competitiveness under the market conditions is substantiated. The issues of formation and use of enterprise resources, innovation and investment activities, determination of financial and economic results, production efficiency are provided. Questions for assessment of knowledge and self-control to all units, test tasks, the list of the used and recommended references are developed.

The textbook is prepared for training students of higher educational institutions in the field of 073 "Management" and 075 - "Marketing", by the programm for undergraduate training. The tutorial can be useful for institutes aimed at retraining students and advanced training of enterprises employees, as well as for graduate students, teachers and professionals solving issues of the enterprise economic activity.

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INTRODUCTION

Radical changes in society and fundamental transformation of basics of management in the country require each company to implement measures that are aimed at ensuring its stable economic growth. To achieve this goal it is important that specialists acquire skills to use theoretical and practical knowledge in economic activities of the enterprise.

Successful preparation for professional entrepreneurial activity in modern business conditions requires in-depth knowledge by specialists of main aspects of enterprise economics, organization and ensuring efficient management of the primary level of economic system of the country where goods are produced and services provided. The study of enterprise economics lays the foundation of an important set of theoretical and practical knowledge, which is necessary for every economist and specialist, regardless of his specialization and position.

The priority of the specialist's competencies is related to his ability to think on a large scale and specifically economically, master modern information and management innovations, diagnose results of economic entities, substantiate alternative resources for enterprise functioning, evaluate models of their development and form decisions on effective management.

Current trends in training of specialists in higher education institutions involve use of the latest learning technologies and increase efficiency of independent work of students. Based on this, manual aims to provide more intensive use of lecture time and visual accompaniment of lectures, as well as to provide assistance and systematize independent work of students.

The study of enterprise's economics involves formation of modern economic thinking, acquisition of future specialists of special knowledge and skills in the field of analysis of the enterprise, substantiation of its current and future plans, search and evaluation of effective areas of investment and innovation. Extensive knowledge and creative thinking form a conscious use of objective economic laws in a decision-

making process, contribute to the improvement of the system of industrial relations, which are motivating motives for effective activity.

MODULE I. ECONOMIC PRINCIPLES OF ENTERPRISE FUNCTIONING

TOPIC 1. ENTERPRISE IN THE MARKET ECONOMY

- 1.1. The concept of enterprise, its goals and activities.
- 1.2. Types of enterprises and their classification. Association of enterprises.
- 1.3. External management environment of enterprises.
- 1.4. Market environment of enterprises.

1.1. The concept of enterprise, its goals and activities

The main production and economic unit of Ukraine's economy is the enterprise. The enterprise as a socio-economic and legal institution has a certain set of economic, organizational and legal characteristics, which qualifies as a business entity and a legal entity. On the basis of these features that are systematized in the Commercial Code of Ukraine, the legal status of enterprises of all forms of ownership and sectors of the national economy is determined.

According to the Commercial Code of Ukraine, an enterprise is an independent business entity set up by a competent state authority or local government, or other parties for the purpose of satisfaction of public and personal needs through the regular production, research, trade and other economic activities.

In a market economy, an enterprise that is engaged in production activities is a business entity. The enterprise as a business entity is the main production and economic unit of the Ukraine's economy. Business entities are defined as enterprises that handle economic activities, have separate property, a set of economic rights and responsibilities.

The enterprise is an economically independent business unit with the rights of a legal entity that produces products, performs work or provides services. The enterprise is an organizationally separate and initial chain in the production sphere

of the national economy. It is characterized by an appropriate production specialization, the basis of which is a professionally organized team that is capable of producing products that society needs or providing certain services.

In terms of commodity production and market economy, enterprises act as commodity producers. The products that are the result of their activities acquire a commodity form and enter the market for exchange. However, it should be noted that enterprises can be created both for entrepreneurship and for non-commercial economic activity.

In most countries with developed market economies, enterprises are called firms. The word "firm" means enterprises that are engaged in economic activities in various sectors of the economy. In some countries, more specific names of companies are quite common. For example, in England they are called companies, in the United States - corporations, in continental Europe - unions.

The company determines a certain brand name for itself, under which it is putted on record in the state register of the country. As a rule, the brand name of an agricultural enterprise today includes the name of the village where the farm operates, reflects the nature of its activities, legal status and form of management.

Each company has the legal status of a business entity, a complete system of accounting and reporting, an independent balance sheet, a bank account, a seal with its own name, and in some cases a trademark. The trademark (brand) is used to identify the company's products and to distinguish them on the market from the products of competitors.

The enterprise is the main chain of the country's economy; it produces products, performs work and provides services that form the material basis of life of every person and society. At the same time, in the process of production and selling of products, appropriate *production relations* are formed at the enterprise, in which the interests of the employee and the team, the owner and society as a whole are manifested. The basis of the enterprise is the workforce, so it must solve both economic and social problems.

To organize the effective operation of the enterprise it is necessary to determine its purpose and main goals, which are formed depending on the internal and external conditions of operation.

The purpose of the production activities of the enterprise is twofold - to meet social needs and to make a profit. In a market economy, the satisfaction of social needs cannot be the only goal, but it is also impossible to exclude this goal and leave the only one - to make a profit. Undoubtedly, the immediate goal and motivation of the enterprise is to get the biggest mass from the sale of products. However, this goal can be achieved only by producing the products that are needed by consumers, which are in demand and sold on the market. Based on this, companies are forced to meet more fully social needs and to receive appropriate profits on this basis.

Depending on this, the basis of effective management is to determine *the general* purpose of the enterprise, justification of the objective need for its creation and operation. In the world economy, the main goal of the enterprise is called *the mission*. The mission of a modern enterprise is to achieve certain economic and social results and obtain the maximum possible profit.

On the basis of the mission of the enterprise *the general company purposes* which have to meet certain requirements are formulated and established:

- firstly, the goals of the enterprise have to be *specific and measurable*. Formulation of goals in specific forms creates a starting point for later economic and social decisions. Due to this, it is possible to determine reasonably how effectively the company is working towards its goals;
- secondly, the goals of the enterprise have to be *time-oriented* that means to have specific forecasting horizons. Goals are set for long or short periods of the enterprise activity. The long-term goal has a forecast horizon for five years, sometimes more: 7-10 years for technically advanced firms; short-term within one year;
- thirdly, the goals of the enterprise have to be *achievable* and increase the efficiency of its activities. Unattainable or partially achievable goals cause negative consequences, particularly, reducing of management efficiency, reducing

of employee motivation, downturn of innovation, production and social performance of the enterprise, reducing of competitiveness of its products on the market;

- fourthly, according to the dynamics of production efficiency, multiple goals of the enterprise have to be *mutually supportive*, which means that the actions and decisions have to contribute to achieving the appropriate goal. Others can lead to a conflict situation between the units of the enterprise that are responsible for achieving different goals.

Finally, the goals of the enterprise have to be clearly stated for each of its activities, which is important for the entity that seeks to measure the results of these activities.

In the practice of management, each enterprise that is a complex production and economic system carries out many specific activities, which on the basis of kinship can be combined into separate areas.

The main activities of the enterprise: marketing, innovation, production, sales and after-sales service.

Under the marketing activities of the enterprise should be understood the process of organizing the production and selling of products, focused on meeting the needs of individual consumers and making a profit based on market research and forecasting, studying of internal and external environments. Such programs should include measures of improving the properties of the product and expand its range, studying the psychology of buyers and competitors, and to ensure effective pricing and sales policy, optimization of sales channels, sales and technical service as well.

Based on the results of marketing research of the goods market, the principles of innovative activity are formed to ensure straight and successful access to new market segments with innovative products.

Innovative activity of the enterprise includes: realization of scientific and technical developments and tests; effective technological and design activities; introduction of technical, organizational and other innovations; development of new utility models to improve the organization, management and regulation of the enterprise; formation of an effective innovation and investment policy of the

enterprise. Innovative activity of the enterprise is accomplished on the basis of realization of investment resources for the purpose of performance of scientific and technical programs, introduction of new scientific and technical achievements in manufacture.

The key to the successful operation of the enterprise in a competitive market environment is the effective *production activity of the enterprise*, which includes the development of a program of production of goods and services in the current period and in the future; balance of the production capacity of the enterprise; validation of the volume of production goods and services of a certain commodity items in accordance with the needs of the market; constant logistical support of production with the necessary resources; development of coordinated in time and space operational-calendar schedules of production and provision of services; introduction of optimization programs for the rational use of resources that are available to the enterprise.

The efficiency of previous activities should be determined by the results of commercial and marketing activities, the scale and quality of which depends on the financial efficiency of production. *The commercial and marketing activities* should be understood as a set of commercial, trade and technological measures of the enterprise with bringing its products to consumers. It should include: active search for markets for goods and services; finding potential customers; choice of distribution channels for goods and services; establishment long-term honest relationships with customers; documentation of economic relations by the drawing up supply contracts.

An integral part of consumer commitment to the products manufactured by the company is the provision of *after-sales service* upon selling of products that provides the following services: providing warranty maintenance of goods that are sold during the period of operation; operational support of the standard operating life of the sold goods (installation or commissioning work, computer and information support, supply of spare parts, repair, consulting, etc.).

1.2. Types of enterprises and their classification. Association of enterprises

To ensure efficient and skilled management in modern business conditions, the classification of enterprises on certain characteristics becomes important:

Depending on *the form of ownership* in Ukraine there may be enterprises of the following *types*:

- private enterprise that operates on the basis of private property of residents or business entities (legal entities);
 - an enterprise that operates on the basis of collective ownership;
- communal enterprise that operates on the basis of communal property of the territorial community;
 - a state-owned enterprise that operates on the basis of state ownership;
- an enterprise based on a mixed form of ownership by combining the property of different forms of ownership.

State-owned enterprises also include *treasury enterprises* that are not the subjects of privatization. The Cabinet of Ministers of Ukraine decides to transform a state-owned enterprise into a governmental one under the following conditions:

- 1) the enterprise carries out production activity that, according to the current legislation, can be conducted only by the state enterprise;
 - 2) the main consumer of the enterprise's products (over 50 %) is the state;
 - 3) the enterprise is a subject of natural monopolies.

Depending on *the national affiliation of capital*, the following enterprises are distinguished:

- enterprise with foreign investments if the foreign investments are more than 10 % in the authorized capital;
- foreign enterprise if the foreign investments are 100 % in the authorized capital;
- national enterprise if there are no foreign investments in the authorized capital.

Depending on the method of establishment and formation of the authorized capital in Ukraine there are the following enterprises:

- unitary and corporate.

A unitary enterprise is set up by one founder, who allocates the necessary property, forms the authorized capital in accordance with the law, not divided into shares, approves the charter, distributes incomes directly or through a head that he appoints, manages the enterprise and forms its staff on the basis of employment, makes decisions about the reorganization and liquidation of the enterprise. Unitary enterprises are state and communal enterprises, also enterprises based on the property of associations of residents or on the private property of the founder.

As a rule, a *corporate enterprise* is formed by two or more founders by their joint decision or agreement, operates on the basis of combining the property of business or employment of the founders that are called participants, their joint management based on corporate rights, including control bodies created by them, the participation of the founders (participants) in the distribution of incomes and risks of the enterprise. Corporate enterprises are cooperative enterprises, enterprises that are set up in the form of a business partnership, as well as other enterprises, including those that are based on the private property of two or more people.

Depending on the number of employees and the volume of gross income from sales for the year, there are micro-business entities, small businesses, medium-sized and large businesses.

The subjects of micro-entrepreneurship are:

people that are registered in the manner prescribed by law as *individual* entrepreneurs, whose average number of employees for the reporting period (calendar year) does not exceed 10 people and annual income from activity does not exceed the amount equivalent to 2 million euros, that is determined by the average annual the rate of the National Bank of Ukraine;

legal entities - business entities of all organizational, legal form and ownership, in which the average number of employees for the reporting period (calendar year) does not exceed 10 people and the annual income from any activity

does not exceed the amount equivalent to 2 million euros that is determined by the average annual rate of the National Bank of Ukraine.

The subjects of small business are:

people that are registered in the manner prescribed by law as individual entrepreneurs, whose average number of employees for the reporting period (calendar year) does not exceed 50 people and annual income from any activity does not exceed the amount equivalent to 10 million euros, that is determined by the average annual the rate of the National Bank of Ukraine;

legal entities - business entities of all organizational, legal form and ownership, in which the average number of employees for the reporting period (calendar year) does not exceed 50 people and the annual income from any activity does not exceed the amount equivalent to 10 million euros, that is determined by the average annual rate of the National Bank of Ukraine.

The subjects of large business are: - legal entities - business entities of all organizational, legal form and ownership, in which the average number of employees for the reporting period (calendar year) exceeds 250 people and the annual income from any activity exceeds the amount equivalent to 50 million euros, that is determined by the average annual rate of the National Bank of Ukraine.

According to the degree of dependence on another enterprise, the following enterprises are distinguished:

- main; subsidiaries, branches.

Depending on the industry affiliation there are: industrial; agricultural; constructional; transportation; trading; researching; leasing; banking; insurance; touristic; communication companies; consumer's service enterprises, etc.

According to the legal status and forms of management there are:

- *sole proprietorship* is the property of one person who is responsible for his/her relations with all property;
- *cooperative enterprise* is a voluntary association of residents to support the joint implementation of economic activities;

- leased enterprise is assigned to contract relations for temporary management and membership in the property;
- business association (partnership) enterprises and other business entities established by legal entities or individuals through the integration of their property and participation in business activities of companies to support the supply of profits.

Business associations include: joint-stock companies, limited liability companies, additional liability companies, unlimited companies, kommandit partnerships.

A joint-stock company is a company that has a share capital divided into a certain number of shares of equal nominal value and is liable for obligations only with the company's property, and shareholders have to bear the risk of losses associated with the company's activities within the value of their shares.

Joint-stock companies can be public or private, the number of the latter may not exceed 100 shareholders. Shares of a public joint-stock company can be distributed through the open subscription or purchase and sale on stock exchanges. Shareholders of a public company can dispose of their shares without the consent of other shareholders of the company.

Shares of a private joint-stock company are distributed among the founders or assignees and cannot be distributed by subscription, bought or sold on the stock exchange. Shareholders of a private company have a privilege to purchase shares that are sold by the company's shareholders.

A limited liability company is a business company that has a share capital divided into shares, the amount of which is determined by the foundation documents, and the participants are liable for obligations only with their property.

An additional liability company is a business company, the authorized capital of which is divided into shares stated in the foundation documents. The members of the company are liable for their obligations with their own property, and in case of its insufficiency they bear additional joint and several liability in the amount that is stated in the foundation documents in a multiple amount to the contribution of each of the participants.

An unlimited company is business partnerships, all members of which carry out business activities in accordance with the agreement concluded between them on behalf of the partnership and are jointly and severally liable for the obligations of the partnership with all their property.

A kommandit partnership is a business partnership in which one or more participants carry out business activities on behalf of the company and are jointly and severally liable for its obligations with all their property, which can be levied (full participants) by law and other participants that are present in the activity, companies only with their contributions (depositors).

Depending on the purpose and nature of the enterprise are divided into: commercial enterprises - are for profit; non-profit organizations which activities do not involve making a profit (credit unions, charities, etc.).

Enterprises have the right to combine their scientific, technical, production, commercial and other activities on a voluntary basis, providing that this does not contradict the current anti-trust law. According to world and domestic business experience, companies can form different principles and goals of voluntary associations:

- associations are the simplest forms of contractual association of enterprises (firms, companies, organizations) for the purpose of constant coordination of economic activity. The association has no right to interfere in the production and commercial activities of any of its participants (members);
- corporations contractual associations of economic entities on the basis of integration of their scientific, technical, production and commercial interests, with the delegation of certain powers of centralized regulation of the activities of each of the participants;
- consortiums temporary statutory associations of industrial and banking capital to achieve a common goal (for example, the implementation of a joint large economic project). The members of the consortium can be public and private firms, as well as individual countries (for example, The International Satellite Organization);

- concerns a form of statutory associations of enterprises (firms) that are characterized by unity of ownership and control; unification occurs most often on the principle of diversification, when one concern integrates enterprises (firms) of different sectors of the economy (industry, transport, trade, research organizations, banks, insurance). After the creation of the concern, business entities lose their independence, usually are subordinated to financial structures. In modern conditions, the network of international concerns is significantly expanding;
- cartels are contractual associations of enterprises (firms) mainly of one industry to carry out joint commercial activities such as regulation of sales of manufactured products;
- *syndicates* are organizational forms of existence of a kind of cartel agreement, which provides the selling of products of participants through the creation of a joint sales body or sales network of one of the members of the association. In a similar way, raw materials can be procured for all syndicate members. This form of association of enterprises is typical for industries with mass production of homogeneous products;
- *trusts* are monopolistic associations of enterprises that previously were belonged to different entrepreneurs into a single production and economic complex. At the same time, enterprises completely lose their legal and economic independence;
- holdings are specific organizational forms of capital pooling; a state-owned integrated company that is not directly engaged in production activities, but uses its financial resources to acquire controlling stakes in other enterprises that are members of a concern or other voluntary association. Due to this, it controls the activities of such enterprises. The entities united in the holding have legal and economic independence. However, the solution of the main issues of their activity belongs to the holding company;
- *financial groups* associations of legally and economically independent enterprises (firms) of different sectors of the national economy. In comparison with the concern, financial groups are headed by one or more banks, which manage the

capital of enterprises (firms, companies) that are part of them, coordinate all areas of their activities.

Along with the voluntary ones, so-called *institutional associations* are creating and functioning in Ukraine, the activity of which is initiated in a directive manner by ministries (departments) or directly by the Cabinet of Ministers of Ukraine. These include production, research and production (scientific and technical), production and trade and other similar associations (complexes, centers), integrating the stages of creation (project planning), production, sale and after-sales service of durable products.

There are powerful state corporations in our country which are created on the basis of former narrow-sector ministries (for example, the state corporation «Ukrbudmaterialy»). Institutional intersectoral associations of enterprises and organizations are set up and operate under various official names in the agroindustrial complex, construction, housing and communal services and other interconnected sectors of the Ukraine's economy. Economic methods of corporate management are applied to such integration and organizational formations, which are properly correlated with the methods of management of primary links (enterprises, firms, companies) of the suitable production and economic systems.

1.3. External management environment of enterprises

Radical changes in the economy of Ukraine have determined the need to create such economic mechanism that will allow companies to implement the principles of market relations, help increase competitiveness and ensure their dynamic development.

Each company is an independent producer under the market conditions. It makes all decisions independently within the current legislation, but at the same time in its activities is influenced by environmental factors, and is responsible for its actions to the state, business partners and the final consumer of products. The company constantly interacts with the external environment and depends on it. The

effectiveness of the enterprise often depends on the success of interaction with the environment, which is formed by economic conditions, the global market, technological progress, political activity and social traditions. From the point of view of management, the relationship between the enterprise and the external environment is called cooperation with stakeholders, which is influenced by the policy of the enterprise and its decisions, competing organizations, suppliers and customers.

The external environment includes a set of all external factors that affect the activities of the entity. It plays the role of the main source of uncertainty in the operation of the enterprise today. On the other hand, the diversity of activities of economic entities requires the usage of specific methods of regulating their development. According to it, there is an objective need to create compensatory management mechanisms that would allow companies to adapt to new business conditions.

By monitoring the activities of domestic enterprises and analyzing the factors that form their environment at the macro and micro levels, show that the most influential of them at the *macro-level* are:

- global (international): scientific and technical cooperation, establishment of business relations with foreign partners;
- economic: the degree of state regulation of the economy, household incomes, price dynamics, inflation, tax structure;
- political and legal: the activities of political parties in society, legislative regulation of economic activity, anti-trust regulation, the legislative framework of tax regulation;
- *natural-geographical*: natural conditions of the region, energy supplies, minerals and other resources, quality of soil, air, water, level of environmental pollution;
- scientific and technological: development of science and technology, level of innovation, state regulation and stimulation of scientific research;

- socio-cultural: number, age and gender structure of the population, territorial division, level of education, social values, customs and traditions.

At the micro-level: business (competitors, suppliers, intermediaries, consumers); production (price, cost of production, profitability of products and enterprises); technical and technological (quality, operational properties, conformance to standard); aesthetic (design, brand); organizational (terms of supply, service, product credit, sales).

The efficiency of the enterprise is determined by the degree of development and branching of market infrastructure. Market infrastructure is a set of organizations and institutions that have different activities ensure effective interaction of producers and other market agents that carry out the circulation of goods, their promotion to the final consumer.

Supply and sales organizations, intermediary firms, dealer wholesale networks and retail trade enterprises, leasing companies, repair and service centers, audit and insurance companies, trading houses, advertising agencies, foreign trade organizations play a key role in ensuring the constant movement of goods. The most important elements of the market infrastructure include commercial, investment and other banks; commodity, stock and currency exchanges, information centers, communication systems.

1.4. Market environment of enterprises

In a broad sense, the market is the way of manifestation of economic relations between people that arise in the process of production, distribution, exchange and consumption. In a narrow sense, the market is a sphere of commodity circulation and related set of commodity-money relations that arise between producers (sellers) and consumers (buyers) in the process of buying and selling goods.

The expanded interpretation reveals an important essential aspect of the market, which makes it possible to determine its place and role in the process of reproduction: the market provides an organic link between production and consumption under their influence and influences on them; the market reveals the real volume and structure of various needs, the social significance of the product and the labor expended on its manufacture, establishes the relationship between supply and demand, which forms a certain level of prices for goods and services.

In addition to the special function of ensuring the movement of goods from producer to consumer, the market represents regulatory, control and stimulating functions in the economic system of society. World experience recognizes that the market is the most perfect tool for self-regulation of social production. Mediation determines: "what?", "how much?", "when?", "how and for whom to produce?" As the result, the law of value and the law of supply and demand, the necessary reproductive proportions are established, the distribution of investment, material and labor resources between areas of activity and industries are optimized, effective economic control over the rational socially acceptable level of production costs is ensured.

The stimulating function of the market consists in that it initiates the production of those goods that consumers exactly need. Market relations actively influence the expansion of the range and improvement of product quality, withdrawal from production and consumption of obsolete products that do not have the prospect of expanding sales through the mechanism of competition.

The desire to gain market advantage stimulates intensive and innovative activities of manufacturers that are aimed at timely updating of technical and technological base of enterprises, development of new products and services, as well as strengthens the motivation of employees to improve their skills, creative and productive work.

Market relations have general character, extend to all economic spheres and regions of the country, and penetrate into all parts of the national economic system. Many entities enter into these relations and various goods and services enter the

sphere of circulation, which forms a complex and multidimensional market structure. The study of the latter involves a comprehensive study of the unity, relationship and interaction of market components, search and development of new organizational forms of economic relations and commodity-money exchange, supply and demand management, mechanisms for adjusting the main links of production to efficient management.

The greatest coverage of market participants, their grouping taking into account the specific features of market behavior is achieved by identifying five main types of markets:

- *consumer market* individuals and households that buy goods or receive services for personal consumption;
- *producer market* people and enterprises that purchase goods for the usage in the production of other goods and services;
- market of intermediate sellers (intermediaries) people and organizations that become owners of goods for resale or lease to other consumers to get profit for themselves;
- market of public institutions that purchase goods and services to ensure the sphere of public utilities or to ensure the activities of various non-profit organizations;
 - international market foreign buyers, consumers, producers, intermediaries.

A broad division of the market by subject composition, as well as its greater structuring, taking into account the product and resource content, which includes markets for food and non-food consumer goods, tool markets, raw materials, energy and other industrial products, housing markets, land, natural resources have great analytical and practical importance to ensure the structural balance of the market, as well as the development of economic entities' marketing strategy.

According to the degree of monopolization, there are the following types of markets: monopolistic, oligopolistic, perfect (pure) and monopolistic competition.

A monopolistic market occurs when one company appears as the only supplier of a particular product with no close substitutes. Based on this, the buyer has no

choice, and the monopolist may not spend money on advertising, dictating prices, because market entry is blocked by economic, technical, legal and other barriers. So, an enterprise that is under a monopoly is called a monopolist, and the market in which the monopolist operates is called a monopoly market.

The Law of Ukraine "On Limitation of Monopolism and Prevention of Unfair Competition in Entrepreneurial Activities" defines two more categories related to the monopoly market: "monopoly formation" and "monopoly position".

Monopoly formation - an enterprise, amalgamation or an economic society and other formation that occupies monopoly position on the market. Monopoly position is the dominant position of an economic entity that enables it to restrict competition on the market of a particular product independently or jointly with other economic entities. The position of an economic entity that share in the market of a certain product exceeds 35% is recognized as monopolistic. The Antimonopoly Committee of Ukraine can also make a decision to recognize the position of an economic entity that share in the market of a certain product is less than 35% as monopolistic.

The classification of monopolies is reduced to three main types: natural, administrative and economic.

Natural monopoly arises due to objective reasons. It reflects the situation when the demand for a particular product is better met by one or more firms. It is based on the features of production technologies and customer services. Here competition is impossible or undesirable. The examples are: communication services, and energy supply. There is limited number of enterprises in such industries and they naturally have a monopoly on the market.

Administrative monopoly arises as a result of actions of state bodies. On the one hand, it gives individual companies the exclusive right to perform a certain type of activity. On the other hand, these are organizational structures for state-owned enterprises, when they are united and subordinated to various associations or ministries. As a rule, the enterprises of one branch are grouped. They operate in the market as one business entity with no competition between them. The economy of

the former Soviet Union was one of the most monopolized in the world. The dominant one was the administrative monopoly, first of all the monopoly of ministries and departments. In addition, there was an absolute state monopoly of the organization and management of the economy, which was exclusively based almost on state ownership of means of production.

Economic monopoly is the most common one. It appears due to economic reasons and expands on the basis of patterns of economic development. This is about entrepreneurs who have managed to gain a monopoly position in the market. There are two ways to do this: 1) successful development of the enterprise, constant increase in its scale through the concentration of capital; 2) is more dynamic and based on the processes of centralization of capital that means a voluntary association or absorption bankruptcies by the winners. In some way or another, or with the help of both at the same time, the company reaches such scale when it begins to dominate the market.

The oligopolistic market occupies an intermediate place between monopoly and monopolistic competition. Oligopolistic market - economic relations between several the most powerful companies in the industry that seek to selling, market share, price levels, the introduction of advanced science and technology in production in order to maximize profits. In other words, an oligopoly is a collective form of monopoly.

The market of perfect (pure) competition - is a set of a large number of small and medium enterprises, trade between which, as well as between individuals is carried out without significant impact on the price level. Perfect competition has the following features: a large number of sellers and buyers, each of which has a small share in total sales or consumption of products; all enterprises produce homogeneous products using similar production processes; each firm has reliable information; the presence of freedom to enter and to exit the market (i.e., the absence of entry and exit barriers to the market).

Monopolistic competition - economic relations between different forms and types of monopolies in the struggle for monopolization of factors of production,

areas of capital investment, markets that are aimed at appropriating monopoly profits. The key characteristics of the market of monopolistic competition that distinguish it from other types of market are: product differentiation; the presence of a significant number of sellers; price competition; competition for non-price factors; relatively low entry and exit barriers. Nowadays economic development is quite difficult to imagine without the existence of competition, which ensures the formation of a market environment. In this regard, the introduction and protection of competitive relations is one of the priorities of the state.

CONTROL QUESTIONS

- 1. Give the definition of the enterprise according to the applicable law.
- 2. Name the main purpose (mission) of the enterprise and list the goals of its production and economic activities.
 - 3. Describe the main activities of the enterprise.
- 4. Discover the essence of commercial and non-commercial enterprises and describe the features of their activities.
- 5. Which enterprises are allocated according to the form of ownership of the means of production?
- 6. Which companies are distinguished by legal status and form of management?
- 7. Define and discuss the essence of joint-stock company, limited liability company, additional liability company, unlimited company and kommandit partnership.
- 8. Describe the joint-stock companies and name the advantages of joint-stock management.
- 9. Which companies are distinguished by the degree of dependence on the parent company?
- 10. By which characteristics enterprises are divided into small, medium-sized and large businesses?

- 11. What is the essence and what are the components of the microenvironment of the enterprise?
- 12. What is the essence and what are the components of the macroeconomic environment of enterprises?
- 13. Describe the market environment of enterprises and list the functions of the market.
- 14. How does the division of markets go according to the composition of its subjects?
 - 15. Which markets are allocated by territorial and economic organization?

TESTS

- 1. The enterprise is:
- a) organizationally separate unit of production that specializes in the provision of services;
- b) economically independent link of production sphere of national economy that specializes in manufacture of products;
- c) organizationally separate and economically independent link of production sphere that specializes in manufacture of products, performance of works and provision of services;
- d) an independent link of production sphere of national economy that interacts with environment.
 - 2. The main task of the enterprise is:
 - a) efficient use of production assets;
 - b) improving quality of products;
 - c) reducing labor costs and increasing its productivity;
 - d) meeting needs of a market in order to make a profit.
 - 3. The enterprise is characterized by the following features:
- a) financial and economic independence, production, technical and organizational and social unity;

- b) financial and economic independence, production and technical unity, common territory and consumed raw materials;
- c) financial and economic independence, common territory, presence of a single labor collective;
- d) financial and economic independence, organizational and social unity, unity of leadership, common subsidiary and service farms.
 - 4. Non-profit enterprises include:
 - a) agricultural;
 - b) charitable;
 - c) leasing;
 - d) transport.
- 5. Enterprises that are based on the property of one person with the right to hire labor are:
 - a) individual enterprises;
 - b) family businesses;
 - c) private enterprises;
 - d) joint ventures.
- 6. Depending on the sectoral and functional activities of the enterprise are divided into:
 - a) national, foreign, mixed;
 - b) cooperative, lease, business associations;
 - c) industrial, transport, trade;
 - d) correct answers are b) and c).
 - 7. Consumers, competitors, government agencies form:
 - a) external environment;
 - b) macroenvironment;
 - c) microenvironment;
 - d) economic environment.
- 8. The set of people and enterprises that buy goods for use in production of other goods and services is:

- a) market of producers;
- b) market of intermediaries;
- c) market of state institutions;
- d) there is no correct answer.
- 9. Which of the activities of the enterprise include scientific and technical development and technological and design preparation of production:
 - a) production activities;
 - b) commercial activity;
 - c) innovative activity;
 - d) there is no correct answer.
 - 10. What kind of markets for a subjective composition does not exist:
 - a) consumer market;
 - b) market of means of production;
 - c) market of intermediaries;
 - d) market of producers

TOPIC 2. PLANNING OF THE ENTERPRISE

- 2.1. Content and basic principles of enterprise planning.
- 2.2. Strategic planning of the enterprise.
- 2.3. Tactical and operational planning.

2.1. Content and basic principles of enterprise planning

In the management system of the enterprise a special place belongs to planning as its main function. Planning is about such goals: "what needs to be done?" as well as "how to do it?" The purpose of planning is the final state that the company seeks to achieve at some point in the future.

Planning is the process of determining the goals that the company intends to achieve over a certain period of time and ways to achieve them. The planning period

covers the determination of organizational goals, the development of a general strategy for achieving these goals and the development of a general hierarchy of plans for integration and coordination of activities. In the market conditions enterprises independently carry out all complex of planned work. Compared to directive planning in market economy, the plans of enterprises are objectively determined and focused on meeting needs of consumers in certain product types. Enterprises can independently determine the ways of production development, use work motivation systems and establish production programs.

Along with broad rights and opportunities in market conditions, companies are responsible for the results of their work, they have to monitor changes in market conditions independently and take risks into the account. While planning the development of the enterprise, managers are guided by certain rules which called the *principles of planning*. These include the following:

- target orientation the presence of clearly defined missions and goals of activity;
- systematicity coverage of all areas of the enterprise, all trends, changes and feedbacks in it;
- continuity constant support of the planned perspective, timely adjustment of plans that are based on the received external and internal (within the enterprise) signals about changes in business conditions;
- optimal use of resources the fullest possible realization of available reserves;
- balance the correspondence between the needs for resources and the availability of it;
- adequacy the planning system has to meet the characteristics of production and commercial activities of the enterprise.

Depending on the goals of the enterprise, it builds a planning system, which may consist of different *types of plans*.

According to the breadth of coverage of the planning object there are:

- strategic plans that are related to the enterprise in a whole and determine its overall goals, as well as those that are aimed at positioning of the enterprise in terms of the external environment;
- tactical plans that define the details of the way to achieve common goals and cover a shorter period;
- operational plans that contain detailed ways to achieve the goals of the enterprise and its units for short periods of time (month, decade, day, and shift).

By the time period there are:

- short-term (planning period is less than a year);
- long-term (planning period is more than a year).

By frequency of use:

- one-time plans are formed to meet the needs of a specific or unique situation;
- regular plans that provide the main directions of repeated actions of the enterprise.

According to the specifics of planning there are:

- specific plans which provide clearly defined goals, for example, in order to increase production by 3% we have to offer specific procedures, determine costs and plan activities;
- directive plans with a high degree of uncertainty and need to maintain management flexibility in order to respond to unexpected changes, they determine the general directions of activity.

A plan is a quantitative expression of goals and the development of ways to achieve them. A plan as a result of planning is a motivated model of action that is created on the basis of the economic forecast of the economic environment and set goal.

The plan of the enterprise (firm, company) is a developed system of actions that provides purposes, maintenance, balanced interaction of resources and their volume, methods and terms of performance of works for production and realization of products or rendering of services. The plan allows the company to assess the

reality of achieving goals, to determine factors that help and ones that prevent from achieving them.

The planning process consists of the following stages:

- definition of planning goals (they are decisive factors in choosing the form and methods of planning);
- analysis of the problem (the initial situation at the moment of making the plan is determined and the final situation is formed);
- search for alternatives (at this stage, among the possible ways to solve the problem situation, the best one is chosen and the necessary actions are developed);
 - forecasting (an idea of the development of the planned situation is formed);
 - assessment (optimal calculations are made to choose the best alternative);
- making a planning decision (a single planning decision is selected and executed).

Due to the variety of specific management functions the enterprise is considered as a multi-purpose and open system. Therefore, any enterprise has a hierarchical system of goals. Goals mostly determine the nature and characteristics of the enterprise on the current state and in the future. The system of goals is characterized by qualitative and quantitative indicators that determine the relevant activities of the enterprise.

The goal system always takes the form of a "tree" that represents goals. The top of the "tree" corresponds to the main activity of the enterprise that is usually called the mission. It answers the question: "What is the purpose of the branch of activities that the organization wants to do?" The second level reflects on the internal values that the company's management holds on to. Such values mostly depend on the style of leaders that is why they are called *stylistic goals*.

They are the main guidelines on the way to achieving the desired final result. Their formulation needs to contain the answer to the question: "What should be done for the chosen type of business to be effective?"

Other goals that are below in the goal "tree" called *work goals*. Their main purpose is to define detailed conditions that are necessary for the company to achieve

the end result. This is the most dynamic part of the goals, which tends to periodic changes that occur in the process of adaption of the company to the external environment.

The process of forming a tree of goals on the enterprise consists of the following *stages*: according to the mission of the enterprise – confirmation of stylistic and operational goals, determination of priority goals, check test of the goals for compatibility and "ecology". Execution of these stages requires corresponding knowledge and modern economic thinking from managers because each stage demands logical performance of number of stages.

2.2. Strategic planning of the enterprise

A special place in the planning of organization at the enterprise belongs to strategic planning that is one of the main functions of management and represents the process of determining the goals of the organization, as well as ways to achieve them. Strategic planning forms the basis for all management decisions. The functions of organization, motivation and control of management are focused on the development and implementation of strategic plans. In case of not taking advantage of strategic planning, the firm and its individual employees will not be able to assess properly the goals and directions of long-term development of the enterprise. The process of strategic planning provides a basis for managing the team of the enterprise.

Thus, *strategic planning* is a process of systematic definition of long-term goals and activities of the enterprise.

Strategic planning requires substantiation of enterprise development strategy. *The strategy* is a general complex program of actions that identifies priority issues for the company, its main goals and the allocation of resources to achieve them.

The strategy forms the main ways to achieve certain goals in a way that the company has common (uniting all its units) direction of development. The strategy

is a long-term planning document and occurs as the basis of strategic planning by its content.

In the world practice, there are three types of main strategies of the enterprise, each of which is based on the state of its economy and the specificity of production:

- 1. *Growth strategy* reflects the intention of the company to increase sales, profits and capital investments.
- 2. Stabilization strategy reflects the desire of the company to maintain the achieved production volumes; is mainly used in conditions of significant instability of sales and profits.
- 3. Survival strategy is used as a defense strategy while the enterprise is in a deep crisis.

Strategic alternatives can be defined as certain areas of enterprise's activities within the chosen basic strategy. At the stage of developing a planning strategy, enterprise *is making a choice of strategic alternatives*. Strategic alternatives can be divided and include functional strategies which define specific strategic goals for all functional units of the enterprise: for the production department, sales department, logistics, investments, etc.

As part of the relevant basic strategy, the company forms alternative strategies that have to implement strategic goals. In modern business conditions, the following alternative *strategies for enterprise development* are widely used:

- 1) cost minimization strategy includes the actions of the enterprise that are aimed at reducing the cost of production of market products;
- 2) *strategy of differentiation* consists of the actions of the enterprise to produce a wide range of goods of one functional purpose, which allow it to serve a significant number of consumers with different needs;
- 3) diversification strategy is the activity of the enterprise that is aimed at penetrating other areas (industries) or inclusion in the portfolio of business activity of the enterprise new areas of business. Diversification of production involves the simultaneous development of many technologically unrelated types of production in the enterprise;

- 4) activity segmentation strategy is the concentration of the enterprise's efforts on a narrow market segment that is characterized by special needs;
- 5) *innovation strategy* is the focus of the enterprise on finding fundamentally new effective technologies, the introduction of advanced methods of organization of production and ways to stimulate staff. Businesses that have chosen such strategy seek to form a concrete advantage through radical innovation in various fields and gain additional profits.

After choosing the appropriate basic and alternative strategies, a strategic plan of the enterprise develops and often presents in the form of a business plan.

The business plan of the enterprise is a complex planning document that contains a system of measures and actions according to the purpose and resources and aimed at obtaining maximum profit as a result of the business project. The business plan of the enterprise is developed for the purpose of planning economic activity of the enterprise for a certain period of time in keeping with needs of the market and availability of necessary resources.

The business plan as a program of the enterprise for the future performs an external and internal function. The main external goal is to convince interested partners in the effectiveness of the business project. The internal function of a business plan is to form an effective business management system for achieving its goals.

Depending on the scale of business activity and the degree of detalization of strategic decisions, the content and structure of the business plan may be different. A typical structure of an enterprise's business plan usually includes the following sections:

- 1. SUMMARY. Includes: information about the enterprise; a brief overview of the business project; a description of opportunities and strategies; a statement of intent.
- 2. INDUSTRY, ENTERPRISE AND ITS PRODUCTS. Includes: the current situation and trends in the industry; the main types and nature of the enterprise; description of the product and its technological features; competitiveness of products

in the consumer market; identification of products that are intended for sale on foreign markets.

- 3. MARKET RESEARCH. Includes: characteristics of the regional product market; market segmentation of products that are manufactured by the enterprise; target business market; identification of competitors in the market; list of organizations with which the company will cooperate; assessment of the impact of external factors on sales.
- 4. PRODUCTION PLAN. Includes: the volume of production and sales; characteristics of production departments and production process; calculation of the need for production resources and the number of employees; opportunities of usage the production capacity of the enterprise and implement a quality control program.
- 5. MARKETING PLAN. Includes: marketing strategy; expected sales volumes and market share that will occupy with its products; the list of buyers of production by certain qualitative and price characteristics.
- 6. ORGANIZATIONAL PLAN. Includes: form of business organization; owners and managers of the enterprise; management organization; management of the enterprise, its responsibilities, reward and conditions of bonuses; criteria for personnel selection, evaluation of the results of their work and forms of encouragement.
- 7. RISK ASSESSMENT. Includes: types of possible risks; ways to respond to threats to business.
- 8. FINANCIAL PLAN. Includes: cash flow and expenditure plan; consolidated balance of assets and liabilities; break-even chart; profit balance and its distribution.

2.3. Tactical and operational planning

The company's strategy is implemented in *tactical and operational plans*. The organization's short-term plans that are developed on the basis of strategic plans reflect short-term goals consistent with long-term goals. Tactical planning covers

short-term and medium-term periods and appears as a set of methods and techniques to achieve this goal.

Tactical plans differ from the strategic purpose of development, content, time and coverage of areas of influence. Tactical plans are detailed strategic ones, but their scope is narrower. Tactical plans usually regulate the activities of the enterprise in the production, sale of products and financial matters for a year. This period of time allows quickly implement the achievements of STP in production, ensure the expected result, make decisions about the identified deviations. In the process of developing a tactical plan, the company independently determines the composition and content of its sections and the system of economic indicators.

In the general system of planning activity strategic planning forms the purposes which the enterprise has to reach in the corresponding period, and tactical forms conditions of achievement of the set purposes. Tactical plans of enterprises are drawn up according to a single methodology, and their basis is a plan of production and sales in the planning period. They can have the following main sections:

- 1. *Marketing activities*. Marketing plans for the main types of products and the general plan for the products of the enterprise.
- 2. *Production and sales plan*. Substantiation of the production program of the enterprise. Production and sale of products in quantity and value measurement.
- 3. *Logistics*. The need for material resources to implement the production program and the source of its satisfaction.
- 4. Staff and remuneration of labor. The total number and structure of personnel, the salary fund is established. Labor productivity indicators are calculated.
- 5. Costs, profits, profitability. The planned unit costs of production and its total volume are determined. Taking into account planned prices, profit and profitability of production of certain types of products are calculated.

- 6. Financial plan of the enterprise. The balance of income and expenses is made, the financial result is defined. Relationships are established with the budget and credit institutions.
- 7. *Innovative activity*. It is planned to introduce innovations that involve the use of advanced technology, improving the organization of production, labor and management.
- 8. Capital investments and capital construction. Investments are planned, which include the commissioning of fixed assets of the non-productive sphere.
- 9. *Social development of the team.* Measures to improve working conditions and safety are planned, improvement of the health and well-being of employees.
- 10. Plan for the protection and rational use of natural resources. Measures for environmental protection and rational use of natural resources are developed.

In the process of tactical planning, the production program of the enterprise forms and has to be detailed in time and brought to the production units for execution in the planning period. This is realized through *operational planning*, which is, on the one hand, the final link in the system of planning activities, and on the other hand - means of implementing long-, medium- and short-term plans and the main lever of current production management.

In the process of operational planning, the development of plans of the enterprise and its divisions - individual industries, production sites, even jobs - for short periods of time is detailed (month, decade, working week, shift). Thus, development of plans is properly combined with the decision of questions of the organization of their execution and current regulation of manufacture. So, the main task of operational planning is to specify the indicators of the tactical plan in order to organize the daily work of the enterprise and its structural units.

Operational planning combines two areas of work. The first area is responsible for the development of operational plans and schedules of manufacturing and product release and called calendar planning.

In this way, *calendar planning* is the development of production plans for each type of product for individual production units according to the annual

production program of the enterprise. It provides detailed plans for the timing of production and the development of operational (i.e., quarterly, monthly, decade) plans and schedules for individual production units.

The second direction includes the work that is required for continuous operational accounting, control and regulation of operational plans and production. This area is called *scheduling*.

Dispatching control is a process of ensuring the implementation of operational plans and production schedules in all departments through operational control, timely detection and elimination of deficiencies and deviations that occur in the work.

In the process of operational planning, the following main tasks are sold: ensuring the implementation of the plan of production activities (timely release of planned products) for the rhythmic work of all departments of the enterprise; establishing the optimal mode of operation of the enterprise that will promote the most efficient and full use of labor.

Tactical and operational planning is carried out independently in the main divisions of the enterprise. Tactical planning covers the relationships that have developed within the subsystems, as well as between departments and the enterprise as a whole. It also takes into account the existing relationships but relationships between the enterprise as a whole, its external business partners and entire environment with which it interacts directly.

CONTROL QUESTIONS

- 1. Discover the essence and name the basic principles of planning.
- 2. List the planning methods according to the relevant classification criteria.
- 3. In what sequence does the planning process run at the enterprise?
- 4. What is the essence and what are the stages of strategic planning of enterprise development?
 - 5. Describe the essence of the strategy of differentiation.

- 6. Name the basic strategies for planning the activities of the enterprise.
- 7. What alternative strategies are selected and formed by the company to implement strategic goals?
 - 8. Explain the essence of the business plan and provide its typical structure.
 - 9. What is the importance of a business plan for enterprise development?
 - 10. Describe the tactical plans of the enterprise.
 - 11. What is the essence of operational planning?
- 12. Why operational planning is divided into calendar planning and dispatching control?

TESTS

- 1. Planning of the enterprise is:
- a) a process of determining goals of the enterprise, as well as means and ways to achieve them;
- b) anticipation of quantitative and qualitative changes in development of the enterprise in the future;
- c) comparison of indicators of its development in the reporting and base periods;
- d) assessment of the future state of the enterprise on the basis of substantiation of actual indicators.
 - 2. The main planning methods are:
- a) normative, balance, resource, statistical, factor, economic and mathematical;
 - b) production and technical, factor, balance, economic, graph analysis;
 - c) resource, economic, social, factor;
- d) statistical, production and technical, economic, balance sheet, economic and mathematical.
 - 3. The strategy is:
- a) a set of mutually agreed measures and actions that reflect long-term goal and main activities;

- b) planning of the most important actions that need to be implemented during a long-term course of enterprise development;
 - c) vision of the future state of the enterprise;
 - d) the company's plans to expand market opportunities.
 - 4. The basic strategies of the enterprise are:
 - a) survival, stabilization, growth;
 - b) stabilization, absorption, growth;
 - c) diversification, stabilization, absorption;
 - d) absorption, survival, growth.
 - 5. The business plan of the enterprise is:
 - a) a company's plan to cover a certain part of the market;
 - b) a long-term plan for the volume of products and its sales;
 - c) a document which provides measures that are aimed at making profit;
 - d) production and sales plan for the next year.
 - 6. The business plan is developed on:
 - a) 1-3 years;
 - b) 3-5 years;
 - c) 5-10 years;
 - d) 10-15 years.
 - 7. The main sections of the business plan are:
 - a) summary, main part, financing strategy;
 - b) main part, market analysis, legal plan, summary;
 - c) financing strategy, main part, legal plan;
 - d) market analysis, main part, summary.
 - 8. The principles of planning include:
 - a) principle of efficiency;
 - b) principle of promoting the achievement of the goal;
 - c) principle of flexibility;
 - d) all answers are correct.
 - 9. The essence of a principle of scientificity is:

- a) reflection in action plans of objective economic laws;
- b) use of reliable information;
- c) changes in plans in relation to internal and external situation;
- d) there is no correct answer.
- 10. The stages of strategic planning are:
- a) formation of a purpose of the enterprise;
- b) analysis of the environment and market factors;
- c) choice of general strategy;
- d) all answers are correct.

TOPIC 3. PRODUCTION CAPACITY OF THE ENTERPRISE

- 3.1. The essence and factors of formation of production capacity of the enterprise.
 - 3.2. Foundations of methods for determining of production capacity.
- 3.3. The level of utilization rate of production capacity of enterprises and directions of its increase.

3.1. The essence and factors of formation of production capacity of the enterprise

The production capacity of the enterprise is characterized by the maximum possible quantity of products of the corresponding quality and range which can be made within a year in the conditions of use of advanced technology and organization of production.

Production capacity is measured in physical (conditionally natural) units and in monetary terms. Thus, the capacity of textile enterprises is determined by the maximum possible production of fabrics in running and square meters, spinning mills - in tons of yarn, brick factories - in thousands of typical bricks. The usage of natural indicators to measure production capacity is possible only in highly

specialized enterprises that produce homogeneous products. In multi-item production, the total capacity of the enterprise is determined in monetary terms.

In the practice of entrepreneurial activity there are three types of enterprise capacity: project, current (i.e., actually achieved), reserve. Project capacity is determined in the process of projection, reconstruction (expansion) of an existing enterprise or construction of a new one. It is considered to be optimal, because the composition and structure of the equipment correspond to the structure of the complexity of the projected product range, and has to be achieved within the regulatory period of its development.

Current (actually achieved) capacity is determined periodically in connection with changes in production conditions (nomenclature and structure of labor intensity of products) or exceeding the project indicators. At the same time, the input (at the beginning of the year), output (at the end of the year) and the average annual capacity of the enterprise are calculated.

Reserve capacity has to be formed and constantly exist in certain sectors of the national economy: electricity and gas industry - to cover the so-called peak loads in electricity and gas networks, reliable energy supply to consumers for the period of repair and emergency works; food industry - for processing a significantly increased amount of easy spoiled agricultural raw materials in high-yielding years; transport - to carry an increased number of passengers in the summer months; in mechanical engineering and other branches - for preparation of production and development of release of new types of the equipment (units, devices) and constructional materials.

The value of the production capacity of the enterprise is formed under the influence of many factors. The main ones are: nomenclature, range and quality of manufactured products; the number of installed equipment, the size and composition of production areas, the possible useful lifetime of equipment and use of production space during the year; progressive technical and economic norms of productivity, removal of production from production areas, standards of duration of a production cycle and complexity of the made production (the rendered services).

3.2. Foundations of methods for determining of production capacity

The production capacity of the enterprise is calculated according to the relevant industry regulations that reflect their characteristics. However, there are most common to the majority of sectors of the economy methodological principles for calculating the production capacity of existing enterprises.

The production capacity of the enterprise is determined by the entire range of core products. At the same time, a possible constriction of the nomenclature is carried out, combining individual products into groups according to structural and technological unity with the definition of the basic variant for each of them. Products of this group lead to a single meter using the estimated labor intensity of their production.

If the company produces several types of different products, the production capacity will be determined separately for each type of product. For example, at metallurgical enterprises (plants) the capacity of blast furnace, steelmaking and rolling production is calculated separately.

In the calculations of the capacity of multi-item productions in monetary terms, the program of production of the enterprise for which the capacity is determined has to be added.

The production capacity of the enterprise is established on the basis of the capacity of the leading shop floors (sections, technological lines, units) of the main production, taking into account measures to eliminate barriers and possible internal production cooperation. Leading shop floors are those production units of the enterprise, which perform the main technological processes (operations) and are crucial to ensure the production of specialized products. For example, blast-furnace, steel-smelting and rolling mills are considered to be the leading shop floors for ferrous metallurgy enterprises; mechanical engineering and metalworking - mechanical, assembly, foundry and forging and pressing shops; cement industry - clinker kilns; textile industry - spinning and weaving.

If there are several leading shop floors of the enterprise, its production capacity will be calculated according to those of them who perform the most labor-intensive volume of work.

The calculations of the production capacity of the enterprise include: a) all operating and non-operating equipment due to malfunction, repair and modernization of it on the main production shops; b) the equipment that is in a warehouse and has to be put into operation in the main shops during the accounting period; c) excessive backup equipment; d) equipment above the standards of auxiliary shops, only if it is similar to the technological equipment of the main shops.

The production capacity of the enterprise is calculated according to technical or project standards of equipment productivity, use of production areas and labor intensity of products, production rates, taking into account the use of advanced technology and perfect organization of production. In case of absence of such standards, you can use your own calculated technical standards, which take into account the progressive achievements of a significant number (20-25%) of workers of the same professions and production units.

For calculations of production capacity of the enterprise the maximum possible annual fund of time (number of hours) of work of the equipment is taken into account. At the enterprises with continuous process of production this maximum possible fund of working time of the equipment is a calendar fund minus the time that is necessary for carrying out repairs and technological stops of the equipment. For enterprises with a discrete production process, the time fund of equipment is determined based on the actual mode of operation of the main shops and the established duration of changes in hours, taking into account the time for equipment repairs, weekends and holidays. In seasonal productions the fund of working time of the equipment is regulated by the established mode of work of the enterprise (according to the technical project) taking into account maintenance of optimum quantity of days of work of separate technological shops.

In the most general form, the production capacity of the leading shop floor (site) for the manufacture of homogeneous products (processing of raw materials, other production operations) can be determined by one of the following formulas:

$$Production\ capacity\ =\ PT_aN_a,$$

where P - productivity of the equipment in the corresponding units of measurement of one production for an hour;

T_a - annual time of equipment operation;

 N_a is the average annual number of physical units of equipment.

The technological capacity (capacity) of the rest of the production units of the enterprise (along with the leading shops or sections) is also calculated. Such calculations are necessary to identify the mismatch between the potential production capacities of individual production units and to ensure consistent technological proportionality between interconnected production units. The degree of conformity of capacities of different structural subdivisions of the enterprise is determined on the basis of comparison of adjacency coefficients characterizing the ratio of capacities of the leading subdivision and other production units.

Determining the production capacity of the enterprise is completed by drawing up a balance sheet that reflects changes in its value during the calculation period and characterizes the output capacity (PC). To do this, use the formula:

$$PC = PC_{in} + PC_{otm} + PC_{re} \pm PC_{nr} + PC_{d},$$

where PC_{in} - input capacity of the enterprise;

PC_{otm} - increase in capacity during the settlement period due to the implementation of current organizational and technical measures;

 PC_{re} - increase of production capacity due to reconstruction or expansion of the enterprise;

 PC_{nr} - increase (+) or decrease (-) of production capacity caused by changes in the nomenclature and range of manufactured products;

PC_d - reduction of production capacity due to its disposal, i.e., decommissioning of a certain amount of physically operated and technically obsolete equipment.

Installation and regulation of reserve production capacity of the enterprise is carried out by means of calculations of necessary quantity of reserve units (groups of the equipment) and the substantiation of the sizes of experimental-research manufactures. The value of reserve capacity to cover peak loads usually does not exceed 10-15%, and for the preparation and development of new products - 3-5% of total capacity. It should be noted that the production capacity reserve is provided for enterprises that have reached the level of current capacity utilization not less than 95% and produce more than 25% of new products.

3.3. The level of utilization rate of production capacity of enterprises and directions of its increase

In the practice of management, the level of use of production capacity of the existing enterprise is determined by the following indicators:

- 1) the coefficient of development of project capacity (the ratio of current and project capacity);
- 2) the current capacity utilization factor (the ratio of annual output and its average annual value).

Today in Ukraine the level of utilization of production capacities of enterprises in many branches of the economy and especially in industry does not exceed 50%, and project capacities are not mastered in time (in normative terms) as a rule. It happens due to the fact that now the functioning of enterprises adequately responds to changes in the general economic situation and the nature of the measures is taken to restructure the economy.

Analysis of the use of production capacity of Ukrainian enterprises shows that the main factors that affect the level of their load can be divided into two groups: external and internal, depending on the level of economic activity of the enterprise. The first group includes: the level of income, demand for products, general economic conditions of the market and the level of concentration of production. The factors of the second group include: the level of technology and product quality, labor skills,

supply of materials, fuel, electricity, the level of production, variable mode of operation of enterprises, etc. The decisive factor that reflects the general economic situation is the receipt of orders. The influence of other factors is determined by the laws of development and functioning of the economy, the level of economic activity of enterprises. The general situation in the economy of Ukraine is closely linked by the factors of both groups.

The level of production concentration has a significant impact on the degree of capacity utilization. At enterprises with fixed capital of over 50 million UAH the level of capacity utilization is higher than the average and gives a small number of products. Medium-sized enterprises have limited list of stages of the technological cycle and less flexibility when market demands change. Large enterprises with universal technology have more opportunities to maintain a relatively high level of capacity utilization. At these enterprises, production declines occur less frequently. The gap between the higher and lower load points of production capacity is smaller than on small enterprises.

The main reason for underutilization of production capacity on many enterprises is a deep disproportion in the structure of their use that characterizes the lack of adaptation of production to changes in demand, the emergence of demand for new products. To some extent, this happens due to insufficient funding for research in recent years and implementation of new technical developments in production.

Increasing the use of production capacity of the enterprise is the basis of its efficient management. Solution of this problem leads to increase in production, increase the return of production capacity, reduce production costs, increase profitability, create savings in the enterprise for the implementation of investment and innovation projects and improve material incentives for employees.

The successful operation of production facilities is ensured on the basis of extensive and intensive factors to improve their use. On the one hand, extensive improvement of capacity utilization is carried out by increasing the operating time

of fixed assets in the calendar period, and on the other hand, increasing the share of existing equipment in all available fixed assets in the enterprise.

The main directions of increasing the time of production capacity utilization are reduction and elimination of internally variable equipment downtime by improving the quality of equipment maintenance, timely provision of main production with raw materials, fuel, semi-finished products, labor production; reduction of all-day downtime of the equipment, increase of a factor of variability of its work.

The full use of the variable working time of the existing fleet of equipment allows without additional investment to increase production and reduce its cost. Increase of the operating time of individual machines and devices contributes to the growth of output and reduce capital intensity in the event that this stage of the process is a "bottleneck" in the overall technological "chain". Increase of the operating time of all technological equipment also leads to an increase in production and reduce the capital intensity of products.

An important way to increase the efficiency of the use of fixed capital and production capacity is to reduce the amount of redundant equipment and the rapid involvement in the production of uninstalled equipment.

An important reserve for improving the efficiency of fixed capital and production capacity is to ensure their loading. Increase of the intensity of equipment loading can be achieved on the basis of modernization of existing machines and mechanisms, establishing the optimal mode of their operation. By achieving the optimal mode of the technological process provides an increase in output without changing the composition of fixed capital, increasing the number of employees and reducing the cost of material resources of output per unit.

The intensity of the use of fixed capital is also increased by improving production technology, achieving project productivity of equipment, training and professionalism of workers.

An important way to increase the efficiency of production capacity is to improve the structure of fixed capital. Since the increase in output is achieved in the

leading shop floors, it is important to increase their share in the total cost of fixed capital. The increase in the fixed capital of additional industries leads to an increase in the capital intensity of production, as the increase in output does not occur. However, without the proportional development of additional production, the main shops cannot function fully. Therefore, the establishment of the optimal production structure of fixed capital in the enterprise is a very important way to improve its use.

The successful solution of the problem of improving the use of fixed capital, production capacity and productivity growth is significantly influenced by the creation of large production associations.

Increasing the level of mechanization, loading and unloading, warehousing is the basis for eliminating the existing disparity in the development of primary and secondary production in enterprises. This provides for the release of a significant number of auxiliary workers and providing the main shops with labor, increasing the coefficient of variability of enterprises and increasing production without additional labor. Solving the problem of improving the use of fixed capital and production capacity of enterprises through their reconstruction, expansion, mechanization and automation of production, improving the organization of production and labor has the great economic and social importance.

The level of utilization of production capacity and fixed capital largely depends on the perfection of the system of moral and material incentives. The analysis of technical and economic indicators of enterprises that operate in the new conditions of planning and economic incentives shows that the new economic mechanism, including the introduction of payment for fixed capital, revision of wholesale prices, creation of incentive funds contribute to improving the use of production capacity.

CONTROL QUESTIONS

- 1. Discover the essence of the production capacity of the enterprise.
- 2. List the factors that form the production capacity of the enterprise.

- 3. Name general methodological principles for determining the production capacity of diversified enterprises.
 - 4. Name preconditions of the use of reserve powers.
- 5. Why does the assessment of use of production capacity of the enterprise require a system of indicators?
- 6. What determines the need for periodic calculations of production capacity of enterprises?
- 7. Make a model for calculating the production capacity of the enterprise and give a description of its components.
- 8. What indicators determine the level of use of production capacity of the existing enterprise?
- 9. Name the main factors that affect the level of capacity utilization of Ukrainian enterprises.
 - 10. List the ways to increase the efficiency of production capacity.

TESTS

- 1. The maximum possible quantity of products of appropriate quality and range that can be manufactured per year in terms of using advanced technology and organization of production is:
 - a) production capacity;
 - b) production activity;
 - c) production regulation;
 - d) there is no correct answer.
 - 2. Types of production capacity of the enterprise are:
 - a) project;
 - b) current;
 - c) reserve;
 - d) perspective.
- 3. What kind of enterprise capacity is determined periodically in connection with changes in production conditions or exceeding the project indicators:
 - a) project;

- b) current;
- c) reserve;
- d) perspective.
- 4. The value of production capacity of the enterprise is formed under the influence of:
 - a) nomenclature, range and quality of manufactured products;
 - b) the number of installed equipment;
 - c) possible time fund of equipment operation;
 - d) standards for the duration of production cycle.
 - 5. The production structure of the enterprise is not affected by:
 - a) the scale of production;
 - b) complexity of the product design;
 - c) nature of the technological process;
 - d) presence of a single labor collective.
 - 6. The production capacity of the enterprise is set based on:
 - a) capacity of leading shops, sections, technological lines, units;
 - b) production volumes;
 - c) the number of employees of the enterprise;
 - d) qualifications of employees of the enterprise.
- 7. In presence of several leading units of the enterprise its production capacity is calculated by those of which:
 - a) produce the largest volume of products;
 - b) perform the most time-consuming type of work;
 - c) have the smallest number of employees;
 - d) there is no correct answer.
 - 8. Determination of production capacity of the enterprise includes:
 - a) input capacity of the enterprise;
- b) increase in capacity during the settlement period due to the implementation of current organizational and technical measures;

- c) increase of production capacity due to reconstruction or expansion of the enterprise;
- d) increase or decrease of production capacity caused by changes in the nomenclature and range of manufactured products;
- e) reduction of production capacity due to its disposal, i.e., decommissioning of a certain amount of physically operated and technically obsolete equipment.
- 9. The coefficient of development of project capacity of the enterprise is determined by:
 - a) the ratio of current and design capacity;
 - b) the ratio of annual output and its average annual value;
 - c) the ratio of current capacity and its average annual value;
 - d) the ratio of annual output and project capacity of the enterprise.
- 10. The utilization factor of current capacity of the enterprise is determined by:
 - a) the ratio of current and project capacity;
 - b) the ratio of annual output and its average annual value;
 - c) the ratio of the value of current capacity and its average annual value;
 - d) the ratio of annual output and project capacity of the enterprise.

MODULE II. RESOURCE SUPPORT OF THE ENTERPRISE'S ACTIVITY

TOPIC 4. PERSONNEL OF THE ENTERPRISE

- 4.1. The concept, classification and structure of personnel of the enterprise.
- 4.2. Productive efficiency of the staff.
- 4.3. Remuneration of enterprise's personnel.
- 4.4. Types and methods of work motivation.

4.1. The concept, classification and structure of personnel of the enterprise

Any production is impossible to imagine without labor resources. They are the main component of the productive forces, and their work is a decisive factor in production. Therefore, along with the means of production, labor is a necessary factor of production (resource) in all sectors of the economy.

Labor - is a useful human activity, in the process of which material goods are created to meet personal and social needs. The carriers of the ability to work are labor resources.

Labor resources are the hardworking population, which according to their age, physical and educational data corresponds to a certain field of activity.

It is necessary to distinguish between the concepts of "labor resources" and "labor force". The concept of "labor resources" is broader and more multifaceted than the concept of "labor force". Labor resources are people of working age who are employed in a particular sector of the economy and characterized by a variety of economic, social and spiritual needs. Labor force is determined by the ability of people to work and realized in the production process. The carrier of labor force is human, so it exists at all stages of development of social production and is inseparable from its owner, e.i., human. Thus, the social essence of labor resources

are people in certain production conditions, whereas labor force reflects the economic content of labor resources.

The labor resources of the enterprise are a set of employees of different professional qualification groups who are employed at the enterprise and are the part of its accounting staff. In addition to able-bodied people, teenagers from 12 to 16 years old and people of retirement age who have entered into relevant contractual relations take part in the production in the enterprise. Therefore, the accounting structure of the labor resources of the enterprise includes all employees who are hired, which is associated with both main and non-operating activities.

The labor resources of the enterprise are directly involved in the production process and after this they become the staff of the enterprise.

From formation of personnel of the enterprise, its quantity and qualitative balance and level of use largely depend on the efficiency of all other components of production resources, ensuring high performance of the enterprise, its sustainable and competitive development.

The staff of the enterprise is a set of permanent employees who have received necessary professional training and have practical experience. In addition to permanent employees, other able-bodied people may participate in the activities of the enterprise on the basis of a temporary employment agreement (contract).

Depending on the functions performed by employees of the enterprise, they are divided into two groups: personnel of the main activity and personnel of non-operating activities. The first group includes all employees that are engaged in production and its direct maintenance. These are employees of main, auxiliary and service productions, research divisions and laboratories, warehouses, protection and management of the enterprise. The set of these employees is a production staff of the enterprise. The second group of staff includes employees of non-operating units of the enterprise, which are not directly related to production process. These are employees of housing and communal services, kindergartens and nurseries, cultural and household institutions, etc. This distribution of enterprise personnel is used to match labor indicators with the results of certain categories and groups of

employees, particularly to determine productivity in the enterprise, payroll and justify methods and level of employee incentives.

According to the nature of the functions performed, the staff of the enterprise is divided into the following categories: managers, specialists, employees, workers.

Managers are employees who hold the positions of heads of enterprises and their structural units. These include directors, chiefs, supervisors, managers, main specialists of the enterprise.

Specialists are people who perform special engineering, economic and other work: engineers, economists, accountants, legal advisers, sociologists, etc.

Employees are people who perform only technical work, execution of documents. Particularly, these are clerks, accountants, secretaries, etc.

Workers are a category of workers who are directly engaged in the process of production, performance of works and provision of production services. Workers also include janitors, cleaners, security guards, couriers, and cloakroom attendants. All workers are divided into main, which are directly involved in technological operations for the production of products, and auxiliary, e.i., those who perform various additional operations to service main production.

The classification of staff by professions, specialties and qualifications is important.

A profession is a special type of work that requires appropriate special knowledge and practical skills.

A specialty is a type of work activity within a certain profession that has specific features and requires additional special knowledge and skills from employee. The specialty determines type of work within one profession. Thus, a profession of economist includes specialties of planner, accountant, financier, laborer, and marketer. The professional staff of the enterprise depends on industry characteristics of production activities and nature of products.

Employees of each specialty are divided depending on the level of qualification that is based on their ability to do work of a certain complexity. Qualification is a set of special knowledge and practical skills that determine the

degree of readiness of the employee to do work of a certain complexity of relevant specialty.

The level of qualification of managers, specialists and employees is characterized by level of special training and practical experience. Depending on this, there are specialists of the highest qualification (employees with scientific degrees and titles), specialists of higher qualification (employees with higher special education and considerable practical experience), semiskilled specialists (employees with secondary special education and some practical experience), practical specialists (workers without special education, but with significant work experience).

The professional qualification structure of managers, specialists and employees of the enterprise is reflected in the personnel list. This is a normative document of the enterprise, which provides a list of positions in the enterprise, number of employees for each of them and salary size.

Workers by level of qualification do different in complexity work, have different professional training and are divided into four groups: highly skilled, skilled, low-skilled, unskilled. The level of qualification of each worker is determined on the basis of tariff and qualification directories. They describe types and complexity of work of a particular profession, which has to be done by a worker of an appropriate level of qualification.

To ensure the effective operation of the enterprise it is necessary to analyze structural changes in staff over time. The staff structure is characterized by composition and quantitative ratio of individual categories and groups of employees. Currently, the ratio between categories of personnel in average Ukrainian enterprise is: 18% - managers, specialists, employees and 82% - workers.

The number of staff is calculated for each category of employees and the total one for the company. There is a determination of accounting, average and shop-floor workforce size of employees at the same time.

The accounting workforce size includes all permanent and temporary employees hired, including people who are absent according reasons provided by labor legislation. Particularly, these are employees who are on business trips, studying, performing state duties, temporarily incapacitated. Part-time employees are also taken into account.

The average number of employees is the number of employees on average to their accounting size for a certain period. It is calculated by the ratio of the total number of employees on the list for all calendar days of this period to the number of days in the period (the number of employees for the day off is taken equal to their number for previous working day).

The average number for the month is defined as the sum of the number of employees for each calendar day of the month, divided by the number of days in the month. The average number of employees per year is defined as the sum of the average monthly number divided by 12.

Shop-floor workforce size is the number of employees who came to work in a certain period (during the working day, week, month, etc.).

During calculation of the number of employees at the enterprise, an important point is to determine the actual (effective, useful) annual working time of one average employee. The annual fund is defined as the difference between the number of calendar days and the days of regular and additional rest leave, leave in connection with studies, childbirth, absence due to illness, in connection with the performance of state duties with the permission of the administration, etc. In this case, working time fund of one average annual employee will be determined in days. To determine it in hours, the fund of working time in days needs to be multiplied by the average length of working day.

In the process of determination of main directions of enterprise development, it is necessary to choose the optimal number of staff to implement production program, as well as to establish required number of employees in certain categories.

4.2. Productive efficiency of the staff

The most important property of labor is its productivity, the level of which characterizes efficiency of personnel at the enterprise. Labor productivity is a decisive factor in increasing the efficiency and competitiveness of production. The economic essence of labor productivity is that it expresses relationship between the number of products and the cost of working time for its manufacture. Thus, it characterizes efficiency of labor costs in the process of social production.

Labor productivity is the ability of labor to create a certain amount of output per unit of working time. The level of labor productivity is measured by the number of products that is produced per unit of working time (direct method), or the amount of working time spent on production per unit of output (inverse method).

When applying the direct method, the level of labor productivity is determined by the number of products that are produced by one employee per time unit (hour, day, and year); the main indicator is output, which in general is expressed by the ratio of mass of output to the time spent on production of the entire mass of production. In practice, a system of indicators is used to measure labor productivity, which is based on the ratio of output to the number of industrial production personnel.

The inverse method determines complexity of the product, e.i., the amount of working time spent on production per unit of output. Labor intensity is measured in man-hours.

Depending on the measure of production, labor productivity can be expressed in natural, labor and cost indicators.

Natural indicators of the level of labor productivity are calculated by the ratio of volume of output in natural units (centners, pieces, meters, etc.) to the time worked (in man-hours, man-days) or to the average number of staff for the period. Natural indicators most accurately reflect the volume of production and productivity because they characterize the actual amount of tangible assets produced over a period of time, but can be used only in enterprises that produce homogeneous products, or within enterprises - in workplaces or areas, where homogeneous products are made.

The labor indicators that characterize the level of labor productivity include indicators of labor intensity of products: technological labor intensity (labor costs of primary and secondary workers); complexity of production maintenance (labor costs of auxiliary workers); complexity of production management (labor costs of managers, specialists and employees); full labor intensity (total labor costs of all categories of industrial and production personnel of the enterprise.

Labor indicators are used in production, where are well-established work on technical standardization and labor accounting. It is especially expedient to apply them at enterprises with considerable volumes of unfinished production which cannot be measured in cost and natural units.

Cost indicators of labor productivity are calculated by the ratio of the cost of production to the time spent on its production, or to the average number of personnel on the enterprise. The main cost indicator of the level of labor productivity is output per employee per year, which is determined by the ratio of annual output (services rendered or work made) in value terms to the average annual number of industrial staff. This indicator is the most common and generalizing. It allows measuring the level and dynamics of labor productivity in multi-item production.

Factors of productivity growth are measures that cause a change in its level. A single classification of factors is used in practice and has such groups: increasing the technical level of production (reserves of labor savings of key workers (application of modern technologies, equipment, materials; increasing productivity of existing equipment; intensification of technological processes; mechanization of manual labor; improvement of organization, production planning); organization of production and labor; changes in production (reserves to save labor costs of other categories of industrial staff (mechanization of additional manual labor; specialization and typification of auxiliary processes; improving the organization of additional services; improving the organization of factory and shop equipment; automation and computerization of engineering and management works, raising the level of their organization; general reserves for increasing productivity of all categories of production and industrial staff (training of workers; improving the

working time; reducing productive labor costs; using methods of scientific organization of labor; use of incentive pay systems; improving the rationing of works); changes in production (indirect reserves to increase productivity (increase in production; change in the structure of output; changes in the volume of cooperative supplies; increase of labor discipline; reserves to save labor costs are primarily related to reducing material consumption by improving product design, increase their quality, use of modern production technologies, materials), industry and other factors. Reserves for productivity growth are out-of-use opportunities to save the cost of living and tangible labor.

The most important thing to increase productivity is to identify and use reserves to reduce labor intensity. At the enterprises labor intensity of production can be defined by labor costs only of main workers, or all production and industrial staff. In the first case, reserves related to the work of auxiliary workers, engineers, employees and other employees are not taken into account. They can be found by reducing their number per unit of output. These reserves (that are called personnel structure improvement reserves) are related to measures to improve management, organization of production services, improve structure and use of personnel.

4.3. Remuneration of enterprise's personnel

The efficiency of economic activity is determined by the current wage system to some extent. On the one hand, wages as a socio-economic category is the main source of income for employees, so its value largely characterizes the level of well-being of all members of society. On the other hand, its proper organization stimulates employees to increase productivity, and directly affects pace and scale of socio-economic development of the country.

Remuneration (wages) - a cost expression of the value and price of labor, which owner of the enterprise to the employee in the form of earnings for the work that is done.

According to the Law of Ukraine "On Remuneration of Labor", wage is a remuneration that is calculated, as a rule, in monetary terms, which the owner or the authorized body by him pays to the employee for the performed work according to the terms of work contract. The number of wages and salary depends on complexity and conditions of work performed, professional and business qualities of the employee, results of work and economic activity of the enterprise.

As a socio-economic category, wages are the main means of meeting personal needs of workers, an economic lever that stimulates development of social production, productivity growth, reduction of production costs, and tool of labor resources in regions and sectors of national economy.

As an important socio-economic category in a market economy, wages has to perform the following functions:

- reproductive as a source of reproduction of labor and a tool for attracting people to work;
- stimulating establishing dependence of the level of wages on the quantity, quality and results of work;
- regulatory as a tool of distribution and redistribution of personnel in the regions of the country, sectors of economy, by taking into account market conditions:
 - social ensuring social justice and equal remuneration for equal work.

From a practical point of view, wages can be described as wages for the used work or as the price of this labor. It can take the form of bonuses, fees, monthly salaries, etc.

The main types of wages are nominal and actual wages. Nominal wages are the amount of money received by the employee for work.

The actual one is determined by the number of goods and services that the employee can buy for the amount of money earned.

Wages is heterogeneous by the structure, each of its elements performs its inherent function of material incentives and has a certain economic independence with the necessary interconnection and interdependence of all its parts.

Remuneration consists of the basic wages and additional charge, which are approximately in the ratio: 70% - the basic wages; 30% - additional.

The basic wages are a reward for the work performed in accordance with its complexity and established labor standards. It is determined by tariff rates, salaries, piece wage-rates, as well as additional payments in the amounts established by current legislation. Its size depends on the results of the employee.

Extra wage is a reward for work above the established norms, for labor successes and special working conditions. It includes additional payments, markups and compensatory payments provided by the current legislation, as well as bonuses related to the performance of production tasks.

The basis of the organization of wages in enterprises is the tariff system, which is a set of standards that provide an opportunity to differentiate and regulate wages of different groups and categories of workers depending on the quality characteristics of their work. The tariff system includes the following elements: tariff scale; tariff rates; wage rate book.

Tariff scale is a gradation of qualification categories and corresponding tariff coefficients. Tariff scales are used to take into account the level of their qualifications in the remuneration of employees.

In 1993, the Unified Tariff Network of Remuneration of Workers, Employees, Specialists, Managers of General Professions and Positions was approved ind Ukraine, which provides uniform conditions for remuneration of these categories of workers regardless of the industry. The tariff scale contains 15 digits with a range of tariff coefficients from 1 to 4.1.

The tariff rate determines the absolute number of wages of various groups of workers per unit of working time, which is expressed in terms of value. The tariff rate is the main normative value that determines the number of wages of all categories of employees. The size of the tariff rate of the first category is determined at the level of the minimum wage set by the state, below which no payment can be made for the actual rate of work performed by the employee. Tariff rates of other

categories are determined by multiplying the tariff rate of the first category by the tariff coefficient of the appropriate tariff category.

Wage rate book is a collection of normative documents that contains a system of requirements that has to be met by employees of a certain profession and qualification.

Enterprises independently set the forms, systems and number of wages, and the tariff system of wages has a recommendatory nature and can be served as a guide in the process of organizing wages. Important components of the organization of wages are its forms and systems, which are established by enterprises themselves in compliance with the requirements of the law. Enterprises use two forms of remuneration: hourly and piecework.

The hourly form is characterized by two main wage systems: direct hourly and hourly-bonus. In the direct hourly system, earnings are calculated on the basis of the established tariff rate or salary for the time actually worked in production. By the hourly-bonus system, wages consist of the amount of earnings accrued under the direct hourly system and the amount of bonus additional payments for achieving certain qualitative or quantitative indicators.

In the case of piecework rate form of remuneration, wages are charged to employees for each unit of manufactured products or work performed. It includes the following systems:

- 1) direct piecework system, when wages are charged only for the number of manufactured products at piece rates;
- 2) the indirect piecework system is used to pay for the work of auxiliary workers, their earnings depend on results of the work of the piecework workers they serve;
- 3) piece-bonus system, when the employee, in addition to the basic earnings at direct piece rates, additionally receives a bonus for achieving certain quantitative and qualitative indicators;

- 4) progressive piece rate wage system, which allows to pay for work of worker within the norm at direct piece rates, and in the case of production above the norm at higher rates;
- 5) job contract system, which provides for the establishment of a price not for a unit of work performed, but immediately for the entire scope of work with the establishment of the term of its performance.

Tariffless payment system has been used at many enterprises in market conditions. Under this system, the salary of all employees of the enterprise from director to employee is the share of each employee in the payroll of the enterprise. Under these conditions, earnings of each employee depend on the qualification level of the employee, the coefficient of labor participation (CLP) and the actual time worked.

A variant of a tariffless system of remuneration is a contract system, which makes a provision for conclusion of an agreement (contract) for a specific period between employer and contractor. The contract defines terms and remuneration, as well as term of the contract. A feature of the contract system is a clear division of rights and responsibilities of both the employee and the company's management. This system is quite effective in market conditions.

4.4. Types and methods of work motivation

An important role in achieving high results of work of employees of the enterprise plays motivation of labor activity.

Work motivation is a purposeful motivation of the employee to highly effective work by a stable influence on needs, interests, and goals.

Motivation includes a set of psychological factors that guide human behavior to achieve a certain goal.

Motivation is an integral part of personnel management system and aimed at achieving personal interests of the employee and goals of the enterprise. Since the work of the employee is based on his needs and interests, main of which are material,

to create long-term motives for his work, it is necessary to create conditions under which the employee would perceive his work as a source of fair remuneration, basis of his professional growth, effective assessment of his abilities and performance.

The basis of the motive of human labor is its various needs: physiological; security and safety; need for belonging and love (to belong to the team, to be recognized and accepted by them, to communicate and feel attached); need for respect; cognitive (needs to learn, research, understand, know); aesthetic (need for order, beauty, harmony); need for self-actualization (realization of goals, abilities, and personal development).

Motivation acts as a set of internal and external driving forces that motivate a person to activity, influence behavior, give activity to purposefulness (achievement of personal goals and goals of the enterprise). There are three types of work motivation: material, moral, administrative.

Material motivation is realized through the system of remuneration, e.i., employee participation in profits. In addition to material incentives, this type of motivation involves application of material sanctions (bacause of reduced product quality, admission of defects).

Moral motivation involves use of a system of evaluation of merit, business qualities of employees, reaeing in them a sense of pride of their company, devotion to it, a sense of necessity, e.i., their need in the company.

Administrative motivation is based on labor discipline, employee responsibility, use of various forms of disciplinary punishment (cautions, reprimands, dismissal) and disciplinary incentives.

In practice, the following methods of work motivation are used:

Direct economic: operating forms and systems of remuneration that operate at the enterprise; rewarding employees for rationalization and invention; rewarding employees for high performance; tuition fees; payments for absence at work.

Indirect economic: additional payments for length of service; payment of additional leave that is provided by current legislation; payment of vouchers to

employees for treatment and rest; discounted meals, housing and transport; establishment of pension supplements, one-time retirement benefits.

Non-monetary (social): rational mode of work, flexible work schedules; ensuring a high level of labor protection; increasing the content and attractiveness of work; promotion; participation in production management and profit distribution.

Creating an effective system of motivation at the enterprise has to be based on the following basic principles: formation of a harmonious production team; improving relationship between employees; perception of the employee as a person, respect for the person, his needs and interests; creation of safe, comfortable working conditions; creating conditions and providing equal opportunities for professional growth of employees; application of objective criteria for evaluating the employee and results of his work; fair distribution of income, employee participation in profits; involvement of employees in production management; care for the social development of the team.

Motivation systems are a component of modern personnel management systems and based on understanding the employee as the main driving force of production. The basis of work with staff has to be not just motivation for highly productive work, but also development of labor potential of the enterprise, increasing competitiveness of staff, comprehensive motivation for work.

CONTROL QUESTIONS

- 1. Give the definition of labor resources.
- 2. Describe the labor resources of agriculture.
- 3. What is the essence of the labor resources of the enterprise?
- 4. What is the essence of the company's staff?
- 5. In which groups staff of the enterprise is divided into depending on the functions performed by its employees?
- 6. Which categories of personnel of the enterprise are distinguished by the nature of the functions performed?

- 7. What are a profession and specialty?
- 8. How is the division of personnel of the enterprise by level of qualification happening?
 - 9. What is the personnel structure of the enterprise?
- 10. Name the indicators that measure the quantitative characteristics of employees.
- 11. Name the indicators that characterize the movement of labor resources in the enterprise.
- 12. Which indicators characterize the level of use of labor resources of the enterprise?
- 13. Name the indicators of the seasonal nature of the use of labor resources of agricultural enterprises.
- 14. What is the essence of labor productivity and by which indicators it is determined?
 - 15. What should be the ratio of productivity growth and wages?
 - 16. Name the main ways to increase productivity.
 - 17. What is the essence and which are the components of wages?
 - 18. What are the main types of wages and what functions does it perform?
 - 19. What forms of wages are used?
 - 20. Which remuneration systems include piecework and hourly forms?
 - 21. What is the essence of the tariffless system of remuneration?

TESTS

- 1. The set of employees with professional training or practical experience is:
- a) staff of the enterprise;
- b) labor potential;
- c) personnel of the enterprise;
- d) no correct answer.
- 2. By the nature of performed functions, personnel of the enterprise is divided into:

- a) highly qualified, qualified, unqualified;
- b) main and auxiliary;
- c) managers, specialists, workers;
- d) all answers are correct.
- 3. The ratio between categories of personnel at the average enterprise in Ukraine is approximately as follows:
 - a) 30% managers, specialists, employees, 70% workers;
 - b) 18% managers, specialists, employees, 82% workers;
 - c) 10% managers, specialists, employees, 90% workers;
 - d) 25% managers, specialists, employees, 75% workers.
- 4. The level of qualification of managers, specialists and employees depends on:
 - a) level of education and position;
 - b) work experience and category;
 - c) positions and ranks;
 - d) level of education and work experience.
 - 5. The level of qualification of workers is characterized by:
 - a) positions;
 - b) levels;
 - c) categories;
 - d) degrees.
 - 6. The number of workers in the list who came to work is called:
 - a) the registered number;
 - b) the average number for the year;
 - c) turnout;
 - d) the average number for the month.
- 7. The ability of employees to produce a certain number of products per unit of time is:
 - a) the cost-of-living labor;
 - b) labor productivity;

- c) the volume of output;
- d) the number of products that are manufactured per unit of time.
- 8. Indicators of productivity are:
- a) production and time rate;
- b) labor intensity and capital adequacy of labor;
- c) labor intensity and output;
- d) the rate of time and capital adequacy of labor.
- 9. The inverse indicators of labor productivity include:
- a) production;
- b) labor intensity;
- c) the rate of time;
- d) the rate of production.
- 10. The actual labor intensity is:
- a) the available labor costs of an individual employee per unit of finished product;
- b) the cost of working time of an individual worker or team for the manufacture of a unit of production or performance of a set of works;
- c) comparison of labor costs for the same products in different parts of the enterprise;
 - d) all answers are correct.
 - 11. Wages are:
- a) remuneration in monetary terms that is paid to the employee for success, special working conditions;
- b) monetary expression of the price of labor that is paid to the employee for performed work;
- c) the amount of money that is paid to the employee for the maintenance of unemployed members of his family;
- d) cash payments to the employee in order to motivate him to highly productive work.
 - 12. The amount of funds that are received by an employee for his work is:

- a) nominal wage;
- b) real wages;
- c) profit of the worker;
- d) no correct answer.
- 13. The basic salary of the employee is not determined by:
- a) tariff rates;
- b) results of the enterprise;
- c) salaries;
- d) results of work of the employee.
- 14. The tariff system includes the following elements:
- a) tariff rates, wage rate book, bonuses;
- b) tariff scales, salaries;
- c) tariff rates, tariff scales, wage rate books;
- d) tariff rates, salaries, bonuses.
- 15. If output increases and labor costs remain unchanged, then labor productivity:
 - a) decreases;
 - b) grows;
 - c) does not change.

TOPIC 5. PROPERTY RESOURCES (ASSETS) OF THE ENTERPRISE

5.1. The essence and classification of the assets of the enterprise.

5.2. Fixed capital.

- 5.2.1. The fixed capital of the enterprise, its composition and structure.
- 5.2.2. Depreciation of fixed assets of the enterprise.
- 5.2.3. Indicators of the use of fixed capital of the enterprise and ways of improvement.

5.3. Current capital.

5.3.1. Economic essence and composition of current capital.

5.3.2. Indicators of current capital efficiency and main directions of its rational use.

5.4. Intellectual capital.

- 5.4.1. The concept and types of intangible resources of the enterprise.
- 5.4.2. The essence and classification of intangible assets.
- 5.4.3. Valuation and amortization of intangible assets.

5.1. The essence of the assets of the enterprise and their classification

A set of property, funds and intangible assets form the assets of the enterprise. These are buildings, structures, machinery and equipment, inventories, bank deposits, securities, as well as intellectual products, patents, copyrights in which the owners' funds are invested, debt obligations of other enterprises, special rights to use resources. Assets are property resources that are controlled by an enterprise as a result of past events, the use of which is expected to have economic benefits in future.

The assets of the enterprise are economic resources in the form of aggregate property values and used in economic activities for profit. The assets of the enterprise are classified on many grounds, paticularly *by the forms of operation*: tangible assets; intangible assets; financial assets.

Tangible assets are resources of the enterprise that have a tangible form and monetary value, such as buildings, structures, machinery, raw materials, finished products, etc. Tangible assets are divided into reproducible (fixed assets, inventories of tangible operating assets, tangible and artistic values) and non-reproducible (land, subsoil).

Intangible assets are non-monetary resources that do not have a tangible form, can be identified and held for use in production, trade, administrative purposes or lease to others. Their objects can be: rights to industrial property, e.i., rights to inventions, industrial designs, trademarks and service marks, "know-how", copyright (the exclusive right to publish, public or other use of scientific, literary

achievements or art); rights to use land and other natural resources; computer software.

Financial assets are a group of economic resources of an enterprise in the form of cash and other financial instruments that belong to it. This group includes cash, long-term and current financial investments, and receivables.

According to the nature of participation in the economic process, assets of the enterprise are divided into current and non-current.

Current assets are a set of property values of the enterprise, which serve current economic activity and are fully consumed during one operating cycle. In the practice of accounting, current assets include property values of all types with a useful life up to one year. The main elements of current assets are inventories, biological assets, finished goods, current receivables, currency on bank accounts and cash.

Non-current assets are intended for long-term use in the process of financial and economic activities. These include fixed assets, intangible assets, long-term investments, as well as construction in progress, and long-term receivables. Funds invested in non-current assets that have been operating for many years are withdrawn from operating cycle for a long period and cannot be quickly used for other purposes. Therefore, investments in non-current assets are usually made from long-term sources of funding and evaluated in terms of their feasibility. Fixed assets are the most important component of non-current assets, as they are necessary in the organization of any production process. Funds that are invested in fixed assets, as well as fixed assets themselves are the fixed capital of the enterprise.

According to the nature of servicing of certain activities, assets of the enterprise are divided into operating assets and investment assets.

Operating assets are a set of property values that are used in the operating activities of the enterprise in order to obtain operating profit. The operating assets of the enterprise include fixed assets, intangible assets that serve operating process, current assets (all of them besides short-term financial investments).

Investment assets characterize a set of property values of the enterprise that are associated with implementation of its investment activities. Investment assets include construction in progress, long-term financial investments, and short-term financial investments.

According to the nature of ownership, assets of company are rental (leased) and received on a basis of free charge.

Own assets characterize property values of the enterprise, which belong to it on property rights, e.i., in its permanent possession and are reflected in the balance sheet. Leased assets characterize property values of the enterprise, which are attracted by it to carry out business activities on lease. Assets received on a basis of free charge characterize property values transferred to the enterprise for temporary economic use on a free basis by other business entities.

According to the degree of liquidity of assets of the enterprise are divided into assets in absolutely liquid assets, highly liquid assets, assets with an average liquidity, illiquid assets.

The assets of the enterprise according to the degree of liquidity are divided into several groups. The least liquid are non-current assets, more liquid - inventories, receivables. The most liquid assets are the company's cash. Liquid ones are easily sold funds (short-term government securities, shares and bonds of large companies, current accounts, cash), which do not bring interest income and allow their owners to make payments on obligations.

5.2. FIXED CAPITAL

5.2.1. The fixed capital of the enterprise, its composition and structure

Product manufacturing is carried out in the process of interaction of labor and certain means of production, which consist of means of labor and objects of labor.

Objects of labor - is all that human labor is aimed and has to be processed in the production process in order to manufacture products for personal and industrial consumption.

Means of labor are various mechanisms, tools, engines, tractors, cars, buildings, etc., e.i., means by which people make products and provide services.

Means of labor and objects of labor perform as material content of productive capital. Means of labor are expressed in the fixed capital of the enterprise and objects of labor - in current one. In this case, means of production as a set of means of labor and objects of labor become productive capital only from the moment of their direct use in production process. Productive capital, in contrast to means of production, is a costly economic category. This means that it does not include all elements of means of production in general, but only those that have value. Thus, means of production consist of means of labor and objects of labor, and productive capital - of fixed and current one.

The word "capital" comes from the Latin "capitalis", which means - main, basic. It should be noted that representatives of different economic schools have associated with capital different concepts: value that brings additional value (A. Smith, D. Ricardo, K. Marx); part of wealth that is involved in production process (F. Wieser, I. Fisher, J. C. Mill); cash value that is reflected in accounts of firms (J. R. Hicks); a set of share and equity of private enterprises.

Nowadays characteristic of capital as an economic resource occupies a central place in the economic theory. The capital of the enterprise is considered as a factor of production. Under the factor of production should be understood a set of means of production that are involved in production process and directly affect results of production.

Thus, the capital of the enterprise is a set of means of production, values in tangible, monetary and intangible forms, which provide its owner with additional value.

The study of enterprise capital is not limited to its characteristics only as a factor of production. By its socio-economic nature, capital reflects production

relations, which are formed in society. The owner of capital buys on market means of production and labor, combines them in production process and after sale of created product receives a higher value than it was advanced.

Advanced capital is the amount of money that owner invests in the company in order to make a profit as a result of its activities. The money is spent on the acquisition of means of production and on remuneration of employees.

In the practice of entrepreneurial activity, advanced capital is divided into *fixed* and *current capital*. This is due to the fact that various material elements of productive capital have certain features of functioning in production process. Thus, means of labor (buildings, structures, machinery, equipment, etc.) operate for a long time and serve many production cycles. Objects of labor (seeds, feed, raw materials, fuels and lubricants, etc.) are consumed completely during one production period.

Fixed capital is a part of productive capital that consists of value of means of labor, circulates over several periods of production and gradually transfers its value to produced product.

The term **fixed assets** is also used in accointing and reflects value of means of labor. Accounting Regulation (Standard) 7 states that *fixed assets* are tangible assets, which enterprise retains for purpose of using them in the process of production or provision of services, expected useful life of which is more than one year.

The capital circulates in the process of production and is consistently in such functional forms as *money*, *production* and *commodity*. Continuity of productive capital behavior - the most important condition for successful operation of the enterprise. Delay in its movement at one stage disrupts the rhythm of production that reduces its efficiency.

In the process of production, individual material elements of fixed capital play a different role that is why they are divided into active and passive.

The *active* part of fixed capital includes a set of machines and mechanisms that is directly involved in production process (tractors, combines, vehicles, equipment, production equipment, etc.).

The *passive* part of fixed capital includes all its types, which are not directly involved in manufacturing of the product, but which are necessary for the production process. They ensure normal use of active part of fixed capital (production facilities, structures).

Accounting for fixed assets is carried out in *natural* and *value* forms. *Natural indicators* (area, number and capacity of power machines, equipment, etc.) are used in determining production capacity, developing equipment balances, improving composition of fixed assets. The ratio of value of certain types of fixed capital determines material structure of fixed capital of the enterprise.

The value form of accounting is necessary to determine the amount of depreciation and calculation of production costs. There are the following types of valuation of fixed assets:

Initial value (prime) is their actual value at the time of commissioning or acquisition. It includes the cost of item of property, the cost of its delivery, the cost of installing and commissioning the item of property, and other related costs that are associated with the acquisition or construction of the item of property. Acquired (created) fixed assets are credited to the balance sheet of the enterprise by initial cost.

Revalued or recovered value of fixed assets is the cost of their reproduction under modern conditions of production. It takes into account the same costs as the initial cost, but at current prices, i.e., revalued value - is the value of non-current assets after their revaluation.

Residual value - is defined as the difference between the initial cost and the amount of depreciation that is accumulated over the entire period of operation of fixed assets. This is a real value of fixed assets in a certain period.

Liquidation value is the cost of selling taken down and decommissioned fixed assets (this may be the cost of scrap, units, spare parts, metal, rubber, etc.). In the practice of management, it is used to calculate the rates of depreciation and determine consequences of liquidation of fixed assets. At this cost, the company can sell fixed assets and transfer to the balance of another company.

In analytical studies calculate the *average annual value* of fixed assets, which is determined on the basis of the initial value, by taking into account their commissioning and disposal by the following formula:

$$AAVFA = IVFA + \frac{\Sigma VFAO*t}{12} - \frac{\Sigma VFAD*t'}{12}$$

where, AAVFA – average annual value of fixed assets;

 \sum VFAO – the sum of the value of fixed asstets that are put into operation during the year;

 \sum VFAD – the sum of value of fixed assets that are disposed during the year; t – months, during which fixed assets will work;

t' – months, that left till the end of the year after disposal of fixed assets.

5.2.2. Depreciation of fixed assets of the enterprise

In the process of production activities, fixed assets take out and gradually lose their value. The continuous process of production requires reproduction of physically worked and technically obsolete means of labor. A necessary condition for their restoration is a gradual reimbursement of value, which is carried out by depreciation.

Depreciation (lat. amortizatio - repayment, payment of debt) - is an economic process of gradual transfer of the value of fixed assets as they take out to manufactured products and use this value to reproduce means of labor. The need for depreciation stems from the fact that fixed assets in production process operate for many years, but still retain their natural form. Each year or each production cycle, they transfer to the newly created product part of their value, which is proportional to their taking out during this period.

To reimburse the cost of depreciated fixed assets, each company makes depreciation deductions. These deductions are included in the cost of production as production costs and realized during the sale of goods. They accumulate in a special depreciation fund that performs as a source of recovery of spent fixed assets. Thus,

depreciation provides reimbursement in monetary terms of the value of means of labor as they are physically depreciated in the production process.

There are physical and moral depreciation of fixed assets. *The physical operation* of fixed assets - is a gradual loss of their original technical and operational qualities, i.e., consumption value, which leads to decrease in their real value.

Physical wear of any tool (machine, equipment) can be divided into two parts: one, which is periodically, rectified by repairs, second - part of wear and tear that can not be eliminated in this way. Over time, wear and tear increases and there comes a moment of complete physical wear and tear, e.i., replacement of tool with a new one for a similar purpose. In this regard, there are removable (temporary) and non-removable physical wear and tear.

Moral wear is a process of depreciation of existing fixed assets before their full physical operation under the influence of scientific and technological progress. Such depreciation is characterized by the loss of value of fixed assets due to improvement of existing and creation of new means of production, so it is not transferred to the value of product. When new equipment appears and the entrepreneur does not replace the old one (even when it is not fully operational), he will produce more expensive or not so high-quality goods and may go bankrupt.

Due to depreciation deductions, a depreciation fund is formed and used to replace worn-out means of labor. Depreciation is carried out according to norms that are established in the country. The depreciation rate is determined by the ratio of the annual amount of depreciation to the average annual value of fixed assets, and expressed in a percentage. This norm is established depending on durability, physical and moral wear and tear of fixed assets, material features and other objective factors.

Depreciation deductions can be made at the balance (initial or restored) value of fixed assets and depreciation rates, which determine the annual share of reimbursement of their prime value.

The *depreciation rate* for renovation or full restoration of fixed assets depends on the term of their use and is expressed in a percentage of balance value, and is calculated by the formula:

Depreciation rate =
$$\frac{BV - LV}{BV \times T} \times 100$$
,

where BV- balanced value of fixed assets, UAH;

LV- liquidation value of fixed assets, UAH;

T- depreciation period, years.

The depreciation period of certain types of fixed assets is set based on the economic justification and feasibility of their use, by taking into account many factors, including overall physical durability and cost-effectiveness of major repairs, their operating conditions, timing of technical and economic aging, possible rates of renewal.

The company has to apply rules and methods of depreciation of fixed assets, which are provided by tax legislation. For implementation of depreciation deductions and calculation of depreciation amounts, classification of groups of fixed assets and other non-current assets is provided. According to the Tax Code of Ukraine, fixed assets and other non-current assets are divided into 16 groups and minimum allowed terms of their depreciation are determined:

Group 1 - land plots. Depreciation is not accrued;

Group 2 - capital expenditures for land improvement not related to construction. The minimum allowed depreciation period is 15 years;

Group 3 - buildings, depreciation period of 20 years; buildings, depreciation period of 15 years; transmitting devices, depreciation period of 10 years;

Group 4 - machinery and equipment, depreciation period of 5 years, from which: electronic computers, depreciation period of 2 years;

Group 5 - vehicles, depreciation period of 5 years;

Group 6 - tools, devices, inventory (furniture), depreciation period 4 years;

Group 7 - animals, depreciation period of 6 years;

Group 8 - perennial plantings, depreciation period of 10 years;

- Group 9 other fixed assets, depreciation period of 12 years;
- Group 10 library funds, term of use is not set;
- Group 11 low-value non-current tangible assets, useful life is not set;
- Group 12 temporary (untitled) structures, depreciation period of 5 years;
- Group 13 natural resources. Depreciation is not accrued;
- Group 14 inventory packaging, depreciation period of 6 years;
- Group 15 rental items, depreciation period of 5 years;
- Group 16 long-term library assets, depreciation period of 7 years.

Depreciation is accrued during the useful life (operation) of the object that is established by the order of the enterprise when determining this object as an asset (when credited to the balance sheet), but not less than the minimum allowed depreciation period established by the Tax Code. Depreciation of fixed assets is carried out until the residual value of the object of its liquidation value. Depreciation of fixed assets is accrued by using the following methods:

- 1. Straight-line method, in which the annual amount of depreciation is determined by dividing the depreciable amount to the useful life of the item of property, plant and equipment.
- 2. Reduction in residual value, at which the annual amount of depreciation is determined as the product of the residual value of the object at the beginning of the reporting year or the initial value at the date of depreciation and the annual depreciation rate. The annual depreciation rate (in percentage) is calculated as the difference between the unit and the result of the root with degree of the number of years of useful life of the object from the result of dividing the liquidation value of the object by its balance value.
- 3. Accelerated reduction in residual value, at which the annual amount of depreciation is determined as the product of the residual value of the object at the beginning of the reporting year or the initial value at the date of depreciation and the annual depreciation rate, which is calculated according to the useful life of the object. The method of accelerated residual value reduction is used only when

depreciation is charged to fixed assets included in groups 4 (machinery and equipment) and 5 (vehicles).

- 4. *Cumulative*, according to which the annual amount of depreciation is defined as the product of depreciable value and cumulative coefficient. The cumulative ratio is calculated by dividing the number of years remaining until the end of the useful life of an item of property, plant and equipment to the sum of the number of years of its useful life.
- 5. *Production*, according to which the monthly amount of depreciation is defined as the product of the actual monthly volume of products (works, services) and the production rate of depreciation. The production rate of depreciation is calculated by dividing the value that is depreciated to the total amount of products (works, services) that the company expects to produce (perform) using fixed assets.

Depreciation of objects of groups 9 - other fixed assets, 12 - temporary (non-title) structures, 14 - inventory packaging, 15 - rental items are accrued according to the first method (straight-line) and the fifth (production).

Depreciation of low-value non-current tangible assets (group 11) and library funds (group 10) may be accrued at the discretion of the taxpayer in the first month of use of the object at 50% of its depreciable value and the remaining 50% of depreciable value in the month their withdrawal from assets (write-off from the balance sheet) due to non-compliance with the criteria for recognition as an asset. These items can also be depreciated in the first month of use at 100% of their value.

Depreciation is not accrued on fixed assets of groups 1 - land plots and 13 - natural resources.

Depreciation for tax purposes is calculated by the enterprise according to the method that is specified in the order of accounting policy for the purpose of preparing financial statements, and may be revised in the event of a change in the expected method of obtaining economic benefits from its use.

Depreciable value is accounted for for each item that is a part of separate group of property, plant and equipment, including the cost of repairs, improvements

that are received on a free of charge or leased (rented), as a separate item of depreciation.

Depreciation of fixed assets is accrued *monthly* during the useful life (operation) of the object established by the taxpayer, but not less than the minimum allowed period that is established by the Tax Code. Amounts of depreciation deductions are not subject to deduction to the budget, and also cannot be a basis for charge of any taxes and charges. The amount of depreciation of the reporting year is defined as the amount of depreciation accrued for each of the calendar quarters included in such reporting period. The total amount of depreciation for the standard life of fixed assets should be equal to the sum of their initial cost and cost of overhaul and modernization minus the liquidation value.

5.2.3. Indicators of the use of fixed capital of the enterprise and ways of improvement

The efficiency of use of fixed capital involves constant maintenance of proper technical level of the enterprise, which allows increasing production without additional investment resources, increase return on investment and profitability.

To analyze and evaluate use of fixed assets, it is advisable to use a system of indicators that can comprehensively characterize all aspects of their operation in the enterprise. These indicators can be divided into the following groups: indicators that characterize technical condition and movement of means of production; indicators that characterize technical equipment of the enterprise; indicators that characterize efficiency of fixed capital use.

Indicators that characterize technical condition and movement of fixed assets:

The coefficient of wear reflects the share of value of fixed assets that are already transferred to the cost of manufactured products, and at the same time, characterizes the degree of depreciation of fixed assets of the enterprise on a certain date. The coefficient of wear is calculated by the formula and is expressed in percentage:

Coefficient of wear =
$$\frac{WFA}{IV} \times 100$$
,

where WFA – wear of fixed assets;

IV – initial value of fixed assets.

Coefficient of suitability – characterizes unworn share of fixed assets of the enterprise on a certain date.

Coefficient of suitability =
$$\frac{RV}{IV}$$
,

where RV – residual value of fixed asstes;

IV – initial value of fixed assets.

There is a tight connection between coefficient of wear and coefficient of suitability; together they are 1 or 100%.

Renewal rate – characterizes the degree of intensivity of renewal of fixed assets of the enterprize.

Renewal rate =
$$\frac{VFA}{IV}$$
,

where VFA – value of fixed assets that were received during the year;

IV – initial value of fixed assets at the end of year.

Disposal rate characterizes the intensivity of disposal of fixed assets during the covered period.

Disposal rate =
$$\frac{VFA}{IV}$$
,

where VFA – value of fixed assets that disposed during the covered period;

IV – initial value of fixed assets at the beginning of the year.

Indicators that characterize technical equipment of the enterprise:

Capital equipment characterizes cost of fixed capital per unit of main equipment.

Capital equipment =
$$\frac{ACFC}{E}$$
,

ACFC – average annual cost of fixed capital;

E – amount of equipment at the enterprise.

Labor capitalization characterizes the degree of armament of one employee with fixed capital, determined by dividing the average annual cost of fixed apital to the average annual number of employees.

Labor capitalization =
$$\frac{ACFC}{N}$$
,

ACFC – average annual cost of fixed capital;

N – annual number of employees.

Indicators that characterize efficiency of use of fixed capital of the enterprise:

Capital productivity shows the amount of the value of gross output per 1 UAH of the value of fixed capital. This indicator characterizes the total return on the use of fixed capital, i.e., the efficiency of investment in fixed capital. Capital productivity is determined by the ratio of the value of gross output to fixed capital and represented by the following formula:

Capital productivity =
$$\frac{CGO}{AVFC}$$
,

CGO – cost of gross output for the calculation period;

AVFC - average annual cost of fixed capital.

Capital intensity of production - shows what part of the value of fixed capital accounts for 1 UAH of the value of gross output. This indicator is inversed to capital productivity. It characterizes the amount of fixed capital required for the production of gross output worth 1 UAH. Under normal economic conditions, capital productivity should tend to increase, and capital intensity of production to decrease. Capital intensity of production is determined by the formula:

Capital intensity of production =
$$\frac{AVCF}{CGO}$$
.

Rate of return (ROR) is defined as the ratio of net income to the average annual value of fixed and current capital and expressed in percentage:

$$ROR = \frac{NI}{AVFC + AVCC} \times 100,$$

NI – net income of the enterprise in covered period;

AVFC – average annual cost of fixed capital;

 $AVCC-average\ annual\ cost\ of\ current\ capital.$

Level of profitability (revenue) of fixed capital shows the amount of profit of the enterprise per 1 unit of value of fixed capital of business entity. It is calculated as the ratio between net income to the average annual cost of fixed capital and expressed in percentage:

Level of profitability =
$$\frac{NI}{ACFC} \times 100$$
.

The level of profitability of fixed capital can be determined by gross and net profit. In the first case, profitability characterizes the efficiency of use of fixed capital in production activities of the enterprise, in the second - in ordinary and extraordinary activities of the enterprise.

Efficient use of fixed assets and production capacity allows to increase production of products needed by society, to increase return of created production potential, to reduce cost of production, to increase profitability of production. Improving the use of fixed assets also reduces the need for the introduction of new production capacity during changes in production, helps to solve problem of reducing the gap in terms of physical and moral depreciation, accelerating the rate of renewal of fixed assets.

The successful operation of fixed assets depends on extensive and intensive factors to improve their use. On the one hand, *extensive ones* mean that it will increase operating time of existing equipment for calendar period, and, on the other - increased its share in total equipment used in the enterprise.

To increase operating time of the equipment it is necessary to: reduce and eliminate intermittent downtime of equipment by improving the quality of repair services, timely provision of production with labor, raw materials, fuel; reduce round-the-clock downtime of equipment, which will increase variability of its operation.

Intensive factors of improving efficiency of fixed assets involve increasing the degree of loading of equipment per unit time (by upgrading equipment, establishing optimal modes of loading).

In recent years, many enterprises in various industries of Ukraine have a low level of efficiency of reproduction processes. The coefficients of renewal of machinery and equipment are the most active fixed assets in industrial enterprises, range from 2-3% of their total volume, and the coefficient of economic performance reaches 50-55% of the total cost. The fleet of existing production equipment is almost a third part of physically operational and technically obsolete. This primarily explains urgent task of accelerating and improving the efficiency of reproduction of fixed assets, growth of the technical level of enterprises. Under modern conditions, the following main directions of intensification of the reproduction of fixed assets should be introduced and implemented:

- accelerating the development of machine-building complex of Ukraine, radical restructuring of its structure in order to meet the maximum possible demand for a wide range of machines and equipment, ensuring the manufacture of new generations of machinery and complete (technologically related) machine systems, development and organization of production of tools, which were not previously manufactured or imported from other countries;
- focusing efforts of various branches of science on priority areas of scientific and technological progress, development of primarily knowledge-intensive industries, a significant increase in technical and organizational level and socioeconomic efficiency of production at enterprises;
- compliance of each enterprise with its own strategy of technical, organizational and economic development; reorientation of investment policy to the maximum technical re-equipment and reconstruction of existing production facilities; increasing the scale of withdrawal from production of technically obsolete and economically inefficient machines and equipment, transition to a comprehensive update of technical and technological base of enterprises;
- formation of market economic mechanism capable of ensuring interest of all levels of government in the implementation of effective reproduction processes and perception of scientific, technical and organizational novations (innovations).

The practical implementation of these areas of intensification of reproduction processes requires not only active engineering and production activities, but also mobilization of significant financial resources. First of all, it is fully possible to provide with the help of constant state support, direct participation of many institutions of market infrastructure and foreign capital.

In market conditions, management system as a whole has to provide sufficient economic incentives to ensure the efficient use of fixed assets, and all property of enterprises. The current system of such economic incentives at enterprises of various sectors of the Ukrainian economy is still only at the stage of development and development. Its rapid introduction will be facilitated by: improvement of tax legislation; construction of mechanism of payment of work depending on final results of production; more flexible depreciation and investment policy; state support for implementation of large investment projects, intensification of foreign economic activity; development of financial market and reduction in the cost of credit resources.

5.3. CURRENT CAPITAL

5.3.1. Economic essence and composition of current capital

To ensure the production process, enterprises need to have current capital along with fixed one. The latter by its economic nature is one of the main factors of production (along with land, labor, and fixed capital). Current capital determines the pace of development of economic entities, affects the formation of costs for production (works, services), and this is a necessary condition for effective functioning of the enterprise in market conditions. The presence of the optimal volume and rational structure of current capital helps to increase the efficiency of management.

Current capital is a part of productive capital, value of which is fully transferred to the newly created product and returned to company in cash after the

sale of goods. Current capital is basically funds advanced by the enterprise for the formation of stocks of objects of labor, which after appropriate processing are transformed into finished products - goods, and funds that serve process of turnover of goods.

At the enterprises in course of manufacture current capital carries out a certain cycle and passes *monetary*, *production* and *commodity* stages. At the first stage of the cycle, funds are spent on the purchase of raw materials, materials and other resources, i.e., move from monetary to material and commodity, forming certain inventories.

In the second stage, objects of labor enter the production stage. At this stage, production process includes workers who receive wages for performed work. In the process of production inventories materialize in the form of finished products.

At the last stage of the cycle, manufactured products are sold and company has an appropriate revenue (amount of money), which not only fully reimburses previously advanced costs, but gives a certain profit. The monetary form that current capital acquires at the third stage of the cycle is at the same time the initial stage of its circulation. Current capital is simultaneously *at all stages of the cycle*, which ensures continuous and uninterrupted operation of the enterprise.

In the practice of planning and accounting of economic activity to current capital include: inventories; unfinished production and semi-finished products of own production; future expenses; finished products; goods; promissory notes received; receivables (long-term receivables; receivables for goods, works, services; receivables by settlement; current financial investments; cash and cash equivalents) (in national currency, in foreign currency); other current assets.

Inventories make up the largest part of current capital. These include stocks of low-value and perishable items, raw materials, basic and auxiliary materials, fuel, purchased semi-finished products and components, spare parts, packaging, construction and other materials that are intended for consumption during the operating cycle.

Unfinished production are items of work, processing (reworking) of which is not completed, and they are directly at the workplace or in the process of transportation from one workplace to another.

Semi-finished products of own production include those items of labor that are fully processed or processed in a certain production unit of the enterprise, but which require further processing in other units.

Future expenses are expenses that occurred during current or previous reporting periods, but which will be included in the cost of products (works, services) in subsequent periods. These include costs of preparation for production, development of production of new products, rationalization and invention, acquisition of scientific, technical and economic information.

Finished products - stocks of products in the warehouse, processing of which is completed and which have been tested, accepted, completed in accordance with the terms of contracts with customers and meet technical conditions and standards.

Goods - value of goods without the amount of trade margins, which are purchased by the company for sale.

Promissory notes received - debts of buyers and other debtors for shipped products (goods), work performed and services provided, which is secured by promissory notes. A promissory note is a paper security in the form of a long-term commitment, drawn up in writing and certain forms.

Accounts receivable - the number of debts that belong to the company and arose as a result of non-performance of commercial, economic, financial and monetary obligations by legal entities or individuals who are debtors (borrowers).

Current financial investments are so-called portfolio investments that an enterprise invests in stocks, bonds and other securities that can be freely sold at any time (except investments that are cash equivalents).

Cash and cash equivalents are cash in till, current and other bank accounts that can be used for current operations, as well as cash equivalents.

Other current assets are the amounts of current assets that cannot be included in the previous elements of current capital.

The ratio between individual elements of current assets, expressed in percentage of their total value, is called the *structure of current capital*. It is formed under the influence of number of factors (type of production, product features and technology of its manufacture, etc.) and slowly changes over time.

Thus, current capital of the enterprise characterizes the total value of resources in monetary terms that are invested in current assets. In other words, current capital is a valuable substance of all types of current assets of the enterprise. The formation and regulation of individual elements of current capital has its own characteristics. Due to this, current capital is distinguished in the spheres of production and circulation, as well as divided into standardized and non-standardized (Fig. 5.1).

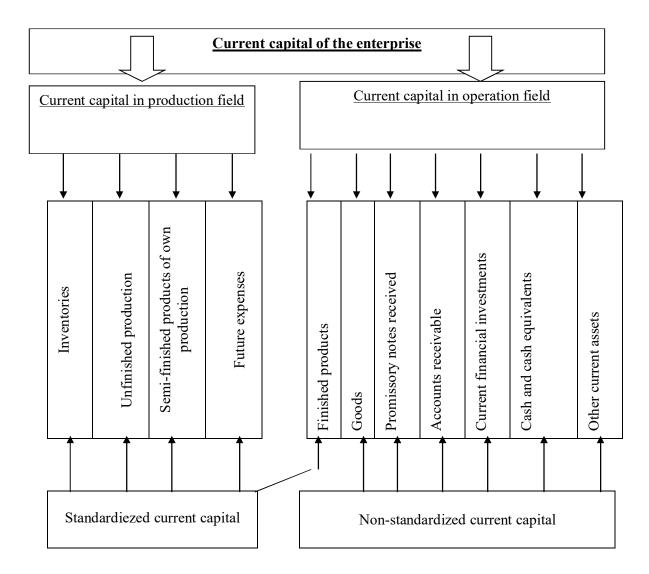


Fig. 5.1. Components of current capital of the enterprise

Current capital in the field of production enters production in its natural form (raw materials, materials, etc.) and in manufacturing process is fully consumed and transfers its value to the created product.

Current capital in the field of operation is associated with maintenance of turnover process. It does not participate in the creation of value, but iperforms as its carrier. At the end of the production cycle, production and sales, cost of currentcapital is returned as part of revenue from sales. This creates an opportunity to systematically renew production process, which is carried out through a continuous cycle of current capital.

Standardiezed current capital is an element of current assets, the minimum reserves of which are constantly needed by the company that is why they are planned (standardiezed). These include all elements of current capital in the field of production and finished products. From these elements at the enterprises the norm of current capital is defined - the economically substantiated minimum volume of stocks of commodity-material values, sufficient for maintenance of continuous process of manufacture and realization of production.

5.3.2. Indicators of current capital efficiency and main directions of its rational use

Current capital of enterprises is a significant part of their tangible assets. Therefore, rational and economical use of current capital in the management process is of great economic importance. To assess the effectiveness of current capital enterprises, use the following indicators:

Current capital turnover is the duration of its full cycle from the moment of acquisition of current capital to the output and sale of finished products. The economic significance of the indicator is that it depends on the amount of funds that are required by the enterprise for production and sale of products.

The turnover ratio (number of turnovers) is determined by dividing revenue from sales per year to the average annual balance of current capital. This indicator shows the number of turnovers that make funds for the planning period and number of products sold per 1 UAH of current capital, and is determined by the formula:

$$Turnover\ ratio = \frac{\textit{Volume of sold products,UAH}}{\textit{Average annual balance of current capital,UAH}}$$

The more turnover of current capital per year, the more efficiently it is used. To analyze the dynamics of the efficiency of its use, two indicators are determined: the turnover ratio of standardiezed current capital and the turnover ratio of all current capital.

Turnover ratio in operation - an indicator inverse to the turnover ratio, which shows how much of current capital per 1 UAH of sold products. The value of this indicator is calculated by the formula:

Turnover ratio in operation =
$$\frac{Average \ annual \ balance \ of \ current \ capital, UAH}{Volume \ of \ sold \ products, UAH}$$

The duration of one turnover (in days) is determined by dividing the number of days per year to the turnover ratio of current capital:

$$T = \frac{360}{Turnover\ ratio}$$

The duration of one turnover characterizes the speed of rotation. This indicator is calculated in days and is determined by the period during which current capital of the enterprise makes one turnover. The speed of turnover of current capital characterizes the efficiency of its use. Acceleration of current capital turnover causes: first, an increase in production by 1 UAH of current costs of the enterprise; secondly, release of part of funds and creation of additional reserves to expand production.

The duration of turnover is a synthetic indicator that can reflect both result of the process of material reproduction (the volume of sales of created goods) and efficiency of use of material resources in this process. Comparing the actual turnover time with the planned, determine the *acceleration or deceleration of the turnover of current capital* of the enterprise. The result of accelerating turnover of current capital

is a decrease in its amount with constant production. Conversely, with a slow turnover of current capital, it is necessary to further attract the appropriate amount of funds to implement production program.

The amount of release of current capital as a result of accelerating their rotation or additional involvement due to slowing down rotation is determined by the formula:

Release of current capital =
$$\frac{(t_1 - t_0) \cdot Q}{T}$$
,

where t_0 and t_1 – duration of one turnover of current capital in base and reporting period, days;

Q – quantity of sold products per year, UAH;

T – duration of analyzed period, days.

If the amount of released or attracted current capital of the enterprise is calculated for a year and duration of the analyzed period is 360 days.

Return on current capital is determined by the ratio of enterprise profit to the average annual balance of current capital. This indicator shows the mass of profit per 1 UAH of current capital of the enterprise.

Return on current capital =
$$\frac{Profit \ of \ the \ enterprise}{Average \ annual \ balance \ of \ current \ capital}$$

The efficiency of the use of current assets in the enterprise is important because it has a significant impact on the overall efficiency of the whole set of means of production. In modern business conditions, rational and economical management of current assets, ensuring the continuity and efficiency of economic activity is one of the most important tasks of enterprises. Effective management of current assets involves constant monitoring of current capital, period of its stay at each stage and search for ways to accelerate turnover. In addition, it is important to determine the optimal amount of current capital that will ensure smooth and efficient operation of the enterprise, as well as minimize presence of inactive current assets.

In order to accelerate turnover of current capital in the field of production it is necessary to: introduce the latest equipment and technology, including waste-free and resource-saving; to provide reduction of material and energy consumption of production; rational use of material resources; organize the use of secondary resources; to modernize production infrastructure of the enterprise; to form a system of motivation for the rational use of material resources; to improve forms of organization of production.

In the field of operation, it is necessary to provide: improvement of marketing activity of the enterprise; accelerating the process of selling finished products; improvement of system of payments for shipped products; effective management of receivables; expanding cooperation with banking institutions on raising funds and making payments; compliance with contractual and payment discipline.

An important way to improve the use of current capital is *a rational use of material resources*. Areas of saving material resources can be divided into two groups: production and technical, and organizational and economic.

Production and technical reserves of saving raw materials - is the introduction of new equipment and advanced technologies, improving quality of material resources and storage conditions. The implementation of measures that ensure rational use of material resources involves additional costs, but leads to increased production efficiency.

Organizational and economic ways of efficient use of current capital include improving business planning, pricing and material incentives. As a rule, the peculiarity of organizational and economic measures is that their implementation does not require additional costs.

An important way to increase the efficiency of current capital is *to reduce* material consumption of products. Saving material resources makes it possible to increase production at relatively lower costs, which reduces costs and leads to increased profits.

An important area of improving the efficiency of current capital at enterprises is the *introduction of resource-saving and waste-free technologies*. In these conditions the most rational use of production resources is provided, and production wastes in technological process are minimalistic. Elimination of losses at all stages of agricultural production, improvement of storage and sale of manufactured

products can increase the country's food fund by about 20-25%.

In enterprises that rework products, an important way to increase the efficiency of current assets is a *rational use of raw materials*. Improving the use of raw materials is based on reducing the cost of raw materials for production of a unit of final product and reducing losses of raw materials during storage, transportation and processing. To determine the efficiency of current capital in enterprises that rework raw materials, calculate such indicators as the *coefficient of yield of finished products from raw materials and consumption of raw materials per unit of finished products*.

An important way to improve the use of current capital is to *accelerate its turnover*. It can be achieved on the basis of a rational combination of industries with different duration of the production cycle; ensuring a rational structure of current capital to obtain the largest increase in production.

5.4. INTELLECTUAL CAPITAL

5.4.1. The concept and types of intangible resources of the enterprise

The successful operation of a modern enterprise requires the use in its economic activity not only material, labor, financial and credit resources, but also intangible ones.

Intangible resources - a part of potential of the enterprise, that is able to bring economic benefits for a long period of time, which is characterized by the lack of material basis and uncertainty about size of future profits from its use. The term "intangible resources" is used to describe a set of intellectual property, which includes: industrial property; objects that are protected by copyright and related rights; other (non-traditional) intellectual property.

According to the Paris Convention for the Protection of Industrial Property, the term "industrial property" applies not only to industry and trade, but also to agricultural production, extractive industries and all products of both industrial and natural origin.

Objects of industrial property include:

The invention is a result of human creative activity in any sector of the economy, which is characterized by significant novelty and provides a positive effect (practical usefulness) from its implementation. Inventions are documented and protected by a patent.

A utility model is a result of a person's intellectual activity, object of which is a new model, suitable for industrial production in terms of appearance, shape, placement of parts or construction.

Industrial designs are a new artistic and artistic-design solution of products, when unity of technical and aesthetic properties, which determine appearance of an industrial product is achieved. The industrial design can be three-dimensional (model), flat (drawing) or combined.

Trademarks (marks for goods and services) are original designations that distinguish goods (services) of some producers from others, helping to identify goods (services) and their producers on the market. A brand performs two functions simultaneously: it advertises a product or service and guarantees their quality.

Geographical indication of origin of goods is any verbal or graphic indication that directly or indirectly indicates geographical place of origin of goods (country, region, town, locality).

Commercial (brand) name is a permanent designation of an enterprise (firm, company, organization) or individual on whose behalf production, research, commercial and other activities are carried out.

A plant variety is a set of plants that are created as a result of human selection activity and characterized by certain useful economic inherited properties.

Animal breed is a group of domestic animals that are created as a result of selection activity, which have a common origin and are characterized by certain useful economic inherited properties.

Ways to protect against unfair competition are measures that prevent any aggressive actions of competitors that are contrary to rules and fair practices of

business. Unfair competition is considered to be actions that are related to creation of obstacles to other economic entities in the implementation of competition (discrediting an economic entity, dissemination of false information about a competitor, industrial espionage, blackmail, etc.). Illegal intelligence, disclosure and use of trade secrets.

Objects that are protected by copyright include:

Works in the field of science, literature and art are objects of intellectual property that are protected by copyright and can exist in written (manuscript, typescript, musical notation), oral (lectures, speeches, sermons), fine arts (illustrations, paintings, movies, video, audio, photo materials), three-dimensional (sculptures, architectural forms) and other forms.

Copyright does not apply to: official documents (laws, decrees, regulations, instructions, explanations); state symbols and signs (coat of arms, flag, orders, banknotes); objects of folk art; press information; ideas, procedures, processes, concepts, innovation proposals; works whose copyright has expired.

The scientific discovery is an establishment of previously unknown, but objectively existing laws, properties and phenomena of material world, which make radical changes in the level of scientific knowledge.

A computer program is an objective form of representation of a set of data and commands (a set of instructions in the form of words, numbers, symbols or any other form perceived by a machine), designed to ensure functioning of computers to achieve a specific goal or result (a set of programs used to work with computers);

Database (data compilation) - a set of data, materials or works that are systematized and presented in a form that is perceived by computer technology.

An integrated circuit topography is a spatial-geometric arrangement of a set of integrated circuit elements and connections between them fixed on a material carrier.

Related rights are rights that are adjacent to and derived from copyright. These include rights of performers, producers of phonograms and rights of broadcasting organizations.

Other (non-traditional) intellectual property objects include:

Proposal for technical improvement - a proposal recognized by a legal entity, which contains a new technological (technical) or organizational solution and increases technical and technological level of production.

Know-how is not protected by security documents and not fully disclosed knowledge or experience of technical, industrial, managerial, commercial, financial or other nature, which can be practically used in research and development, in manufacture and sale of goods (services), providing thereby certain advantages to their owner. The know-how is a property of the enterprise.

A trade secret is information that directly related to activities of an enterprise that is not a state secret, but the disclosure of which may harm interests of the enterprise.

5.4.2. The essence and classification of intangible assets

Intangible resources significantly affect final results of production, and therefore the effect is considered as resources that increase assets of the enterprise. Intangible resources that are planned to be used in production activities have to be created or acquired by the enterprise. The value of intangible resources is reflected in assets of the balance sheet of the enterprise and form its intangible assets.

Intangible assets include rights to use natural resources, industrial property and copyrights that are acquired for a certain fee.

Intangible assets are means that have no tangible basis and recognized as industrial property, have a notional value and bring the owner some income.

The main features of intangible assets are: lack of tangible structure; use for a long period of time (more than one year); ability to be useful to the enterprise; a high degree of uncertainty about size of possible future profits due to their use; do not have a monetary form; are not a receivable.

Classification and accounting of intangible assets is conducted in the following groups:

- right to use natural resources (right to use land, subsoil, other resources of natural environment);
- right to use property (right to use buildings, production area, right to rent premises);
- right to use marks for goods and services (trademarks, trade marks, brand names);
- rights to industrial property (right to inventions, utility models, industrial marks, plant varieties, animal breeds, know-how, protection against unfair competition);
- copyright and related rights (right to literary and musical works, computer programs, databases);
- goodwill is the higher market price of an enterprise compared to the value of its assets and liabilities at the date of acquisition. In other words, it is a difference between market and book values of the enterprise. A positive goodwill means that price of the enterprise exceeds the total value of its assets and liabilities, and a negative indicates a lower price of the enterprise.

Legal protection of intellectual property consists in prohibition of use of intangible assets without permission of their owner.

Ownership of inventions, utility models and industrial designs is certified by *patents*.

Patent - is a security document issued by a state body (patent office), which confirms right of its owner to relevant object of industrial property.

Legal protection of trademarks and layout of integrated circuits is carried out on the basis of a *certificate*.

Legal protection of a commercial (brand) name is provided when it makes it possible to distinguish one person from others and does not mislead consumers about its true activities. The intellectual property right to a commercial name is valid from the first use of this name and protected without the mandatory submission of an application for it or its registration and regardless of whether or not the commercial name is part of a trademark. Information about trade name may be entered in the

registers.

The intellectual property right to a geographical indication arises from the date of *state registration*. The scope of legal protection of a geographical indication is determined by characteristics of goods (services) and boundaries of the geographical place of its origin, and fixed by the state registration of intellectual property rights to the geographical indication.

A copyright holder may use copyright protection mark that is affixed to each copy of work and register own right in official state registers.

A certificate of *copyright registration* is issued.

Protection of related rights has to be carried out without copyright infringement, their origin and implementation do not require any formalities, subjects of related rights may use *a sign of protection of related rights*.

Know-how, innovation proposals, goodwill, which are the property of the enterprise and do not have special legal protection. The order of their protection is determined by management of the enterprise.

The transfer of ownership of use of intangible resources is carried out in the form of a *license agreement*.

A license is a permit to use an intangible resource for a certain period of time for a specified fee. In practice, several types of payments for licenses are used, the most common of which are:

- royalties periodic payments during the term of license agreement; deductions are set in the form of financial rates to the volume of net sales, and the cost of production, per unit of licensed products.
- *lump sum payment* actual price of the license, a one-time fee for right to use the object of license agreement, its amount does not depend on future production and sales of licensed products.

Intangible assets have a monetary value. An intangible asset resulting from development should be recognized in the balance sheet if the entity has: intent, technical ability and resources to bring the intangible asset to a condition of fitness for sale or use; possibility of obtaining future economic benefits from the sale or use

of an intangible asset; information to determine costs that are associated with developing an intangible asset.

Not recognized as an intangible asset, but are reflected in the costs of the reporting period in which they were made: research costs; training and retraining costs; costs of advertising and promotion of products on the market; costs of creation, reorganization and relocation of the enterprise or its part; cost of improving business reputation of the enterprise, cost of publications and cost of creating trademarks (tradesigns).

5.4.3. Valuation and amortization of intangible assets

In the practice of entrepreneurial activity, problems that are related to the valuation of intangible assets increasingly arise. This assessment, particularly, is necessary in the following circumstances: alienation of intangible assets by the state; inclusion of intellectual property objects in the statutory fund; determination of property parts in the statutory fund for mergers or divisions of organizations; valuation and revaluation of intangible assets in order to account for all assets of the enterprise; resolving issues related to the purchase (sale) of rights to intellectual property; implementation of financial statements of enterprises; assessment of collateral for loan; determination of losses from infringement of intellectual property rights; franchising organization.

The specifics of intangible assets as an intangible part of the enterprise's assets are reflected in peculiarities of their valuation. The complexity of valuation of intangible assets is due to: variety of intellectual property, each of which has to be original by law; different ways of their appearance at the enterprise; various forms of their practical use at the enterprise; probabilistic nature of obtained valuation results.

The approaches used in practice to assess the value of intangible assets are focused mainly on International Accounting Standards (IAS). These standards were developed by The International Assets Valuation Standards Committee (TIAVSC)

and have been in force since 1994.

Valuation of intangible assets is performed in a certain sequence and includes the following stages: survey of intangible assets; legal expertise; finding out the type of value being determined and selecting the appropriate method (methods) of valuation; formation of an information base for evaluation; calculations of value of intangible assets by selected methods; preparation of an evaluation report.

The valuation of intangible assets to some extent depends on the method of acquisition. The company can independently create certain types of intangible assets, buy by its own expense and bank loans, receive as a participant's contribution to the authorized capital of the company, as well as through free transfer of intangible assets to other legal entities and individuals.

Acquired (created) intangible assets are credited to the balance sheet of the enterprise *at initial cost*.

The cost of an *intangible asset created by an enterprise* includes labor costs; direct material costs; other costs that are directly related to the creation of this intangible asset and bringing it to a state of suitability (payment for registration of legal rights, amortization of patents, licenses); costs associated with improving intangible assets and increasing their capabilities and useful lives.

The initial cost of an intangible asset includes the cost of the intangible asset; toll; indirect non-refundable taxes; other acquisition costs interest on the loan.

The initial cost of *intangible assets received on a free of charge* is their fair value at the date of receipt, by taking into account costs that are incurred as a result of its acquisition.

The initial cost of *intangible assets that are contributed to the authorized* capital of the enterprise is recognized as their fair value that is agreed by the founders of the enterprise, by taking into account costs arising from its acquisition.

The revalued cost of an intangible asset is defined as the product of cost and revaluation index.

Intangible assets by the nature of operation and effect on the final results of production are identical to fixed assets. They are used for a long time for profit in

the company. This is an economic basis for *amortization*. Amortization of intangible assets is accrued over their useful life, which is set by the company when recognizing this object as an asset (when credited to the balance sheet), but not more than 20 years.

The method of accrual of amortization of an intangible asset is chosen by the enterprise independently, and based on conditions of obtaining future economic benefits. If such conditions cannot be determined, depreciation is accrued using the straight-line method. Amortization is calculated by using the appropriate accrual methods in accordance with Accounting Regulation (Standard) 7 "Fixed Assets".

Amortization begins on the month following month in which the intangible asset became available for use and ends on the month following month of disposal of intangible asset. The useful life of an intangible asset and its amortization method are reviewed at the end of the reporting year if changes in the useful life of the asset or differences in the future economic benefits are expected in the next period.

Depreciation is not charged on the following intangible assets: know-how, goodwill, trademarks, value of which does not decrease in the process of their use.

An intangible asset is debted from the balance sheet of the enterprise in case of expiration of its useful life, due to sale or inability to obtain economic benefits from its operation. If an intangible asset ceases to bring income to the company before the full repayment of its balance value, then a one-time amortization is added to the initial cost and this amount and attributed to financial results of management.

Businesses, by using their funds to acquire intangible assets, plan to obtain additional income from their use. Therefore, the effectiveness of use of intangible assets should be ultimately expressed in improving the overall economic activity of the enterprise.

CONTROL QUESTIONS

- 1. Discover the economic essence of assets of the enterprise.
- 2. What is the difference between the accounting approach to defining assets

and understanding of their essence as an economic category?

3. Describe the main types of assets of the enterprise according to their main classification features.

5.1. Fixed assets

- 1. What are means of labor and objects of labor?
- 2. What is the essence of means of production of the enterprise?
- 3. What is the essence of capital?
- 4. What are assets of the enterprise?
- 5. What does the company's equity include?
- 6. What is the essence of real and fictitious capital of a joint stock company?
- 7. What is the essence of the fixed capital of the enterprise?
- 8. What is the essence of division of material elements of fixed capital into active and passive?
 - 9. How is the structure of fixed capital determined?
- 10. How does the valuation of fixed assets at initial (initial), recovered and residual value made?
 - 11. What is depreciation of fixed assets of the enterprise?
 - 12. What is the essence of depreciation?
- 13. How are fixed assets of the enterprise divided according to the Tax Code of Ukraine?
 - 14. Which methods of depreciation of fixed assets are used in enterprises?
- 15. Which indicators characterize reproduction and technical condition of fixed capital?
- 16. Which indicators determine provision of agricultural enterprises with fixed capital?
- 17. Which indicators characterize economic efficiency of fixed capital of the enterprise?
 - 18. List the main directions of improving the efficiency of fixed capital.

5.2. Current capital

1. What is the essence of current capital of the enterprise?

- 2. Which functional forms include in current capital of the enterprise?
- 3. What is the essence of division of current capital into standardized and non-standardized?
- 4. What are sources of formation and replenishment of current capital of the enterprise?
 - 5. Which indicators determine the efficiency of current capital?
 - 6. Describe features of current capital.
 - 7. Define the content of the operating cycle of the enterprise.
 - 8. Define the nature and content of inventories of the enterprise.
 - 9. Describe the main methods of inventory valuation.
- 10. Which factors determine the degree of risk of investing in various components of current capital?
- 11. Identify the main factors that determine the company's need for current assets.
 - 12. List the main directions of improving the efficiency of current capital.

5.3. Intellectual capital

- 1. What is the essence of intangible resources of the enterprise?
- 2. What are types of intangible resources of the enterprise?
- 3. Which intellectual property objects are included in the set of objects protected by copyright and related rights?
- 4. Which objects of intellectual property are included in the set of objects of other (non-traditional) objects of intellectual property?
 - 5. What is the essence of intangible assets of the enterprise?
 - 6. What types are included in the intangible assets of the enterprise?
 - 7. What is the essence of the license and license agreement?
 - 8. What is royalty?
 - 9. What is the essence of the lump sum payment?
 - 10. How are intangible assets valued depending on the method of acquisition?
 - 11. What is the economic basis for amortization of intangible assets?
 - 12. How is the useful life of intangible assets determined?

- 13. Name types of intangible assets at which amortization is not accrued? Why?
- 14. How to debit an intangible asset from the balance sheet of the enterprise that ceases to generate income?

TESTS

- 1. The set of property, funds and intangible assets of the enterprise is:
- a) assets of the enterprise;
- b) fixed capital of the enterprise;
- b) current capital of the enterprise;
- d) intellectual capital of the enterprise.
- 2. According to the forms of operation assets of the enterprise are divided into:
- a) material;
- b) intangible;
- c) financial;
- d) investment.
- 3. The features of fixed capital of the enterprise do not include:
- a) preservation of natural material form during operation;
- b) are subject of depreciation;
- c) in the course of operation change of form and size;
- d) functioning in production process for several production cycles.
- 4. Depending on the degree of participation in production process, fixed capital is divided into:
 - a) production and non-production;
 - b) active and passive part;
 - c) all answers are correct;
 - d) no correct answer.
- 5. When creditin fixed capital to the balance sheet of the enterprise as a result of acquisition, construction is valued at:
 - a) replacement cost;
 - b) residual value;

- c) initial cost;
- d) liquidation value.
- 6. Depreciation of fixed capital is:
- a) a process of transferring value of fixed assets to the cost of manufactured products;
- b) a gradual loss of fixed assets of their original technical and operational qualities;
- c) a process of depreciation of fixed assets before the onset of full physical operation under the influence of STP;
 - d) the cost of maintaining fixed assets.
- 7. Which method of depreciation is characterized by higher depreciation rates in the first half of the depreciation period and their gradual decrease in the second half?
 - a) production;
 - b) cumulative;
 - c) accelerated reduction of residual value;
 - d) reduction of residual value.
- 8. Which of the following indicators characterizes the efficiency of fixed capital:
 - a) the ratio of disposal of fixed assets;
 - b) return on assets;
 - c) renewal rate;
 - d) capital security.
 - 9. What characterizes the depreciation rate of fixed capital?
- a) the degree of depreciation and reimbursement of costs for formation of fixed capital;
 - b) a possibility of further use;
 - c) the average period of complete renewal;
 - d) an intensity of recovery.
 - 10. From the following formulas, choose the formula for return on capital:

- a) the average annual cost of fixed capital / value of output;
- b) the value of output / average annual cost of fixed capital;
- c) the average annual cost of fixed capital / average number of employees;
- d) no correct answer.
- 11. The main features of current capital are as follows:
- a) are fully consumed in each technological cycle and fully transfer their value to the cost of production;
- b) do not change their shapes and sizes and transfer the cost to the cost of finished products gradually;
- c) are fully consumed in the production cycle of production, gradually transferring cost to the cost of finished products;
 - d) no correct answer.
 - 12. The current capital of the enterprise does not include:
 - a) inventories;
 - b) work in progress;
 - c) household inventory;
 - d) future expenses.
 - 13. Items of work that have not passed all stages of processing yet are:
 - a) inventories;
 - b) low-value and perishable items;
 - c) finished products in warehouses;
 - d) work in progress.
 - 14. The methods of rationing the cost of material resources include:
 - a) research and production;
 - b) method of reducing the residual value;
 - c) cumulative method;
 - d) grouping method.
- 15. The costs of main types of raw materials per unit of operational characteristics of products are:
 - a) total material consumption;

- 112 b) specific material consumption; c) material return; d) absolute material consumption. 16. Finished goods in warehouses of the enterprise and shipped for cash on the current account, in work in progress, receivables at the box office belongs to: a) current capital; b) rotation fund; c) current funds; d) future expenses. 17. According to sources of formation of current capital of the enterprise funds are divided into: a) own and invested; b) normalized and non-normalized; c) own and normalized; d) invested and unregulated. 18. The method of rationing current capital is: a) production and technical; b) organizational and economic; c) analytical; d) all answers are correct. 19. The turnover of current assets characterizes: a) the coefficient of disposal; b) load factor; c) renewal rate; d) coefficient of variability. 20. The turnover of current assets does not affect:
 - b) profit growth;
 - c) the level of profitability;

a) results of the enterprise;

d) duration of one revolution.

- 21. Industrial property does not include: a) industrial designs; b) trademarks; c) brand names; d) innovation proposals. 22. A document that confirms the right of its owner to the relevant object of industrial property is called: a) a license; b) a certificate; c) a patent; d) no correct answer. 23. The essence of which approach to determining the value of intellectual property and intangible assets is to calculate the cost of reproduction of intangible assets: a) consumables; b) exchange; c) market; d) profitable. 24. The market approach to determining the value of intellectual property and intangible assets is implemented through: a) the method of capitalization of profits; b) the method of free value; c) the method of comparative analysis of sales; d) the method of initial costs. 25. Acquired or created intangible assets are credited to the balance sheet of the enterprise for: a) initial cost; b) replacement cost; c) residual value;
 - d) no correct answer.

TOPIC 6. FINANCIAL RESOURCES OF THE ENTERPRISE

- 6.1. The essence and sources of financial resources.
- 6.2. Equity of the enterprise and its composition.
- 6.3. Borrowed capital and features of its formation.

6.1. The essence and sources of financial resources

Production and financial activities of enterprises begin with the formation of financial resources. They have to be created in conditions of a stable production process and its constant growth, which determines the competitiveness of the enterprise. The stability of the enterprise is based on the adequacy of financial resources and their stable circulation.

Prospects for the development of the enterprise are determined by its capabilities in acumulation and attracting financial resources. The capital that is mobilized by the founders of the enterprise, which belongs to them on the rights of ownership and to which they endow the enterprise (on the rights of ownership or economic management) as a legal entity, becomes the own capital of the business entity. At the enterprise with the definition of the need for capital and the attraction of the necessary financial resources begins a process of production and sale of goods (services), and received funds from the sale of products will ensure the continuation of production activities.

Financial resources - funds that are at disposal of the enterprise and participate in the process of reproduction. The financial resources of the enterprise include cash income and receipts that are at disposal of the entity and necessary to meet its financial obligations, implementation of costs of expanded reproduction and economic incentives for employees.

Depending on the property, financial resources can be own or borrowed.

Own financial resources - are resources that belong to the enterprise and formed as a result of its financial and economic activities. These include: statutory

fund, depreciation fund and profit.

Borrowed financial resources - resources that are temporarily available to the company and can be used to achieve statutory goals. They include loans received and funds that are mobilized at the financial market.

To ensure continuity of production and sales, each company has the appropriate current capital. Therefore, after the establishment of the company, there is a need in a certain amount of funds for the formation of current capital that will serve process of production and sale of products. Cash that is advanced to current capital is current assets of the enterprise.

To form current capital, the company uses both own and borrowed resources. Own funds play a major role in the organization of the capital cycle, as enterprises that operate on the basis of commercial calculation, have property and operational independence and have to operate profitable.

Features and conditions of the cycle of fixed and current capital determine the need for the formation of a certain part of financial resources through borrowed funds. To replenish current capital, companies attract short-term loans (with a maturity of up to one year), to finance investments - medium-term (from one to three years) and long-term loans (from three years).

A bank loan is provided to business entities of all forms of ownership for temporary use on the terms that are stipulated in the loan agreement. The main ones are security, return, urgency, payment and targeting. Secured loan means that the bank has the right to protect their interests, to prevent losses from non-repayment of debt due to the insolvency of the borrower.

Loans can be secured by collateral (property, property rights, securities), guaranteed (banks, finances or third-party property) or have other collateral (surety, insurance certificate) organizations). Repayment, maturity and payment mean that the loan has to be repaid by the borrower to the bank within the period that is specified in the loan agreement with appropriate payment for its use. Targeting involves the use of borrowed funds for specific purposes in accordance with the loan agreement.

Credit relations are regulated by credit agreements that are concluded between the lender and the borrower in writing form, determine the mutual obligations and responsibilities of the parties and may not change unilaterally without consent of both parties.

Commercial banks can provide loans to all business entities, regardless of industry, status, ownership, if they have real opportunities and legal forms to ensure timely repayment of the loan and payment of interest (commissions) for its use. To obtain a loan, the borrower submits to the bank an application in the form of a letter, petition, application. The documents indicate the required amount of the loan, its purpose, repayment terms and forms of collateral. If the borrower's current account is opened in another bank, he submits to the bank the constituent documents indicating the legal address, a card with sample signatures that is certified by the bank, and a certificate from the bank on account balances and debt on loans.

The amount of interest rates and procedure for their payment are set by the bank and determined in the loan agreement depending on the credit risk, collateral, supply and demand in the credit market, term of the loan, discount rate and other factors. In the event of a change in the discount rate, terms of the agreement may be revised and changed only with the mutual consent of the lender and the borrower. For loans in foreign currency, it is also necessary to take into account the interest rates prevailing in international capital markets.

The borrower who applies to the bank for a loan for the construction of facilities for storage and processing of agricultural products, production of consumer goods, etc., submits to the bank a project of construction (reconstruction) of the enterprise that meets the statutory sanitary, environmental and other standards, and also conclusions of experts on the design and estimate documentation, which confirm compliance with established norms, and other documents that are necessary for lending (contract with the construction company, feasibility study, work schedules).

In addition to a bank loan to the borrowed financial resources enterprises include *payable accounts* of all kinds, which arise in settlements with other

individuals and legal entities - suppliers, buyers, budget, social insurance agencies, extra-budgetary funds, production workers and employees of the enterprise.

A commercial loan is granted by one enterprise to another in the form of deferred payment for goods sold, performed work, rendered services or in the form of advance payments to a supplier under contracts for the supply of products, performance of works or provision of services. Commercial loans in the form of goods arise in payments for tangible assets, performed work, rendered services. They are transferred to the ownership of the debtor company under terms of the agreement, which provides for the deferral of the final settlement for a specified period and at interest.

Commodity credit involves transfer of the right to goods (results of performed work, rendered services) to the buyer at the time of signing the contract or the actual receipt of goods (performed work, rendered services), regardless of the time of repayment of the debt. In relations that are connected with provision of commercial credit, a common form of trade credit is the issuance of promissory notes to its suppliers.

The company uses various sources of financial resources. The financial resources of the enterprise are formed: during its establishment (contributions of the founders to the statutory fund); as a result of financial and economic activities (retained earnings, depreciation fund, reserve fund); as a result of operations at financial market (additional and borrowed capital); in order of redistribution of funds (budget subsidies, insurance indemnities, other types of resources). The structural and logical scheme of formation of financial resources of the enterprise is given in fig. 6.1.

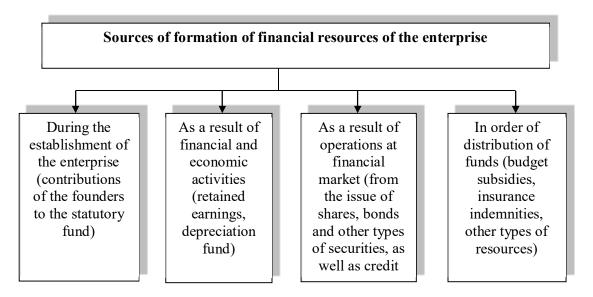


Fig. 6.1. Structural and logical scheme of formation of financial resources of the enterprise

The formation of part of financial resources due to normal (overdue) *payable accounts*, use of bank and commercial credit - is a natural phenomenon of a market economy, inherent in economic entities that function normally and efficiently.

The financial resources of the enterprise consist of the following elements: authorized (or share) capital (fund); additional capital received due to the fact that the value of sales of shares issued by the joint-stock company exceeds their nominal value; the amount of revaluation of non-current assets (value of assets received on free of charge by the company from other legal entities and individuals); reserve capital; depreciation deductions; ensuring subsequent payments and payments (reserves for subsequent vacations, etc.); retained earnings; long- and short-term loans from commercial banks; borrowed funds from the sale of own bonds; legal payable accounts of all types, including arrears of budget payments, contributions to state insurance funds for wages, promissory notes issued, advances received; other funds reflected in liabilities of the balance sheet of the enterprise.

The formation of financial resources of enterprises begins from the moment of its organization. The enterprise in accordance with the current legislation forms the statutory capital.

Statutory capital - the main initial source of own funds of the enterprise; set of funds of the founders, necessary for the functioning of the enterprise and which is invested in assets, as well as in property rights that have a monetary value. The procedure and sources of formation of statutory funds depend on the type of enterprise and form of ownership. The size of the statutory capital characterizes the amount of funds invested in financial and economic activities. On the basis of the statutory capital, fixed and current capital are formed, which are in the process of continuous movement, take different forms depending on the stage of the cycle. Depending on the organizational and legal form of management, statutory capital may be formed from share capital, share contributions of members of cooperatives, founders, as well as of budget funds.

The initial size of the statutory capital of the enterprise is fixed in the charter or in the constituent agreement which are obligatorily submitted to authorities at the state registration of the enterprise. The size of the statutory capital determines the participation of each of the founders and shareholders in the capital of the enterprise and is a criterion for determining the amount of profit that each of them receives in the distribution of profits.

Along with the funds that are available to the company from various sources (from shareholders, co-owners and other founders), the statutory fund is formed from the value of property (buildings, machinery, equipment, vehicles, raw materials, materials, other inventory), valuable securities and intangible assets. Intangible assets include the value of the right to use: results of intellectual activity in the form of inventions, discoveries, industrial designs, technologies, know-how, innovation proposals and other intellectual property; land, water and other natural resources; buildings, equipment.

The procedure of forming, using and increasing the funds of the statutory fund as a source of fulfillment of financial obligations of legal entities to creditors depends on the form of ownership of the enterprise and its organizational and legal form.

The legislation of Ukraine provides the minimum size of the statutory fund

for companies, below which the state registration of the enterprise is prohibited. These minimum sizes due to inflationary phenomena in the economy may change from time to time in the legislative order.

The size of the statutory capital of the enterprise in the course of its economic activity can increase at expense of additional contributions of owners or received profit, or decrease.

The company's profit is the main internal source of increasing its own financial resources. The financial condition of the enterprise can not be stable if it does not receive a profit that provides the necessary increase in cash resources, primarily to finance measures that are aimed at strengthening the material and technical base of production and social sphere. If the company is unprofitable, it leads to a decrease in financial resources, especially statutory fund.

The reserve fund is formed at the enterprise by deductions from profit and used for the purpose of covering losses, overcoming of temporary financial difficulties (not less than 25% of the authorized capital and not less than 5% of the size of profit).

Depreciation fund is formed in the process of using fixed assets and intangible assets through depreciation that are used for their reproduction.

The fund of development concentrates funds that are used to develop production.

The foreign exchange fund is formed at enterprises that receive foreign exchange earnings from export operations or buy foreign exchange for import operations.

The wage fund is created at the enterprise for cash payments to employees for performed work in accordance with the employment contract.

Dividend payment fund is formed in joint-stock companies once a year to pay dividends to shareholders. In addition to fixed funds, operational temporary funds can be formed at enterprises. The company's funds are used not only in stock form. For example, use of funds by the enterprise in order to fulfill financial obligations to the budget and extra-budgetary funds, banks, insurance companies is carried out in

non-fund form. In this form, companies also receive grants and subsidies, sponsorship fees, and bank loans.

6.2. Equity of the enterprise and its composition

Equity as an economic category has become widespread in the system of financial management of the enterprise, which is the basis of the mechanism of its financial management. Equity is the financial basis for creation and development of the enterprise of any form of ownership, organizational and legal form.

The creation and normal functioning of enterprises of any form of ownership is impossible without formation of a sufficient amount of equity. Equity is formed through the personal participation of owners in its formation. In this case, creating the capital of the enterprise, the owner partially loses direct connection with the capital, and he actually becomes the equity of the enterprise. The structure and efficiency of use of equity of the enterprise directly affect the formation of the welfare of its owners. The company's equity practically determines its market value.

The company's equity is the financial resources that enterprise invests in organization and financing of economic activity. The norm for successful and profitable operation of the enterprise, its high competitiveness and financial stability is a situation in which equity occupies the biggest part of its financial resources.

Equity is a part of an enterprise's assets that remains after deducting its liabilities. Only own sources of financing of the enterprise which without definition of term of return are brought by its founders (participants) or left by them at the enterprise from net profit are recognized as own capital.

Equity is the key to the establishment and development of economic activity of any enterprise. The amount of equity and the ratio of its value to the volume of external sources of funding characterize the degree of independence and financial independence of the enterprise from foreign investment.

The company's equity is the most important element of the company's financial resources, a basis for the growth of its assets and a determining factor in

credit relations with business partners.

The essence of the company's equity is manifested in its functions. The main functions of equity:

Foundation and comissioning of the enterprise. Equity in statutory part is a financial basis for launch of a new business entity; financing of activities for a long and current period in the form of investments in non-current and current assets on a permanent basis, i.e., funds that are available to the company indefinitely.

Ensuring responsibility and guarantee of activity of the enterprise. Equity is a kind of property security for creditors of the enterprise. Equity in liabilities of the balance sheet corresponds to the net assets in the active side of the balance sheet. The greater the equity of the enterprise, in particular the statutory capital, the greater losses the enterprise can suffer without endangering the interests of creditors, therefore, the higher its creditworthiness; protection of the rights of creditors who are able to address their claims to the property of the enterprise within its own capital and especially in part of its statutory capital.

Protective function. This function shows the value of equity for its owners. The greater the equity, the better protected the company is from influence of threatening factors for its existence, because it is at the expense of equity can cover losses of the enterprise. As a result of unprofitable activities there is a permanent decrease in equity, i.e., the company may be on the verge of bankruptcy. Guarantee of property protection of rights of owners of the enterprise (in joint-stock companies - participants) to a part of the statutory capital.

Function of financing and providing of liquidity. Cash contributions, together with buildings, equipment, securities and other tangible assets, may be monetary funds. They are used to finance operating and investment activities of the enterprise, as well as to repay debt on loans. This, in turn, increases liquidity of the enterprise and potential for long-term financing of its activities.

Base for accrual of dividends and distribution of property. The profit that is received during the year is distributed and paid to owners of corporate rights in the form of dividends (directed to increase the statutory or reserve capital). Accrual of

dividends, as a rule, is carried out at the established rate according to a share of the shareholder (co-owner) in the statutory capital. Similarly, distribution of enterprise property in the event of its liquidation or reorganization.

Management and control function. According to the law, business owners can participate in its management. The highest body of the joint-stock company or limited liability company is the meeting of participants of the company, which appoints governing bodies and audit committee. The actual control over the enterprise is exercised by the owner of the control package of his corporate rights. Possession of a controlling stake makes it possible to pursue one's own strategic policy of enterprise development, form a dividend policy, and control personnel issues. Thus, the statutory capital provides the right to manage factors of production and property of the enterprise.

The functions of equity of the enterprise are determined by its economic essence. In general, it can be distinguished operational, protective and regulatory functions of equity, which are aimed, respectively, to ensure the continuity of the enterprise, compensation in case of need for large losses and compliance with the established requirements for financial activities.

Characteristics of equity of the enterprise, size and structure of which for a reporting period is presented in the financial statements in the form of №1 Ukrainian Accounting Standards (UAS) 2 in section I of the liabilities of the balance sheet, more detailed is given in the form of № 4 UAS 5 "Statement of equity". The report provides information on the movement of all elements of equity, which allows analyzing changes that have occurred in the equity of the enterprise, reasons for these changes and trends in financial decisions regarding equity. The statement of equity is prepared on the basis of the balance sheet, statement of financial performance, as well as analytical data to the relevant accounting registers. The company's equity changes as a result of receiving in the reporting period net profit (loss), payment of dividends, owners' contributions, revaluation of non-current assets, including revaluation or revaluation of intangible assets, fixed assets, construction in progress.

The company's equity includes: statutory capital; share capital; additional

invested capital; other additional capital; reserve capital; retained earnings (uncovered loss); unpaid capital; withdrawn capital. This composition of equity reflects the presence of its part invested by founders at the time of foundation of the enterprise, and part obtained as a result of activities, primarily retained earnings, the amount of revaluation of non-current assets and additional invested capital. Peculiarities of formation of separate components of the own capital of the enterprises are caused by norms of the legislation concerning organizational and legal forms of the enterprises and forms of their property, and also concerning the order of formation and movement of the own capital.

Statutory capital - the total amount of assets fixed in the constituent documents, which are contributions of owners (participants) to the capital of the enterprise. The ratio of parts of the contributions of individual owners in the statutory capital is a basis for the distribution of financial result of the enterprise and property (in the event of its liquidation). If the company is established as a joint stock company, the amount of statutory capital reflects the collective ownership of shareholders, where the share of each shareholder is determined by the nominal value of the shares acquired by him.

The increase or decrease of the statutory capital occurs only with consent of the participants and has to be reflected in the constituent documents. The order of formation of the statutory capital is regulated by the legislation and constituent documents.

In addition to cash, fixed assets, other tangible and intangible assets, including rights of use, patents, etc., may be included as contributions to the statutory capital. The value of contributions made in tangible or intangible forms is estimated by the general meeting of participants. When an asset is transferred to the statutory capital, the ownership of it passes to the business entity. In case of liquidation of the company or withdrawal of the participant from it, the latter has the right only to compensation for its share within the available property, and not to transferred asset itself.

Share capital - the amount of share contributions of other enterprises, which

is provided by the constituent documents. Unlike the statutory capital, the amount of share capital is not fixed in the charter of the enterprise. Share capital is formed by legal entities, which provide for the payment of share contributions and registration of constituent documents of various forms (credit unions, consumer associations, collective agricultural enterprises). Dividends may also be accrued on additional share contributions according to the decision of the shareholders' meeting.

Additional invested capital is the amount of funds by which the value of sold shares exceeds their nominal value. The use of additional capital occurs if the amount of revaluation of fixed assets, other tangible and intangible assets is transferred to the statutory capital or a decision is made to re-register the statutory capital and it increases at the expense of any assets whose value is reflected in additional capital.

Other additional capital - the value of assets received on free of charge by the enterprise, the amount of revaluation of non-current assets, capital increase due to indexation. Other additional capital as part of equity forms capital reserves of the enterprise, which can be used without direct financial losses to owners, in contrast to the loss of statutory capital, which is a direct loss to owners.

Reserve capital - is a part of the company's equity, which is formed through annual deductions from profits and used to increase fixed capital, cover losses, dividends and other purposes. Reserve capital is formed at enterprises due to net retained earnings on the terms set forth in the constituent documents. These funds are used when required costs are not covered by the available retained earnings, as well as to cover the difference between the nominal and selling price of the issued shares. At the expense of reserve capital, the enterprise can cover losses from the economic activity, and also to increase the statutory capital.

Reserve capital is formed in case of termination of the enterprise to meet obligations to creditors. It is not used or distributed in the normal course of business. Reserve capital funds may be used in some cases, particularly, for payment of dividends on preferred shares in a joint-stock company, if the profit is insufficient to make such payments.

Retained earnings (uncovered loss) - is a part of the annual profit of a joint-stock company, which is not subject to distribution among shareholders and directed to the growth of its assets, i.e., the amount of profit that is reinvested in the company. Uncovered loss is calculated when the amount of equity is determined. Retained earnings increase equity, but in case of unprofitable results of operations, equity decreases by the amount of uncovered loss.

Unpaid capital is the amount of debt of owners (shareholders, participants) of companies of any type on contributions to the statutory capital. This amount is calculated when determining the total equity; its dynamics characterizes the coverage of the statutory capital of the enterprise by real financial resources that are received from the owners.

Withdrawn capital is the actual cost of shares of own issue or parts of shares repurchased by a joint-stock company from its participants. The amount of withdrawn capital is calculated when determining equity. The withdrawn capital includes shares of own issue or shares repurchased by the company from its members. These amounts are deducted from the total when calculating the equity of business entity.

Equity transactions in different countries of the world have their own characteristics, which are determined by a number of factors: from the historical aspect and ending with the dominant form of ownership of enterprises in the country. However, in most foreign countries components of equity are similar, first of all, it is a practice of forming various reserves and funds, rational use of which is aimed at ensuring the appropriate level of solvency and financial stability of the enterprise.

In the process of forming financial resources of enterprises plays an important role in determining the optimal structure of their sources. Financial resources and their efficient use determine financial well-being of enterprises, their solvency, liquidity and financial stability. All this contributes to the fact that companies show initiative, and are responsible for results of their own financial and economic activities.

6.3. Borrowed capital and features of its formation

Effective financial activity of the enterprise is impossible without constant attraction of borrowed funds. On the one hand, their use in the turnover of the enterprise is due to the objective need, namely: the mismatch in time between receipts and costs, seasonality of production, the implementation of investment projects that require significant investments. On the other hand, with the help of borrowed funds provides the expansion of production and economic activities, updating technical base, the use of the effect of financial leverage, etc.

The borrowed capital forms the liabilities of the enterprise. According to the International Financial Reporting Standarts (IFRS), a liability is a responsibility of an enterprise that has arisen as a result of past events and repayment of which is expected to reduce the enterprise's resources embodying economic benefits.

The composition of liabilities and characteristics of their elements are shown in Fig. 6.2.

Among liabilities the main place is occupied by borrowed capital, i.e., financial liabilities. It includes: long-term debt capital - long-term bank loans, long-term loans; short-term debt capital - short-term bank loans, short-term loans, payable accounts, and other short-term liabilities.

Long-term bank loans are usually associated with the purchase of equipment or implementation of investment projects. The main feature of long-term loans is high risks, more complex terms of service and performance in the form of collateral. For example, project loans (loans for investment projects) are issued by banks on the basis of in-depth analysis, business plans of investment projects and reliable collateral. These are the riskiest loans. Mortgages are issued on security of real estate and land. Mortgages are the most reliable type of collateral.

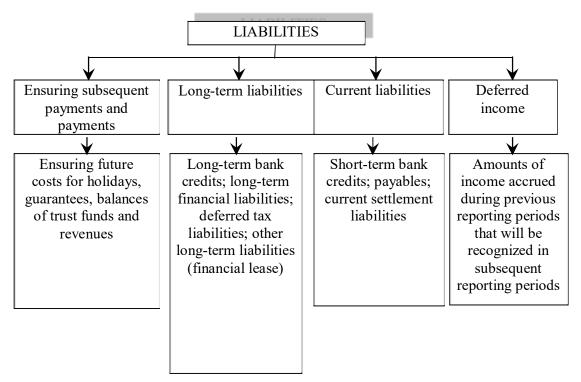


Fig. 6.2. The composition of liabilities and characteristics of their elements

Depending on the type of financial relationship that arises between lenders and the entity that is being financed, they may become co-owners or creditors of the entity. If there is a loan relationship between the lender and the company, it means that financing is at the expense of loan capital: financier acquires the status of a lender.

Lender - is a legal or physical person who has duly substantiated monetary claims against the debtor, including claims for payment of wages, taxes, other mandatory payments, etc.

In the balance sheet, borrowed capital of the enterprise is reflected in liabilities, provided that the valuation of these liabilities can be reliably determined and there is a probability of reduction of economic benefits in the future due to their repayment. The most important parameters of the borrowed capital of the enterprise are given in tab. 6.1.

Table 6.1

Parameters	Classification
Urgency	short-term borrowed capital (up to 12 months); long-term borrowed capital (over a year)
Financier	banks and other financial institutions; suppliers and customers; owners personnel state
Terms of receipt	according to a loan or other agreement if the contract is absent
Purposes of use	investment replenishment of current assets
Forms of involvement	cash: - national currency; - foreign currency; - currency fixing cargo form
Software	secured by collateral (property, property rights, securities); guaranteed (by banks, finances or third-party property) with other security (guarantee, certificate of insurance organization) unsecured
Fee for the use of capital	interest payment: - fixed interest rate; - floating interest rate without interest
Repayment procedure	one-time payment multiple payments with regression of payments in a predetermined period or without such

Depending on the terms of fulfillment of obligations by domestic accounting standards, borrowed capital is divided into long-term and current. Long-term liabilities and, accordingly, *long-term loan capital* of the enterprise can be classified into the following types: bank loans and other loans with a maturity of more than 12 calendar months; long-term liabilities on issued bonds; deferred tax liabilities; long-term promissory notes issued; long-term liabilities for financial lease and lease of integral property complexes; other long-term liabilities, particularly, according to the law, deferred tax arrears (other mandatory payments), financial assistance on a reverse basis.

Under *current (short-term) liabilities* should be understood as liabilities that are going to be repaid during the operating cycle or have to be repaid within 12 months from the date balance sheet formation.

Current loan capital is formed due to the following types of liabilities: short-term bank loans; current debt on long-term liabilities (part of long-term debt that has

to be repaid within one year from the date balance sheet formation); promissory notes issued (the amount of debt on issued promissory notes to secure supplies (works, services) from suppliers, contractors and other creditors, maturity of which does not exceed 12 calendar months); payable accounts for goods, works, services (the amount of debt to suppliers and contractors for received material values, performed works and received services, except for the debt secured by promissory notes); current liabilities according to the calculations from received advances (sum of the contributions received from other people at the expense of subsequent deliveries of production, performance of works (services), and also sum of the advance payment by buyers and customers of accounts of the supplier); current liabilities for settlements with the budget (debts of the enterprise for all types of payments to the budget, including taxes on employees of the enterprise, as well as liabilities for financial sanctions, which are levied on budget revenues); current liabilities for insurance calculations (arrears of fees for mandatory state pension insurance, mandatory social insurance, mandatory social insurance in case of unemployment, calculations for individual insurance of enterprise personnel, property insurance and other insurance calculations); current liabilities for payroll calculations (arrears on accrued but unpaid wages, bonuses); other current liabilities (amounts of liabilities that cannot be included in other items, including accrued interest and a number of others).

The main sources of capital formation are:

- 1) cash temporarily released in the process of circulation of industrial and commercial capital, accumulated in the form of depreciation, part of current capital (due to the mismatch of time of sale of goods and purchase of labor raw materials, fuel, materials), temporarily free funds for wages and intended for capitalization of additional value (due to the gradual accumulation of the necessary value for the purchase of new machinery, equipment, construction of warehouses, etc.);
 - 2) personal cash income and savings of the population;
- 3) monetary accumulations of the state due to processes of nationalization of the economy and, all above, national income.

The main external sources of debt capital formation of enterprises include: bank (financial) loans; funds raised as a result of the bond issue; commercial loans.

All expenses (interest, commissions, etc.) of enterprises that are related to raising and servicing of borrowed capital are reflected under the item "Financial expenses" of the Statement of financial performance.

CONTROL QUESTIONS

- 1. What is the essence of financial resources of the enterprise?
- 2. How are financial resources divided depending on the form of ownership?
- 3. Bank loan: essence and conditions of granting.
- 4. How are credit relations regulated?
- 5. Describe the essence and conditions of a commercial loan.
- 6. List the sources of financial resources.
- 7. Discover the essence of the statutory capital as the main source of own funds of the enterprise.
 - 8. How are reserve and depreciation funds of the enterprise formed?
- 9. How is the company's equity formed and reveal the essence of its main functions?
- 10. Describe equity of the enterprise and features of formation of its separate components.
 - 11. Describe the composition of liabilities and their elements.
 - 12. The essence and characteristics of the borrowed capital of the enterprise.
 - 13. Name the main sources of capital formation.

TESTS

- 1. Cash that is at the disposal of the enterprise and involved in the process of reproduction is:
 - a) financial resources;
 - b) credit resources;

- c) investment resources;
- d) there is no correct answer.
- 2. The company's own financial resources include:
- a) statutory fund;
- b) depreciation fund;
- c) profit;
- d) loans;
- e) funds that are mobilized in the financial market.
- 3. Borrowed financial resources of the enterprise include:
- a) statutory fund;
- b) depreciation fund;
- c) profit;
- d) loans;
- e) funds that are mobilized in the financial market.
- 4. The functions of equity include:
- a) establishment and commissioning of the enterprise;
- b) ensuring responsibility and guarantee of the enterprise;
- c) protective;
- d) financing and providing liquidity;
- e) base for accrual of dividends and distribution of property;
- g) management and control.
- 5. Which function of equity is a kind of property security for creditors of the enterprise:
 - a) establishment and commissioning of the enterprise;
 - b) ensuring responsibility and guarantee of the enterprise;
 - c) protective;
 - d) financing and providing liquidity;
 - e) base for accrual of dividends and distribution of property;
 - g) management and control.
 - 6. Which function of equity is used to finance operating and investment

activities of the enterprise:

- collateral for creditors of the enterprise:
- a) establishment and commissioning of the enterprise;
- b) ensuring the responsibility and guarantee of the enterprise;
- c) protective;
- d) financing and providing liquidity;
- e) base for accrual of dividends and distribution of property;
- g) management and control.
- 7. The total amount of assets fixed in constituent documents, which are owners' contributions to the capital of the enterprise, is:
 - a) statutory capital;
 - b) share capital;
 - c) additional invested capital;
 - d) reserve capital.
 - 8. The obligations of the enterprise include:
 - a) ensuring subsequent payments and payments;
 - b) long-term liabilities;
 - c) current liabilities;
 - d) future income.
 - 9. Debt capital of the enterprise includes:
 - a) long-term bank loans;
 - b) long-term loans;
 - c) short-term bank loans;
 - d) short-term borrowings;
 - e) accounts payable;
 - 10. The current loan capital of the enterprise does not include:
- a) bank loans and other loans with a maturity of more than 12 calendar months;
 - b) deferred tax liabilities;
 - c) accounts payable for goods, works, services;

d) current liabilities for insurance settlements.

TOPIC 7. ENTERPRISE'S CREDITING

- 7.1. The essence and features of enterprise's crediting.
- 7.2. Bank lending to enterprises.
- 7.3. Terms of obtaining and repaying a bank loan.
- 7.4. Commercial crediting to enterprises.
- 7.5. Leasing crediting to enterprises.

7.1. The essence and features of enterprise's crediting

The activity of the enterprise in the market economy involves a periodic use of various forms of borrowing. From an economic point of view, a loan is a form of loan capital (in cash or in kind), which is provided on repayment terms and causes the emergence of credit relations between the lender and the borrower.

The general economic cause of credit relations is commodity production. The basis of loan is movement of value in the field of commodity exchange, in the process of which there is a time gap between movement of goods and its monetary equivalent, and there is a separation of monetary form of value from commodity. If movement of commodity flows is ahead of cash, then the enterprises - consumers of goods with the onset of payment for them do not always have sufficient funds, and this may stop the normal process of reproduction. When movement of cash flows is ahead of commodity, the enterprises accumulate temporarily free funds.

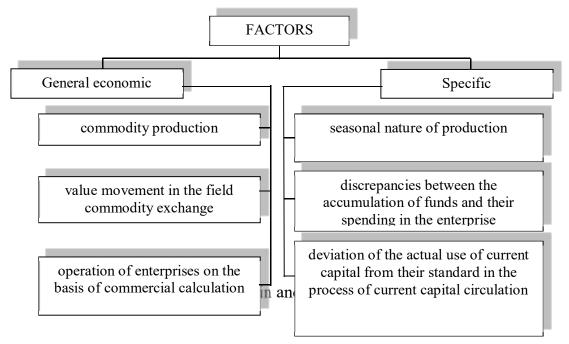
There is a contradiction between continuous release of money in the circulation of current capital and need for constant use of material and monetary resources.

A credit is a loan in cash or in kind on terms of repayment within a certain period with interest. The emergence and functioning of credit are associated with the need to ensure a continuous process of reproduction, with temporary release of funds

in some companies and emergence of the need for them in others. In this case, the emergence of credit relations is not due to the fact of discrepancy in the time of shipment of goods and its payment, and the agreement between subjects of credit relations conditions for deferred payment through the conclusion of a loan agreement. The circulation of goods is not the only cause of credit relations. Today credit relations appear in any economic or financial transaction related to the debt of one of the participants in such transaction.

Certain conditions are required for the emergence of credit relations. First, parties of the loan agreement - the lender and the borrower - have to be legally independent entities that materially guarantee the fulfillment of obligations. Second, interests of the parties of the loan agreement have to coincide.

To ensure the process of reproduction, company needs current capital, which is used to acquire various types of current capital. Due to the lack of own current capital, enterprises attract bank loans, funds of other creditors and commercial (commodity) credit. The loan makes it possible to better organize the turnover of enterprises, not to spend significant financial resources on creation of excessive stocks of raw materials. The main factors of origin and development of credit relations are presented in Fig. 7.1.



In the process of crediting of enterprises, first of all, individual features of the

circulation of their current capital are taken into account, which are manifested in the time difference between the release of funds from circulation and their advance into a new turnover. Such differences occur primarily in seasonal nature of production. Seasonality of production causes in some periods a faster growth of production costs against the receipt of funds and causes an additional need for funds to ensure production process.

In other periods, production costs are reduced or stopped altogether, output of finished products and cash receipts increase, part of which is temporarily free.

This alternation of the growth of additional needs in funds and creation of temporarily free balances in the enterprise creates a real economic basis for use of loans for the formation of current capital and their repayment over the time.

Features of individual turnover of the enterprise are determined by many objective and subjective factors. *Objective factors include*: industry affiliation of the enterprise; nature of production process; seasonality of production. *Subjective factors include*: the level of organization of production; organization of sales and supply of the enterprise with production resources.

The subjects of credit relations can be economically and legally independent enterprises. Credit relations are characterized by the fact that their subjects are two parties: one of them in a particular loan agreement is called a lender, the other - a borrower. Monetary or material values, costs or performed work and provided services in respect of which the loan agreement is concluded, are the objects of the loan.

The main objects of short-term lending in current capital are: inventories (raw materials, basic and auxiliary materials, spare parts, fuel, tools); work in progress and semi-finished products of own production; expenses of future periods (seasonal expenses, expenses for development of release of new products); finished products and goods; payment and settlement transactions with suppliers and buyers.

Enterprises need loans to replenish inventories in case if their size exceeds their own funds and if excessive stocks are created. This is due to the seasonality of delivery, uneven or early supply of material resources by suppliers. The formation of excess stocks of agricultural raw materials is the main object of bank credit in enterprises that process these raw materials and work seasonally (sugar factories, canneries, food and light industry enterprises), or create seasonal stocks of raw materials for the year, until the new harvest.

Excessive stocks of work in progress and finished products can be created at enterprises in connection with acceleration of production growth, incomplete supply, transport difficulties in sending products to consumers, termination of shipment due to insolvency of consumers.

As part of future expenses, banks issue loans to enterprises to cover seasonal costs, because in periods of seasonal decline in production or off-season downtime, production costs are temporarily not covered by sales revenue. Thus, even during the off-season downtime (February-August), sugar plant needs funds to repair equipment, maintain permanent staff, and carry out preparatory work for the sugar season. It covers these costs mainly through a bank loan, and is calculated from the proceeds from the sale of sugar.

With the help of loans, the company can settle with its suppliers, as well as maintain the circulation of current capital, which serve the process of selling products.

The objects of long- and medium-term crediting are capital investments that are related to reconstruction of the enterprise, its technical re-equipment, introduction of new equipment, improvement of production technology, as well as other costs that lead to an increase in the value of fixed assets. Such loans are used by enterprises if they have a lack of own funds intended for these purposes, namely: profits and depreciation.

By determining needs for loans, company proceeds from the total need for funds and their availability. Planning the need for credit for the formation of current capital of the enterprise is carried out in this way. At the first stage, the need for current capital as a whole and in individual areas is calculated: formation of inventories, work in progress, and finished products. In the second stage, the required amount of bank loans to cover increase in current capital needs is

determined. To do this, you can use the formula:

Required amount of loans = Need for current capital – Own current capital at the beginning of the period – Replenishment of current capital from profit + reduction of payble accounts

The company's need for loans for investment projects is determined on the basis of investment program at individual stages of its implementation by taking into account its own sources of funding. Own funds for financing investment programs consist of depreciation deductions, part of the profit, which is directed to the reconstruction, technical re-equipment and new construction.

After calculating needs of the enterprise in credit resources determine the period of their involvement. The period of borrowing is the time from the moment of granting a bank loan to the moment of its full repayment and payment of interest for use.

Loans that can be obtained by enterprises are classified according to the following characteristics: by creditors; forms and types; purpose of use; term of granting; security; order of provision.

Creditors of enterprises can be: banks and specialized financial and credit institutions (leasing companies); enterprises; state (state credit is provided through certified banks); international financial institutions (opening of credit lines through certified banks).

By forms and types, the following loans are allocated:

- 1. A bank loan is an economic relationship between a lender and a borrower regarding the provision of funds by a bank to an enterprise on terms of maturity, payment, repayment, material support, and purpose. Bank credit is provided to business entities of all forms of ownership on terms that are stipulated in the loan agreement.
- 2. *Commercial credit* is economic, credit relations that arise between individual enterprises.
- 3. *State credit* is economic, credit relations between the state and business entities.

4. *Leasing loan* is a relationship between business entities that arises in the case of lease of property (property loan or lease loan).

Bank and state loans are provided to enterprises in cash, leasing and commercial - in commodity. Bank and state loans are repaid in cash. Commercial credit is also repaid mainly in cash. The lease loan can be repaid in cash, commodity and mixed forms.

It should be noted that traditionally in countries with developed market economies, factoring and leasing credit services are provided to enterprises mainly by specialized financial and credit institutions - factoring and leasing companies. In Ukraine, credit services in form of factoring are provided only by commercial banks. Leasing services are provided mainly by leasing companies.

Depending on *the purpose of use*, there are loans that are aimed at financing of current and fixed capitals. The company has the opportunity to obtain loans for purchase of inventories, equipment, other assets, expansion and modernization of production facilities, purchase of individual production facilities or entire enterprises.

According to the term of provision, there are short-term (up to 1 year); medium-term (up to 3 years) and long-term (over 3 years) loans.

Short-term loans can be obtained by enterprises in case of financial difficulties that arise in connection with production costs that are not secured by the receipt of funds in the relevant period. The term of a short-term loan does not exceed one year.

Medium-term loans (up to three years) are provided for current expenses that are related to the payment of equipment and financing of capital investments.

Long-term loans (more than three years) can be provided for the formation of fixed capital. The objects of lending can be capital expenditures for reconstruction, modernization, expansion of existing fixed assets, new construction and corporatization of enterprises.

Depending on the *securing*, loans are divided into two groups: secured and blank. *Secured loans* are guaranteed by certain types of assets such as: real estate; securities; inventory; receivables. Loans can also be secured by: property rights,

intellectual property rights of land, land; bank guarantees; funds or property of a third party; other collateral (surety, insurance company certificate). In Ukraine, commodity values and real estate are mainly used as collateral for loans.

Loans provided by banks to enterprises secured by government securities are called lombard. As the government securities market develops, the value of this loan in the activities of Ukrainian enterprises will increase.

Blank loans are received only by financially stable enterprises for a short period (up to 10 days) of time. In domestic practice, the use of blank loans is limited.

According to the procedure for granting a loan, the following types are distinguished: direct; consortium; participation loans. Granting a direct loan involves crediting to the company directly by one lender.

Consortium loans are granted when the borrower needs funds in an amount that can not be secured by a single lender. In this case, several lenders cooprate, and each of them provides a part of the total loan. The consortium agreement can involve not only several banks, but also several borrowing companies that are affected by a particular loan project.

The enterprise-borrower that wishes to obtain a large loan can independently determine the bank that undertakes to organize a banking consortium and perform functions of the parent bank in the loan agreement. The credit relationship between consortium and borrower is governed by a loan agreement signed by all participants. The parent bank accumulates funds from participating banks and lends to the company in accordance with the loan agreement.

Upon maturity, company returns to creditors not only borrowed funds and interest on the loan, but also reimburses all costs associated with the organization and implementation of the loan operation in the amount and terms that are specified in the loan agreement. The use of various forms of enterprise crediting accelerates movement of monetary and material resources and increases efficiency of financial and economic activities.

7.2. Bank lending to enterprises

The most common type of loan is a bank one. In such lending, company acts only as a borrower. Bank loan is classified according to the following characteristics: target direction; loan term; type of interest rate; loan currency; types of service.

Depending on *the target direction*, the loan can be provided: to finance current capital; fixed capital financing; redemption of a privatized enterprise. The current Ukrainian legislation prohibits provision of loans to enterprises to cover losses from economic activities, to form and increase the statutory capital of banks and other companies.

According to banking practice, enterprises *cannot receive loans*: against which a bankruptcy case has been initiated (except for lending to financial rehabilitation measures); under concluded contracts which do not provide protection of the borrower against possible losses connected with delays in deliveries of the goods; in the presence of overdue debt on previously granted loans.

Depending on *the term* distinguishes: short-term, medium-term and long-term loans.

Depending on *the interest rate*, companies can receive loans with floating and fixed interest rates. Fixed interest rate loans are provided to enterprises mainly in a stable economy. In times of economic instability, companies are, of course, given loans with a floating interest rate. Rates on such loans depend on the value of resources raised by banks and official discount rate of the National Bank of Ukraine. Businesses mostly try to get loans from banks with a fixed interest rate.

Enterprises can receive loans from banks in both *national* and *foreign* currency. To obtain loans in foreign currency from foreign creditors, the company has to register a loan with the NBU. Crediting in foreign currency has a feature that cash inflows in the national currency, which are now sufficient to buy foreign currency, can not be considered as a reliable source of loan repayment, because changes in exchange rates are possible.

The loan in foreign currency can be used by the company to finance capital investments, purchase of equipment, and raw materials. In particular, the company

may provide for the partial use of the loan for the following purposes: payment of commissions for the bank's payments or other foreign exchange transactions that are carried out in accordance with the loan agreement of the company with a foreign firm; payment of travel expenses of employees of the enterprise abroad within the limits established by the contract; payment of duties, insurance and customs contributions, which are set by the exporting country and attributed under the terms of the contract to the importer; payment of transport costs within the current tariffs or documented costs for transportation of export products; payment of import contracts; payment of expenses on the domestic market of Ukraine by means of conversion into national currency.

Enterprises can receive various types of bank loans and credit services (term loan, credit line, overdraft, promissory note loan, acceptance, aval loan, factoring service).

A term loan is a credit that is provided immediately after the conclusion of the loan agreement. It is repaid either in periodic installments or in a lump sum payment at the end of the term.

A credit line is a bank's agreement to provide a loan in the future in amounts that not exceede a predetermined amount for a certain period of time without additional special negotiations. The credit line is opened, as usual, for a year, but it can be opened for a shorter period. An open credit line allows paying at the expense of the loan any settlement documents provided in the loan agreement and concluded between the company and the bank. During the term of the credit line, the company can obtain a loan at any time without additional negotiations with the bank and other formalities. However, the bank retains the right to refuse the company to issue the next part of the loan within approved limit, if the bank finds deterioration in the financial condition of the borrower, non-compliance with the terms of the loan agreement. Because of this, the credit line is opened to companies with a stable financial position and good reputation.

There are *two types of credit lines*: seasonal (non-renewable) and permanently renewable. *The seasonal credit line* is opened in case of periodic lack of current

capital related to the seasonality of production or the need to create stocks of goods in the warehouse. Such line can be opened, for example, to a sugar factory for the formation of stocks of sugar beets or a vegetable base for the creation of stocks of vegetables for the winter. Loans to the vegetable base and the sugar factory are repaid at the expense of proceeds from the sale of products. Debt and interest are repaid in a single payment. In the case of opening a seasonal credit line, the bank has to require collateral from the company.

A renewable credit line can be opened to an enterprise when it experiences a constant lack of current capital to resume production process in a given amount. A renewable credit line is usually granted for a period that not exceed one year. The peculiarity of the renewable credit line is that the company, having repaid part of the loan, can receive a new amount within the relevant limit and period of the loan agreement. In this regard, the company has to pledge the bank's fixed assets or provide other collateral.

Currently, commercial banks in Ukraine open credit lines, usually to agricultural enterprises, enterprises of processing industries, and trade organizations.

Overdraft – is a short-term loan granted by a bank to a reliable company in excess of the balance of its current account (within a predetermined amount) through the debiting of its current account.

A special account can be opened for a company in a commercial bank - a current account (ital. conto corrente - current account) - the only account that takes into account all the operations of the company. On the one hand, the current account reflects the repayment of the bank loan and other payments on behalf of the company, on the other - the funds received in favor of the company (revenue from sales, credit and other income). An overdraft is a combination of a loan account and a current account; it can have a debit and credit balance.

An enterprise can maintain commercial relations with many partners, and constantly has monetary obligations and requirements. The bank undertakes settlements on the current requirements and obligations of the enterprise and for this purpose opens a current account for it. The financial obligations of an enterprise can

sometimes exceed its financial capabilities. In this regard, there is a need to obtain a current account.

If the company, using current account, goes beyond its established limits, then this part of the loan is called the term "overdraft". By opening a current account for the company, the bank determines the credit limit (a certain percentage of receipts on the current account of the company), which can be revised during the year by agreement of the parties. The credit limit can be increased, as a rule, no more than 30%, if the company convinces the bank of the feasibility of such a decision (planned increase in production).

The credit limit on the current account depends on the size of the required loan, the company's ability to repay it, and daily volume of sales. When an enterprise makes overdrafts on a current account, the bank may: review the loan limit; collect a fine; refuse to give an overdraft.

The use of *current account loan* is associated with relatively higher costs for the company. The interest rate for using a current account loan is the highest in banking practice. However, current account has certain advantages for the borrower: interest on the loan is accrued only for the actual days of use; the company can use the loan funds at any time without concluding an additional loan agreement.

A promissory note loan (discounting loan) is a short-term loan that banking institution provides to a bearer of promissory notes, accounting for (buying) them before the maturity of obligations under them and paying the bearer the nominal value of promissory notes minus the discount.

Advantages of such loan for the company: a guarantee that loans to its counterparties can be refinanced with the bank at a favorable interest rate; in connection with the existence of joint and several liabilities for the bill, banks do not require additional guarantees from enterprises; such loan improves the liquidity state of the entity.

The provision of an accounting loan is carried out on the basis of an application for discounting bills that are submitted by the enterprise. The bank carefully checks the reputation of issuing company, as well as the company - the

bearer of the bill. When their financial condition is positive, the bank discounts bills.

Repayment of a promissory note loan is made on the day of payment of the promissory note by the payer (drawer). When the drawer is insolvent, the bearer of the bill and other people who are jointly and severally liable for the bill are liable for obligations. All operations on the account of bills are carried out by bank on the basis of the agreement concluded with the enterprise - the owner of the bill. The subject of the agreement is a procedure and conditions for the bank to acquire the rights to the bill through its payment before the due date.

Credit and guarantee services provided to enterprises by banks include: acceptance credit and aval loan.

Acceptance credit is short-term and used to finance the current capital of the enterprise, mainly in the field of foreign trade. This loan is cheaper for companies against the promissory note, because they need to pay the bank only commissions for the acceptance of the promissory note.

In contrast to the discounting of promissory notes, the acceptance credit is provided to the issuer (payer of the promissory note) and acts as a guarantee service. In world banking practice, this operation is carried out according to the classical scheme: the loan agreement is executed by using a bill of exchange, where the recipient indicates the payer who has to accept the bill, i.e., agree to make a payment. The company issues a promissory note to the bank, i.e., the bank becomes the drawer. The bank accepts the promissory note on the condition that before the due date of payment on the promissory note the company will pay to the bank the necessary amount for its repayment. The borrower (drawer) can use a promissory note accepted by the bank as a means of payment for the purchase of goods, payment of its obligations to other creditors and settlements with another bank.

Since the condition of the accepted loan is cash coverage of the promissory note by the borrower before the maturity of the promissory note, banks place high demands on the reliability of enterprises. If the company has not fulfilled its obligations to the guarantor bank, the bank in accordance with the promissory note law makes a counterclaim to the issuer with the subsequent enforcement of the debt

from the borrower company. The bank charges an acceptance commission for granting an acceptance loan. Due to the unreliable financial condition of most enterprises in Ukraine, the acceptance loan has not been widely used.

An aval loan is a credit when the bank assumes responsibility for the obligations of the enterprise in the form of a guarantee or surety. The enterprise - is a payee, as well as for the acceptance loan, receives from the guarantor bank (avalist) a contingent payment obligation. If the holder of the bill files a protest in connection with the non-payment of the bill, the bank-guarantor repays the entire amount of the bill for the payer. For an aval loan, bank receives commissions, the amount of which depends on the type of claims arising from the guarantee, as well as the term of the guarantee. In addition, the loan is charged interest at current rates.

The fundamental difference between aval and acceptance loans are the nature of the bank's liability. For the provision of an aval loan, regardless of its essence as a promissory note guarantee, the bank bears only subsidiary (additional) liability, i.e., claim can be applied to it only for non-compliance with its enterprise. For the acceptance loan, the bank is jointly and severally liable with other participants in the promissory note turnover. The creditor's claim can be addressed to both the company and the bank.

For companies that use promissory notes intensively, more elastic form of promissory note credit is loans issued on the security of promissory notes. Banks can open special loan accounts for enterprises and reflect on them the amount of provided loan that is secured by accepted bills. Loans are issued without specifying the term or before the maturity of promissory notes that take them as collateral.

Promissory notes are accepted (deposited) as collateral not at their full value, but at 60-90% of nominal value, depending on the creditworthiness of the enterprise that pledges the promissory notes and reliability of the promissory notes themselves. Repayment of a loan under promissory notes is made by the person who uses the loan, after which the bank returns the promissory notes to him in the amount of the repaid debt. If the company does not receive money, the loan is repaid in the amount that comes to pay bills.

Factoring service is based on the principle of acquisition by the bank of invoices of the supplier for the shipped products, i.e., handing-over to the bank of right to demand payments from the buyer of products by the supplier. A factoring account is opened for the enterprise, where all factoring operations are accounted for. Factoring is mainly used by small and medium enterprises, as they often have lack of current capital.

The essence of factoring is that the bank buys from the supplier the right to collect receivables from the buyer of products (works, services) and transfers to the supplier (seller) 70-90 % of the amount for the shipped products at the time of submission of all necessary documents. After receiving payment from the buyer, the bank transfers to the seller (supplier) the balance of funds (30-10 %) minus interest on factoring credit and commission.

Before concluding a factoring agreement, the bank examines the supplier in terms of compliance with the following requirements: products have to be of high quality and in demand at the market; the supplier has to have a steady growth rate of production and adhere to clearly established conditions for the sale of products; the company has to be financially stable and have a good reputation.

Factoring with the right of recourse allows the bank (factoring company) to return to the supplier the settlement documents, which the buyer refused to pay, and to demand the return of funds by the supplier. Factoring without recourse means that the bank (factoring company) assumes all the risk of payment.

Full factoring service also includes: auditing, accounting for receivables, full management of debt. Partial factoring is a payment by the bank (factoring company) only of the supplier's invoices.

Prepayment factoring involves the immediate payment of the supplier's settlement documents as soon as they are provided to the bank (factoring company).

Factoring without prepayment is a type of factoring when the bank (factoring company) undertakes to pay the settlement documents that are submitted to it by the supplier only on the day of payment of the documents by the debtor.

The fee for factoring service depends on the type of factoring, financial

condition of the borrower, scale and structure of its production activities and reliability of customers. Determining the factoring fee, take into account the interest rate on the loan and the average turnover of the bank in settlements with the buyer.

Factoring services of the bank (factoring company) have the following advantages for enterprises: greater guarantee of recovery (collection) of receivables of the buyer; providing the seller with a short-term loan; reduction of credit risks of the seller; the seller has an opportunity to quickly improve its financial situation, as payment for products (works, services) is made by the bank within 2-3 days from the conclusion of the factoring agreement.

The disadvantage of factoring for the company is the higher cost of this service compared to simple credit. In Ukraine, factoring services for enterprises have not become widespread due to the low level of payment discipline in various industries.

7.3. Terms of obtaining and repaying a bank loan

The emergence of credit relations between enterprises and banks is possible under the following conditions: participants in the loan agreement have to be business entities (enterprises, entrepreneurs without creating a legal entity); the borrower has either be the owner of property or has the right to use and dispose of it; it is necessary to have economic and legal guarantees of loan repayment after a certain period; the lender has to be as interested in issuing the loan as the enterprise is in obtaining it, i.e., the economic interests of economic entities has coincide.

The lending bank, assessing the activities of the borrower, makes the following requirements: the borrower has to be creditworthy; the borrower has to ensure the growth of production and sales of products (works, services); the ratio of the amount of liabilities, including the amount of the loan to be obtained, to the amount of equity, as a rule, should not exceed 30:70, or the bank sets other requirements for the share of the borrower's own funds in the project; the investment project of the borrower has to be financially viable and not involve production with

high environmental risk; the loan has to be secured. Shares, technological equipment, immovable (buildings) and movable (vehicles, mechanisms) property, goods, stocks, production and other assets that belong to the borrowing enterprise and which can be accepted as collateral in accordance with the current legislation of Ukraine are used as collateral. According to the conditions set by most Ukrainian banks, the discounted value of the collateral should be 130-200% of the borrower's liabilities. In the process of valuing the property transferred as collateral, its liquidity is taken into account.

At the second stage, the company applies to the bank and submits to it documents that are necessary to determine the legal status, financial condition of the company, project evaluation, analysis of the possibility of its successful implementation, and loan security.

At the third stage, the bank: analyzes formal and informal information about the company; evaluates its business reputation and image; analyzes creditworthiness of the enterprise, conducts an in-depth survey of its financial condition and determines the degree of risk; determines prospects for enterprise development; checks the availability of sources and guarantees of loan repayment.

To provide credit, it is important to assess the creditworthiness of the borrower. The creditworthiness of the enterprise is assessed on the basis of a system of indicators that reflect location and sources of current capital, and results of financial activities. The choice of indicators depends on the characteristics of production activities, industry specifics and other factors. The analysis of creditworthiness also takes into account the presence in the past of the company's credit relations with the bank, size and timing of loan.

To assess financial condition of the enterprise, the following objective indicators of its activities are taken into account: sales volume; profits and losses; profitability; liquidity; cash flows (cash flows on customer accounts); composition and dynamics of receivables and payables. Commercial banks can also develop additional valuation indicators for borrowing companies depending on the main activity and forms of ownership. Based on the analysis of the system of key

performance indicators of a commercial bank, reliability class of the borrower is determined.

The content of the loan agreement is determined by the company and the bank independently. It indicates purpose of the loan, conditions, procedure for granting and repaying the loan, method of securing the loan, interest rates on the loan, rights and responsibilities of parties and other conditions.

In accordance with the agreement, the bank undertakes to provide the company with a certain amount of money within a specified period. The company undertakes: to use received funds for the purposes that are specified in the contract; repay the loan in a timely manner; pay interest and enable the bank to control the intended use of the loan, as well as its provision.

The terms of *loan repayment* significantly affect financial condition of economic entities. The loan repayment procedure is a way to repay the principal amount and accrued interest. The loan is repaid either in full after the expiration of the loan agreement, or gradually, in installments. Interest is accrued on the amount of the outstanding loan.

Repayment of the loan is carried out in different ways: on demand, with repayment due to time, with long-term repayment. For loans on demand, term of full repayment is not specified and repaid at the request of the bank. The loan can be repaid by the company not only in accordance with the loan agreement, but also in advance (at the request of the lender or at the request of the company).

For repayment by periodic installments, a certain share of the principal amount of the loan is paid in equal installments during the term of the loan agreement, mostly after expiration of the loan.

For amortization, the principal amount of the loan is repaid gradually. Payments are made in equal amounts on a regular basis and include relevant portion of the principal amount and interest. Repayment in equal installments implies that each subsequent payment will be less than the previous one, as interest payments decrease over time.

Terms of loan repayment are stipulated during the signing of the enterprise

agreement with the bank that is based on: target direction of the loan; loan volume and term; order and terms of receipt of funds on the account of the enterprise; seasonality and cyclical production; the level of solvency and reliability of material support of the enterprise, etc.

Sources of repayment of the loan received by the enterprise can be: proceeds from the sale of products that the enterprise will receive in the process of implementing the lending project; proceeds from the sale of products of own production that are not related to the lending project; other income from economic activities.

Interest on the loan is accrued monthly in the amount that is specified in the loan agreement. Interest is paid for the actual number of days of using the loan. The company may ask the banking institution to review the schedule of debt repayment and accrual of interest. With the consent of the bank, the company enters into an additional loan agreement with it or adjusts the schedule of partial payments.

Early recovery of the amount of principal and accrued interest may occur if the company uses the loan for other purposes, submits inaccurate reports to the bank, and has significant deficiencies in accounting. The bank may charge a fine to the company for late repayment of the debt. In case of refusal of the enterprise to pay the debts, the bank collects them in a resolution claim procedure. In case of systematic non-fulfillment of credit obligations, the bank may file for bankruptcy against the enterprise.

Repayment of debt for the loan and payment of interest for its use are carried out in the order that is established by the parties at the time of concluding the agreement. Deferment of loan repayment with an increase in interest rates is carried out by the bank in exceptional cases, for example, in case of temporary financial difficulties of the enterprise due to unforeseen circumstances. This deferral is formalized by an additional agreement between the borrower and the bank. It is an integral part of the main loan agreement.

7.4. Commercial crediting to enterprises

The turnover of the enterprise in the process of production, services and other commercial activities is often accompanied by a temporary lack of financial resources - the buyer of products for various reasons can not pay the supplier in time. Then there is a need to defer payment by applying for a commercial loan.

Commercial credit is one of the earliest forms of credit relations in the economy, it gave rise to promissory notes and thus contributed to the development of cashless money circulation. The main purpose of a commercial credit is to accelerate the process of selling goods and making a profit.

A commercial credit is a corresponding loan agreement between two companies - the seller (lender) and the buyer (borrower). The instrument of a commercial credit is a promissory note, which determines financial obligations of the borrower to the lender. The interest on a commercial credit is included in the price of the goods and the amount of the promissory note and usually lower than on a bank loan. Repayment of the loan can be made: payment of a promissory note; transfer of a promissory note in accordance with the current legislation to another legal entity; reissuance of a commercial bank loan.

Commercial credit is fundamentally different from bank credit: the role of lender performs not specialized credit and financial organizations, but enterprises that are engaged in the production or sale of goods and services; it is provided in commodity form; loan capital is integrated with industrial or commercial one, which is embodied in the creation of financial companies, holdings and other similar structures that unite enterprises of different specializations and activities.

In transactions with commercial credit are certain risks: possible changes in the price of goods; non-compliance by the buyer with payment terms; bankruptcy of the buyer; possible increase in the cost of credit. The specific term of a commercial credit depends on: the type of goods and services; transaction costs; financial condition of the buyer and supplier; the cost of the loan; the presence of long-term relationships between suppliers and customers; product quality.

Commercial credit has its advantages and disadvantages. The advantages

include: efficiency of providing funds in the form of goods; technical complexity of transaction; providing the company with greater opportunities for maneuvering current capital; promoting the development of the credit market. Disadvantages of commercial credit are: limited opportunities in time and size; presence of significant risk for the lender; possibility of undesirable influence of banks that discount bills.

Today, in practice, there are mainly three types of commercial credit: a loan with a fixed maturity; loan with repayment after the actual sale of goods received by the borrower; crediting on an open account, when the supply of the next batch of goods on the terms of a commercial loan is carried out until the repayment of the previous debt.

Today, the traditional promissory note loan is beginning to give way to the loan provided by sellers to buyers through a simple record of the value of goods sold on credit. Having an open account, the buyer can periodically purchase goods without drawing up credit agreements in each case. At the request of the buyer, goods are shipped immediately, and payment for it is made due to time after receipt of the invoice.

Currently, in developed countries, an open account is the main financial instrument for selling products in wholesale trade. Such account as a form of settlement and credit relations between seller and buyer is widely used in the UK, Germany, France and other countries.

An open account loan has several advantages over a commercial credit in promissory note form. First, a loan in promissory note form is somewhat limited, as a promissory note loan can be provided by enterprises that manufacture products only to enterprises that consume them, or by commodity producers, i.e., trading firms. An open account loan has no similar restrictions. The mechanism of crediting and settlements on the open account is mostly applied in mutual counter deliveries of the enterprises. The open account reflects mutual financial claims and liabilities, such claims and liabilities are offset, which somewhat reduces payment risks. Secondly, such system of lending and settlements is technically simpler against the promissory note form.

Now the mechanism of commercial credit has changed significantly. Its borders have expanded considerably. If at the beginning of the XX century commercial credit functioned mainly in the field of trade, now it is used by almost all industrial companies and trading firms. As a result of it, the sale of not only large but also small consignments of goods is financed.

To accelerate the sale of goods and the conversion of commodity capital into money apply trade discounts on the purchase value of goods (settelment discount). This way of providing a commercial credit is that the companies-buyers are given a discount if they pay for the goods in a timely manner. If the payment is made by the buyer on time, the price of goods is reduced by the amount of trade discount. The size of the discount is determined by the creditor company. In foreign practice, it is usually 1-3% of the value of goods.

The amount of the discount is determined in percentage, differentiated depending on the loan repayment period and focused on the current level of interest rates. Businesses are willing to provide discounts to buyers, as the value of goods is mostly calculated so that the number of deferred payments (i.e., interest on the loan) is included in the price of the goods. If the payment is made earlier, the customer is given a discount in the form of settelment discount.

Seasonal credit is used by companies to create necessary stocks during the seasonal sale and allows the manufacturer to defer payments until the end of the sale. The advantage of such loan is that companies can produce products without additional costs for warehousing and storage.

Consignment - is used mainly for the sale of new goods, demand for which is difficult to predict. The essence of consignment is that retail trade can receive inventory without a specific obligation. This means that payment for goods is made only if it is sold. When there is no demand for a new product, the product returns to the manufacturer.

In certain cases, the company-owner of the bill before the due date of the bill may have a discount it in a commercial bank. Then the commercial loan is transformed into a bank.

The promissory note has to be paid on the day of its presentation by the remitter. In case of refusal to pay, the creditor may file a protest the next day or postpone (extend) the maturity of the bill. This is possible if the holder of the bill and the debtor agree to issue a new bill. A new promissory note is issued for the previous amount of debt, adding the appropriate interest and commissions for using a new loan. When the debtor is unable to pay the bill, the creditor may file a claim with any of the participants in the promissory note in recourse order.

Relatively recently, new types of commercial credit have emerged. These are intercompany cash loans provided for commercial papers and promissory notes. In some countries, such as the United States, commercial papers of non-financial companies guaranteed by banks have become widespread. As a means of short-term raising funds, commercial papers compete with certificates of deposit and treasury bills.

7.5. Leasing crediting to enterprises

Under current economic conditions, many Ukrainian enterprises are unable to carry out technical upgrades at their own expense. In this regard, there is an objective need to develop leasing business, which leads to attracting private investment for financial support of enterprises.

The term "leasing" comes from the English verb "to lease", which that means "to rent". Any leasing transaction has a financial (credit) nature. The property owner (lessor) provides the user (lessee) with a financial service: he buys the property and at expense of the lessee's periodic contributions covers its full value and receives a certain profit in the form of a lease margin.

In economic terms, a lease is a loan that is provided in commodity form by the lessor to the lessee. The subjects of credit relations here are: in the role of creditor - the lessor, the borrower - the lessee. From an economic point of view, leasing can be compared to a bank loan provided for the purchase of fixed capital. Credit and leasing relations between the borrower (lessee) and the creditor (lessor) are built on

terms of urgency, payment, repayment, material security (collateral).

Since the rent is included in the gross costs, taxable profit of the enterprise is reduced accordingly. The application of the mechanism of accelerated depreciation contributes not only to the reduction of taxable income of the lessee, but also to the acceleration of technical renewal of production.

The production function is to quickly solve the problem of re-equipment of production not through the purchase of machinery and equipment, but through their temporary use on lease. It is an effective tool for ensuring access of enterprises to new technologies and equipment. The sales function is to expand the range of consumers and the development of new market segments by attracting primarily those companies that are unable to immediately purchase a property.

The object of leasing can be any property that can be attributed to fixed capital, which is not prohibited for free sale on the market and for which there are no restrictions on the transfer of leasing (rent). The following may not be objects of leasing: objects of lease of state property, except for separate, individually determined property of state enterprises; land and other natural objects.

Classic leasing is characterized by a tripartite nature of the relationship: lessor, lessee, and supplier.

Lessor - is a business entity, including a banking (non-banking) financial institution, which transfers leased assets in accordance with the agreement. The lessee is a business entity that receives leased assets under the contract. Leasing property supplier is a business entity that manufactures machinery, equipment, etc., and transfers its own property, which is the object of leasing.

In addition to the main participants, intermediaries, i.e., people representing the economic interests of both sellers and buyers of leasing objects, participate in the leasing business. These include: insurance companies; broker-dealer firms; service centers for maintenance of machinery and equipment; other intermediaries. Involvement of intermediaries in the leasing business leads to a reduction in the turnover of capital, resulting in increased profitability.

For each of the participants in the leasing activity, this type of business activity

has certain advantages. For the seller of property leasing is a convenient means of solving not only production and technical, but also financial problems. For example, under conditions of overproduction, leasing acts as an effective tool to recoup invested capital, as payment for the company's products is made immediately after signing the agreement. Thus, the possibility of "freezing" the capital of the enterprise in the form of the balance of finished products in the warehouse is reduced. Moreover, the supplier is deprived of the need to use commercial credit.

An enterprise that seeks to obtain fixed assets on a loan basis has to go through the leasing process, which consists of the following stages: preparation and justification of the leasing project; legal registration of the leasing agreement; payment of lease payments; return of the leased object or its redemption at the residual value.

The company submits to the leasing company: application, economic justification of the leasing agreement (business plan), notarized copies of the constituent documents, balance sheet for the last year and other documents at the request of the lessor. The lessor assesses solvency of the enterprise (lessee) according to the scheme adopted for analysis by the bank of creditworthiness of its customers. Due to the fact that the leasing operation has a long-term nature, the lessor is primarily interested in the long-term financial condition of the lessee.

After a positive conclusion on solvency of the lessee and the effectiveness of a leasing project, the lessor sends the supplier an order for the purchase of a leased object. The property is leased only after the lessee enters into an insurance contract for the leased object in favor of the lessor. The lessee is obliged to ensure the maintenance of the leased property in proper condition, as well as to make relevant lease payments.

Lease payments include: the amount of reimbursement of the value of depreciable leased asset for the period for which the lease payment is made; the amount paid to the lessor as interest for the acquisition of property under the lease agreement; payment-reward to the lessor for the leased property; reimbursement of insurance payments under the insurance contract of the leased object, if the object is

insured by the lessor; other costs of the lessor that are provided by the lease agreement.

Depending on the peculiarities of leasing operations, leasing can be devided into two types: *financial* and *operational*. In both financial and operational leasing, fixed assets remain property of the lessor during the term of the agreement.

Operational leasing - is a lease agreement under which the lessee receives a leased asset from the lessor for a term less than the term for which 90% of the value of the leased asset is determined on the date of the contract. Upon expiration of the operating lease agreement, it may be extended or the leased object may be returned to the lessor and may be re-transferred for use to another lessee under the lease agreement.

Operational leasing is a profitable and convenient method of financing, in which leasing company buys equipment from supplier and transfers it for temporary use to lessee on terms that are agreed by parties, with the subsequent transfer of ownership of these objects to lessee. As a rule, the term of operating lease is shorter than the standard service life of the leased asset, and lease payments do not cover the full cost of the leased asset.

Under an operational leasing, the lessor is required to account for the leased asset as a property, plant and equipment, to retain ownership of it, and to depreciate the asset. The lessee has a right to attribute the amount of lease payments to gross expenses and reduce the amount of profit before paying corporate income tax.

Operational leasing provides the lessee with a possibility of off-balance sheet financing, provides flexible cash flow management, and does not put at stake existing credit relations; leasing of third parties may not be imposed on the subject of leasing; the subject of leasing cannot be the object of tax lien; increasing the volume of production by restoring fixed capital with high-performance equipment, as well as the introduction of new technologies.

Financial leasing - is a lease agreement that provides for the payment of an amount equal to the full depreciation of machinery and equipment, or at least 60% of the value of the leased asset, over the term of the lease. Upon expiration of

financial lease agreement, the leased asset becomes the property of the lessee or is repurchased by the lessee at residual value.

The lessor's costs of purchasing a finance lease are not included in gross expenses or in the fixed capital of a lessor. Fixed capital transferred to financial leasing is included in the fixed capital of the lessee. Three subjects take part in financial leasing operations at the initial stages: manufacturer or seller of the equipment who, had concluded the agreement of purchase and sale or delivery, loses the property right (the right of full economic management) to the specified equipment; leaseholder (leasing company), which enters into a contract of sale with the manufacturer and becomes the owner of the equipment; a lessee who receives property for possession, use and makes rent payments. This is the traditional and most common form of leasing operation, which is fully financed by the leaseholder, and therefore it is called a direct leasing operation - direct leasing.

However, in commercial practice, indirect leasing is used, in which the circle of entities connected to such operation involves a bank that finances the agreement. Thus, two schemes of implementation of indirect leasing operations can be applied. In the first case, the bank provides the leasing company with a loan to purchase equipment secured by this equipment, and the leasing company, having leased the equipment, pays a bank loan and interest for its use at the expense of the received rent. Under the second scheme, the bank itself buys the equipment (becomes its owner), with the help of a leasing company leases it and receives rent payments. The role of the leasing company is to service this operation. It is possible to conclude an agreement on joint activities between the bank and the leasing company.

In the case of financial leasing, the lessee: credits the object of leasing to its balance sheet; accrues depreciation; receives a tax credit immediately for the entire value of the leased object (interest on financial leasing is not subject to VAT and is paid in full on gross expenses); does not attract additional borrowed capital and the balance of the lessee's enterprise maintains the optimal ratio of equity and debt capital; receives free installments for the entire period of leasing for expenses that are related to the maintenance of the leased object.

No additional financial security is required in the process of drawing up a leasing agreement. The subject of leasing cannot be fined by third parties. The subject of leasing cannot be the object of tax lien. At the same time the obligatory insurance of the transferred property is carried out. One contract is executed - financial leasing (in case of inclusion of insurance in leasing payments).

The lessee stops to pay lease payments after the expiration of the lease agreement. The lessee has a right to: return the equipment to the lessor; renew or enter into a new leasing agreement; purchase equipment at a residual value. The method of further use of leasing property depends on the areas of investment strategy of the enterprise. Leasing credit helps to intensify private capital investment in production, improve financial condition of producers, as well as increase the competitiveness of enterprises.

CONTROL QUESTIONS

- 1. Discover the essence of credit from an economic point of view.
- 2. Terms of credit relations.
- 3. Factors of origin and development of credit relations.
- 4. Describe features of individual turnover of the enterprise.
- 5. How does the company determine the need for loans?
- 6. What are the objects of long- and medium-term lending?
- 7. By what characteristics are loans classified?
- 8. Name loans that are allocated by form and type.
- 9. How are loans divided depending on the purpose of use?
- 10. What are lombard loans?
- 11. The essence of consortium loans.
- 12. What can a loan be issued depending on the target direction?
- 13. Which loans depend on the term?
- 14. Under what conditions the company can get a loan in foreign currency?
- 15. The essence of a term loan and terms of its repayment.
- 16. What are the conditions for opening a credit line and to whom do

commercial banks open them?

- 17. Under what conditions are credit relations appear between enterprises and banks?
- 18. What are the requirements of the lending bank in assessing the activities of the borrower?
 - 19. Explain the content of the loan agreement.
 - 20. What are terms of loan repayment?
 - 21. What can perform as sources of loan repayment?
 - 22. What is the difference between commercial credit and bank one?
 - 23. The essence and economic significance of leasing.
 - 24. What is leasing depending on characteristics of leasing transactions?

TESTS

- 1. Factors of formation and development of credit relations are divided into:
- a) general economic and specific;
- b) general economic and legal;
- c) legal and specific;
- d) there is no correct answer.
- 2. Objects of short-term crediting are:
- a) inventories;
- b) work in progress;
- c) finished products and goods;
- d) capital investments.
- 3. By forms and types there are the following loans:
- a) bank loan;
- b) commercial credit;
- c) state credit;
- d) leasing loan.
- 4. What loan is a relationship between business entities that arise in the case of lease of property:

a) bank loan;
b) commercial credit;
c) state credit;
d) leasing loan.
5. Which loans are received only by financially stable enterprises for up to 10
days:
a) short-term;
b) medium-term;
c) secured;
d) blank.
6. The types of bank loans and credit services do not include:
a) term loan;
b) credit line;
c) overdraft;
d) aval loan;
e) there is no correct answer.
7. To assess financial state of the enterprise there is a need to take into account
the following indicators of its activities:
a) the volume of sales;
b) profits and losses;
c) profitability;
d) liquidity;
e) cash flows;
g) production capacity of the enterprise.
8. Sources of loan repayment can be:
a) proceeds from sale of products that the company will receive in the process
of implementing a lending project;
b) proceeds from sale of products of own production that are not related to a

lending project;

c) other income from economic activity;

- d) all answers are correct.
- 9. The advantages of commercial credit include:
- a) the efficiency of providing funds in commodity form;
- b) limited capabilities in time and size;
- c) technical simplicity of the transaction;
- d) providing the company with greater opportunities for maneuvering current capital.
 - 10. Depending on the peculiarities of leasing operations, leasing can be:
 - a) financial;
 - b) operational;
 - c) technical;
 - d) perspective.

TOPIC 8. INVESTMENT RESOURCES

- 8.1. Economic essence and classification of investment resources.
- 8.2. Fixed capital investments and their structure.
- 8.3. Financial investments.
- 8.4. Estimation of economic efficiency of production investments.

8.1. Economic essence and classification of investment resources

The effective functioning and development of the country is carried out on the basis of investments that form the future of the socio-economic system and its progressive macroeconomic changes. Currently, the main obstacle to stable economic growth of Ukraine on the basis of structural and qualitative renewal of the production sphere is rather low activity of investment processes and the dynamics of their deployment.

Investments are the material and financial basis for the renewal and accumulation of fixed capital. Embodied in fixed assets, they determine the structure

of the economy, its growth rate and the level of competitiveness of marketable products in the world market. Therefore, the problem of investing in the economy is given considerable attention by both government agencies and businesses.

Investments are contributions of cash, property and intellectual values in tangible and intangible assets, financial instruments for the purpose of profit or social, and environmental effects. The total amount of investment in the field of material production depends on many factors, namely: existing legal framework that shapes investment climate, volume of national domestic product, foreign direct investment in the economy of Ukraine.

Due to the limited investment resources, there is a question of determining the priority areas of use of these funds (material resources, technologies). This is especially important in a regional context, as far as it is at this level that major institutional transformations take place. Currently, there is a trend according to which high investment activity is characterized by regions whose overall level of socio-economic development is higher than the national average. This situation is logically explained by the expectation of a rapid economic effect, which is faster obtained in highly developed territorial and economic complexes.

The urgent task of the state is to intensify investment activities and significantly increase investments. General legal, economic and social conditions of investment activity on the territory of Ukraine are determined by the Law of Ukraine "On Investment Activity". It is aimed at ensuring equal protection of rights, interests and property of investment entities regardless of ownership, as well as effective investment of Ukraine development of international economic cooperation and integration.

Investments are all types of property and intellectual values that are set out in the objects of entrepreneurial and other activities, as a result of which a profit (income) is created or a social effect is achieved. Such values may be: funds, targeted bank deposits, shares and other securities; movable and immovable property (buildings, structures, equipment and other tangible assets); property rights arising from copyright, experience and other intellectual values; a set of technical, technological, commercial and other knowledge, designed in the form of technical documentation, skills and production experience that is necessary for the organization of a particular type of production, but not patented ("know-how"); rights to use land, water, resources, buildings, structures, equipment, as well as other property rights; other values.

According to calculations for a long period of time, in average, about one third of financial assets of enterprises in various sectors of the economy of Ukraine are investments in the form of one-time capital expenditures).

Investments are contributions in entrepreneurial activities for profit. For the substantive and semantic characteristics of investments, it is essential to determine types of investments by individual features, and by their functional-elemental composition (Fig. 8.1).

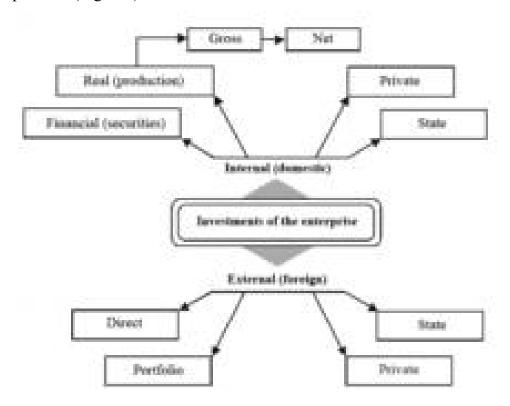


Fig. 8.1. Functional-elemental composition of the enterprise's investments

Depending on where the capital is invested (within the country or abroad), there are *internal (domestic)* and *external (foreign) investments*. In turn, domestic

investments are divided into financial and real, and foreign - into direct and portfolio.

Financial investments mean the use of available capital for the acquisition (purchase) of shares, bonds and other securities that are issued by enterprises or the state. With such investment, there is a transfer of property titles, which give the right to receive non-labor income. Capital in the form of securities is called stock, or fictitious, because it is not real wealth and has no real value (unlike capital invested in various spheres and branches of social production).

Real investment is an investment of capital in various spheres and branches of social production in order to renew existing and create new material goods, and as a result - to obtain greater profits. Such real investments are also called productive, and in the practice of management they have another name - capital investment.

External direct investment is an investment abroad, which is at least 10% of the cost of a particular project. Foreign investments less than 10% of the value of the capital project that is implemented with their help are called portfolio. Periodic analysis of the ratio of direct and portfolio investments is of practical importance to identify the overall scale and share of foreign capital in the development and increase the efficiency of production and other activities of economic entities.

The effectiveness of long-term financing for the modernization of existing and construction of new production and non-production facilities largely depends on the proportions between state and private investment. Naturally, with the intensification of the development of property privatization and corporatization of state-owned enterprises, share of private capital in total investment will increase. This will help increase the efficiency of both domestic and foreign investment.

Investments are classified by different characteristics. The most common and detailed classification of investments was proposed by I. Blank (Table 8.1).

Table 8.1 Classification of enterprise investments

Type of investment	Characteristics
III , COULTE	

1	2	
By objects of capital investment		
Real	Investments in: reproduction of fixed assets, innovative intangible assets, growth of inventories and other objects of investment related to the implementation of operating activities of the enterprise or improving the working and living conditions of staff	
Financial	Investing in various financial instruments (mainly securities) for income	
By the nature of participation in the investment process		
Straight	Direct participation of the investor in the choice of objects of investment and investment. They are carried out by direct investment in the statutory capital of other enterprises. Direct investment is carried out mainly by experienced investors who are sufficiently informed about the objects of investment and are well acquainted with its mechanism	
Indirect (portfolio)	Investor's capital investment mediated by other persons (financial intermediaries)	
By level of investment risk		
Without risk	Investing in such investment objects, for which there is no real risk of loss of capital (expected income) and guaranteed receipt of the estimated amount of investment income	
Low risk	Investing in investment objects, the risk of which is much lower than the average one at the market	
Medium risk	The level of risk on investment objects roughly corresponds to the average one at the market	
High-risk	The level of capital investment risk exceeds the market average one	
Speculative	Investing in the riskiest investment projects or investment instruments that are expected to have the highest level of investment income	
By forms of ownership of invested capital		
Private	Capital investment of individuals and legal entities (non-state forms of ownership)	
State	Investment of the capital of the state enterprises, and also means of the state budget of various levels and the state extra-budgetary funds	
By regional affiliation of investors		

National (internal)	Capital investment by residents (legal entities or individuals) of a given country in investment objects on its territory. Residents are legal entities and economic entities of Ukraine that do not have the status of a legal entity (branches, representative offices, etc.), which are established and carry out their activities in accordance with the legislation of Ukraine and located in its territory
Foreign	Investment of non-residents in investment objects of the country. Non-residents - are legal entities and business entities that do not have the status of a legal entity (branches, representative offices, etc.) located outside Ukraine, which are established and operate in accordance with the laws of another state

The successful development of Ukraine's economy largely depends on attracting foreign investment. Foreign investments are all types of property and intellectual values that are invested by foreign economic entities in Ukraine, as a result of which a profit is made or a social effect is achieved. Foreign business entities - are business entities that have a permanent location or permanent residence outside Ukraine.

Foreign investors are entities that carry out investment activities on the territory of Ukraine: legal entities formed under legislation other than the legislation of Ukraine; foreigners and stateless people who do not have a permanent place of residence on the territory of Ukraine; international governmental and non-governmental organizations; other states; other foreign investment entities.

Foreign investors have the right to make all types of investments on the territory of Ukraine. The following main *types of investments* are distinguished: foreign currency recognized as convertible by the National Bank of Ukraine; any movable and immovable property and related property rights; other values (property) that are recognized as foreign investment.

Foreign investment can take various *forms* depending on the type of investor, its purpose and degree of the risk. Foreign investors invest in the following forms:

a) creation of joint ventures (organizations); b) start-up of subsidiaries (branches);

c) concluding license agreements with domestic firms; d) acquisition of non-controlling stakes in domestic issuing firms; e) purchase of controlling stakes in enterprises that issue and sell them.

Joint ventures are created and managed jointly by foreign investors and local partners. The role of the latter are often private companies, but they can also be state-owned enterprises. Several foreign investors from different countries can set up a joint venture in a third country to reduce start-up investment costs. Joint ventures allow foreign investors to have a larger niche at the local market with less entrepreneurial risk than by directly buying a local firm at auction or setting up a subsidiary (branch).

Creation of own subsidiaries (branches) as a form of capital investment is the riskiest and associated with the largest liabilities of a foreign investor. This option is usually used in a country whose markets have the greatest potential for profit.

The license agreement is usually concluded by the local firm with the relevant multinational corporation. According to the license agreement, the latter transfers the right to use a new technology to a local company, which becomes responsible for the marketing and production of a particular product. Such agreement gives a foreign partner the opportunity to enter the market with minimal business risk. In addition, foreign investors can buy shares in a local (domestic) company with which a license agreement has been concluded.

Acquisition of non-controlling stakes in local firms is carried out by a foreign investor through their direct purchase on the local stock market. As foreign partners do not acquire the right to control activities of a local firm as a result of the acquisition of such large number of shares, these investments are called portfolio investments. This method of investment is used mainly in the process of privatization of enterprises (organizations) or the exchange of debts of private or state entities for their shares.

Controlling stakes in local firms can be acquired by foreign investors in various ways (by direct purchase, in the process of privatization, exchange of debt for shares, etc.). This investment option of domestic firms (enterprises,

organizations) gives the right to control their activities. At the same time, it provides greater liabilities of the foreign investor and longer time to obtain expected returns. However, this form of investment provides significant benefits to local enterprises: it accelerates the renewal of the range of products, increases total production, helps cover existing debts.

Possible types and forms of foreign investment are shown in Fig. 8.2.

The following forms of enterprises with foreign investments may be created and operate on the territory of Ukraine: enterprises with foreign investments; foreign enterprise; branch or representative office of a foreign legal entity; other forms are not prohibited by law.

Enterprises with foreign investment are those whose foreign investment in the statutory capital is not less than 10%. Property that is imported into Ukraine as a contribution of a foreign investor to the statutory capital of a domestic enterprise (except for goods for sale or own consumption) is exempt from customs duties. A national regime of investment and other economic activity is established for all foreign investors on the territory of Ukraine.

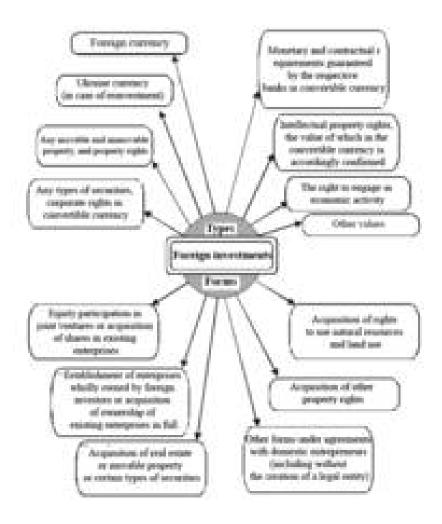


Fig. 8.2. Possible types and forms of foreign investment

Enterprises with foreign investment have the right to be founders of subsidiaries, establish branches and representative offices in Ukraine and abroad.

Foreign enterprise is a unitary or corporate enterprise that is established under the legislation of Ukraine, which operates only on the basis of property of foreigners or foreign legal entities, or an operating enterprise acquired entirely in the ownership of these people. In order to ensure stability of the legal regime of foreign investment, the following guarantees are established for foreign investors: use of state guarantees for the protection of foreign investment in case of changes in foreign investment legislation; guarantees against forcible seizure, as well as from illegal actions of authorities and their officials; compensation and compensation of losses to foreign investors; guarantees in case of termination of investment activity; guarantees of

transfer of profits and use of income from foreign investments; other guarantees of investment activity.

Purposeful and rationally used foreign investments are mostly highly effective both for the foreign investor and for the enterprise of the recipient country. Under a favorable economic and investment climate, a foreign investor will always benefit from investing in a particular place of the company. The efficiency of foreign investment is characterized primarily by the level of return (profit) on invested funds) and the payback period of invested capital. In Ukraine, these indicators are quite high and, thus, confirm the effectiveness of foreign investment.

It is very important for foreign investors to establish the degree of attractiveness of investment of local firms (enterprises, organizations). Potential foreign investors, when deciding on the feasibility of investing in a country, pay attention to the presence of sufficient signs of investment attractiveness. These features include: characteristics of the local market (volume, purchasing power of the population, growth potential of these indicators); market availability in terms of a favorable legal environment; availability of a sufficient number of skilled labor, its real cost and productivity; degree of currency risk (local exchange rate should promote economic stability and generate confidence of foreign investors); possibility of repatriation of capital (primarily existence of legislation that does not restrict the export of invested capital and profits); state of protection of intellectual property (this feature is a priority, especially for dynamic industries such as production of computers, communications, pharmaceuticals); trade policy, which significantly affects the value and scale of exports and imports of certain products; a measure of state regulation of the economy, which is important to protect the interests of producers and consumers, as well as to promote the inflow of foreign investment; presence or possibility of introducing tax and other benefits that stimulate the active attraction of foreign investment; favorable economic climate, maintaining low and predictable inflation rates; sufficient development of production and market infrastructure, presence or possibility of creating free trade zones.

In case of a change in the legislation on the regime of foreign investment at the request of a foreign investor, state guarantees are applied, which are defined by the legislation in force at the time of investment.

8.2. Fixed capital investments and their structure

Investments that are aimed at reproduction of fixed assets and growth of inventories are made in the form of capital investments (production investments). Capital investment is the implementation of long-term capital expenditures for the reproduction of fixed assets and social infrastructure of the enterprise.

Considering the functional focus, there are gross and net capital investment. Gross capital investment is the total cost of capital for simple and extended reproduction of fixed assets and social infrastructure, and net - the cost of only their expanded reproduction. The amount of net investment is easy to calculate; for this purpose, the amount of depreciation deductions, which are used for simple reproduction of fixed assets and other property of the enterprise, should be excluded from the total amount of capital investments.

The relationship between capital investments directed to different purposes characterizes their structure. There are the following types of capital investment structure: sectoral; territorial; technological; reproductive; by forms of ownership.

Sectoral structure characterizes the distribution of investment by industry and type of production.

Territorial structure - is the ratio of the distribution of investments by regions and counties of the country.

According to the system of planning and accounting in force at the enterprises, composition of capital investments includes: 1) the cost of construction and installation works; 2) the cost of all types of production equipment, as well as tools and inventory included in fixed assets; 3) other capital works and expenses. The latter include: the value of land; deep exploration drilling for oil, gas and thermal water; design work; research works; the cost of purchased patents and licenses; costs

of training operational personnel for enterprises under construction, etc.

The ratio between these types of capital investment: the cost of construction and installation work, the cost of equipment, machinery and mechanisms, other capital costs characterize *technological structure of capital investment*. A positive trend in the dynamics of technological structure of capital investments is a gradual increase in the share of costs for equipment, tools and inventory with a relative decrease in the share of the cost of construction and installation work.

In the investment policy of enterprises and their associations it is very important to make informed decisions about *reproducible structure of capital investments*, which reflects the ratio of long-term costs for simple and expanded reproduction of fixed assets (technical re-equipment and reconstruction, expansion of existing enterprises, new construction). The main trend of changing the reproductive structure of capital investments in recent years is a significant increase in the share of costs for technical re-equipment and reconstruction of existing enterprises in most industries.

According to the results of special researches, the optimal (or close to it) can be considered the ratio of costs for simple and extended reproduction of fixed assets, which is equal to 35 and 65% of the total gross capital investment. Nowadays, reproductive structure of gross capital investments in enterprises of various spheres and branches of the Ukrainian economy is changing in such proportion. The ratio of individual shares in the total amount of net capital investments is approximately: technical re-equipment and reconstruction of industrial enterprises - 50-60%; expansion of enterprises - 15-20; new construction - 20-35%. The predominant focus of capital investments on technical re-equipment, reconstruction and expansion of existing enterprises should continue in the near future in the development of Ukraine's economy.

The structure of capital expenditures by forms of ownership is characterized by the ratio of state investment and private capital in the total investment.

The development of the economy of enterprises is largely determined by the structure of investment, which characterizes priority areas of their use. The ratio of

the main directions of investment has to meet needs of production and ensure the formation of rational structure of fixed assets of farms.

The development and strengthening of the efficiency of management of Ukrainian enterprises largely (if not decisively) depends on the national investment potential, which is formed at the expense of various financial sources, including foreign investment. Considering the crisis of domestic enterprises and organizations, lack of own investment resources, intensive internationalization (integration) of production and economic systems, it is objectively necessary to attract more and more foreign investment in fixed assets. The latter provide technical re-equipment and reconstruction of enterprises, restructuring of their economy, introduction of new technologies, increase of production and increase of export potential.

8.3. Financial investments

Financial investments are considered as an effective form of using the company's equity or as a tool for achieving strategic goals related to the diversification of its operating activities. Financial investments have to be understood as assets held by the company in order to increase profits (interest, dividends), increase the cost of capital or other benefits for the investor. They are necessary for the purchase of securities that are issued by enterprises or the state.

Making of financial investments is characterized by the following features: financial investments are a separate type of financial activity of the enterprise; financial investments are used by enterprises in order to obtain additional investment income in the process of functioning of equity or to strengthen the anti-inflationary protection of monetary assets; financial investments give companies the opportunity to expand the range of investment instruments on a scale of "return – risk" and "return – liquidity"; difference in substantiation of alternative management decisions related to the implementation of financial investments compared to real investments; the high level of fluctuations in the financial market compared to the commodity necessitates more active monitoring in the process of financial investment.

The financial investments of the enterprise are inextricably linked with the functioning of the financial market, the main task of which is the accumulation and efficient allocation of savings in the sectors of the economy.

Financial investments are made by the company in the following main forms:

- 1. Investment in the founding funds of joint ventures. This ensures the strengthening of strategic economic ties with suppliers of raw materials (based on their participation in the founding capital); development of own production infrastructure (by investing in transport and other similar enterprises); expanding sales opportunities or penetrating other regional markets (by investing in statutory funds of commercial enterprises, various forms of sectoral and commodity diversification of operating activities and other areas of development).
- 2. Investing in profitable types of monetary instruments (for example, deposits in a commercial bank).
- 3. Investment in profitable types of stock instruments (various types of securities that circulate freely in the stock market).

In the process of financial investment, one of the most important tasks is to assess investment properties of individual financial instruments, which provides a description of their individual types, which are carried out by the investor, by taking into account objectives of the investment portfolio. Financial instruments from standpoint of peculiarities of their investment properties are classified according to the following characteristics:

- 1. According to the degree of effectiveness envisaged by the investment fund:
- debt securities, which are characterized by clear predictability of the investment fund on a scale of "return risk", "return liquidity". Such securities have a priority right to repay liabilities in the event of bankruptcy, which significantly reduces their risk;
- equity securities are characterized by a low level of predictability of their investment income, which is characterized by two parameters the level of dividend payments and an increase in the exchange rate value of stock instrument;
 - 2. The degree of risk that is associated with the nature of the issuer:

- government securities, which are represented mainly by debt obligations and have the lowest level of investment risk. The level of investment income of such securities is the lowest;
- securities of municipal bodies. The investment characteristics of such stock instruments are determined by the level of investment attractiveness of the region, and investment risk is low;
- securities issued by banks. The investment properties of stock instruments are considered to be quite high, as their level of profitability is higher than that of municipal and government securities. In addition, system of economic standards of banking and a high level of state control over their activities reduces the potential level of risk of investing in the securities of these issuers;
- securities of enterprises. This type of financial instruments in our country is characterized by low investment properties, due to the low efficiency of economic activity of most enterprises. The level of investment risk on corporate securities is the highest. In addition, this type of securities is generally characterized by the lowest level of liquidity in the stock market.
- 3. According to the level of risk and liquidity that is associated with the period of circulation:
- short-term securities. The period of their circulation determines a fairly high level of liquidity in the stock market, as well as reduces the level of investment risk. At the same time, the high level of liquidity and low level of risk determine the low level of investment income on such stock instruments;
- long-term securities. They are characterized by a low level of liquidity, a high degree of risk and a higher level of profitability;
- 4. The level of liquidity that is associated with the nature of issue and circulation:
- registered securities. Due to the complex procedure of their registration and the issuer's control over their circulation, such securities are characterized by a low level of liquidity;
 - bearer securities. This feature of the issuance of such stock instruments does

not impede their free circulation and, accordingly, increases a potential level of liquidity.

Income types of stock instruments include different types of securities that trade on the stock market:

Securities are monetary documents that certify the right of ownership or credit relations, determine relationships between the entity that issued them (the issuer) and their owner, and usually provide for the payment of income in the form of dividends or interest, as well as the possibility of transfer of monetary rights to others. Securities can be registered or bearer.

Registered securities are mostly transferred by way of full endorsement (transfer inscription that certifies the transfer of rights to the security to another person), and bearer securities are freely traded. It is very important to know that securities can be used for settlements between businesses or as collateral to secure payments and loans.

A share - is a security without fixed term of circulation that certifies equity participation in the statutory fund of the company, confirms membership in it and the right to participate in its management, entitles its owner to receive part of the profits in the form of dividends, as well as to participate in the distribution of property upon liquidation of the company. Shares can be registered and bearer, preferred and common. Citizens have a right to own, as a rule, registered shares. The circulation of the latter is recorded in the book of registration of shares of the respective companies. It includes information about the owner of shares, time of their acquisition and number of each shareholder. As for bearer shares, only their total number is registered.

Preference shares give the owner a preemptive right to receive dividends, as well as to priority participation in the distribution of property of the company in case of its liquidation. They can be issued at a fixed percentage of their nominal value as an annual dividend. Then the company has to pay dividends in the specified amount, regardless of the absolute amount of profit in the year. In case if the profit of the year is insufficient, payment of dividends on such shares has to be made at the

expense of the reserve fund of the company. The issue of all types of shares by a joint-stock company is carried out in the amount of its statutory capital or for the entire value of the property of a state-owned enterprise in the event that the latter is transformed into a joint-stock company. Preference shares may be issued for an amount not exceeding 10% of the statutory capital of the company.

A bond is a security that certifies payment of a certain amount of money by its owner and confirms the issuer's obligation to return to a bondholder within stipulated period its nominal value with the payment of fixed interest. Two types of bonds are issued: 1) domestic government and local bonds; 2) bonds of enterprises that may be registered and bearer; interest and interest-free (target); freely rotating or with limited circulation.

Bonds of domestic state and local loans are issued to the bearer. The obligatory requisites of target bonds should be indication of goods (services) under which they are issued. Bonds intended for open sale with subsequent free circulation (except for interest-free bonds) must have coupon sheets for interest payments. Decisions on the issuance of domestic and local government bonds are made by the Cabinet of Ministers of Ukraine and local authorities, respectively, and corporate bonds are issued by the issuer with execution of relevant protocol.

Joint-stock companies may issue bonds in the amount that not exceeding 25% of the statutory capital and subject to full payment of all previously issued shares. Funds received from the sale of loan bonds are directed to the state and local budgets, as well as to extra-budgetary funds of local administrations. Payment of income on purchased bonds is made in accordance with the terms of their issue.

The profitability on the target loan bonds (interest-free bonds) is not paid. Holders of such bonds have the right to purchase relevant goods or services under which this type of securities is issued. If the price of the goods at the time of receipt exceeds the value of the bond, the owner receives goods at the price that is specified in the bond, and when goods become cheaper, the owner pays the difference between the value of the bond and the price of goods. Bonds of all types are distributed to legal entities and individuals on a voluntary basis.

Treasury obligations of Ukraine - a type of bearer securities that are placed only on a voluntary basis among the population, certify the contribution of the owners of funds to the budget and give the right to receive a fixed income. There are three types of treasury obligations: a) long-term - with a validity of 5 to 10 years; b) medium-term - from 1 to 5 years; c) short-term - up to one year. The decision to issue long- and medium-term treasury bonds is made by the Cabinet of Ministers, and short-term - by the Ministry of Finance of Ukraine. The sale price of treasury bonds is set depending on the time of their acquisition within the validity period. Funds from implementation of treasury obligations are used to cover current expenditures of the state budget.

The savings certificate by the form and content is a written certificate of the bank on the deposit of funds, which certifies the right of the depositor to receive after the expiration of the term both the deposit and interest thereon. Savings certificates can be term (at a certain contractual interest for a certain period) or on request, registered and bearer. Registered savings certificates are not a subject of circulation, their alienation to other persons is not allowed. This type of securities (as well as bonds) can be purchased by individuals only at the expense of personal funds, and by enterprises (organizations) - at the expense of net profit that remains at their disposal. Payment of income on savings certificates is a subject to their presentation for payment to the issuing bank. If the owner of savings certificate requires a return of funds that are deposited for a certain period earlier than the agreed period, he pays a lower interest rate, which is agreed with the owner at the time of deposit into the deposit account.

A promissory note - is a type of securities that certifies the unconditional monetary obligation of the debtor (drawer) to pay after the due date a certain amount of money to the holder of the promissory note (promissory note holder). There are promissory notes and bills of exchange. A promissory note contains a simple and unconditional promise of the issuer to pay the holder of the bill after the specified period an appropriate amount. A bill of exchange (draft) is a written order of a billholder (drawer) addressed to the payer (drawer) to pay a third party (remitter) a

certain amount of money within a specified period. In this case, the drawee becomes a debtor only after accepting the bill, i.e., will agree to its payment, putting his signature on it. In the process of circulation, the bill is transferred by one holder to another by means of transfer inscription - endorsement. Each endorser, as well as the issuer of the bill, is responsible for the acceptance and payment of the bill.

Promissory note obligations can be additionally guaranteed by means of an aval - the promissory note guarantee. Timely payment of the bill repays all promissory note obligations. In case of refusal to pay, the billholder may file a lawsuit against the acceptor. In addition, if the bill is not accepted or paid, he has a right to demand payment of the bill by recourse (reverse claim) from other responsible persons (issuer, endorser, avalist), jointly and severally liable to the billholder.

The set of different types of securities issued and traded in Ukraine is divided into three groups. The first of them includes: *equity securities*, for which the issuer is not obliged to return the funds that are invested in its activities, but which certify participation in the statutory capital, give their owners a right to participate in the management of the issuer and receive a part of the property in case of liquidation of the issuer. The second group includes: *debt securities* for which the issuer undertakes to return within a certain period of time funds that are invested in its activities, but which do not give their owners the right to participate in the management of the issuer. The third group consists of *derivative securities*, circulation mechanism of which is related to equity and debt securities and other financial instruments or rights to them.

The company's strategy to intensify the attraction and use of investment resources should be based on assessing the probability, reliability of investment, and, above all, on assessing the correct choice of innovative solutions. In order to ensure a sound choice of innovative solutions, companies provide scientific justification of management decisions.

The main factors that affect the efficiency of investment resources are the amount of investment, timing of investment projects, as well as their progressiveness

and efficiency. Based on this, important areas for improving the efficiency of investment activities at the enterprise should be considered: implementation of a thorough examination of investment projects; concentration of efforts of the enterprise on reduction of the period of implementation and realization of the investment project; prevention of large-scale projects due to their low mobility to innovation; attracting short-term loans; verification and scientific substantiation of project reliability.

8.4. Estimation of economic efficiency of production investments

The efficiency of productive investment (capital investment) is characterized by economic or social results and economic feasibility of their implementation. The basis for assessing feasibility of capital expenditures is a comparison of the profitability of a project considering the limited capital as a resource and ensuring the highest returns through the implementation of the best of several options (projects) of investment.

The methodology for assessing the effectiveness (feasibility) of capital investments primarily includes *general provisions*. The most significant of them are the following:

- firstly, calculations of economic efficiency of capital investments are used for the development of various design and planning (forecast) documents; optimizing distribution of real investment in various forms of reproduction of fixed assets; evaluating the efficiency of spending the company's own funds;
- *secondly*, calculations define the overall economic efficiency as the ratio of the effect (result) to the amount of capital expenditures that caused this effect. Costs and results are calculated by taking into account the time factor. In enterprises, the economic effect of capital investment is an increase in profits;
- *thirdly*, in order to comprehensively substantiate and analyze the economic efficiency of capital investments, to identify reserves for its increase a system of indicators is used. The generalized indicators include the payback period of capital

expenditures (the number of years for which the initial investment is reimbursed) and specific capital investment (per unit increase in production capacity or output) - capital intensity. In addition to generalized, the system includes the following indicators that are subject to joint comprehensive analysis: labor productivity; material consumption, cost, quality and technical level of products; magnitude of the social effect (compared to social standards); indicators that characterize the improvement of the environment;

- *fourthly*, when determining the effectiveness of capital investments, the influence on the total effect of the so-called non-investment factors, i.e., measures, implementation of which does not require capital investments, should be excluded. This means that the effect obtained from the overall effect (profit) should be removed from the full use of previously introduced production capacity, increase the coefficient of variability of equipment, introduction of progressive forms of organization of production, labor and management, training and skills.

The economic efficiency of productive investments can be determined by using indicators of their absolute and comparative economic efficiency.

The absolute efficiency of capital investments characterizes the total value of their return and is determined by the ratio of magnitude of the economic effect to magnitude of incurred costs. The absolute efficiency of productive investment (capital investment) is determined by two interrelated indicators.

The coefficient of economic efficiency of capital investments is determined by the ratio of the increase in profits due to them to the total investment. It is calculated by the formula:

$$Coefficient \ of \ economic \ efficiency = \frac{Increase \ in \ profit \ from \ investments, UAH}{Amount \ of \ investments, UAH}$$

To assess the economic efficiency of investments, the calculated coefficient of economic efficiency of investments is compared with the normative, which determines the minimum level of profit growth per 1 UAH of investments. The normative coefficient of efficiency of capital investments is set centrally by the Ministry of Economic Development and Trade of Ukraine for a certain period. Its

duration is usually equal to the so-called forecasting horizon or indicative planning. The project (variant) of capital investments is determined to be effective provided that the calculated coefficient of efficiency of investments is equal to or greater than the normative one.

The payback period of capital investments (PP) is determined by the ratio of the volume of investments to the average annual increase in the mass of profit. This indicator is inverse to the investment efficiency ratio. It is determined by the formula:

$$Payback\ period = \frac{Amount\ of\ investments, UAH}{Increase\ in\ profit\ from\ investments, UAH}$$

If enterprises are provided with long-term credit for construction, reconstruction and technical re-equipment of production facilities for a payback period of up to 20 years, for the purchase of agricultural machinery, vehicles - for up to 5 years, the coefficients of absolute economic efficiency of capital investments should be 0,05 and 0,20.

The comparative economic efficiency of capital investments is determined by choosing the best option for the use of capital investments based on the application of the indicator of *reduced costs*. It characterizes not only the amount of investment, but also the amount of subsequent production costs when using fixed assets.

Reduced costs are the sum of annual production costs (cost) and capital investments, reduced to the annual dimension in accordance with the normative coefficient of their efficiency. For each investment option, the following costs are calculated, and their annual amount is calculated by the formula:

Reduced costs = Annual production costs + Normative efficiency ratio \times Amount of capital investments in the i-th option, $UAH \rightarrow min$

The given normative coefficients of economic efficiency of investments are used only for comparison of growth of investments at a substantiation of the most rational variant, they cannot be identified with the standard at definition of absolute efficiency of investments.

The economic efficiency of capital investments is determined by the level of

reduced costs for several investment options. The most efficient of the investment options is the one that provides the minimum amount of reduced costs per unit of output or performed work. The project (option) of capital investments with the lowest reduced costs will be the best from an economic point of view. However, it should be borne in mind that projects have to meet the requirements of technical, economic and social standards, environmental protection and safety, and only then can they be considered as optimal.

An important form of production investments is investment in capital construction. *Capital construction* is a process of creation of new, reconstruction and expansion of existing objects of production and social sphere of the enterprise. It is characterized by a long cycle, complexity of the facilities under construction, high labor, material and financial resources. The sphere of capital construction includes: construction of buildings and objects of industrial and non-industrial purposes; installation of equipment; design and survey and other works; overhaul of equipment and facilities.

The end result of capital construction is the commissioning of production facilities. Enterprises that create fixed assets through construction and make certain capital investments for this purpose are called *developers*. Capital construction can be carried out by contract and economic means.

The contract method involves the performance of construction and installation work by permanent specialized organizations on the basis of contract agreements. In the economic method, construction is carried out by the developer, work on the construction site is carried out along with the main production activities by their own forces and means. The enterprise-developer in this case simultaneously performs the functions of the construction manager and the executor of construction and installation works.

In any method of construction and installation work, the estimated cost of construction is determined. It is the price for the construction of the object and calculated in accordance with the established prices, tariffs, and prices for construction and installation works.

The economic efficiency of investment in capital construction largely depends on the timing of commissioning and development of fixed assets and the achievement of project indicators (crop yields on reclaimed lands, livestock productivity in livestock complexes). At the same time, the efficiency of capital investments increases if the time from the beginning of construction of industrial buildings and structures to their commissioning and obtaining the corresponding effect as a result decreases. Therefore, the efficiency of investment in capital construction is also characterized by the following indicators: the lag of construction and the development lag of fixed assets.

Construction lag is a time from the beginning of construction to the commissioning and operation of production facilities. If the construction period is reduced, the efficiency of investment increases significantly.

Development lag is characterized by the time from the completion of construction and commissioning of fixed assets to the achievement of production volumes that are provided by the project. The duration of the development lag depends on many factors and especially on the quality of performed work and ensuring the optimal ratio of fixed and current capital of the enterprise.

On the basis of the given expenses, it is also calculated *annual economic effect* from realization of the corresponding direction of capital investments. It is determined on the basis of a comparison of the following costs for new and basic investment options:

Annual economic effect =
$$[(C_1+E_n\times K_1)-(C_2+E_n\times K_2)]\times VP$$
,

where C_1 and C_2 - unit cost of production or work, respectively, the basic and new version, UAH;

 K_1 and K_2 - capital investment per unit of output or work, respectively, under the basic and new version, UAH;

VP - volume of products or performed work after the investment, UAH.

To determine the effectiveness of investment in *technical re-equipment or* reconstruction of the enterprise used additional indicators - the conditional release of workers and savings of material and fuel and energy resources. If the purpose of

technical re-equipment (reconstruction) is to improve product quality, the economic result of investment may be an increase in producer profits and consumer demand. For this form of reproduction of fixed capital in order to organize the production of updated nomenclature, economic indicators of investment in technical re-equipment (reconstruction) should be compared with similar indicators of the efficiency of construction of a new enterprise. The process of comparing performance indicators have to take into account the entire amount of capital investment, including the cost of creating social infrastructure, as well as the cost of "freezing" investment.

The economic efficiency of capital investments in *environmental facilities* is determined by comparing the achieved effect of preserving or improving the ecological state of the environment or reducing its pollution and capital costs for the creation (development) of such facilities. When designing such facilities, the choice of the best technical solution from several possible ones is made by taking into account the time factor. To determine the full effect of the implementation of environmental measures, it is necessary to take into account the possible improvement of the environment throughout the territory, where there are negative consequences of ecological imbalance.

Comparing the efficiency of capital investments allows selecting the best projects (options) for the minimum amount of reduced costs and determine the overall economic efficiency of the project by calculating the expected rate of return on investment. However, the application of such technique significantly complicates the objective assessment of the feasibility of investment in a market economy. This is due to the fact that it only partially takes into account the time factor (change in the value of money over time); ignores depreciation as a source of funds and, thus, limits cash flows only to income from sales; it does not take into account the existing economic risk and inflation in a market economy.

In addition to determining the effectiveness of capital investments, it is necessary to take into account their positive impact on accelerating the economic and social development of the economy, including the improvement and protection of the environment. There are certain features of the formation of high efficiency of capital investments at certain stages and directions of investment and reproduction cycle.

Great opportunities to increase the efficiency of capital investments are due to the organization of modern design and budgeting and ensuring high economic efficiency of design decisions. In the process of developing projects for expansion and reconstruction of existing and construction of new production facilities (enterprises) should be: used achievements in the field of technical, technological and organizational solutions, building materials and structures, spatial location of buildings (structures); substantiated and accepted for calculations reduced against other similar objects specific capital investments; real estimated cost of the entire volume of work is determined by the appropriate form of reproduction of fixed assets.

For the implementation of design and estimate works, the efficiency of capital investments should be determined by taking into account their final result - the quality of design decisions. In order to achieve the appropriate level of efficiency of real investments, selection and economic justification of the best design solutions are carried out. According to the implemented projects, the specific capital costs for design are calculated, the latter are compared with the standards or analogues by taking into account the payback period.

Improving the economic efficiency of capital investments in enterprises involves reducing of the time of their development, as well as reducing the payback period of investments based on increasing production and improving product quality, as well as reducing its cost. The level of efficiency in the use of capital investments is influenced by a large number of different organizational and economic factors. Without careful consideration of their impact in business practice, it is impossible to achieve maximum profitability of investment in production and other areas of activity of enterprises. The most significant influence on the efficiency of capital investments is exerted by groups of factors that determine the structure and duration of investment and reproduction processes, the effect-forming ability of economic methods to manage them by relevant entities (Fig. 8.3).

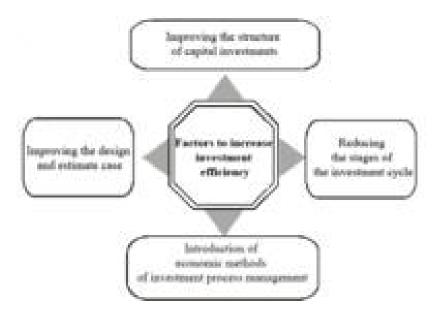


Fig. 8.3. The main organizational and economic factors of increase efficiency of use of capital investments

The high level of efficiency of production investments is largely explained by the *progressiveness of their element-technological and reproducible structure*. The higher share of costs for the creation or renewal of the active part of fixed assets of enterprises, the greater the return on capital investment.

This necessitates a careful economic justification of the share of capital expenditures for the purchase of production and technological equipment for each project (option) of investment of an existing or under construction enterprise. Actions to optimize the reproducible structure of capital investments should be especially active and purposeful. The practical implementation of such actions is associated with the solution of two main tasks: 1) increase of relative amount of investment in reimbursement (simple reproduction) of the cost of machinery and equipment of the entire amount of accumulated depreciation fund; 2) establishment of rational proportions of net capital investment in various forms of expanded reproduction of fixed assets and formation of a necessary production capacity of enterprises.

An important reserve for improving the efficiency of capital investments is a significant reduction in the duration of all stages of the investment cycle - from

design to development of commissioned production facilities and social infrastructure. According to the analysis of actual state of affairs at the enterprises of many branches of the economy of Ukraine, duration of reconstruction (expansion) of existing and construction of new production facilities exceeds existing standards on average twice, and design and development - about one and a half times. It should be added that current standards for the duration of certain stages of the investment cycle in Ukraine are significantly higher than in many countries with developed market economies.

The implementation of technical, technological and organizational measures to improve the efficiency of capital investments can not achieve expected results if they are not accompanied by *effective economic methods of managing investment processes* in general. It should be noted that these methods are not used in isolation (independently), but should be a part of the implemented general mechanism of market relations between all participants in the investment process; methods of determining the required volume and assessing the economic feasibility of capital investments, forecasting a real duration of the investment process for functionally identical production facilities, system of motivation for intensive investment in production need to be improved.

CONTROL QUESTIONS

- 1. What is the essence of investment?
- 2. What are sources of investment in the enterprise?
- 3. What is an investment activity?
- 4. Describe the functional-elemental composition of the enterprise's investments.
 - 5. How are investments divided according to the nationality of investors?
 - 6. How are internal (domestic) investments divided by investment objects?
- 7. How are foreign investments divided by the nature of participation in the investment process?

- 8. What is the essence of capital investment?
- 9. How are capital investments divided by their value in the process of reproduction?
 - 10. Describe the structure of capital expenditures by form of the ownership.
- 11. How does the national investment potential affect the efficiency of enterprises?
 - 12. What are gross and net capital investments?
 - 13. What is the territorial and sectoral structure of capital investment?
- 14. What is a technological structure of capital investments and what are the main directions of their use?
 - 15. How is a reproducible structure of capital investments determined?
- 16. What indicators characterize the economic efficiency of capital investment?
- 17. How is the comparative economic efficiency of capital investment determined?
 - 18. What are the lag of construction and lag of development of fixed assets?
 - 19. In what basic forms does the company make financial investments?
- 20. What are the main features from the standpoint of their investment properties are classified as financial instruments?
- 21. What income types of stock instruments include different types of securities traded on the stock market?
- 22. What are the general provisions of the methodology for assessing the effectiveness of capital investments?
- 23. List the main organizational and economic factors to improve the efficiency of capital investment.

TESTS

- 1. Funds that are directed to an expanded reproduction of fixed assets and social infrastructure of the enterprise are:
 - a) real investment;

- b) financial investments; c) capital investments; d) capital construction. 2. What types of investments are made by direct investment in the statutory capital of other enterprises: a) indirect; b) direct; c) financial; d) internal. 3. There are the following types of capital investment structure: a) industry; b) territorial; c) technological; d) technical; e) reproductive. 4. The ratio of long-term costs for new construction, expansion, reconstruction reflects: a) sectoral structure of investments; b) territorial structure of investments; c) technological structure of investments; d) reproducible structure of investments. 5. Sources of financing of capital investments do not include: a) income from sale of securities;
 - b) funds from state budget;
 - c) insurance indemnities on fixed assets;
 - d) part of retained earnings.
- 6. Depending on the role in the process of expanded reproduction, capital investments are divided into:
 - a) capital investments for production purposes;
 - b) capital investments for non-production purposes;

- c) capital investments for production and non-production purposes;
- d) all answers are correct.
- 7. Economic efficiency of capital investments is divided into:
- a) market and general;
- b) general and comparative;
- c) comparative and market;
- d) additional and market.
- 8. Comparative economic efficiency of capital investments is determined by:
- a) the minimum of the resulted expenses;
- b) the maximum of the reduced costs;
- c) the minimum production costs;
- d) the maximum production costs.
- 9. The coefficient of economic efficiency of capital investments is defined as:
- a) the ratio of profit growth due to investment to total investment;
- b) the ratio of the volume of investments to the average annual increase in the mass of profit;
- c) the amount of annual production costs and capital investments, reduced to the annual dimension in accordance with the normative coefficient of their efficiency;
- d) on the basis of comparison of the resulted expenses on new and basic variants of investments.
 - 10. The payback period of capital investments is defined as:
 - a) the ratio of profit growth due to investment to total investment;
- b) the ratio of the volume of investments to the average annual increase in the mass of profit;
- c) the amount of annual production costs and capital investments, reduced to the annual dimension in accordance with the normative coefficient of their efficiency;
- d) on the basis of comparison of the resulted expenses on new and basic variants of investments.

TOPIC 9. INNOVATIVE ACTIVITY

- 9.1. The concept and types of innovative activity.
- 9.2. The essence of scientific and technological progress and main directions of its development.
 - 9.3. Evaluation of the effectiveness of innovations.

9.1. The concept and types of innovative activity

Improvment of the efficiency of material production and ensuring the competitiveness of products is based on the use of new high-performance equipment and advanced technology, use of modern organizational forms and economic management methods. Production improvement is carried out on the basis of innovative activity at different stages of the "science-production" cycle.

As a result of carrying out research or research and development works receive an innovative product (news), and its introduction into economic practice is recognized as innovations (novations).

An innovative product (news) is the result of the implementation of an innovative project and research or development of a new technology (including information) or products with the manufacture of an experimental sample or experimental batch.

Innovations are newly created or improved competitive technologies, products or services, as well as organizational and technical solutions of production, administrative, commercial or other nature, which significantly improve the structure and quality of production or social sphere. The process of application for the first time in the production of new scientific achievements, i.e., innovations, initiates innovative activity.

The innovative activity of the enterprise is a complex process of creation, use and dissemination of innovations in order to obtain competitive advantages and increase profitability of its production. In a market economy, the innovative activity of the enterprise is the most important factor that allows the company to occupy a stable market position and gain an advantage over the competitors in a field that is the area of its commercial interests.

Adoption and implementation of appropriate decisions on materialization of scientific achievements characterize the essence and constitute the content of innovation processes.

Innovative processes are a set of progressive, qualitatively new changes that constantly arise in complex production and economic systems that are based on the use of scientific achievements. Innovative processes begin with certain branches of science and finish in the field of production. The innovation process is carried out according to the scheme "science - innovation – production".

The innovation process is characterized by an innovation cycle, which covers the period from search for new ideas to their application in production and obtaining concrete results. In the innovation process, the life cycle of innovation is also distinguished. This is the period from the introduction of innovation in production to the cessation of its use. Thus, innovation cycle is associated with the stage of creating innovations (news), and life cycle - with the stage of their practical use.

According to their nature and functional purpose, the following news and innovations are distinguished: technical - new products, technologies, constructional and auxiliary materials, equipment; organizational - new methods and forms of organization of all types of activities of enterprises and their institutional-voluntary associations; economic - methods of economic management of science, production and other areas of activity that are based on the implementation of functions of forecasting and planning, financing, pricing, motivation and remuneration, evaluation of performance; social - various forms of activation of the human factor, including new forms of professional training of personnel, stimulation of their creative activity, creation of comfortable living and working conditions; legal - new laws and various legal documents (acts) that define and regulate all activities of enterprises and organizations.

According to the scale and strength of the impact on the efficiency of certain parts of social production, all innovations can be combined into two groups - local (individual) and global (large-scale). Local innovations lead mainly to progressive transformations in activities of enterprises and have a corresponding impact on the efficiency of their operation. Global innovations are mostly fundamentally new, which significantly increase technical and organizational level of production, ensure economic and social development of society.

In innovation it is important to take into account the life cycle of innovations - a period of time when innovation goes from the origin of the idea to its commercial use, when there is an active demand for this innovation, and then there is a transition to ordinary items, processes, products. In this case, to ensure further competitive advantages, the company has to curtail inefficient production when it has no active consumer demand and start implementing a new innovation. With the introduction of a new innovation, the life cycle of the previous one ends.

There are three ways to organize innovation:

- innovation activity on the basis of internal organization when innovation is created and mastered within firm by its specialized divisions on the basis of planning and monitoring of their interaction on innovation project;
- innovation activity on the basis of external organization with the help of contracts, when the order for the creation and development of innovation is placed between third-party organizations;
- innovative activity on the basis of external organization through the activities of venture enterprises. To implement the innovative project, the firm establishes a subsidiary venture firm, which attracts additional third-party tools (funds).

The second method of organizing innovative activities is the most often in use - ta firm places an order for the development of news, and masters it on their own. The relative rarity of the use of the first method is due to insufficient scientific potential of enterprises in various sectors of the economy.

The essence of the innovative strategy of the enterprise is that the effective development of the enterprise is associated with gaining an advantage over competitors and increasing profits by constantly updating the range of products and expanding activities of the enterprise. In a market economy, preference is given to those enterprises that are actively developing innovations. This allows them to expand markets for their products, conquer new market segments, and in the case of mastering fundamentally new innovations - temporarily occupy a dominant position in the market of new products, which directly increases the mass of profits.

Innovative entrepreneurial activity is a special process of organization of management, based on the constant search for new opportunities to improve the technical and technological factors of production. It is associated with the willingness of the business structure to take the risk of a new project, as well as resulting financial, social and moral responsibility. In general, innovative entrepreneurial activity can be defined as a social economic process that leads to the creation of the best properties of goods (products, services) and technologies through a practical use of innovations.

The need for innovative entrepreneurial activity is due to: need to increase technical and technological level of production; increase in costs and deterioration of economic indicators of the enterprise; moral aging of equipment and technology; increasing production efficiency based on the introduction of new equipment; economic expediency of strengthening intensive factors of production development on the basis of use of achievements of scientific and technical progress in all spheres of economic activity; importance of developing the creativity of inventors and innovators and the use of their proposals.

In practice, there are three main types of innovative business activities: innovative activities in the field of technical and technological support of production; innovative activities in the field of increasing production, improving quality and reducing the cost of products; innovative activities in the field of social development of enterprises and rural areas.

The first type of innovative entrepreneurial activity is associated with the process of quantitative and qualitative renewal of production capacity, which will increase productivity, save energy, raw materials and increase the mass of profits.

The second type of innovative entrepreneurial activity is a process of qualitative improvement of products, its reduction in price, expansion of the range, which is aimed at better meeting needs of the population.

The third type of innovative business activity is associated with expansion and improvement of services for population, helps improve working conditions and recreation of the company's staff.

To increase the efficiency of social production, the state promotes development of the economy on an innovative basis, ensures functioning of innovative enterprises that develop, produce and sell innovative products. The main goal of the state innovation policy is to create socio-economic, organizational and legal conditions for effective reproduction, development and use of scientific and technical potential of the country, ensuring introduction of modern environmentally friendly and resource-saving technologies, production and sale of new competitive products.

State regulation of innovation is carried out by: identifying and supporting priority areas of innovation at the state, industry and regional levels; formation and implementation of state, sectoral and regional innovation programs; creation of normative-legal base and economic mechanisms for support and stimulation of innovative activity; protection of rights and interests of innovation subjects; financial support for implementation of innovative projects; establishment of preferential taxation of subjects of innovation activity; supporting the functioning and development of modern innovation infrastructure.

Accordingly, the state ensures interaction of science, education, production, financial and credit sphere in the development of innovation, makes effective use of market mechanisms to promote innovation and entrepreneurship in research and production.

9.2. The essence of scientific and technological progress and main directions of its development

In the process of innovative activity there is a practical use of innovations in the enterprise and production and launch of new competitive products begins. Expanding the consumption of scientific advances in production leads to the transition to mass use of innovative products that characterize the development of scientific and technological progress.

Thus, the innovative activity of enterprises is an important center for the development of scientific and technological progress. If a newly created innovative product is introduced into production, the task of research institution is to develop another innovative product. This characterizes formation of the principle of continuity of the innovation process as the basis for the development of scientific and technological progress, from the creation of an innovative product to its mass application in manufacturing sector.

The concept of scientific and technological progress is primarily associated with technological application of science, which determines development of productive forces through the use of scientific and technological developments. Thus, scientific and technological progress (STP) is the basic and determining factor in the development of production.

Scientific and technological progress is a continuous process of obtaining and accumulating scientific knowledge, their materialization in the development of technics, technology and their introduction into production. Therefore, STP should be considered as a system that covers three interrelated stages: science, technology, and production. STP is also more important means of solving socio-economic problems, namely: environmental protection, improving working conditions, improving welfare of the population.

STP is characterized by both evolutionary and revolutionary forms of improvement of means of production, technological processes, and final products. The evolutionary form of STP is characterized by gradual continuous improvement of technical means and technologies, accumulation of these qualitative changes in technical and technological base of enterprises. This process can take a long time. The revolutionary form of STP is associated with the emergence of fundamentally

new scientific and technical ideas and on this basis a rapid change in the equipment, technology and range used.

Scientific and technological progress plays an important role in improving means of production, as it covers basic theoretical research, applied research, design and creation of samples of new technology, its development and industrial production, as well as implementation in the national economy.

Currently, the following areas of scientific and technological progress are identified:

- electrification of industries providing all spheres of production and social life with highly efficient means of computer technology (up to the use of principles of artificial intelligence), satellite communication systems;
- comprehensive automation of all sectors of the economy on the basis of electrification: introduction of flexible production systems, industrial robots, computer-aided design systems, automated process control systems;
- application of advanced basic technologies low-stage processes and wastefree production, application of technological lines and machine systems;
- development of fundamentally new technologies: membrane, laser, plasma, vacuum, detonation, etc.;
- creation and use of new materials that have new properties: superconductivity, radiation resistance, resistance to wear, superpure materials with a set properties;
- accelerated development of biotechnology, which contributes to the creation of waste-free technological processes, increasing the production of raw materials, food resources;
- chemicalization of production contributes to rational use of natural resources, expanding material and raw material base of production, improving product quality; ensures the use of synthetic chemical materials for technical needs, in the manufacture of packaging, use of chemicals in production processes to accelerate them;
 - development of accelerated infrastructure as a special area of scientific and

technical process that forms external conditions of operation of enterprises (production, environmental, financial and credit systems, etc.).

9.3. Evaluation of the effectiveness of innovations

Technical innovations have a decisive impact on economic development and, in addition, introduction of technical innovations requires investment of significant funds, it is important to assess the economic efficiency of these measures.

The only generalizing indicator of economic efficiency of any group of technical innovations is the economic effect, which characterizes the absolute value of exceeding the value of the expected (actual) results over the total cost of resources for a given calculation period. Depending on the range of tasks, magnitude of the economic effect can be in the following forms - national (general effect under the conditions of use of innovations) and economic (effect obtained separately by the developer, producer and consumer of technical news or innovations).

The national economic effect is determined by comparing the results of the application of technical innovations and all the costs of their development, production and consumption; it reflects the effectiveness of a group of technical innovations in terms of their impact on final indicators of economic development.

Economic (commercial) economic effect, calculated at certain stages of reproduction cycle "science-production-operation (consumption)", allows to assess the effectiveness of certain technical news and innovations in view of the market economic interests of individual research (design) organizations, producer enterprises and consumer enterprises.

The first form of economic effect as an indicator is used at the stages of justification of development and subsequent implementation of new technical solutions and selection of the best option, and the second - in implementation of news (innovations), when already known prices for new scientific and technical products and production. Despite the differences between two forms of expression of economic effect, methods of their calculation are identical; the B effect is defined

as the difference between the results (products, work, services in the valuation) and the cost of achieving such for a certain calculation period, according to the formula:

$$E_t = P_t - B_t$$

where P_t - the cost of results from innovations for a certain period, UAH B_t - costs for the introduction of innovations for a certain period, UAH.

Since the calculation period has a significant duration, results and costs for each of its years have to be determined by taking into account the time factor, i.e., lead to one point in time - the calculation year using a special reduction factor (α_t) , calculated by the formula:

$$a_t = (1 + En)^{tp-t},$$

where E_n - the standard for bringing different costs and results (E_n =0,1); t_p - settlement year;

t - the year for which the costs and results are reduced to the settlement year.

The absolute values of the reduction coefficients calculated by this formula (a_t) for the respective years are given in table. 9.1.

By taking into account the time factor, the economic effect in the form of profit from technical innovations is equal to:

$$E_t = \sum_{t=t_n}^{t_k} (P_t - B_t) a_t,$$

where $P_t i B_t$ — valuation, respectively, of the results and costs in the -th year of the settlement period;

 t_n , t_k respectively the initial and final years of the settlement period.

The initial year of the settlement period is the year of the beginning of financing of development of technical news, including carrying out of scientific researches. The final year of the calculation period is considered to be the moment of completion of the entire life cycle of technical innovation, covering the development, development of production and use in the enterprise. It can be determined by the normative (expected) terms of renewal of products or means of labor, by taking into account their technical and economic aging.

Absolute values of reduction coefficients for the corresponding years of the calculation period

Number of years preceding the settlement	αt	Number of years following the estimated	αt
10	2.5937	1	0.909I
9	2.3579	2	0.8264
8	2.1436	3	0.7513
7	1.9487	4	0.6830
6	1.77I6	5	0.6209
5	1.6I05	6	0.5645
4	1.464I	7	0.5132
3	1.3310	8	0.4665
2	1.2100	9	0.4241
1	1.1000	10	0.3855
0	1.0000	15	0.2394

The current costs include costs that are taken into account in accordance with the current procedure for calculating the cost of production, and to simultaneous - capital investments and other costs of one-time nature. In particular, they include the cost of: research, design and technological and design work; development of production and completion of prototypes of products; purchase of equipment, its transportation, installation and adjustment; construction of new or reconstruction of existing buildings and other elements of fixed capital and social infrastructure; replenishment of current capital, which is associated with implementation of technical innovations; funds that are needed to prevent negative social, environmental and other consequences.

The presence of general economic effect from a particular technical innovation does not always indicate the feasibility of its use. Economically beneficial for the country's economy as a whole, a new technical solution may lead to the deterioration of certain economic indicators of individual scientific organizations or enterprises involved in the reproductive cycle "science-production-operation (consumption)". Therefore, it is always necessary to determine not only the total value of the economic effect, but also its share, which should receive each of the participants in the process of creating and implementing technical innovation,

i.e., to calculate economic (commercial) effect.

Under the conditions of functioning of market economic relations between counterparties of production for an estimation of economic (commercial) effect from the created technical news and used technical innovations apply the indicator of the profit which remains at the disposal of the enterprise (scientific organization); it is calculated by the formula:

$$P_t = R_t - C_t - T_t,$$

where P_t - profit that remains at the disposal of the enterprise (scientific organization) in a given year;

 R_t - revenue from the sale of products of scientific and technical or production and technical (consumer) purpose in a given year;

 C_t - cost of production in a given year;

 T_t - total amount of taxes and payments from the balance sheet profit of the enterprise (scientific organization) in a given year.

For the purpose of deeper economic analysis of efficiency of technical news (innovations) it is necessary to calculate and estimate also other derivative measures such as efficiency factor of simultaneous expenses (internal norm of efficiency), term of their payback, etc.

Under modern conditions of building a socially oriented economy, a fundamentally new approach to determining the effectiveness of technical news and innovations becomes possible and necessary. Its essence is to recognize unconditional priority of the criteria of social efficiency and environmental safety of objects of technical news and innovations in relation to the criterion of economic efficiency. The procedural mechanism of comparison and selection of the best of possible variants of technical news (innovations) is carried out in a certain sequence.

Firstly, goals of development, production and use of technical news objects are ranked; the highest rank includes social goals and environmental safety requirements, lower - maximization of economic efficiency.

Secondly, possible versions of technical news of the same functional purpose are tested for compliance with social goals and environmental safety requirements, which are fixed in national and international standards, as well as in targeted social standards - if news does not meet such goals and requirements, they should be rejected regardless of their level of economic efficiency.

Thirdly, at the final stage of the comparison and selection process, only socially and environmentally acceptable (and in this sense effective) versions of technical news or innovations should be considered; the best of them is determined by economic criteria.

Given the peculiarities of efficiency assessment, the whole set of new organizational decisions can be divided into two groups: the first - organizational innovations, implementation of which requires certain (often significant) additional costs (capital investment); the second - those that do not require additional investment.

Determining and evaluating the economic efficiency of organizational innovations belonging to the first group (for example, organization of new specialized or combined production; concentration of production in the enterprise, leading to need to expand, reconstruct or re-equip) as well as new technical solutions. At the same time, one important fact should be taken into account - current costs should include additional transport costs, as well as losses of raw materials and finished products during their transportation and storage.

The effectiveness of cost-effective new organizational solutions (including introduction of a progressive form of organization and remuneration; improvement of certain elements of the economic mechanism - organizational management structures, planning and financing systems; creation of new market structures) is determined mainly by calculating current cost savings additional income. In each case, it is necessary to clearly define range of indicators to assess the effectiveness of a group of cost-effective organizational decisions.

CONTROL QUESTIONS

1. What is the essence of innovations?

- 2. Why is state regulation of innovation necessary?
- 3. What is the essence of innovation processes?
- 4. What is an innovative product (news)?
- 5. What is an innovation (novation)?
- 6. What types of innovations are distinguished depending on the scope of scientific achievements?
 - 7. What are local and global innovations?
- 8. What news and innovations are distinguished by their nature and functional purpose?
- 9. Name two groups in which all innovations are combined in scale and strength of impact on efficiency.
 - 10. What is the life cycle of innovations?
 - 11. Describe three ways to organize innovation.
- 12. The essence, main tasks and features of scientific and technological progress.
 - 13. What are main directions of scientific and technological progress?
 - 14. Indicators of economic efficiency of innovation in different industries.
- 15. Discover the essence of the procedural mechanism of comparison and selection of the best possible options for news (innovations).
 - 16. What is the initial year of the settlement period?

TESTS

- 1. Newly created or improved competitive technologies, products or services, as well as organizational and technical solutions of production, administrative, commercial or other nature, which significantly improve structure and quality of production or social sphere are:
 - a) innovation;
 - b) innovation activity;
 - c) innovation processes;
 - d) all answers are correct.

- 2. Various forms of activation of human factor, including new forms of professional training of personnel, stimulation of their creative activity, improvement of living and working conditions are:
 - a) technological innovations;
 - b) organizational innovations;
 - c) economic innovations;
 - d) social innovations.
- 3. According to the scale and strength of impact on the efficiency of certain parts of social production innovations are divided into:
 - a) local;
 - b) global;
 - c) large-scale;
 - d) regional.
 - 4. Scientific and technical progress is:
- a) use of results of scientific research and development that is aimed at improving the process of production, economy, legal and social relations in the field of science, culture, education and other spheres of society;
- b) the continuous process of obtaining and accumulating scientific knowledge, their materialization in elements of technology, introduction of the latter into production and all spheres of life;
- c) improvement of existing and application of new methods and forms of organization of production and labor, elements of economic mechanism in all parts of economic management;
 - d) all answers are correct.
 - 5. The following forms are accepted for scientific and technical progress:
 - a) evolutionary;
 - b) periodic;
 - c) revolutionary;
 - d) constant.

- 6. Gradual continuous improvement of traditional technical means and technologies is characterized by:
 - a) a revolutionary form of STP;
 - b) an evolutionary form of STP;
 - c) scientific and technological revolution;
 - d) a permanent form of STP.
 - 7. Innovation processes are:
- a) a set of qualitatively new, progressive changes occurring in the production and economic system;
 - b) changing needs of society as a whole and individual consumer groups;
- c) transformation of scientific knowledge into physical reality, which ends in space and time;
- d) a period of time between the emergence of news and its implementation in innovation.
 - 8. Development of production of new types of products is:
 - a) organizational innovation processes;
 - b) economic innovation processes;
 - c) product innovation processes;
 - d) social innovation processes;
- 9. The generalizing indicator of economic efficiency of any innovations serves:
 - a) economic effect;
 - b) national economic effect;
 - c) household economic effect;
 - d) profit that remains at the disposal of the enterprise.
- 10. What indicator of economic efficiency of innovations is determined by comparing results of innovation and the cost of their development, production and consumption and reflects the effectiveness of a group of innovations in terms of their impact on final indicators of economic development:
 - a) economic effect;

- b) national economic effect;
- c) household economic effect;
- d) profit that remains at the disposal of the enterprise.

MODULE III. ECONOMIC RESULTS OF ENTERPRISE'S ACTIVITY AND ITS DEVELOPMENT

TOPIC 10. COSTS OF THE ENTERPRISE AND PRODUCT VALUE

- 10.1. The concept of production costs and cost value.
- 10.2. Classification of production costs.
- 10.3. Methods of calculating the cost of production.

10.1. The concept of production costs and cost value

The economic activity of the enterprise requires the use of production resources: raw materials, labor, machinery, equipment, facilities, etc. The funds of the enterprise that are associated with the formation of the necessary resources (factors of production) and their usage form its costs. The costs that are incurred by the company have different directions, also they are heterogeneous in content and in period of implementation. All costs of the enterprise for a certain period can be divided into two groups: *capital (investment)* and *current*.

Capital - is a one-time cost of the enterprise for the purchase of fixed assets, intangible assets or other assets that are used for a long period, which value is reimbursed usually by amortization.

Current costs arise in the process of operating activities, that is why they are called operating costs in practice. Current (operating) costs are cyclical and constant. The first ones are repeated with each cycle of product production (basic materials, technological energy, wages of production workers). Their value depends on the

intensity of production. Constant running costs are required constantly to manage and maintain the operating system of the enterprise in a state of readiness (maintenance of management staff, machinery and equipment, structures and buildings, rent, etc.).

According to the object of formation, there are total (general) costs and per unit of output. *Total costs* include all operating expenses for a given period. If the output is manufactured continuously or in batches, costs per unit of output are calculated as *average*. The cost of the product is *individual* in unit production. Since costs are the function of production volume (operating activity) with certain elasticity, there is a concept of *marginal costs*. They characterize the increase in costs per unit of production growth:

$$C_m = \frac{\Delta C}{\Delta N}$$
,

where C_m - marginal costs;

 ΔC - increase in total costs;

 ΔN - increase in output in physical term.

Marginal costs are the costs on the last unit of production at the time of manufacturing output (in physical term).

Average costs are calculated in case of determining the cost of production (in the process of calculation), and marginal costs are used to analyze the feasibility of changing in the volume of production.

Cost as an economic category is inherent in commodity-money relations. It arose when there was a need to determine how much it costs to produce a product and with what profit or loss it can be sold.

Thus, the *cost of production* is a monetary expression of the costs of the enterprise for the production and sale of products. This is a complex economic indicator that combines the costs of tangible labor (i.e., the cost of consumed means of production) and the cost of living labor (i.e., the cost of wages of workers).

The cost of production is an important generalizing indicator that characterizes the efficiency of the enterprise. It reflects all aspects of production and

economic activities of the firm. The better company works, the more economical and rational it uses its own resources, the lower cost of manufactured products.

The cost performs as the basis of the price of the product and its lower limit for the manufacturer to ensure the process of reproduction of production. The company cannot set a price lower than the production cost, because in that case it will incur losses.

During the calculation of the cost of production, it is important to determine the composition of costs that are included in it. It is known that the costs of the enterprise are reimbursed by its two own sources: costs of production (gross expenditures) and profit. Therefore, the question about the composition of costs that are included in the cost is an issue of their delimitation between these sources of reimbursement. The general principle of this distinction is that the cost should reimburse the costs of the enterprise, providing a simple reproduction of all factors of production: objects (subjects), means of labor, labor and natural resources.

Depending on researches, purposes of the analysis of activity of the enterprises distinguish individual and sectoral costs of production.

Individual costs of production perform as a real reflection of the company's costs for production and sale of products.

Sectoral costs reflect the total cost of production and sales of all enterprises in the industry i.e., are the average cost of production in the industry.

The cost of production is influenced by a large number of factors that take into account the specifics of each industry and individual enterprise. The high level of production costs may indicate the presence of outdated technological equipment, irrational use of working time, low productivity, high material consumption of products, expensive raw materials or high transport costs, unproductive technology, high administrative costs, imperfect market research.

During the economic analysis there are planned and actual costs.

Planned costs reflect the individual costs of a particular enterprise, which are planned on basis of the costs standards, tariffs, prices and rates of the current period.

Actual costs - are expressed in monetary terms of the individual costs of a particular enterprise under these conditions. In comparison with planned ones, the actual costs are calculated in the process of operational, technical and accounting costs for work and manufacture.

In most production processes, costs and output are not one-time actions. Expenses are incurred throughout the operating cycle and production and sales (realization) - upon its completion. Therefore, it is necessary to distinguish between the costs at the entrance of the operating cycle (for the purchase of raw materials and other factors of production), during the production cycle and the costs that are attributed to the final and sold products. Expenses that are incurred at all stages of the operating cycle in a certain (reporting) period and not included in the cost of sold goods and financial results in the same period form the *cost of inventories* (raw materials, work in progress) and inventories of final products, which are important components of the assets of the balance sheet of the enterprise.

10.2. Classification of production costs

The costs of the enterprise that are associated with operating activities are different, so they are classified according to certain characteristics (Table 10.1).

In economic terms, costs are divided into homogeneous elements that have single economic essence and form the basis for planning and accounting. These are material costs, wages, social security contributions, amortization deductions and other expenses. The grouping of costs by economic elements is the same for all industries and enterprises of the national economy. This grouping of costs characterizes their resource structure and has the great economic importance, so these costs have to be reflected in a separate section of the financial and statistical statements of the enterprise.

The division of costs by costing items gives a possibility to determine the cost of production. Expense items (material costs, labor costs, other direct costs, general

expenses of production) at individual enterprises may be more extensive and specified taking into account the specifics of production and calculation methods.

According to the method of assignment to certain types of products, costs are divided into direct and indirect. *Direct costs* are directly related to the production of a particular type of product and can be directly included in the product value. For example, the costs of raw materials, packaging that were spent on production, etc. *Indirect costs* cannot be fully and directly taken into account during the calculation of the cost of certain products, because they are not related to the manufacture of specific products. They are related to the production process as a whole: salaries of service and management personnel, maintenance and operation of buildings, structures, machines, etc. The division of costs into direct and indirect depends on the level of specialization of production, its organizational structure, methods of rationing and accounting.

Depending on the volume of production there are *variable and fixed* costs. *Variable costs* - costs, the total amount of which depends on the volume of manufactured products for the current period. For example, the cost of raw materials, packaging, etc. *Fixed costs* - costs, the total value of which does not change for the current period. Fixed costs include the cost of maintenance and operation of buildings and structures, organization of production and management. In practice, the group of fixed assets also includes costs that change insignificantly due to changes in production.

 $Table\ 10.1$ Classification of current costs of the enterprise

Criterion of classification	Type of costs	
1. Economic content	material costs, wages, social security	
	contributions, depreciation, other expenses	
2. Costing items	material costs, labor costs, other direct costs,	
	overhead costs	
3. Method of assignment of current costs	direct, indirect	
to cost value		
4. Dependence on the level of production	variable, fixed	
5. The ability to be under control	regulated, unregulated	
6. Dependence on decision-making	relevant, irrelevant	
options		

7. Connection with the production	production, non-production
process	
8. The method of accounting during the	expenses that are related to the cost of
calculation of financial result	production and costs of the period

According to the ability to be under control, costs are divided into *regulated* and *unregulated*. Regulated costs are under control and influence of the responsibility center, where their level is formed. In conformity with regulated costs, unregulated ones are beyond the scope of such impact. For example, the manager of a certain production site may affect the level of wages, costs of materials, tools and some other costs to some extent. Therefore, they are regulated for this section. At the same time, the head of the precinct as a center of responsibility cannot influence the amount of depreciation deductions, rent for leased fixed assets, and costs for their maintenance (these costs are unregulated).

Depending on decision-making options costs are divided into *relevant and irrelevant*. Relevant costs depend on alternative management decisions and are taken into account during determining their comparative effectiveness. Irrelevant costs do not depend on alternative management decisions and are not taken into account in comparative calculations. For example, in consideration of two options for purchasing machines of different power and processing technology, the relevant ones will be such operating costs as cost of electricity, technological tools, depreciation, etc. However, the costs of production management, maintenance of buildings, structures, administrative and other similar costs do not depend on these options. In this case, they are irrelevant, so it makes no sense to take them into account.

In connection with the production process there are *production* and *non-production* costs. Production costs arise during to the implementation of the production process and its maintenance (direct material costs, salaries of production staff, and general expenses of production). Non-production costs are not directly related to the production of products due to the performance of functions. These are costs of managing the enterprise as a whole, general maintenance, product sales, etc.

Depending on the method of accounting during the calculation of final result costs are divided into ones that are related to the cost of production and costs of the period. Product costing includes partial cost, i.e., costs that are associated with the sale of products are not included in its cost. That part of operating costs, which is not included in the cost of production, is considered to be *the cost of the period*. During the process of determination, the financial result of the enterprise for a certain period is deducted from revenue as well as the cost of sold goods. This simplifies the process of calculating the cost of production for operational needs, reduces the cost of inventories of work in progress and products in the warehouse, and allows the reimbursement from all non-production costs in the reporting period without relating them to inventories.

According to the Law of Ukraine "On Accounting and Financial Reporting in Ukraine" and the provision (standard) of accounting "Costs" the cost of sold goods (products, services) consists of the cost production of products (works, services), which were sold during the reporting period, unallocated fixed general expenses and excessive productive costs.

Cost of production includes:

- direct material costs, which include cost of raw materials and other materials that form the basis of products, purchased semi-finished products and components, additional and other materials that can be directly connected with a specific cost object;
- direct labor costs, which include wages and other payments to workers that are engaged in the production of products that can directly refer to a specific cost object;
- other direct costs that include all other production costs that can be directly connected with a specific cost object, including social security contributions, rent for land and share contributions, depreciation, etc.;
- overhead expenses that include costs of production management (remuneration of the management of shop floors, sections, etc.); amortization of fixed assets and intangible assets of general production purpose; costs for improving

technology and organization of production; costs for heating, lighting, water supply and other maintenance of production facilities; cost for maintenance of production process; on labor protection, safety and environmental protection, etc. Overhead expenses are divided into fixed and variable.

According to accounting standards, not all costs are included in the cost of sold goods. Expenses that are related to operating activities, which are not included in the cost of sold goods, are divided into: administrative (general expenses for the maintenance and management of the enterprise); marketing costs (costs that are associated with the sale (realization) of products); other operating expenses.

Calculation of cost of finished (marketable) and sold products. The first indicator has an additional value and is used for domestic needs (determining the amount of working capital, the dynamics of the cost of production, the cost of sold goods, etc.).

The cost of finished products is the production cost of products that are ready for sale. The cost of finished products is calculated as the cost of production.

The cost of sold goods is used to calculate the company's profit and indicates in the financial statements as an important indicator.

10.3. Methods of calculating the cost of production

In the system of technical and economic calculations at the enterprise an important place is occupied by *calculation*, i.e., *calculation of the cost of individual products*. Calculation is needed to solve many economic problems: justification of product prices, calculation of profitability, and analysis of production costs of the same products at different enterprises, determining the economic efficiency of various organizational and technical measures.

Regardless of the specific features of production and goods, the calculation involves the solution of the following methodological tasks: the definition of the object of calculation and the choice of calculation units, the definition of costing items and methods of their calculation.

The object of calculation is the product or service, the cost of which is calculated. The objects of calculation at the enterprise include: main, ancillary products (tools, energy, spare parts, etc.); services and works (repairment, transportation, etc.). The main object of calculation is finished products that are delivered outside the enterprise (to the market). Calculating of other products is ancillary.

The unit of calculation is chosen for each object of calculation, i.e., unit of its quantitative measurement (quantity, weight, area, volume). For example, the object of calculation – tractors, i.e., the unit of calculation – one tractor, hence, coal - one ton, electricity - one kilowatt-hour, etc.

In the world practice of management, different methods of calculation are used. This is due to the different purpose of calculations, type of production and traditions of internal management. Full and incomplete calculations are used very often.

During the usage of *full cost calculation method*, all types of costs related to the production and sale of products are included in the calculation. This method was traditional for domestic manufacturing enterprises.

Incomplete cost calculation method is widely used, i.e., the calculation does not include all the costs of production and marketing. Part of the indirect costs are not attributed to the cost of individual products, but are directly deducted from revenue for a certain period during determination of profit. The classic method of calculating partial costs is the so-called "direct-cost" method, when the cost of individual products includes only direct costs, and indirect for a certain period.

It significantly affects the methods of calculating the breadth of the product range of the enterprise and the specifics of production. The most accurate and methodologically simple is calculation in single-product production. The unit cost of production is calculated by dividing the total costs for a certain period by the number of manufactured products. However, in the domestic industries of the economy, multi-product production dominates. Under these conditions, the

calculation is significantly more complicated and less accurate, because there is a problem of correct allocation of indirect costs.

During the process of calculation, costs are grouped by costing items, range of which depends on the characteristics of production. When setting cost items, the following requirements have to be met: the maximum share of costs that are included in the cost has to be calculated directly for individual products; articles of indirect costs have to be formed in such way that they can be reasonably distributed among the products.

During the calculation of cost of production at enterprises of different industries, the following nomenclature of cost items is formed:

- 1) Raw materials and supplies;
- 2) Technological energy;
- 3) Basic wages of production workers;
- 4) Additional wages of production workers;
- 5) Deductions for the social needs of production workers;
- 6) Maintenance and operation of machinery and equipment;
- 7) Overhead costs;
- 8) General expenses;
- 9) Preparation and development of production;
- 10) Non-production costs (marketing costs).

The sum of the first seven cost items is the shop price, nine - production and all items - the total cost. In some sectors of the economy (especially in industry) the nomenclature of costing items deviates from the defined above. So, for mechanical engineering articles "Purchased products, semi-finished products, production services of third-party enterprises and organizations", "Operation of tools and devices of a special purpose" are specific, in some industries the article "Semi-finished products of own production" (ferrous and nonferrous metallurgy).

CONTROL QUESTIONS

- 1. On which two groups all costs of the enterprise are divided in?
- 2. Differentiate costs by the object of formation.
- 3. Discover the essence of cost as an economic category.
- 4. The essence and economic significance of individual and industry costs.
- 5. How to distinguish the cost during the economic analysis?
- 6. Which types of costs exist according to the economic content?
- 7. By which characteristics operating costs of the enterprise are classified?
- 8. List the main cost items that are included in the production cost of production.
 - 9. Why does the company calculate the cost of production?
- 10. Explain the essence of different methods of calculating the cost of production.
- 11. What nomenclature of costing items is formed during calculation the cost of production in enterprises of different industries?
 - 12. What are cost object and cost unit?

TESTS

- 1. The monetary expression of current costs of the enterprise for production and sale is:
 - a) operating expenses;
 - b) investment costs;
 - c) cost of production;
 - d) total costs.
- 2. In order to control expenditure of funds on the basis of both actual and data obtained by calculation determine:
 - a) expected cost;
 - b) planned cost;
 - c) actual cost;

- d) there is no correct answer.
- 3. According to the method of assignment to certain types of products costs are divided into:
 - a) simple and complex;
 - b) direct and indirect;
 - c) fixed and variable;
 - d) individual and public.
- 4. Costs, the total amount of which does not depend on the number of manufactured products, are called:
 - a) fixed;
 - b) variable;
 - c) medium;
 - d) direct.
 - 5. In connection with production process distinguish costs:
 - a) production;
 - b) non-production;
 - c) regulated;
 - d) unregulated.
 - 6. The cost per unit of output is defined as:
- a) the ratio of the cost of all products of the relevant type to its volume in kind;
 - b) the ratio of the cost of all products to its volume in monetary terms;
 - c) percentage of individual cost items to their total amount;
 - d) the ratio of the cost of all products of the relevant type to the total cost.
 - 7. Calculation involves solving the following methodological tasks:
 - a) definition of the object of calculation;
 - b) choice of calculation units;
 - c) definition of costing items;
 - d) choice of calculation method.
 - 8. Products, works or services, cost of which is calculated is:

- a) unit of account;
- b) method of calculation;
- c) object of calculation;
- d) there is no correct answer.
- 9. The methods of calculating the cost of production do not include:
- a) normative method;
- b) parametric method;
- c) calculation and analytical method;
- d) generalizing method.
- 10. The choice of method of calculating the cost of production is significantly influenced by:
 - a) breadth of the range of products of the enterprise;
 - b) specifics of production;
 - c) production capacity of the enterprise;
 - d) all answers are correct.

TOPIC 11. PRICING OF PRODUCTS

- 11.1. Economic content and classification of prices.
- 11.2. Principles of product pricing.
- 11.3. Development and substantiation of price strategy of an enterprise.

11.1. Economic content and classification of prices

In terms of commodity-money relations, products are produced and sold as goods that meet social needs. Commodity form of social production is a precondition for the law of value, which requires equivalence in the exchange of economic results between different producers. Thus, the law of value is the basic law of pricing.

Price is a manifestation of the law of value, which through the mechanism of market relations, i.e., through the ratio of supply and demand, fluctuations in prices

and profits affects the development of production and increase of production of necessary products. It should be noted that the most complete law of value can regulate economic equilibrium in conditions of market competition of producers. And, in the opposite way, the monopoly of individual enterprises or state in pricing significantly reduces the effectiveness of economic levers that determine the formation of the most favorable proportions in the production of certain products.

Price is a monetary expression of the value of goods (products and services). It always fluctuates around the value that reflects the level of socially necessary costs of live and tangible labor for production.

The cost of a product forms its price, but these values do not match quantitatively. This is due to the fact that the price reflects not only on the value of the product, but also on the specific conditions of its sale. Therefore, the value of the product is only the basis around which its price fluctuates. Thus, product prices are expressed in monetary terms by socially necessary costs of its production, but in the form of price that is already laid down in the possibility of its quantitative deviation from the value.

Pricing of products is based on the level of its cost that reflects the actual cost of production. According to this, economically reasonable sales prices should exceed the level of its cost that provides not only reimbursement, but also receipt of the necessary savings.

The price of products includes *cost and profit*. The ratio of the components of the price characterizes its structure that reflects the distribution of the cost of production. In the process of pricing, the optimal ratio of cost and profit should be established. Profits at farms are used to increase production, taxes, insurance payments, etc.

Price is an important economic category that affects both the development of the economy as a whole and the efficiency of an individual enterprise. It is an important factor that determines the state of the financial sphere and influences the solution of social problems. Price is the most important economic indicator of the enterprise in a market economy.

Price is formed under the influence of many factors that do not depend on the company in a competitive market. However, it is necessary to properly assess the state of the market, the company's ability to influence the prices of its products and the factors which determine them. In the process of enterprise activity improve technologies, organization of production and labor, product quality. Evaluation of the effectiveness of this activity is ultimately determined by the selling price of products.

Price is a tool to competition, redistribution of material, financial and labor resources. A market economy can function effectively only at free competitive prices, which are formed under the influence of supply and demand, other factors. During the solution of pricing issues, the following main components of the microenvironment of the enterprise are analyzed: the market for products and sale prices; production and sales costs, including taxes and other payments, as well as the terms of delivery and provision of the enterprise with resources; the effectiveness of measures and activities of the enterprise as a whole. They also take into account factors that characterize the macro environment of the enterprise: inflation, monetary, financial and tax policy of the state, possible measures for state regulation of prices, the main risks of the external environment that may affect prices.

Necessary conditions of market pricing are: economic independence of enterprises - business entities, commercial basis of relations between them, legal guarantees of contractual relations, presence of a competitive environment, ability to achieve market equilibrium. In the market economy life of the enterprise is largely determined by the chosen pricing strategy. The complexity of practical pricing is that price formation is carried out under the influence of a combination of economic, political, psychological and social factors that necessitate interests of producers, consumers and state.

Prices that are used in a market economy perform three main functions: accounting and measuring, distribution and stimulation. *The accounting and measuring functions of price* are means of accounting and measuring the cost of production of certain products or provision of various services. *The distribution*

function is reduced to the fact that with the help of prices redistribution of net products is created in the field of material production. The stimulating function of the price is used for motivation of increase of efficiency of management, maintenance of necessary profitability (revenue) to the enterprise that works normally, the intermediary and the seller of the goods of industrial and consumer appointment. The unit price of a product (individual service) is formed from certain elements that reflect the structure of the respective types of prices that are used by different economic entities.

By performing these functions, prices have to reflect socially necessary costs of production, take into account the quality and effective demand on products. They can help increase production efficiency under such conditions.

Traditionally, the following types of prices are used in domestic practice: wholesale; purchasing of agricultural products; estimated prices in construction; retail prices in trade; transport tariffs; tariffs for various services. Contracted and free prices are used to stimulate the development of new highly efficient products. *Contracted* prices are set by mutual agreement of producers and consumers. *Free prices* are set under the influence of market conditions without any administrative influence.

Regulated prices are also used in a market economy. The value of these prices is set by taking into account the restrictions and regulatory influences of the state. It includes prices for: electricity and heat; pumping and transshipment of oil; gas; nuclear fuel products; defense products; precious metals and stones. This also includes tariffs for freight transportation and loading and unloading operations on rail transport; tariffs for transportation of passengers, luggage and post by rail; tariffs for postal and telecommunication services.

The price system is used in trade and economic relations of economic entities and classified according to the following characteristics:

1. According to the nature of the turnover that is served, there are *wholesale* and *retail* prices.

Wholesale prices are prices on which enterprises sell products to other enterprises and sales organizations in large batches (wholesale). Wholesale also includes purchase prices on which agricultural producers sell their products to enterprises for further processing. In international trade, transactions are often essentially wholesale transactions and carried out at wholesale prices. The exchange price for various types of products is also considered as a wholesale.

Retail prices are prices on which enterprises and trade organizations sell their products to the population. The selling price for the products of public catering enterprises is a form of retail price.

In the field of circulation there are discounts - margins (wholesale, retail). The difference between the selling price of the goods by supply and marketing organization and wholesale price of the supplier's enterprise is supply and marketing surcharge. The difference between the wholesale purchase and sale prices, between the wholesale and retail price is in a trade margin (discount).

2. Depending on the level of state regulation: *free (market)* and *regulated* prices are distinguished.

Free (market) prices are prices that are set in the market on the basis of demand and supply of goods. Free prices include: demand price and supply price. Demand price - the price in the market of buyers. Supply price - the market price, which is included in the offer (official offer of the seller) without discounts.

Regulated are prices that are set under the regulatory influence of government. Regulated prices can be: guaranteed, recommended (indicative), limit, mortgage, threshold (protective). Marginal and fixed prices can also be distinguished among the regulated ones. Fixed - prices that are set at a certain level and may change at the discretion of the entity that appointed them.

3. At signing the contract prices are divided into *firm (fixed)*, *movable* and *variable* are established.

Firm (fixed) are the prices which are established at the moment of signing of the contract and do not change during all term of delivery of goods.

Movable is a price that can be revised after signing the contract if market prices change. In this case, a precaution is made to increase or decrease the price. When setting a fixed price, the source of information that can be used to change the price is indicated. Such prices are set for raw materials, industrial or agricultural goods that are supplied on the basis of long-term contracts.

Variable prices are prices that are determined at the time of the contract by revising the initial price and taking into account changes in production costs during the manufacture of the product (prices for resources, inflation, etc.). Thus, the basic price in the contract, its structure (a share of variable and constant parts, profit) is fixed, the method of calculation of the price is resulted. Such prices are set for goods with long production times and widely used in world trade. In the contract may be predicted that the change applies only to certain cost elements (for example, materials), or not to the entire term. Sometimes a mixed method of fixing the price is used, i.e., one part of the price is fixed and the other is variable.

4. According to the method of obtaining information, world prices are divided into *reference posted* and *estimated*.

References posted prices are commonly used and given in special sources of information. These include list prices and prices that are concluded in large centers of international trade. Reference posted prices are those that are published in various printed publications (economic newspapers and magazines, bulletins, catalogs, price lists). Price lists are a type of reference posted prices that are published in price lists (guidebook of firms-manufacturers). Reference posted prices can be nominal (not related to actual commercial transactions) and prices that reflect transactions of the past period. On the basis of reference posted prices, prices of real transactions and prices of offers of large firms are defined.

Estimated prices are used in contracts for non-standard equipment that is manufactured for individual orders.

5. Depending on the type of market, there are prices of *commodity auctions*, *stock-exchange quotations*, *biddings*.

Commodity auctions are auctions that specialize in the sale of certain goods. They are held once or several times per year. Commodity auction prices are prices of public sale of a consignment of goods (lot) at the maximum offered level. Many buyers and one or more sellers take part in the auctions. Auctions are held for the sale of antiques, precious stones, fur, tea, etc.

Stock-exchange quotations are the prices of commodity and stock exchanges. At commodity exchanges (permanent markets for homogeneous goods) sells oil, non-ferrous metals, some agricultural products, including grain, timber and others. More than 50 types of goods are sold on exchanges (15-20% of exports). Stock-exchange quotations are the prices of real contracts, which are used to set prices in regular contracts at the same time. Auction price levels and stock-exchange quotations are published in special bulletins that are issued by auction and stock-exchange committees.

Bidding prices are prices of a special form of specialized trade that provides issuance of an order for the supply of goods or receipt of a contract for the performance of works on the terms that are announced in a special document (tender). The tender provides the involvement of proposals from several manufacturers (performers) for a specified period in order to ensure the most favorable conditions for the organizer of the future contract. Tenders are held for technically complex products (energy equipment), purchase of large consignments of military equipment (tanks, aircraft, etc.), construction of large facilities.

- 6. *Intra-firm (transfer) prices* are the prices that are used in sale of products within the firm or related firms.
- 7. Under the terms of delivery distinguish: *net prices* (prices at the point of sale) and *gross prices or invoice prices*. The last ones are ex-works wholesale prices, which are determined by taking into account terms of sale, insurance and other costs. The term ex-works indicates to which point transport costs are included in the price. For example, the ex-works price of the station of departure means that transport costs are included in the price to the station of departure.

Prices are an extremely important part of the economic mechanism, especially in market conditions. They have a significant impact on the economic efficiency of production; determine the pace of expanded reproduction and living standards. The level and dynamics of prices largely reflect on product quality, efficiency of land use, material and labor resources.

11.2. Principles of product pricing

The pricing process is influenced by the whole set of factors to some extent, which are divided into two groups: general and specific. *General factors* that determine prices for goods (products, services) include: *flexibility of demand*, rising of prices leads to a decrease in demand and vice versa; *high technical parameters and low costs of operation* are important indicators for a potential buyer and contribute to the growth of demand for the product; *evaluation of potential purchases in view of their effectiveness*, factors that influence on buyer's choice of goods, according to the degree of their importance are placed in the following sequence: quality, maintenance, price; *the ability to make finished product more attractive to buyers*: affordable prices that are consistent with the quality of the product and are more attractive to potential buyers.

Specific pricing factors for main types of products for industrial and technical purposes are acting objectively (raw materials, basic and auxiliary materials, components and units, basic and auxiliary equipment).

Raw materials are subject of processing that facilitates their usage or transportation or brings them in-line with current standards. When selling raw materials on the market, their prices are set by taking into account all requirements of standards, demand and sales.

Basic materials are usually purchased in accordance with the specification developed on the basis of current standards. The presence of established standards is the main factor in pricing of basic materials.

Auxiliary materials perform almost the same functions in various industries and have a steady demand. Therefore, the pricing of such materials is influenced by existing demand, their quality indicators and production volumes.

Due to the natural desire of buyers to limit number of suppliers of *components* and units, the latter are usually purchased directly from manufacturers, who set the price for them based on the image of their products on the market. Some components and units are quite noticeable in the finished product, which allows manufacturers to sell them at a favorable price.

Under market conditions, various pricing methods can be used.

1. The calculation of the price by the method of "average costs plus profit" is the simplest and widely used in practice. According to it, the price (PRC) is determined by the formula:

$$PRC = AC + P$$
,

where AC – average costs (cost of production); P – profit margin that is set by the enterprise (organization) or limited by the state as marginal level of profitability of goods and services.

- 2. The calculation of the price on the basis of the target (fixed) profit is considered as a kind of method of determining the price on the basis of average costs (cost of production). Its peculiarity is that the price is strictly dependent on the total amount of profit that the company expects to receive from the sale of a certain number of products.
- 3. *Pricing that based on the subjective value of goods* is carried out by taking into account the potential (actually identified) demand.
- 4. The method of pricing "by the level of current prices" ("by the level of competition") shows the fact that price is considered and set as a function of prices for similar products of competitors. Depending on the characteristics of product and type of market, this method of pricing has different modifications (setting the price at the level of the current market price or slightly below it; setting the price for a particular product by taking into account prices for similar products and ratio of these products).

- 5. The method of pricing "by the level of demand" involves settlement of the price through a trial sale of goods on the market. This takes into account sales conditions, market conditions and related services. When using this method in different places (segments) of market, prices for the same goods may be different.
- 6. The method of establishing a single price with the included delivery costs means appropriate actions of the enterprise (organization) about inclusion in the price fixed amount of transport costs, regardless of the distance of the buyer (customer).
- 7. The application of the method of setting zonal prices is reduced to the fact that the company (firm) identifies several zones, within which single prices are set depending on the level of transport costs.
- 8. The method of setting prices with the acceptance of delivery costs means that the company (organization) partially or fully carries the cost of delivery of goods in order to stimulate the receipt of orders from customers.
- 9. Setting price discounts seller changes the starting price and sets a certain discount from it by taking into account early payment, purchase of large volumes of products, systematic and off-season purchase, which allows to maintain a stable level of production during the year.

The choice of pricing method and setting a certain price level is the initial stage of developing a pricing strategy and tactics of the enterprise (organization). Further, prices are constantly adjusted (regulated) by the enterprise (organization) and the state, according to changes in market conditions and necessary clarifications of the pricing strategy for different types of products.

Product pricing is one of the most important ways to use economic laws for further development of production. Interests of production require the justification of prices and have to take into account various objective conditions and circumstances, i.e., all pricing factors that determine their level.

11.3. Development and substantiation of price strategy of an enterprise

The complexity of pricing is that prices have to take into account interests of enterprises, individuals and the state. The price level is formed under the influence of complex of economic and social factors. Therefore, the price level that is determined today based on costs, tomorrow it may depend mainly on the psychology and behavior of buyers. In this case, price has to correspond to the quality of the product in some way, which is determined by consumers. If price is high, consumers will believe that they do not receive the equivalent for the spent money. If price of the product is too low, consumers will question its quality, because they know that a lower price means a lower level of quality in most cases. To avoid such problems, knowledge and ability to develop a pricing strategy for each type of product are required.

Pricing strategy - art of managing prices and pricing, setting prices for goods (services) and varying them depending on the position of the product on the market, so that certain goals can be achievable. Thus, pricing strategy is a generalized model of actions in the field of pricing that meet goals of the enterprise and is aimed at achieving its competitive advantages at minimal cost.

The integrated model of the price strategy of the enterprise is developed by taking into account influence of internal and external environment and consists of the basic and auxiliary stages of formation of the price strategy and the period of conditional transition. Here is a brief characteristic of the constituent elements (stages) of the integrated model of pricing strategy of the enterprise.

- 1. The choice of products for analysis in terms of multi-item production. The activity of the enterprise should be focused on obtaining the maximum possible profit from the sale of each type of product. Therefore, the method of forming a pricing strategy should be developed for each product group or an individual product.
- 2. Market segmentation the allocation of buyers into separate categories allows company to create marketing and pricing programs that are most suitable for buyers in each segment. The pricing strategy depends on factors that significantly differ from various market segments.

- 3. Setting goals of pricing. The more clearly company defines its goals, the easier it is to set a price. The goals should follow from the analysis of the company's position in the market and its general goals in a particular segment. Examples of general objectives of pricing strategy of the enterprise can be following: the survival of the company, maximizing profits and increasing market share, ensuring market advantage in product quality, ensuring a certain level of profitability.
- 4. Defining the market model in which the company operates to identify certain opportunities and problems in the field of pricing, which depend on the type of market. The biggest role of pricing is given to the market of monopolistic competition, where is a wide range of prices, and the variety of solutions for their size. The role of pricing is smaller in an oligopolistic market, where is a small number of sellers who react immediately to the pricing policy of competitors. The difficulty of penetrating this market leads to the fact that each entrepreneur focuses not on consumer behavior and costs, but on competitors, i.e., on the benchmarks that are set by price leaders. Its role is insignificant in the market of pure competition, the reason for which is the presence of a market price, which is set due to the large number of sellers and buyers, and the main task is to focus on the dynamics of the market price. The minimal role of pricing in a pure monopoly market, where is only one seller and price can be either lower or higher. For all enterprises, except those that operate in a market of pure competition, it is necessary to have well-ordered methodology for setting the starting price on their products.
- 5. The formation of system of information support of the pricing process at the enterprise aims to respond quickly to changing factors of the marketing environment. The company needs constantly improve the process of collecting and processing information in the following areas: economic value of goods for customers; consumer sensitivity to the price; main value priorities of buyers. The most common reason of price fluctuations is a change in supply and demand prices. Therefore, the next step in forming a pricing strategy should be detailed analysis of the two most important factors of pricing supply and demand.

- 6. Analysis of market demand makes it possible to determine the upper limit of the price. At the same time, indicators of price elasticity of demand for each type of product in specific markets are taken into account; the needs of potential consumers and the usefulness of the product for each segment are studied. Then the nature of demand for the company's products, its level and dynamics, marginal price range for a buyer are investigated. The influence of price change on the image of the enterprise by consumers is determined; the peculiarities of consumers' psychology in the process of purchasing certain products on the market and its competitiveness are analyzed.
- 7. Analysis of production costs involves the study of the cost structure by elements, determining the optimal level of production costs, as well as the lower price level and break-even point of production, which are taken into account during setting the price.
- 8. Monitoring of competitors' prices. Analyzing the prices of competitors' products determine price levels and investigate their compliance with quality indicators. With this goal, the company studies products of competitors to justify the level of price and quality of products that can be offered to consumers in a competitive market.
- 9. Determining the product life cycle. Pricing depends on which stage of the product life cycle it is. At each stage, new consumer segments appear with different price sensitivity that has to be taken into account in the pricing strategy. For goods with a short life cycle, prices are usually set at a higher level than for ones with a long-life cycle. A good strategy at the stage of maturity or decline will keep the maximum possible price and at the stage introduction or growth the price of a product should not be high to increase or maintain its market share.
- 10. Choice of pricing method. An enterprise chooses from a set of existing pricing methods the one that corresponds to the specific goal of its pricing strategy. It is possible to use direct pricing methods: based on the cost of production and sales, real demand by taking into account the conditions of competition and indirect: credit

policy, condition policy, as well as discounts. This choice is based on the use of results of previous stages of product pricing.

11.By taking into account additional factors of influence, pricing is based on identifying those that are not fully taken into account, such as taxes and fees, legislation, availability and value of financial loans, exchange rate and inflation, delivery terms, transportation and other contractual terms with suppliers and intermediaries, the possibility of substitution.

12. Conclusion on the final price. At this stage, it is necessary to make conclusions about the establishment or change of the price of the product, analyze all options for appropriate reactions of consumers, competitors and the state to price modification, anticipate possible risks and minimize their impact. Therefore, when setting the final price, it is advisable to consider several alternatives that may differ in pricing methods, pricing strategies.

13. Control over the implementation of the pricing strategy. The company has to control the pricing process to adjust price in a timely manner, identify possible risks that will make it impossible to achieve the company's goals, take into account contingencies that may significantly affect pricing.

The implementation of the pricing strategy necessitates systematic assessment of the level of achievement of goals and makes informed decisions to set them for the future. By analyzing the degree of achievement of pricing goals, it is necessary to take into account quantitative (financial and economic performance) and qualitative criteria (the company's image in the market, competitive position, consumer attitudes to the product). If the goal is not achieved or achieved partially, it means that important factors that led to the end result were not taken into account or not fully taken. In case of failure, to achieve this goal, it is advisable to return to the study of information support of the process of price formation of goods.

An integrated pricing strategy model targets producers or sellers of goods to make optimal management decisions to set or change the price of their goods. The focus, structure and methods of pricing have general nature, so they are quite suitable for enterprises of various forms of ownership and any scale of economic activity. The main requirement for the application of proposed model is the compliance of the goals and pricing process of the overall marketing strategy that is followed by the company.

CONTROL QUESTIONS

- 1. Explain the essence of the law of value.
- 2. Define the essence of price as an important economic category.
- 3. Which factors influence the price formation in a competitive market?
- 4. Name necessary conditions for market pricing.
- 5. Name and define the essence of the main functions of the price.
- 6. Which types of prices are used in domestic practice?
- 7. On which grounds the price system that used in trade and economic relations of economic entities is classified?
 - 8. Which factors affect the pricing process?
 - 9. Explain the economic pricing methods.
 - 10. Define the essence of the pricing strategy.
- 11. Describe the constituent elements (stages) of the integrated model of the pricing strategy of the enterprise.

TESTS

- 1. The price is:
- a) monetary expression of the value of goods;
- b) production costs;
- c) the amount of money paid per unit of goods;
- d) all answers are correct.
- 2. The price of products includes:
- a) cost;
- b) profit;
- c) demand for products;

- d) all answers are correct.
- 3. Price functions include:
- a) accounting and measuring;
- b) distribution;
- c) stimulating;
- d) predictive.
- 4. The pricing is:
- a) process of justification and approval of prices and tariffs;
- b) process of revising prices and tariffs;
- c) process of determining the price level, their ratio and structure;
- d) all answers are correct.
- 5. The lower price limit is:
- a) cost;
- b) the amount of profit;
- c) supply and marketing margins;
- d) transportation costs.
- 6. Pricing methods do not include:
- a) method of estimating consumer value;
- b) method of rapid reimbursement;
- c) method of obtaining the target rate of return;
- d) there is no correct answer.
- 7. When determining the price of new products use the following methods:
- a) "market skimming";
- b) "costs + profit";
- c) "expected profit";
- d) correct answers a) and c).
- 8. By the method of setting prices are divided into:
- a) state, contractual, free, import;
- b) fixed, free, contractual;
- c) contractual, free, import, regulated;

- d) fixed, regulated, state.
- 9. The art of managing prices and pricing, setting such prices for goods (services) and varying them depending on position of product on the market so that certain goals are achievable are:
 - a) pricing strategy;
 - b) method of pricing;
 - c) price monitoring;
 - d) analysis of supply and demand.
 - 10. The goals of the pricing strategy of the enterprise can be:
 - a) survival of the company;
 - b) maximizing profits and increasing market share;
 - c) ensuring an advantage in the market for quality of goods;
 - d) ensuring a certain level of profitability.

TOPIC 12. FINANCIAL AND ECONOMIC RESULTS OF THE ENTERPRISE

- 12.1. Economic results of the enterprise.
- 12.2. Formation and usage of the enterprise's profit.
- 12.3. The essence and methods of defining profitability of the enterprise.

12.1. Economic results of the enterprise

In the process of production, certain means of production are consumed and material goods are created. The latter are the products of labor, i.e., consumer value, substance of nature that are adapted by human with the help of tools of trade to its needs. The result of labor is mostly materialized in the form of a specific product.

In industrial production, the result (product) of labor is the product, in transport enterprises - the appropriate amount of work that was performed

(transported goods or passengers over a distance), and in communications and banks - services that are provided to legal entities and individuals. Sometimes the product of labor is both the product produced or the work performed, and the service provided (for example, a repaired clock, TV, refrigerator, shoes, etc.).

Most of labor products are suitable for different areas and use in different industries. Grain, for example, can be a raw material for the production of flour, beer or vodka, can be used as livestock feed or seed. The product of labor that exists in a ready-to-eat form, can become a raw material for the production of another product (for example, grapes - for the production of grape juice, wine).

Under the conditions of commodity production and market economy, manufactured products, work that is performed or services that are provided become goods. To constantly meet social needs of planning and accounting of goods that are manufactured for sale are carried out in natural (physical) and cost (monetary) measures. It is important to note that the degree of satisfaction of market needs can be characterized primarily on the basis of indicators of the volume of goods of a certain range and range in kind.

The product range is a list of product names, realization of which is provided by the production plan. The range is a set of varieties of products of each name that differ in relevant technical and economic indicators (size, capacity, performance, design, etc.).

Measuring the volume of production in kind are specific physical units - pieces, tons, meters, etc. In the practice of planning and accounting for the volume of products sometimes conditionally natural (for example, conditional cans, conditional slate sheets, bricks) are used and double natural indicators (for example, the production of steel pipes can be measured in tons and meters, fabrics - running and square meters) are used too.

The volume of production in value terms at most enterprises of various industries is determined by indicators of gross, marketable and net output. The cost of gross output includes the cost of marketable products, as well as changes in the balance of work in progress during the calculation period, the cost of raw materials

and supplies of the customer and some other elements depending on the industry characteristics of the enterprise. Moreover, the dynamics of work in progress is taken into account only in those enterprises, where the duration of the production cycle for the vast majority of products exceeds two months.

Gross output is a value of result of production activities of the enterprise for a certain period. Gross output differs from marketable output by the amount of change in work in progress at the beginning and at the end of the planning period. Work in progress - products in progress: blanks, parts, semi-finished products that are on the workplace, control, transportation, stock, as well as products that are not accepted by the technical control department and not delivered to the warehouse of finished products.

Work in progress is accounted at cost. To convert the balances of work in progress into wholesale prices, two methods are used: 1) the degree of readiness of work in progress on the basis of the ratio of the complexity of the work that is performed and the complexity of the finished product; 2) by coefficients that characterize the ratio of the cost of finished products in wholesale prices and their actual cost. The gross output of the enterprise is calculated at current comparable prices, i.e., constant in a certain period. It determines dynamics of total production and indicators of its economic efficiency.

Gross turnover is the value of all products that were produced during a certain period by all workshops of the enterprise, regardless of whether these products were used within the enterprise for further processing or were sold at the side. Intrafactory turnover is the value of products that are produced by one work shop and consumed by another one during the same period.

An important cost indicator is a marketable product that allows to calculate the volume of production of various types of products and determine the total production at the enterprise, as well as to calculate a number of generalized indicators of its development.

Sold products - products that entered the market in this period and are payable by consumers. The value of sold products is defined as the value of finished products payable in the planning period, semi-finished products of own production and industrial works that are intended for sale at the side (including capital repairs of equipment and vehicles of the enterprise that is performed by personnel), as well as the cost of sold products and work that is performed for own capital construction and other non-industrial farms, which are on the balance of the enterprise.

Cash receipts that are related to the disposal of fixed assets, tangible current and intangible assets, the sale value of currency values, securities are not included in sales revenue and considered as income and taken into account in determining the total profit of the enterprise.

The volume of sold products is calculated on the basis of current prices without value added tax, excises, trade and sales discounts (for exported products - without export tariffs). Sold products, which include works and services of an industrial kind, semi-finished products of own productions are determined on the basis of factory contract prices and tariffs.

The balances of unsold products at the beginning of the year include: finished products in the warehouse (particularly, shipped goods, documents for which are not transferred to the bank); shipped goods, payment term of which has not come; shipped goods that are not paid on time by the buyer; goods on safekeeping at the buyer. At the end of the year, the balances of unsold products are determined only by finished products in the warehouse and shipped goods, payment term of which has not come.

All components of sold products are calculated in sales prices: balances at the beginning of the year - in current prices for the period before the planned one; marketable products and balances of unsold products at the end of the period - in the prices of the planned year.

In order to fuller characteristic of the dynamics of production and indicators of its efficiency (especially labor productivity) for the production program of the enterprise, the volume of net output is calculated. The initial basis for its calculation is the volume of marketable products, value of which excludes material costs and the amount of depreciation, i.e., the cost of tangible labor.

In economic terms, *net output* is a newly created value at the enterprise that characterizes results of use of its own labor potential. Therefore, the indicator of net output should be used to objective assessment of the level of production efficiency and economic activity of the enterprise.

One of the main categories of commodity production is profit, which characterizes relations that develop in the process of social production. *Profit* is the realized part of the value of an additional product that is created at the enterprise. The company receives a profit after the value that is embodied in the created product will be realized and will be expressed in monetary terms. Profit is a part of revenue that remains after reimbursement of all costs for production and commercial activities of the enterprise. In the process of characterizing the excess of revenues over costs, profit expresses the purpose of entrepreneurial activity and is the main indicator of its productivity (efficiency).

12.2. Formation and usage of the enterprise's profit

The main source of formation of financial resources of enterprises that ensure its development is profit. Therefore, the formation of profits and its increase are important for every enterprise - a business entity. Management of these processes has an important place in financial management.

Financing the development of the enterprise indicates the improvement of its material and technical abilities on the basis of extensive use of innovations. All activities of the enterprise are aimed at ensuring the growth of profits in the production and sale of products. Its formation is influenced by the processes which take place in society, in the sphere of production and distribution of gross domestic product.

At the same time, profit is the final indicator, i.e., result of financial and economic activities of the enterprise as a business entity. Therefore, profits reflect its results and are influenced by many factors. There are certain features in the

formation of corporate profits which depend on the scope and type of economic activity, form of ownership, the development of market relations.

The formation of profit as a financial indicator of the enterprise happens in a certain order: firstly, there is a need to determine the financial results (profit) from operating activities, calculate profits from other operating activities, financial transactions, other ordinary activities.

Depending on the formation and distribution, there are several types of profit: gross profit; operating income; profit from other non-operating transactions; total profit; net profit; marginal profit.

Gross profit from production sales. Profit from the sale of products (goods, works, services) depends on the implementation of the main activities of economic entities. Profit is part of sales revenue. However, in contrast to the revenue, the receipt on the company's account is registered regularly, the amount of profit is determined only for a certain period (quarter, year) on the basis of accounting data. Profit from sales directly depends on the following main indicators: the volume of sales, sale prices and its cost. The change in sales is influenced by changes in production and balances of unsold products at the enterprise.

It should be noted that changes in production and balances of unsold products affect not only the amount of revenue from sales, but also its cost, as fixed costs change (in case of changes in production); costs of storage of products, other costs (depending on changes in the balance of unsold products).

This all significantly affects the amount of revenue from sales (as well as the mass of profit), the amount of profit that is included in the price of products. In a market economy, as a rule, there is no state regulation of product profitability. Thus, it is possible to boost the company's profit by increasing the share of profits in the price of individual products. This is facilitated by insufficient competition, monopoly position of individual enterprises in the production and sale of products.

The cost of products (works, services) that is a generalizing indicator of the enterprise's activity and characterizes its efficiency has the primary influence on the formation of profit. Depending on the field of activity, type of economic activity of

the economy, there are certain features in the formation of the cost of products (works, services). However, composition of costs, which can be attributed to the cost of production, is regulated by a relevant legislation.

In addition, the amount of individual costs that are included in the cost is regulated by the state through the definition of deductions. This primarily applies to the following elements of costs: contributions to social activities (state pension insurance, social insurance); application of tax norms and methods of depreciation; other expenses (taxes on land and vehicles, local tax). The influence of enterprises on these cost elements is quite limited. However, it is possible to do a proper management of resources to the value through application of established norms of deductions: labor costs; value of fixed assets that are owned by the enterprise, its structure and a certain period of their usage period.

The calculation of the cost is the basis for determining the financial result of production and economic activities of the enterprise. Reducing the expenses on production, i.e., reducing its cost is an important reserve to increase sales revenue. This can be achieved through the use of numerous factors that can reduce such costs. For this purpose, it is necessary to know: content and structure of expenses, features of formation of expenses by taking into account sphere and branch of activity of the enterprise.

It should be noted that today enterprises of all forms of ownership have greater independence in making decisions on cost formation. However, they cannot contravene the current laws and regulations that govern these processes. Expenses that are related to operating activities, which are not included in the production cost of sold products (goods, works, and services), but are taken into account to determine the profit, are divided into: administrative costs; selling expenses; other operating expenses.

In economic theory and entrepreneurship, concepts of gross, marginal and operating profit are commonly used. *Gross profit* is calculated as the difference between net income (revenue) from sales of products (goods, works, services) and

the cost of sold products (goods, works, services). Here is a scheme of calculation of gross profit (see figure 12.1).

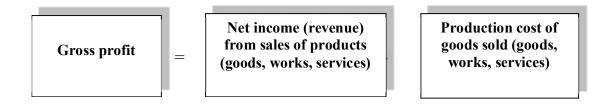


Fig. 12.1. Gross profit calculation scheme

Operating profit is defined as the algebraic sum of gross profit, other operating income, administrative expenses, selling expenses and other operating expenses. Here is a scheme of calculation of profit from operating activities (see figure 12.2).

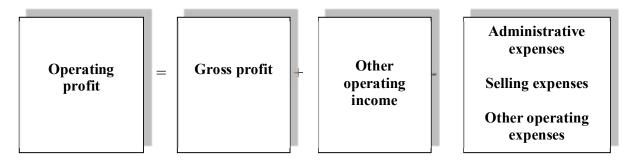


Fig. 12.2. Scheme of calculation of profit from operating activities

Profit from the sale of products (performance of works, provision of services) is the main component of total profit. This is the profit from operating activities that reflects the mission and profile of the enterprise. It is calculated as the difference between the proceeds from the sale of products (excluding value added tax and excise duty) and its full cost.

Profit from the sale of property includes profit from the sale of fixed capital (tangible assets), intangible assets, and securities of other enterprises. It is calculated as the difference between the sale price and the book (residual) value of the object that is sold, by taking into account the cost of sale (dismantling, transportation, payment for agency services).

Profit from non-operating activities is the profit from equity participation in joint ventures, leasing, dividends on securities, income from debt, royalties, income from economic sanctions.

Here is a scheme of calculation of the total profit from usual activity of the enterprise (see figure 12.3).

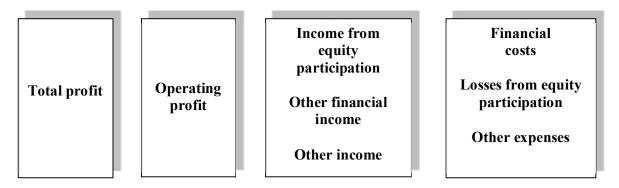


Fig. 12.3. The scheme of calculation of the total profit from usual activity of the enterprise

Total operating income is defined as the algebraic sum of operating income, financial and other income (profits), financial and other expenses (losses).

Marginal profit characterizes the amount of revenue from sales minus variable costs. It includes actual profit and fixed costs. Therefore, such profit can coincide in value with the gross profit, when the cost is calculated only by variable costs.

The company's profit is formed by the following sources: a) sale (realization) of products (services); b) sale of other property; c) non-operating transactions. An important place in the enterprise belongs to the distribution and usage of profits as the main source of financing investment needs and meeting the economic interests of owners (investors). Here is a scheme of using the company's profit (see figure 12.4).

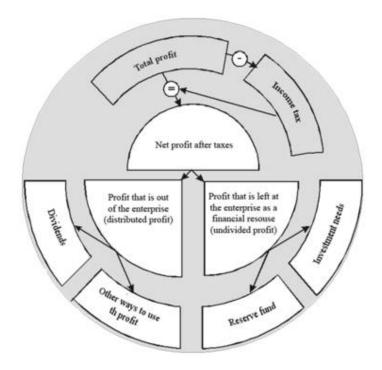


Fig. 12.4. The scheme of use of the company's profit

The general income is taxed in accordance with the conditions that are provided by the legislation on corporate income taxation. The profit that remains after taxation (net profit), comes to the full disposal of the enterprise and is used in accordance with its statute and decisions of the owners is called - *net profit*.

According to the main areas of use, net profit is divided into two parts: 1) profit that is directed outside the company in the form of payments to holders of corporate rights, employees of the company for results of work (as motivation), social support (distributed income); 2) profit that remains at the enterprise and is a financial source of its development (retained profit).

The latter is aimed at creating reserve and investment funds. The reserve fund is a financial compensator for possible deviations from the normal turnover of funds or a source of covering additional need in them. Its formation is the basis of intensive development of enterprises that leads to increased economic efficiency of their activities.

12.3. The essence and methods of defining profitability of the enterprise

The amount of profit that is received by the enterprise is a very important indicator of economic activity. However, it cannot characterize the level of management efficiency. In case of all other equal things, a larger amount of profit will have an enterprise that has more capital, uses more living labor that provides a relatively large volume of production and sales of products (works, services).

The ratio of profit to current expenses or advanced capital characterizes the profitability of production. In the broadest sense, profitability means efficiency, profitability of production of all products (works, services) or its individual types; profitability of enterprises and organizations as business entities; profitability of various sectors of the economy.

Profitability is directly related to the process of profit making. However, it cannot be equated with the absolute amount of profit. *The level of profitability* is a relative indicator that characterizes the level of profitability and is measured in percentage.

In the practice of economic activity, various options are used to determine the profit, current costs, advanced value, which determine the calculation of a large number of indicators of the level of profitability. Here is a classification of profitability indicators (see figure 12.5).

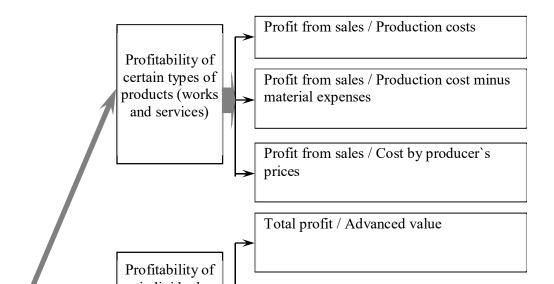


Fig. 12.5. Classification of profitability indicators

Profitability of certain types of products (works, services) is calculated on the basis of indicators of profit from their sale and current costs. To calculate the level of profitability of enterprises can be used: total profit; profit from sales of products (works, services), i.e., from the main activity. Profit is compared with the advanced value that can be determined in different ways (all capital of the enterprise, equity, loan capital, fixed capital, working capital).

An obligatory and important component of financial analysis has to be the assessment of profitability of the enterprise. Such assessment has to be based on certain indicators.

- 1. *The level of profitability of the enterprise* is the ratio of net profit to the total cost of goods sold, expressed in percentage.
- 2. The level of profitability of the main activity is the ratio of profit from sales to costs of production, expressed in percentage.

- 3. The level of return on capital of the enterprise is the ratio of profit to total asset value, expressed in percentage.
- 4. *The level of return on fixed capital* is the ratio of net income to the value of fixed capital, expressed in percentage.
- 5. *The level of return on equity* is the ratio of net income to the average value of equity, expressed in percentage.
- 6. *The level of profitability of sales* is the ratio of profit from sales to revenue from its sales, expressed in percentage.

The dynamics of these indicators makes it possible to determine specific reserves for its increase. The process of achieving the required level of profitability is a precondition for the transition of farms to self-financing, when expanded reproduction is carried out mainly at their own expense. In terms of self-financing, the mass of the company's profit provides necessary savings in order to increase fixed and working capital and socio-cultural activities.

CONTROL QUESTIONS

- 1. What does the product range mean?
- 2. Which indicators measure the volume of production in value terms at most enterprises in different industries?
- 3. What is included in the balance of unsold products at the beginning of the year?
 - 4. What is the main source of formation of financial resources of enterprises?
 - 5. In what order formation of profits as a financial indicator happens?
- 6. What types of profits are distinguished depending on the formation and distribution?
 - 7. How to determine the gross profit from sales?
 - 8. What characterizes the profit margin and how it is determined?
 - 9. With the help of which sources profit of the enterprise is formed?

- 10. How the net profit is distributed according to the main directions and on what is it directed?
- 11. What does characterize the profitability of production in the broadest sense?
 - 12. Give the classification of profitability indicators.
 - 13. What indicators are used to assess the financial condition of the enterprise?
 - 14. Name the reserves to increase profitability.

TESTS

- 1. The volume of production in monetary terms at enterprises of various industries is determined by indicators:
 - a) gross output;
 - b) marketable products;
 - c) clean products;
 - d) all answers are correct.
- 2. The cost of result of production activities of the enterprise for a certain period is:
 - a) gross output;
 - b) marketable products;
 - c) clean products;
 - d) all answers are correct.
 - 3. The profit is:
- a) a part of net income remaining to the enterprise after reimbursement of all costs that are associated with production, sale of products and other activities;
- b) revenue from the sale of products, goods, works or services without deducting discounts and sales taxes;
- c) profit from joint activities of enterprises, interest on purchased shares, bonds, income from debt obligations;
 - d) all answers are correct.
 - 4. The most important types of income do not include:

- a) gross profit;
- b) operating profit;
- c) taxable income;
- d) income from ordinary activities.
- 5. The profit of the enterprise is not formed at the expense of:
- a) product sales;
- b) consumption fund;
- c) sale of property;
- d) non-operating transactions.
- 6. As the difference between sales revenue (excluding VAT and excise duty) and total cost is determined by:
 - a) profit from sale of property;
 - b) profit from non-operating activities;
 - c) gross (balance) profit;
 - d) profit from sales.
- 7. The ratio of profit to the amount of material and labor costs for production and sale of products (full cost) is:
 - a) the level of profitability;
 - b) the rate of return;
 - c) cost recovery;
 - d) there is no correct answer.
 - 8. The indicators of profitability of industries include:
 - a) profit / advance value;
 - b) profit / current expenses;
 - c) sales profit / cost;
 - d) profit from sales / cost minus material costs.
- 9. Indicators of profitability of certain types of products, works, services include:
 - a) profit / advance value;
 - b) profit / current expenses;

- c) sales profit / cost;
- d) profit from sales / cost minus material costs.
- 10. Indicators of profitability of individual enterprises, enterprises, organizations, institutions include:
 - a) profit / advance value;
 - b) profit from sales / cost;
 - c) total profit / advance value;
 - d) profit from operating activities / current expenses (cost).

TOPIC 13. ECONOMIC EFFICIENCY OF THE ENTERPRISE

- 13.1. The essence of economic efficiency of the enterprise.
- 13. 2. The system of indicators of efficiency of the enterprise.
- 13.3. Directions for improving the efficiency of production activities of the enterprise.

13.1. The essence of economic efficiency of the enterprise

The production process in the enterprise is carried out with the proper interaction of its determining factors: personnel (labor), means and objects of labor. Using the available means of production, the staff of the enterprise produces socially useful products or provides production and household services. On the one hand, this means that there are the costs of living and tangible labor, and on the other, the results of production.

Efficiency is an integrated economic category that reflects production relations in terms of saving total cost of materialized and direct labor to obtain final positive result.

The category "efficiency" at the enterprise level characterizes the relationship between the magnitude of the result from its activities and the number of resources that are invested or spent for production. Efficiency gains can be achieved by using fewer resources to produce such result, or by using the same number of resources or more output with relatively fewer resources to produce a greater result.

The disclosure and definition of the following categories will help to reveal the essence of the efficiency of the enterprise: effect; result of the enterprise; efficiency of enterprise activity; efficiency criteria.

The theory of efficiency distinguishes between the concept of effect and efficiency, treating the first as the result of certain measures, and the second - the ratio of effect and cost that have caused it. But the effect does not show whether a particular case is profitable or not, because the same effect can be obtained by different means, with different costs, and vice versa, the same costs can give different results. Therefore, the effect cannot be judged on the efficiency of the enterprise. It is necessary to compare the effect with the cost of obtaining it and determine at what price it is achieved. If the results of economic activity exceed the costs, then it is possible to talk about a positive effect, otherwise - it is a negative effect. Thus, the economic meaning of efficiency means the increase of result (effect) per unit cost of total labor.

It should be noted that there is also a difference between concepts of "effectiveness" and "efficiency". Prominent economist P. Drucker emphasized that the first of them has to be interpreted as "doing the right things" and the second – "doing things right". Essentially, effectiveness has a targeted nature and belongs to the scope of assessing the consequences of the implementation of business decisions or activities for a certain period. At the same time, efficiency is used to characterize the use of production resources to achieve goals.

In foreign practice, the concept of "management efficiency" is used as a synonym for the term "productivity of production and service", and productivity means the efficient use of resources (labor, capital, land, materials, energy, information) for the production of various goods and services. A sign of efficiency may be the achievement of the goal of production and economic activity of the enterprise with the lowest cost of materialized and living labor.

Production efficiency as an economic category reflects the effect of objective economic laws, which are manifested in the efficiency of production. It is the form in which a goal of social production is realized. Economic efficiency shows the ultimate beneficial effect of the use of means of production and living labor, as well as their combined investments. As a result, the concept of efficiency is determined by the objectively valid law of saving working time that is a fundamental substance of wealth and a measure of the costs that are necessary for its accumulation and use by society.

Production efficiency is determined by the ratio between the results of economic activity of the enterprise and the material, labor and financial resources (production costs), which are used to obtain these results.

Relevant types of production efficiency (activity) are distinguished mainly on the basis of obtained effects (results) of economic activity of the enterprise. In this regard, there is a need to provide a substantive description of certain types of efficiency.

Economic efficiency means the production of a certain (any) volume of products with minimal costs of relevant resources. In the American literature, this indicator is called productivity. Economic efficiency of production is a generalized economic category that is characterized by high efficiency of living and tangible labor and shows the final useful result from the use of all production resources and is determined by comparing the results and costs of production resources.

Social efficiency consists from the increase of number of new jobs and level of employment of people, improvement of working and living conditions, the state of the environment, safety of life, etc. The social consequences of production can be not only positive but also negative (unemployment, rising inflation, deteriorating environmental performance).

Ecological efficiency reflects the compliance of costs and environmental performance with the interests of society, comparing the economic effect and the cost of environmental measures.

Comparative efficiency reflects the consequences of comparing of possible management options and choosing the best one; level of comparative efficiency reflects the economic and social advantages of chosen option of economic decisions (line of business) against other possible options.

The basis of the construction of classifications and evaluation of the efficiency of enterprises is *a basic criterion*. This term means the feature on the basis of which the assessment is conducted, i.e., is a measure of evaluation. Disclosing the content of the criterion, it should be noted that the following efficiency criteria are used: economic, social, ecological.

13.2. The system of indicators of efficiency of the enterprise

In the process of assessing the economic efficiency of the enterprise, it is necessary to take into account the efficiency for certain types of economic activity: efficiency of the enterprise as a whole; efficiency of participation in the capital of the enterprise (efficiency of the own capital of the enterprise and efficiency of investments in the enterprise). Calculations are made to confirm feasibility of its participation in the capital of the enterprise for each of the participants.

In practice, several methods are used to assess efficiency, the most common is the traditional approach that involves the use of indicators, which assess the efficiency of certain resources, and generalizing indicators, which characterize the efficiency of the enterprise as a whole, comparing performance with all resources.

The system of indicators for assessing the effectiveness of the enterprise is based on the traditional approach.

- 1. Indicators that characterize the efficiency of use of certain types of resources and allow to focus on the use of a particular resource:
 - I. Indicators of efficiency of the use of labor potential of the enterprise:

The level of labor productivity in value terms is characterized by the following indicators:

- The cost of gross output for one average annual employee (W) determines the decrease in the value of gross output (Q) to the average annual number of employees (N_e).

$$W = \frac{Q}{N_e}$$

- The cost of gross output per one man-hour (W) is determined by the ratio of the value of gross output (Q) to labor costs (LC).

$$W = \frac{Q}{LC}$$

The level of labor productivity can also be calculated by the indicator of net output, such indicator allows to do more complete assessment of the actual contribution of individual industries and enterprises to the mass of newly created product.

- Manufactured products on the single wage fund (MPW) determines the decrease in output (MP) to the annual wage fund of the enterprise (WF).

$$MPW = \frac{MP}{WF}$$

- The share of growth in output due to the growth in labor productivity:

$$\Delta Q_o = \frac{(W_1 - W_0) \cdot N_1}{\Delta Q} \cdot 100,$$

where W_0 i W_1 – level of labor productivity in the base and reporting years; $\Delta Q-$ growth in output.

II. Efficiency indicators of fixed capital:

- Capital productivity (CP) is calculated by the ratio of the value of gross output (W) to the average annual cost of fixed capital (ACFC):

$$CP = \frac{W}{ACFC}$$

- Capital intensity (CI) is calculated by the ratio of fixed capital (ACFC) to the value of gross output (W). This indicator is opposite to capital productivity. It determines the amount of fixed capital that is required by the enterprise under certain conditions for the production of gross output that worth 1 UAH.

$$CI = \frac{ACFC}{W}$$

Return rate (RR) is determined by the ratio of net income (NI) to the sum of advanced capital (fixed capital (FC) and working capital (WC)) and is expressed in percentage:

$$RR = \frac{NI}{FC + WC} \cdot 100 \%$$

III. Indicators of working capital efficiency:

Turnover ratio (number of turns TR) is determined by the dividing the revenue from sales per year (Q) to the average annual balance of normalized revolving funds (RF):

$$TR = \frac{Q}{RF}$$
,

The utilization load factor (ULF) is the opposite indicator to the turnover ratio, and shows how much working capital is dedicated per 1 UAH of sold products. The value of this indicator is calculated by the formula:

$$ULF = \frac{RF}{Q},$$

The duration of one turnover (in days) is determined by dividing the number of days in the year to the turnover ratio: $T = 360 \div TR$.

The duration of one turnover characterizes the speed of rotation. This indicator is calculated in days and determined by the period during which current assets of the enterprise make one turnover. The speed of rotation of working capital characterizes the efficiency of their use.

- the level of return on working capital is determined by the ratio of net income (NI) to the average annual cost of fixed capital (ACFC) and is expressed in percentage:

$$ROWC = \frac{NI}{ACFC} \cdot 100\%$$
,

2. Summary indicators - characterize the efficiency of use of all resources of the enterprise:

The level of return on assets (ROA) characterizes the efficiency of use of all available assets of the enterprise and is determined by the ratio of net profit (NP) to the average sum of assets on the balance sheet of the enterprise (A):

$$ROA = \frac{NP}{A} \cdot 100\%$$

The level of return on equity (ROE) shows the efficiency of the use of assets that are created from own funds, and is determined by the ratio of net profit (NP) to the amount of equity (E):

$$ROE = \frac{NP}{E} \cdot 100\%$$

The amount of equity is taken from the balance sheet. It is equal to the sum of assets without all debt obligations. This indicator is primarily interesting to shareholders, as it determines the upper limit of dividends.

The level of return on investments (ROI) is the value of capital that is created by the enterprise, and determines the reduction of profit (P) to the sum of equity (E) and long-term liabilities (LL).

$$ROI = \frac{P}{E + IJ} \cdot 100\%$$

Product profitability characterizes the cost of production and sales, and is determined by the ratio of profit from sales (P) to the total costs of sales (TC), and is expressed in percentage:

$$PP = \frac{P}{TC} \cdot 100\%,$$

Profitability of sales (PS) determines the decrease in profit (P) to net income from sales (NI).

$$PS = \frac{P}{NI} \cdot 100\%$$

The level of profitability of the enterprise depends on the amount of profit and production costs. Important factors that ensure the growth of profits and profitability of the enterprise are: increase of productivity, rational use of material resources and increased return on capital. By taking into account these factors as fully as possible, it will help increase the efficiency of the enterprise.

Economic efficiency of small business structures. The functioning of the economy in market relations involves the activities of various organizational forms of business structures. Enterprises, which are the main organizational unit of production and economic activity, are divided by size of production into: large, medium and small. The legislation of Ukraine defines the same economic and legal bases of economic activity for all enterprises, but each of these structures has special features.

Based on this, there are relevant features in the methodology for determining the economic efficiency of small businesses. In counties with market economies, the efficiency of small businesses is determined mainly by two indicators: sales and mass of profit.

In determining the economic efficiency of production activities of small business structures of agricultural business expect: 1) marginal revenue; 2) critical volume of production and sales.

To determine the marginal revenue, it is necessary to divide costs into *fixed* and variable. Fixed costs include such costs, the amount of which does not depend on the volume of production (hourly wages and accruals, maintenance costs of fixed assets, costs of management and organization of production, insurance payments, rent, etc.).

Variable costs are defined as the difference between the total amount of production costs and fixed costs.

Marginal revenue (MR) is defined as the difference between sales proceeds and variable costs by the formula:

$$MR = SP - VC$$
,

where SP – sales proceeds, UAH;

VC – amount of variable costs, UAH

Marginal revenue per 1 quintal of products is defined as the difference between the actual price and variable costs in the cost of production of unit by the formula:

$$MR = AP - VC$$
.

where AP- actual price per 1 quintal of products, UAH;

VC- variable costs per 1 quintal of products, UAH.

The ratio of marginal revenue (RMR) is determined on the basis of doing analysis of the dependence on costs and profits on the volume of production. It is calculated by the ratio of marginal revenue to the sales proceeds by the formula:

$$RMR = \frac{MR}{SP}$$

One of the main conditions for successful management is to achieve sales that would provide a profit. The forecast calculation has to give the answer: how many products need to be sold in order that revenue can warrant costs. Based on this, during the determination of the most effective option for the organization of production, it is important to calculate *the critical volume of production*, after which the company begins to make a profit.

During the consideration of this issue, it is better to use a graphical representation of the process of formation of costs and profits of the enterprise depending on the volume of production (see figure 13.1). It shows the linear functions of cost dynamics and sales proceeds. Due to the presence of fixed costs, production is unprofitable to a certain level that is called *critical volume (CV)* (area 1). As can be seen from the figure 13.1, when reaching a critical volume of production costs and revenue from sales are the same. After reaching a critical volume of production, the company begins to make a profit (area 2).

The critical volume of production of certain products in kind is also called *the* break-even point. The critical volume of output is the volume of production at which the sales proceeds from the sale of a particular type of product is equal to the total cost of its production and sale.

The critical volume of production (break-even point) in monetary terms (*BEP*) is determined by the ratio of the sum of fixed costs of the enterprise to the ratio of marginal revenue by the formula:

$$BEP = \frac{FC}{RMR}$$

This volume of production determines the break-even point, after which production becomes profitable. The bigger the volume of production above the critical value (break-even point), the higher the economic efficiency of production, due to lower production costs.

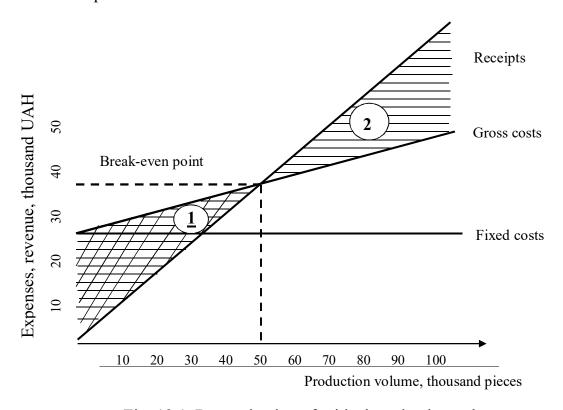


Fig. 13.1. Determination of critical production volume:

1 - damage; 2 - profit.

The critical volume of production of a certain product in kind (CV) from 1 ha of crop or one livestock unit is determined by the ratio of the sum of fixed costs per hectare of crop or livestock unit to the marginal revenue per 1 quintal of production. It is calculated by the formula:

$$CV = \frac{FC}{SP - VC},$$

where FC – sum of fixed costs per 1 ha of crop or one livestock unit, UAH.

The break-even level of production of certain types of agricultural products (BEL) is determined by the ratio of the sum of fixed costs per hectare of crop or livestock unit to the amount of marginal revenue per 1 hectare of crop or livestock unit and is expressed in percentage. It is determined by the formula:

$$BEL = \frac{FC}{(SP-VC)\cdot Q} \cdot 100\% ,$$

where Q – amount of sold goods from hectare of crop or livestock unit, q.

The division of costs into variable (proportional) and fixed ones allows to determine the cost of production by taking into account the volume of production in kind. The unit cost is calculated by the formula:

$$UC = VC - \frac{FC}{N}$$

where N – production level, q.

The formula shows that with the increase in production, its cost decreases due to the reduction of fixed costs per unit of output. Therefore, increasing production is an important factor in the process of reducing the cost of production that is the basis for improving efficiency. This pattern is the framework for the analysis of the dependence of costs and profits on the volume of production, when there is a need to choose the most effective project and planning solutions.

13.3. Directions for improving the efficiency of production activities of the enterprise

The formation of a socially-oriented market management system and the development of competitive relations between its subjects require the introduction of organizational and economic mechanism in Ukraine that is capable of ensuring stable and efficient operation of enterprises, and fast intensification of reproduction processes at local and global levels.

Therefore, in the practice of management it is important to find effective ways to improve the efficiency of enterprises. To solve this problem, the classification of its growth factors acquires certain significance. All factors that improve efficiency of enterprises are reduced to the following areas: cost and resource management; improvement of production and other activities; improving of management system of the enterprise and all its activities.

The first group of mobilization of factors includes the following measures to increase the production activity of the enterprise: increase in labor productivity and reduction of the wage intensity of production (i.e., saving labor costs); reduction of the total resource intensity of production (reduction of energy, capital and material consumption). All this encourages company to rational use natural resources.

Active mobilization of these factors involves the implementation of such measures as: implementation of results of scientific and technological progress in the practice of the enterprise; improvement of organizational and production management systems, forms and methods of organization of activity, its planning and motivation; improving the quality and competitiveness of manufactured products. All identified areas represent the second direction of mobilization of factors that improve the efficiency of the enterprise.

The most important factors are those ones that included in the third group, because their mobilization involves improvement of the management system of the enterprise. In this case, it is better to consider internal and external factors that affect all activities of the enterprise. By taking into account these factors requires significant structural changes, branching of production and social infrastructure, involvement of institutional mechanisms to ensure proper conditions for the operation of the enterprise, and improvement and development of effective economic in general, and social programs for its development.

CONTROL QUESTIONS

- 1. Discover the essence of economic efficiency, and distinguish the difference between the effect and efficiency.
 - 2. Describe individual types of effectiveness and give them a full description.
- 3. Explain methods of assessment of efficiency and describe system of indicators for assessing the effectiveness of the enterprise on the basis of the traditional approach.

- 4. Name the indicators of efficiency of using fixed capital.
- 5. Name the indicators of efficiency of working capital.
- 6. Describe the indicators of economic efficiency of small businesses.
- 7. How does the distribution of costs into fixed and variable happen and what they include?
- 8. On the basis of annual reports of enterprises, calculate the critical volume of output, after which the enterprise begins to make a profit.
 - 9. Name the types of economic results of the enterprise.
- 10. What are the essence and importance of improving the efficiency of production activities of the enterprise?
- 11. What are the main factors that increase the economic efficiency of the enterprise?

TESTS

- 1. The ratio of results to the cost of obtaining them is characterized by:
- a) effect;
- b) result of production activities;
- c) economic efficiency;
- d) all answers are correct.
- 2. There are the following types of efficiency:
- a) economic;
- b) social;
- c) ecological;
- d) all answers are correct.
- 3. Increasing the number of jobs and employment levels, improving working and living conditions, safety of life, etc. is characterized by:
 - a) economic efficiency;
 - b) social efficiency;
 - c) environmental efficiency;
 - d) there is no correct answer.

- 4. Compliance of costs and environmental results with interests of society, comparison of economic effects and costs of environmental measures is characterized by:
 - a) economic efficiency;
 - b) social efficiency;
 - c) environmental efficiency;
 - d) there is no correct answer.
 - 5. The efficiency of using labor potential of the enterprise is characterized by:
 - a) the cost of gross output per average annual employee;
 - b) the cost of gross output per 1 UAH of wage fund;
 - c) capital intensity of products;
 - d) return on capital.
 - 6. Indicators of efficiency of use of fixed capital are:
 - a) rate of return;
 - b) the ratio of funds in circulation;
 - c) capital intensity of products;
 - d) return on capital.
 - 7. Indicators of the efficiency of current capital are:
 - a) the ratio of funds in circulation;
 - b) turnover ratio;
 - c) the duration of one revolution;
 - d) the level of return on current capital.
- 8. Generalizing indicators that characterize the efficiency of use of all resources of the enterprise are:
 - a) the level of return on assets;
 - b) the level of return on equity;
 - c) the level of return on invested capital;
 - d) the level of profitability of products;
 - e) the level of profitability of sales.
 - 9. Marginal income is defined as:

- a) the difference between sales revenue (excluding VAT and excise duty) and total cost;
 - b) the difference between sales revenue and variable costs;
 - c) the difference between sales revenue and fixed costs;
- d)) the difference between sales revenue (excluding VAT and excise duty) and production cost;
- 10. The critical volume of production (break-even point) in monetary terms is determined by:
- a) the ratio of the amount of fixed costs of the enterprise to the marginal revenue ratio;
- b) the ratio of the amount of variable costs of the enterprise to the marginal revenue ratio;
 - c) the ratio of revenue from sales to the marginal revenue ratio;
- d) the ratio of the amount of material costs of the enterprise to the coefficient of marginal revenue.

TOPIC 14. FINANCIAL AND PROPERTY CONDITION OF THE ENTERPRISE AND METHODS OF ITS EVALUATION

- 14.1. The essence of the financial and property state of the enterprise.
- 14.2. Indicators of financial stability of the enterprise.
- 14.3. Indicators of liquidity and financial solvency of the enterprise.
- 14.4. Assessment of the property state of the enterprise.

14.1. The essence of the financial and property state of the enterprise

The role of financial and economic activities is growing significantly under market conditions, that involves timely and qualitative analysis of the financial condition of enterprises, assessment of capital usage and liquidity, financial solvency, stability and profitability. On this basis, the search is carried out and measures are taken to increase and strengthen the financial stability of the enterprise.

A systematic analysis of the financial state of the enterprise, and its financial stability is also necessary because the profitability of the enterprise and the amount of profit largely depend on its financial solvency. The financial state of the enterprise is also taken into account by banks, determining the mode of its lending and the differentiation of interest rates.

The financial and property state of the enterprise is a system of economic relations that is associated with the availability and movement of funds, the formation of financial resources, a set of tangible and intangible assets and debt rights for full financial support of production and economic activity and enterprises' development.

The financial and property state of the enterprise directly depends on the results of its financial and economic activities. First of all, the tightening of the financial condition of the enterprise up is facilitated by the continuous production and sale of high-quality products. Increasing the volume of production and sales of products, works, services and reducing their cost provides high profitability of the enterprise that will have a positive impact on its financial state. On the contrary, non-regular production processes, the deterioration of product quality outline a decrease in revenue from its sale that impairs the financial solvency of the enterprise.

The financial and economic activity of the enterprise has to be aimed at organization of systematic receipt and efficient use of financial resources, compliance with settlement and credit discipline, achieving a rational ratio of own and borrowed funds, financial stability to ensure effective operation process.

Thus, assessment of financial and property state is one of the most important characteristics of production and financial activities of enterprises. The purpose of assessing financial and property state of the enterprise is to find reserves to increase

profitability of production and strengthen commercial settlement as a basis for stable operation of the enterprise and its obligations to partners, creditors and the budget.

The main areas of financial and property state are justification and adoption of proper decisions by the company for the following main types of activities:

- operating activities (management of financial results, support of the profitability of the enterprise, efficient use of financial resources);
- financial activities (management of sources of financial resources and their distribution, liability management);
- investment activities (management of the structure, volume and composition of assets of the enterprise, selection and implementation of investment projects).

The financial and property state of the enterprise has to be systematically and comprehensively assessed by using various methods, techniques and methods of analysis. This will improve the financial results of the enterprise; identify ways to effectively use of financial resources and their rational allocation. Inefficient use of financial resources leads to low financial solvency of the enterprise and, as a consequence, to possible disruptions in production and sales; to non-compliance of the profit plan and reduction of profitability of the enterprise.

The main tasks of assessing the financial and property state of the enterprise are:

- determining the profitability of the enterprise;
- analysis of the efficiency of capital use of the enterprise, providing the enterprise with its own working capital;
- assessment of the dynamics and state of liquidity, financial solvency and stability of the enterprise;
- assessment of the state of the business entity in the financial market and its competitiveness;
 - determining the effectiveness of the use of financial resources.

Assessment of the financial and property state of the enterprise is a necessary condition for the development of plans and forecasts of financial recovery of enterprises, minimization of risks on loans and contributions, as well as to inform

investors and creditors. Creditors and investors analyze the financial state of enterprises to minimize risks on loans and contributions, as well as for mandatory differentiation of interest rates.

The analysis of the financial state is a part of general analysis of economic activity of the enterprise which is carried out by analysts and is based on a wide information base, including statistical reporting and operational data. According to organizational forms, there are two main types of analysis of financial state: internal and external.

The main concept of the external analysis of the financial state includes: indicators of profit and profitability; market stability, balance sheet liquidity, financial solvency of the enterprise; efficient use of borrowed capital; economic diagnostics of the financial condition of the enterprise and rating assessment of emitters.

Internal analysis of the financial state of the enterprise is carried out according to the financial statements and includes: indicators of use of property (capital) of the enterprise and its impact on the financial state; financial firmness and stability of the enterprise; dynamics of profit and profitability of the enterprise and factors that affect them; trustworthiness of the enterprise; efficient use of own and borrowed financial resources; liquidity and financial solvency of the enterprise; comprehensive assessment of the financial state of the enterprise.

Considering the timing and objectives, there are current (operational) and forecast analysis of the financial condition of the enterprise.

Current (operational) analysis of the financial state is carried out in the process of current economic activity in order to quickly influence the results of financial activities.

Forecast (long-range) analysis of the financial state is carried out by the company on the forecast or expected data, which are compared with the data of the relevant reporting period. It allows to more fully analyze the prospective financial state and determine the future results of financial activities of the enterprise.

The subject of analysis of the financial state of the enterprise is its financial

resources, their formation and usage. Various methods can be used to achieve the main goal of the analysis of the financial state of the enterprise, i.e., its objective assessment and identification on this basis of potential opportunities to improve the efficiency of formation and usage of financial resources.

The method of financial analysis is a set of scientific and methodological tools and principles for studying the financial state of the enterprise. Various methods are used to analyze the financial condition of the enterprise in economic practice. Traditional methods of economic statistics (average and relative values, grouping, graphical, index, elementary methods of processing time series), as well as mathematical and statistical methods (correlation analysis, analysis of variance, factor analysis, principal components method).

The set of techniques and methods that is used to study the financial state of the enterprise forms the methodology and techniques of analysis.

The analysis of the financial state of the enterprise is carried out with the help of various models that allow to structure and identify relationships between main indicators. There are three main types of models, which are used in the analysis of the financial state of the enterprise: descriptive, predicative and normative.

Descriptive models are the main to assess the financial state of the enterprise. These include: building a system of balance sheets; submission of financial statements in various analytical sections; vertical and horizontal reporting analysis; system of analytical coefficients; analytical notes to the reporting. Descriptive models are based on the use of information from financial statements.

Predicative models are those ones with predictive and prognostic nature. They are used to forecast the income and profits of the enterprise, its future financial state. The most common of them are: calculations of the point of critical sales volume, construction of prognostic financial reports, models of dynamic analysis (rigidly determined factorial and regressive models).

Normative models are those ones that are based on comparing the actual results of the enterprise with the normative ones. These models are usually used in the internal analysis of financial state. Their essence is to establish standards for each

cost item in relation to technological processes, types of products, and determine the reasons of deviations from actual data to the normative.

Thus, consideration of the essence of the financial and property state of the enterprise involves its assessment and analysis of usage of financial resources, as well as the search for reserves for the effective use of equity and borrowed capital.

The statement of financial results reflects the efficiency (or inefficiency) of the enterprise for a certain period. If the balance sheet reflects the financial state of the enterprise on a particular date, the statement of financial performance will give a picture of financial results for the relevant period (quarter, half year, year).

The financial statements of enterprises also contain other information about state of the enterprises' finances. Based on the analysis of reporting data, main trends in the formation and usage of financial resources, reasons for changes that have occurred, and reserves for improving financial state of the enterprise in the future are used.

14.2. Indicators of financial stability of the enterprise

The financial state of the enterprise is formed in the process of all its production and economic activity, and depends on many factors. Therefore, the assessment of financial state can be objectively based on the use of a system of indicators. Indicators of assessment of financial state have to be such that the partners who are associated with the enterprise economic relations, can conclude about its financial firmness. Each of the company's partners - shareholders, banks, tax administrations - has its own criterion of economic efficiency. Therefore, the system of indicators has to provide a comprehensive assessment of the financial state of the enterprise.

The financial state is formed in the process of relations of the enterprise with suppliers, buyers, shareholders, banks and other legal entities. However, the degree of its economic attractiveness directly depends on the enterprise for all legal entities, which have a choice between many enterprises that are capable to satisfy their economic interest.

One of the most important characteristics of the financial state of the enterprise is its financial firmness (stability). *Financial stability* is a guaranteed financial solvency, a balance between own and borrowed funds, independence from the coincidences of market conditions and partners, obtaining the appropriate mass of profit as a result of management.

Financial stability is the state of the enterprise's property that guarantees its financial solvency. The financial stability of the enterprise presupposes that the resources that are invested in entrepreneurial activity have to be recouped at the expense of cash receipts, and the received profit will provide self-financing and independence of the enterprise from the external involved sources of formation of assets.

Financial stability implies the ability of the enterprise to maintain a given mode of operation for the most important financial and economic indicators. It can be considered as an effective category that characterizes the level of stability of the enterprise, its ability to ensure stable technical and economic performance and effective adaptation to changes in the external and internal environment.

The level of financial stability affects the company's development opportunities. Defining the limits of financial stability is one of the most important economic problems, because insufficient financial stability can lead to financial insolvency of the enterprise and lack of funds for its development, and excess will break development, by formation of excess reserves and reserves in the enterprise. Financial stability is characterized by a state of financial resources that meets the requirements of the market, and their distribution, and use ensures the development of the enterprise on the basis of increasing profits and capital while maintaining financial solvency.

Given the unstable financial state of many enterprises, the possibility of their bankruptcy, a systematic assessment of their financial firmness and stability becomes especially important. The financial stability of the enterprise is characterized by the following factors: financial security of activities; financial independence from external sources of financing; ability to maneuver money freely; ensuring coverage of costs for expansion and renewal of production; stable excess of revenues over expenditures.

According to the level of coverage of inventories and costs by different sources, the following types of financial stability of the financial state of enterprises are distinguished: absolute stability of the financial state; stable financial state; unstable financial state; financial crisis.

Absolute stability of the financial state is manifested when own sources of current assets cover inventories and costs.

Stable financial state is manifested when value of inventories and expenses is covered by the sum of own sources of current assets and long-term borrowed sources.

Unstable financial state is manifested when value of inventories and expenses is not covered by the sum of own sources of current assets, long-term and short-term borrowed sources.

State of financial crisis is manifested when value of stocks and costs are not covered by all possible sources of their provision. This state of the enterprise is called bankruptcy.

The financial stability of the enterprise is closely linked with its long-term financial solvency. Its analysis makes it possible to determine the financial capabilities of the enterprise for the future. Assessment of financial stability of the enterprise aims at an objective analysis of the size and structure of assets and liabilities of the enterprise, and on this basis, determine the degree of its financial stability and independence, as well as compliance with financial and economic activities of the enterprise to its statutory activity.

Detailed analysis of the dynamics of financial firmness and stability of enterprises by a set of indicators can allow to make a comprehensive assessment of the state and trends of financial stability of the enterprise in any field of activity, ownership and identify potential opportunities (reserves) to increase financial firmness and stability.

One of the most important characteristics of the financial state of the enterprise - ensuring the stability of its activities in the future. It is related to a general financial structure of the enterprise, its dependence on creditors and investors.

To assess the financial firmness and stability of the enterprise, it is advisable to use a system of indicators that are calculated according to the form of balance sheet #1 of the annual report that is called "Balance".

1. The coefficient of autonomy (concentration of equity) is the ratio of total equity to the balance sheet total. The higher value of the coefficient, the less company is dependent on external sources of funding. This indicator characterizes the share of ownership of the enterprise in the total amount of funds that are invested in its activities.

The optimal level of the coefficient that ensures financial stability and independence of the enterprise from creditors is ≥ 0.5 .

- 2. Coefficient of financial stability is determined by the ratio of equity and borrowed capital of the enterprise. The growth of this indicator in the dynamics indicates the strengthening of the independence of the enterprise from creditors, i.e., increase its financial stability. The optimal level of the coefficient is <1.
- 3. Coefficient of long-term capital raising is the ratio of the number of long-term credits and long-term loans to the amount of equity and long-term liabilities. This indicator characterizes capital structure. The growth of this indicator is a negative trend that means that the company's becoming increasingly dependent on external investors.
- 4. Coefficient of equity maneuverability is the ratio of the number of equity and long-term liabilities without non-current assets to the amount of equity. This indicator shows which part of equity is used to finance current activities, i.e., which is invested and capitalized in working capital. The optimal level of the coefficient is > 0.3.
- 5. Coefficient of financial dependence is determined by dividing the balance sheet total by the amount of equity. This indicator is the inverse to the autonomy indicator. It shows the amount of the total value of the company's property per 1

UAH of equity. When its value approaches 1 (or 100%), it means that the owners are fully financing their business. The optimal level of the coefficient is <1.

Such enterprise can be considered as financially stable one, which is able to provide stocks and costs, prevent unjustified accounts payable, settle its liabilities in a timely manner at its own expense.

By analyzing coefficients of financial firmness and stability of the enterprise, it is possible to identify strengths and weaknesses of the enterprise. Managers use this information to ensure the effective operation of the enterprise. It is important that the analysis of ratios allows to identify the relationship between the balance sheet and income statement. For example, to calculate the return on investment, there is a need to take total assets from the balance sheet and net income from the income statement. Some ratios also indicate the effectiveness of the combination of different assets and liabilities in the company, and how this affects the mass of profits.

Creditors closely monitor financial result indicators to ensure that the company can pay its short-term debt obligations, as well as cover fixed payments with income. Banks largely build their credit policies on the basis of appropriate financial stability ratios.

The financial stability of economic entities has to be considered as a complex category that reflects the level of financial state and results of the enterprise, ability to meet its obligations, and ensure the development of activities while maintaining creditworthiness and financial solvency. The financial stability of the enterprise is a precondition for its economic development.

The basis for achieving internal stability of the enterprise is timely and flexible management of internal factors of its activities, i.e., the main role in the anti-crisis management system has to belong to the widespread use of internal mechanisms of financial stabilization.

Ensuring the financial stability of enterprise and strengthening its competitiveness is appropriate to use a set of measures that improve financial management, main focus of which is in the short-term: elimination of financial insolvency in case of loss of competitive advantage; in the medium-term:

elimination of the causes that generate financial insolvency and adaptation to the conditions of activity in a competitive environment; in the long-term: ensuring the financial stability of the enterprise to the influence of external factors of the competitive environment.

14.3. Indicators of liquidity and financial solvency of the enterprise

Financial solvency and liquidity characterize the financial state of the business entity, its existing and potential opportunities for effective operation. This indicates the ability of the company to successfully meet its monetary obligations to other market participants.

Liquidity and financial solvency are calculated according to the balance sheet and reflect the financial capabilities of the enterprise in a certain period of its activities. This characterizes the creditworthiness of the enterprise that is a complex concept and means its ability to repay debt not only now but also in the future. The high level of creditworthiness indicates that the company had paid on time and in full for all loans received, has a stable financial state, a high level of financial solvency and liquidity, as well as a positive outlook for debt repayment in the future.

Depending on the time interval during which the company's ability to meet its obligations to creditors is tested, one or another characteristic is used for its evaluation: in the short-term period - financial solvency, in the long-term - liquidity.

The liquidity is the ability of an enterprise to repay its current liabilities on time and fully. To maintain liquidity at the appropriate level, company has to have a sufficient amount of cash and other liquid assets, which, if necessary, can be converted into cash and used to repay liabilities. At a high level of liquidity, volume of liquid assets significantly exceeds the volume of current liabilities.

The liquidity of the enterprise is characterized by the ratio of the value of its highly liquid assets (cash and cash equivalents, marketable securities, receivables) and short-term debts. By analyzing liquidity, it is advisable to assess not only the current amount of liquid assets, but also future changes in liquidity. The shaky state

of the company's liquidity will evidence the fact that the company's need for funds exceeds their actual revenues.

The liquidity has to be considered as the state of assets in their turnover, which ends with the receipt of cash that is a necessary condition for financial solvency. According to this, basis of financial solvency are assets, which are characterized by different degrees of liquidity, the latter is a qualitative characteristic of financial solvency.

The liquidity analysis has to be supplemented by financial solvency analysis, which characterizes the company's ability to timely and fully meet its payment obligations arising from credit and other monetary transactions. The financial solvency of the enterprise indicates the availability of cash for a sufficient period of time to meet financial obligations. This is an opportunity for the company to repay its term liabilities with timely cash resources. The study of current financial solvency compares the amount of means of payment of the enterprise with term liabilities.

Thus, financial solvency means the ability of an enterprise to meet its obligations to creditors. An enterprise is called as financial solvent when it can meet its obligations to creditors and does not require remedial actions or bankruptcy.

The level of financial solvency is determined by the ratio between the amount of money that can be used for settlements and the number of payments that need to be made. An enterprise can be considered as a financial solvent with a small balance on the current account, if it has no overdue debts or debts that require immediate repayment.

The financial solvency of the enterprise depends on the degree of liquidity of its balance sheet. At the same time, the liquidity of the enterprise is typical both for the current payments and for the future ones. The company may be financial solvent at the reporting date, but have adverse opportunities in the future, and vice versa. The relationship between financial solvency, liquidity of the enterprise and liquidity of the balance sheet is based on the balance of assets and liabilities, which form the basis of effective operation of the enterprise (see figure 14.1). In other words, liquidity is a way to maintain financial solvency. However, if the company has a

high image and is constantly financial solvent, it is easier to maintain its liquidity.

Fig. 14.1 The relationship between liquidity and financial solvency of the enterprise

The main features of the financial solvency of the enterprise are the presence of sufficient funds on current account and absence of overdue accounts payable. To ensure the financial solvency of the enterprise on the current account has to be an insurance balance of funds, in a developed stock market - the insurance reserve may be in the form of highly liquid securities. To assess the liquidity, financial solvency and creditworthiness of the enterprise, it is advisable to use a system of indicators that are calculated according to the form # 1 of the annual report that is called "Balance".

1. The amount of own working capital (net working capital) is the difference between the sum of equity and long-term liabilities, and fixed assets, and investments, or current assets minus current liabilities. This indicator characterizes a part of equity that is a source of coverage of current assets of the enterprise (i.e., assets with a turnover period less than one year). The estimated indicator depends on structure of assets and structure of sources of funds. Its growth in dynamics characterizes a positive trend and has a particular importance for development of the enterprise.

The main and constant source of increasing working capital is profit. At the same time, it is impossible to identify the concept of "working capital" and "own working capital". The first indicator characterizes the assets of the enterprise (II and

III sections of the assets side of the balance sheet). The second one- sources of funds, i.e., part of the equity of the enterprise, which is considered as a source of coverage of current assets.

- 2. *Maneuverability of own working capital* is the ratio of cash to working capital. The growth of this indicator in the dynamics is a positive trend.
- 3. Ratio of total coverage is determined by dividing current assets to current liabilities. This indicator characterizes the ratio of current assets and current liabilities. It shows which part of the current liabilities company is able to repay if it sells all its current assets, including inventories. Ratio of total coverage shows how many hryvnias of working capital fall to one hryvnia of current liabilities. This indicator has to be greater than 1 for the normal functioning of the enterprise. The required level of the indicator company sets by itself. It depends on the company's need for free cash resources to repay current debt.
- 4. Ratio of absolute liquidity is determined by dividing absolutely liquid assets (cash) to current liabilities. This indicator shows which part of short-term liabilities can be repaid immediately in case of necessity. The optimal level of the coefficient is ≥ 0.5 . It is considered that a company is liquid if its current assets exceed current liabilities, but in itself this excess does not give a complete description of liquidity. Therefore, to assess liquidity, a system of indicators is used, which perform a significant role, because they are convenient means of summarizing a huge amount of financial data and are a tool for comparative analysis of enterprises.
- 5. The share of own working capital in covering inventories is the ratio of own working capital to the amount of inventories. This is the value of inventories that is covered by working capital. It has a great importance for trade enterprises. The recommended lower limit of this indicator is 50%.
- 6. *Inventory coverage ratio* is the ratio of stable sources of inventory coverage to the sum of inventories. This indicator characterizes the ratio of value of stable sources of stock coverage and amount of stock. If the value of this indicator exceeds 0,6-0,8, the current financial condition of the enterprise is considered as sufficiently stable.

7. Quick liquidity ratio is the ratio of cash, float and other assets to current liabilities. This indicator is similar to the coverage ratio, but is calculated in a narrower range of current assets (excluding the least liquid part of them, i.e., inventories). The funds that can be obtained in the case of forced sale of inventories can be significantly less than the cost of their acquisition.

The quick liquidity ratio shows which part of the current liabilities company is able to repay at the expense of the most liquid working capital, i.e., cash and cash equivalents, financial investments and payable accounts. It characterizes the company's ability to pay current liabilities subject to timely settlements with debtors. The approximate value of this indicator has to be 1.

Based on the use of these indicators, it is possible not only to assess the state and dynamics of liquidity, financial solvency and creditworthiness of the enterprise, but also to identify potential opportunities to improve the financial state of the enterprise.

Generalizing indicators for assessing the financial state of enterprises are indicators of business activity, which are calculated according to the forms of the annual report #1 "Balance" and #2 "Statement of financial performance".

- 1. The turnover ratio of assets is calculated as the ratio of net revenue from sales of products (works, services) to the average value of the balance sheet of the enterprise and characterizes the efficiency of the enterprise of all available resources, independently of their sources.
- 2. The turnover ratio of receivables is calculated as the ratio of net revenue from sales of products (works, services) to the average annual value of receivables and shows the rate of turnover of receivables for the analyzed period, expansion or decrease of commercial credit provided to the company.
- 3. The turnover ratio of payable accounts is calculated as the ratio of net proceeds from sales of products (works, services) to the average annual amount of payable accounts and shows the rate of turnover of payable accounts for the analyzed period, expansion or reduction of commercial credit.

- 4. The maturity of receivables and payables is calculated as the ratio of duration of reporting period to the turnover ratio of receivables or payables and shows the average repayment period of receivables or payables of the enterprise.
- 5. The turnover ratio of inventories is calculated as the ratio of the cost of sold goods to the average annual cost of inventories and characterizes the rate of sale of inventories of the enterprise.
- 6. The duration of the operating cycle is defined as the sum of the period of turnover of receivables (in days) and the period of turnover of inventories (in days).
- 7. The duration of the financial cycle is defined as the duration of the operating cycle minus the period of turnover of accounts payable.
- 8. The turnover ratio of equity is calculated as the ratio of net revenue from sales of products (works, services) to the average annual value of equity of the enterprise and shows the efficiency of use of equity of the enterprise.

The analysis of liquidity and financial solvency involves determining the impact of individual factors on the dynamics of performance indicators. For this purpose, the following methods are used: chain replacements, index, absolute and relative differences, integral, etc. Summarizing the results, it is necessary not only to give an integrated assessment of the financial firmness and solvency of the enterprise, but also to develop a number of measures to improve the economic efficiency of its activities.

Thus, indicators of liquidity and financial solvency are important in the system of indicators of the enterprise, as they provide support for the financial balance of the enterprise. These indicators make it possible to assess the dynamics of the turnover of equity, working capital, finished goods, receivables and payables. On this basis, it is possible to make reasonable conclusions about the acceleration of turnover of all components of property and funds of the enterprise, and, therefore, about the state of its business activity.

14.4. Assessment of the property state of the enterprise

In order to carry out economic activity, an enterprise has to have certain property that belongs to it on the rights of ownership or possession. All property that is owned by the enterprise and reflected in its balance sheet is its assets. *Assets* are economic resources of the enterprise in the form of aggregate property values which are used in economic activity for the purpose of receiving profit. The assets of the enterprise consist of the sum of non-current, operating (current) and other assets.

Therefore, an important step in assessing the financial state of the enterprise is the analysis of the property state of the enterprise that allows to determine the absolute and relative changes in balance sheet items over time, track trends and determine the structure of financial resources.

To assess the property state of the enterprise, it is advisable to use the following system of indicators.

- 1. The sum of economic resources that are available to the enterprise. This indicator gives an overall valuation of assets, which are on the balance sheet of the enterprise. The growth of this indicator affirms an increase in the property potential of the enterprise.
- 2. The share of the active part of fixed capital is the ratio of value of the active part of fixed assets to their total value, expressed in a percentage. According to regulations, the active part of fixed assets includes machinery, equipment and vehicles. The growth of this indicator in the dynamics is a positive trend.
- 3. Depreciation ratio of fixed capital is determined by dividing the amount of depreciation to the initial cost of fixed assets. The indicator characterizes the share of depreciated fixed assets in their total value. It is used in the analysis to characterize the state of fixed assets. On the basis of the undepreciated part of fixed assets there is a calculation the coefficient of suitability of fixed capital.
- 4. Fixed capital renewal ratio is the ratio of the value of fixed assets that are received during this period to the initial value of fixed assets at the end of this period. The indicator shows which part of the fixed assets is available at the end of the reporting period, and are new ones that are received by the enterprise.

5. The coefficient of disposal of fixed capital is determined by dividing the value of fixed assets that are disposed for the analyzed period by the initial cost of fixed assets at the beginning of this period. The indicator shows which part of the fixed assets with which company began operations in the reporting period, and dropped out because of depreciation and other reasons.

The structure of the value of property gives a general idea of the financial state of the enterprise. It shows the share of each element in assets and the ratio of borrowed and own funds of the enterprise in liabilities side. The structure of the value of property reflects the specifics of each enterprise.

Thus, generalized assessment of the financial state of the enterprise contributes to the establishment of various assessment indicators of its reserves to improve the financial state.

CONTROL QUESTIONS

- 1. The essence of the financial and property state of the enterprise and main factors that contribute to its strengthening.
 - 2. Which the financial and economic activities of the enterprise has to be?
 - 3. List the main areas of financial and property state.
 - 4. Name main tasks of assessing financial and property state.
- 5. What is the subject of analysis of financial and property state? Name its main types.
- 6. Name main types of models that are used in the analysis of the financial state of the enterprise.
- 7. What is one of the most important characteristics of the financial state of the enterprise?
- 8. Which types of financial stability of financial state of the enterprise are distinguished by the level of coverage of inventories and costs by different sources?
- 9. Describe a stable financial state, unstable financial state, state of financial crisis of the enterprise.

- 10. Describe the system of indicators that are used to assess the financial firmness and stability of the enterprise.
- 11. Which measures are taken to ensure the financial stability of the enterprise and strengthen its competitiveness?
 - 12. Discover the essence of financial solvency and liquidity.
 - 13. Name main features of the financial solvency of the enterprise.
 - 14. What is the main and constant source of increasing working capital?
- 15. Discover the relationship between financial solvency and liquidity of the enterprise.
 - 16. How does the coverage ratio determine and what should be its level?
 - 17. Name the general indicators of assessing the financial state of enterprises.
- 18. What system of indicators should be used to assess the property state of the enterprise?

TESTS

- 1. The main tasks of assessing the financial and property state of the enterprise are:
 - a) determining the profitability of the enterprise;
- b) study of the efficiency of capital use of the enterprise, providing its own current capital;
- c) assessment of the dynamics and state of liquidity, solvency and financial stability of the enterprise;
 - d) assessment of competitiveness;
 - e) determining the effectiveness of the use of financial resources.
 - 2. The subject of analysis of the financial state of the enterprise are:
 - a) financial resources;
 - b) formation of financial resources of the enterprise;
 - c) use of financial resources of the enterprise;
 - d) all answers are correct.

- 3. There are the following types of financial stability of the financial state of enterprises:
 - a) absolute stability of financial state;
 - b) stable financial state;
 - c) unstable financial state;
 - d) financial crisis.
- 4. Provided that own sources of current assets cover inventories and costs is manifested:
 - a) absolute stability of financial state;
 - b) stable financial state;
 - c) unstable financial state;
 - d) financial crisis.
- 5. Provided that the value of stocks and costs are not covered by all types of possible sources of their provision is manifested:
 - a) absolute stability of financial state;
 - b) stable financial state;
 - c) unstable financial state;
 - d) financial crisis.
 - 6. The ratio of equity and borrowed capital of the enterprise is determined by:
 - a) the coefficient of autonomy;
 - b) the coefficient of financial stability;
 - c) long-term capital ratio;
 - d) the coefficient of financial dependence.
- 7. The ratio of the amount of long-term credits and long-term loans to the amount of equity and long-term liabilities is determined by:
 - a) the coefficient of autonomy;
 - b) the coefficient of financial stability;
 - c) long-term capital ratio;
 - d) the coefficient of financial dependence.

8. The ability of an enterprise to repay its current liabilities on time and in full is:

a) solvency;
b) liquidity;
c) financial stability;
d) financial independence.
9. The ability of the enterprise to timely and fully meet its payment obligations arising from credit and other monetary transactions is:
a) solvency;
b) liquidity;
c) financial stability;
d) financial independence.
10. The ratio of absolutely liquid assets (cash) to current liabilities is:
a) stock coverage ratio;

b) quick liquidity ratio;

c) absolute liquidity ratio;

d) the share of current capital in covering inventories.

MODULE IV. DEVELOPMENT OF THE ENTERPRISE

TOPIC 15. MODERN THEORIES AND MODELS OF ENTERPRISE DEVELOPMENT

- 15.1. The concept of economic growth and development.
- 15.2. Concepts and modern models of enterprise development.
- 15.3. Restructuring, its forms and types.

15.1. The concept of economic growth and development

Economic development of the enterprise is a process that ensures the transition from one state to another through the processes of change. The peculiarity of each specific economic state of the enterprise is ensured by impossibility of complete repetition of quantity and quality, and strength of influence of factors, which determined it.

The primary basis for the development of enterprises has to be considered as a variety of changes (internal and external), which are result of interaction of economic objects and their various properties. Socio-economic changes in the enterprise are objective in nature, so it is possible to say that development of systems at different levels (as well as enterprises) is purposeful or not directed (spontaneous).

Economic development is considered as a process of increasing opportunities and a desire to meet own needs and needs of others. Therefore, economic development of the economic and production system is a process of transition of the system to a new qualitative state due to the accumulation of quantitative potential, change and complication of structure and composition. As a result, there is an

increased ability to resist environmental factors of external environment and increased efficiency of functioning.

It should be noted that the processes of economic development cannot be equated with the processes of growth. To grow is to increase in size or number, and to develop is to increase abilities and competencies. Quantitative characteristics are characteristic of growth, while attributive ones are characteristic of development. However, economic development may contain elements of growth. There is a relationship between economic growth and development, they can enhance effect of each other, i.e., there is a synergy effect between them. It is not necessary to increase the value of an enterprise for economic growth, but development is impossible without it.

In the economic literature, much attention is paid to defining the essence of the categories "economic development" and "economic growth", as the problem of growth and development has always been decisive in the activities of enterprises, industries and economy.

Development is defined as a process of natural change, transition of economic entities from one state to another that is more perfect, from old quality state to a new that is more complex and higher. Based on this, development is a complex concept by its nature. At the same time, it means directed, irreversible movement of the object, change of its qualitative state, as well as the precondition for growth.

The peculiarity of studied categories is a conscious cultivation of the idea of economic growth and development in society as if separating the present and the future, setting priority for the future. In this case, concept of economic development reflects the strategy, and growth reverse tactics of achieving the goal in future.

Nowadays, in conditions of comprehensive chemicalization of economic development of society, formation of technogenic civilization, environmental and social problems have become acute and associated threat to the existence of wildlife. Therefore, it is important to ensure sustainable development that, according to the United Nations organization Special Commission, meets the needs of the current

generation, while not depriving future generations of the opportunity to meet their own vital needs.

Among these two key concepts, the primary one is economic growth as a source of development and its precondition. This naturally led to the development of a long-term strategy for Ukraine's economic development (until 2015) based on a logical chain: stabilization - growth - development.

The economic development of Ukraine is now associated with the growth of knowledge-intensive production of basic industries. At the same time, special attention is paid to sustainable economic growth, especially to the growth of the welfare of the country's population. Thus, economic growth is a derivative of such path of development, which involves socialization and humanization of economic system of Ukraine.

Characterizing objective and subjective aspects of the processes of development and growth of Ukraine's economy, it should be noted that its state is an intermediate stage in the formation of a qualitatively new model of civilization. The approval of the "Strategy of Economic and Social Development of Ukraine (2004-2015)" led to a lively discussion on definition of fundamental goals and directions for their achievement, as well as the characteristics of the future socioeconomic system.

The economic development of the enterprise affects its potential, including resource. The process of changing potential of the enterprise is continuous and at different speeds, which depends on the level of potential itself. The number of available resources is of great importance for the economic growth of the enterprise, but their availability does not determine the development. Lack of resources cannot stop it: the greater development of the enterprise, the less it depends on them and is better able to manage available resources, form its own resource potential. In conditions of changes in the external environment, one of the priority tasks is the formation and assessment of current and future capabilities of the enterprise, i.e., its potential. This is connected with the need to ensure the efficiency of operation and strengthen competitiveness of the enterprise in the market.

The economic development of the enterprise is assessed on the basis of the use of a system of indicators, which can be divided into two groups. Indicators of the first group characterize the level of achievement of the goal of enterprise development (improvement of the business process; meeting needs and expectations of consumers; development of internal capabilities; meeting needs and interests of shareholders).

Indicators of the second group are designed to assess the potential of the enterprise (production volumes; financial indicators; indicators of fixed assets and their use; indicators of material resources; indicators of labor resources, their social protection and use of personnel; indicators of operational efficiency; indicators of intangible assets, etc.).

Thus, it can be approved that economic development is a process of qualitative and quantitative changes in economic activity, which allows company to increase the efficiency of its activities through the efficient use of all available resources.

15.2. Concepts and modern models of enterprise development

Socio-economic development of Ukraine is formed on the basis of concepts and modern models of enterprise development. The main ones are: theory of directed development of enterprises, theory of cyclical development and concept of the life cycle of enterprises.

The theory of directed development of enterprises is the development of enterprises and interpreted as a sequence of transitions from one state of internal and external equilibrium, to another similar state that is formed by current circumstances and factors. The trajectory of an individual enterprise can be of different types, but in general it depends on its ability to adapt to changes in the business environment and resolve internal contradictions. The assessment and analysis of the development of the enterprise is based on its production function and budgetary constraints.

The basic criterion of the analysis is a technical efficiency of the production system, i.e., the ability to convert factors of production into economic goods with the appropriate quality. The transition from one level of technical efficiency to another requires additional resources and time. The general development of the enterprise is limited by the achieved level of development of science and technology.

Theory of cyclical development of enterprises. At the basis of this theory are the works of N.D. Kondratiev and other domestic and foreign scientists. The base for the theory of cyclical development of enterprises was empirical evidence on periodic occurrence of economic crises in the development of socio-economic systems at different levels. Taking into account the accumulated facts, the researchers concluded that companies are also developing cyclically from one phase of the crisis to another.

This theory is based on the criterion of economic efficiency, which periodically tends to increase or decrease by the influence of internal and external factors. The further development of this theory is the concept of spiral development of enterprises that is characterized not only by fluctuations in the efficiency of socioeconomic systems, but also by their transition to a qualitatively new level.

Enterprise life cycle concept. According to this concept, development of the enterprise is analyzed according to the criteria of costs and results, which are obtained from the moment of creation of the socio-economic system to the moment of its liquidation as an organizationally independent formation. The theoretical foundations of this theory are the law of diminishing returns of economic resources and the nature of market development. Each enterprise goes through different stages (launch, growth, maturity, decline), which are characterized by different features: 1) the volume and structure of costs; 2) financial results; 3) the rate of change of costs and financial results.

Nowadays, the two most well-known concepts of economic development of the enterprise - the concept of life cycles of A. Adizes and the concept of enterprise development of L. Greiner.

The concept of life cycles states that the enterprise as a kind of socio-cultural systems is created by people and, therefore, is not eternal. Like any organism, systems are born, grow, grow old, die, i.e., their life is cyclical. In theory, life cycle

means the period from the origin of the system to its death. The basis for the selection of stages (phases) of the life cycle of the enterprise A. Adizes is the ratio of two parameters of the enterprise: flexibility and controllability. *Flexibility* is the ability of an enterprise to adapt to external and internal changes, as well as the ability of management to act outside the rigid framework of rules and regulations.

Controllability is the degree of regulation of the enterprise and its members, as well as the use of coordination and control mechanisms. Before characterizing individual stages of the life cycle, it should be noted that there are no clear indicators of the transition from one stage to another, and the duration of the stages is not clearly defined. In each enterprise it can be individual. Moreover, duration of each stage depends on the level of economic development of the country. However, every enterprise goes through all these stages, but, quite possibly, not for the life of one generation of people.

With a sufficient degree of conditionality, stages of the life cycle can be grouped into two major phases: stage of growth and stage of aging. The stage of growth is characterized by the predominance of flexibility over control; at the stage of aging, on the contrary, controllability prevails over flexibility.

According to the concept of the life cycle of the enterprise there are the following stages of its development:

Courtship. The business is not physical yet, but there is a business idea and enthusiasm of the founder or founders. Discussions take place, the mission is worked out, the market is evaluated. The entrepreneur has a focus on the product, but it is difficult to imagine market need for this product. This stage can be considered complete and organization is going to move on to the next stage if the entrepreneur believes in the idea, and has a willing to take the risk of a new business and can find financial support.

Infancy. The company has a flexible but unclear structure, small budget, weak system of rules and procedures. Personnel personification. Weak subordination, hierarchy is weak. Each decision is new one and sets precedents. Management is reflexive: from crisis to crisis. The company's strategy is determined to a greater

extent by external actions (market, customers, etc.). Conditions of survival at this stage and the transition to the next: stabilization of cash flows; commitment to the idea of building a sustainable organization.

Go-go. This stage is also called a period of rapid growth. This is a stage when difficulties are forgotten and impression of cloudlessness of the further way is created. There is a tendency to unjustifiably diversify and enter new areas of business. A formal organizational structure is emerging, but there are no clear job responsibilities yet, functions are being combined. The entrepreneur (owner) tries to delegate authority, but is afraid of losing control of case and employees. The company operates by method of trials and errors, and cannot predict changes in the external environment, which lead to losses and crisis. The main condition for avoiding failure at this stage: creation of a professional administrative subsystem.

Adolescence. This is a crisis period, and is similar to the transition age of people. The business outgrows capabilities of the entrepreneur (founders) and enthusiasm becomes smaller. Typical solutions for this problem are decentralization, delegation of authority, hiring of professional managers who can change the entire management system of organization. This often leads to conflicts between old and new employees, between professional managers and founders, departments and individual employees. At this stage, organizational culture is strengthened, efficiency of administrative procedures and management increases in general.

Prime. At this stage, the optimal combination of controllability and flexibility is achieved. The organization is focused on results and long-term development strategy. The subsystems for forecasting, planning and implementation of plans work well. Sales, cash flow and profit are growing. The organizational structure and system of official powers are formed. With the right strategy and tactics of development, company can be at this stage long enough. But prosperity is a process, and if during this process the enterprise is not replenished with fresh ideas, loses persistence and flexibility, and then transition to the following stages is inevitable.

Stability. At this stage, the first signs of an aging business appear: it begins to lose flexibility. The company finds a stable market niche, but loses pace. On the one

hand, stability is reassuring; on the other hand, it is dangerous in the long run, as a sense of sufficiency attracts low expectations for new markets and technologies. The interest to innovations is decreased. Quantitative indicators are beginning to displace flexible conceptual thinking and, as a result, importance of the financial subsystem is growing by reducing the assessment of a role of marketing, innovation and research subsystems. Management focuses on past achievements and begins to be suspicious of change. Routine and conservatism are growing in enterprise's management.

Aristocracy. More and more attention is paid to traditions; formalism in communication is becoming commonplace. The company has a fairly large amount of money and stocks, but they are spent on strengthening of the system of control, arrangements, insurance. Saving cash flow is due to higher prices at the same or lower level of quality. Development is not due to developments and innovations, but due to purchases of other companies; to own initiatives and innovations there is a negative attitude. The company becomes less active in terms of long-term prospects; the normal operating range is short-term and guaranteed results.

Recrimination (early bureaucracy). At this stage, administrative subsystem cares primarily about self-preservation. Organizational culture is routine, rules and regulations are strengthened and hyper formalized. The number of unproductive irrational conflicts is growing. The leadership begins an open struggle and search for those, who are responsible for the emergence of adverse trends, rather than the reasons for their occurrence.

Bureaucracy. At this stage, connections with outside world are gradually severed and focus of work on the result is lost. There is no working team, broken information links between subsystems, goals of the unit and personal goals prevail over corporate, and organization leaves the initiative and active employees. There are clear and strict rules, regulations and procedures. Control acquires formal features, there is no clear target orientation, and there is a honoring of written directives, decrees, and instructions. Death occurs when the company is no longer needed.

The concept of the evolutionary development of the enterprise was developed in the 1970s by the American scientist Larry Greiner and still remains popular among theorists and practitioners of organizational science and management.

L. Greiner describes organizational growth and development as an evolutionary change of certain periods, i.e., stages: creativity, direction, delegation, coordination and collaboration. At each stage, the company's activities focus on a specific aspect, and each stage ends in a crisis that threatens the survival of the enterprise. If company copes with the crisis successfully, it enters the next stage.

The environmental problem is not so much environmentally friendly, but a socio-economic one. After all, it is possible to talk about normal living conditions and human health. Therefore, it is necessary to take decisive and urgent measures at all levels of government: national, regional and local. The global resource-ecological problem has to be solved by each country depending on its natural-ecological and socio-economic features.

Since the late 1950s, scientists, politicians and public figures in many countries around the world have realized that current trends in demographic and socio-economic development are rapidly depleting the Earth's biosphere's ability to maintain ecological balance and provide vital resources for the world's growing population. The need for a radical change in the paradigm of earthly civilization has become apparent. Otherwise, no environmental and environmentally friendly measures, even of a comprehensive nature, as well as large-scale technical and technological innovations, rigid economic mechanisms for regulating resource, and environmental processes cannot ensure the normal functioning of the biosphere and its most important component: human society.

In this context, the United Nations organization Conference on Environment and Development that was held in 1992 in Rio de Janeiro (Brazil), was of principal and fundamental importance. There was unanimously declared that the basis for solving acute socio-economic and resource-environmental problems is the transition to a model of sustainable development. *The concept of sustainable economic development* is recognized by the world community of people as the dominant

ideology of human civilization in the XXI century, a strategic direction of material, social and spiritual progress of society. The need to move to a model of sustainable development of all countries is objectively due to the demographic "explosion", the modern scientific and technological revolution, as well as the current crisis of the Earth's biosphere, a significant reduction in its reproductive and assimilation capacity due to excessive anthropogenic pressures on nature.

Sustainable socio-economic development of any country means, in the final analysis, functioning of its economic complex, when at the same time are provided: meeting the growing of material and spiritual needs of the population; rational and environmentally friendly management and highly efficient use of natural resources; maintenance of favorable natural and ecological living conditions, preservation, reproduction for human health; increase of the quality of the environment, and natural resource potential of social production. In other words, sustainable development, first of all, is an economic growth, which effectively solves the most important problems of society without depletion, degradation and environmental pollution.

Prospects for the implementation of principles of sustainable development in Ukraine cannot be considered apart from the ongoing market reforms in the country. The transition to sustainable development of the country and its individual regions has to be closely linked with the radical structural and technological restructuring of social production on the basis of accelerating the pace of STP, particularly in the direction of comprehensive greening not only basic industries but also all spheres of human activity. All this has to be taken into account in the developed National Strategy of Sustainable Development.

The most important prerequisites for Ukraine's transition to a model of sustainable development at the national and regional levels include:

- efficient and environmentally friendly functioning of the economy, which will allow to achieve higher living standards;
- rational use, conservation and reproduction of natural resources, comprehensive protection of the natural environment as the main prerequisites for

ensuring resource and environmental security of present and future generations, maintaining ecological balance in the biosphere, i.e., clean and healthy environment;

- stabilization of demographic situation and establishment of principles of social justice in society, i.e., creation of a system of legal guarantees and effective demographic policy to achieve socio-economic development and environmental welfare of territorial communities;
- expansion of international cooperation for effective solution of resource and environmental problems and ensuring sustainable development of the national economy in the context of globalization.

The need for comprehensive improvement of environment, elimination of causes of ecological catastrophes requires a radical improvement of nature management, economical use of natural resources in all industries and spheres of production. The efficiency of social production, rate of economic growth and improvement of welfare of the country's population on the basis of solving socioeconomic and environmental problems largely depend on this.

Ukraine's economy needs a large-scale modernization of outdated material and technical base of social production, by taking into account resource and environmental requirements, modern criteria and standards. All this has to be done on the basis of use of environmentally friendly technologies, waste-free or low-waste closed production cycles, which make it possible to comprehensively use mineral resources and minimize emissions of pollutants into environment.

15.3. Restructuring, its forms and types

The efficient functioning of enterprises is the basis for stable economic development and increase of economic potential of the country. Therefore, an important task is to ensure the further development and profitability of enterprises in crisis, i.e., to restructure them. It provides for restructuring and rehabilitation of potentially competitive enterprises that is directly related to the implementation of appropriate structural policies.

Restructuring of the enterprise involves the implementation of organizational and economic, legal, technical measures, which are aimed at changing the structure of the enterprise, its management, organizational and legal forms, which can lead the company to financial recovery, increase of competitive output, and increase production efficiency.

The purpose of the restructuring is to create of full value business entities that are capable of operating effectively in a market economy and producing competitive products, which meet consumer requirements.

The restructuring of the enterprise is aimed at solving two main tasks: firstly, to ensure survival of the enterprise as soon as possible and, secondly, to restore its competitiveness. In accordance with these tasks, the following forms of restructuring of enterprises and organizations are used: operational and strategic.

Operational restructuring involves a set of measures that has to ensure the growth of production and sales, and improve the financial state of the enterprise. These measures require the following structural changes: the organizational structure of the enterprise; production structure by allocating separate structural units; personnel structures of the enterprise; reduction of receivables; asset structure through the sale of redundant equipment, vehicles and inventories; structure of the production program; cost and revenue structures; shutdown of inefficient investments.

The set of measures for operational restructuring has to be implemented within 4 months, but the transformation process cannot be stopped after the implementation of operational structural changes, because it will inevitably worsen the financial state of the enterprise.

Strategic restructuring of the enterprise provides high efficiency on the basis of its long-term competitiveness. To achieve this level of entrepreneurial activity it is necessary to determine the strategic goal of the enterprise, develop a strategic concept of its development, as well as directions and measures to achieve this goal.

Long-term stabilization of production and strengthening of the financial state of the enterprise may include the following measures: changes in the ownership structure of the enterprise; acquisition of new high-performance means of production; introduction of new advanced technologies; search for new markets; training of personnel. The implementation of these measures can be carried out by attracting internal and external sources of financial backing.

The operational restructuring of the company solves two main problems: providing of liquidity and significantly improvement of results of its activities. Operational changes at the enterprise require a set of measures, which include: change in the organizational structure of the enterprise; creation and separation of new structural subdivisions; prompt reduction of receivables; reducing the amount of working capital through the identification and sale of surplus stocks (including stocks of auxiliary materials); refusal (sale of shares) from equity participation in other enterprises and organizations, if the preliminary analysis confirmed the insufficient economic efficiency of the latter; reduction of fixed capital through the sale (elimination) of redundant equipment, vehicles, etc.; analytical assessment and shutdown of inefficient investments, besides vital for the company and justified from standpoint of market development. The set of operational restructuring measures includes: measures to reduce all types of costs (without receiving any significant investments) and rapidly increase of sales and capital turnover.

Strategic restructuring of the enterprise ensures its long-term competitiveness. To achieve such competitiveness, it is necessary to determine the strategic goal of the enterprise, the development of a strategic concept of development, as well as areas and tools for its implementation. Thus, reforming can be carried out if the purpose of restructuring is justified that can be formulated (in general) as follows: the company's products have to meet current effective demand. On the one hand, the enterprise that meets this requirement retains control in the relevant areas of activity, and on the other, is revived through an active scientific, technical and market strategy within each product group.

The crisis of the enterprise is caused not by one reason, but by many ones, as a rule. Depending on the nature of problems of the enterprise, which determine the level of economic and technical viability, the following types of restructuring are used: organizational and legal, technical, economic, financial, managerial.

Organizational and legal type of restructuring is characterized by processes of commercialization, corporatization, change of organizational structure and owner of state enterprises.

Technical restructuring is associated with ensuring the state of the enterprise, in which it reaches the appropriate level of production capacity, technology, know-how, management skills, staff qualifications, efficient supply systems and logistics, i.e., all that allows company to enter the market with efficient and competitive products.

Economic staying power is achieved when the company's products, its capital and current costs, sales level and pricing policy, provide a level of economic profitability of the enterprise that meets modern business conditions.

After the achievement of financial staying power, the entity will have a balance sheet structure in which liquidity and financial solvency meet market demands and are free from credit and other debt repayments.

Management restructuring involves training and retraining of personnel with a focus on a competitive operation of the enterprise, change of its organizational structure, management, technology, innovation and marketing policy.

The nature and degree of required restructuring depends on the nature of the enterprise's problems. Sometimes company needs only so-called limited restructuring to restore economic and technical staying power. At the same time, a company sets certain standards (guideposts), which are the ultimate goal of implementing the appropriate type of reforming. Such benchmarks may be: the level of financial leverage (the ratio of borrowed and own funds); the size of the company's capital, as well as the debt coverage ratio. The following measures can be used to achieve the set values: debt restructuring (re-issuance); additional emission of securities; revaluation of assets; reduction of receivables.

When problems of the enterprise are more significant, then the enterprise needs a comprehensive restructuring. Obviously, this type of reforming includes financial restructuring. Comprehensive restructuring includes the development of a new organizational structure, appropriate product, labor, technological policies, changes in management and organization. Restructuring of the enterprise in this way lasts mostly up to three years.

The choice of the type of enterprise's restructuring is to choose exactly one of several options that will fully meet requirements and priorities of its development, high manufacturability and product competitiveness. Forms and methods of enterprise recovery from the crisis depend on the expected results (potential profitability); desired time to achieve such results; necessary funds and opportunities to obtain them. The implementation of the selected measures has to ensure a satisfactory financial state of the enterprise for the current and future periods. It is necessary to take into account social and environmental consequences of each event.

The results of the restructuring are assessed by the following indicators:

- profitability achieving the appropriate level of profitability is one of the goals of restructuring and at the same time an indicator of its success;
- the presence of positive cash flows from operating activities the growth of cash flows makes it possible to repay debts and invest in the renewal and growth of production that indicates the achievement of the goal of restructuring;
- growth of labor productivity with the reduction of sales in traditional markets, companies have to find new markets; to assess the success of these actions, dynamics of productivity growth is used;
- increase in efficiency of resources of all types assessment of the success of actions is carried out on the basis of increasing the level of profitability of the enterprise;
- growth of export focus on foreign markets requires the use of the latest marketing technologies, improving product quality and competitiveness. The success of restructuring in this direction can be assessed by the growth rate of sales of the enterprise in foreign markets.

CONTROL QUESTIONS

- 1. What is the economic development of the enterprise?
- 2. Distinguish between concepts "economic development" and "economic growth".
 - 3. Discover the essence of the theory of directed development of enterprises.
 - 4. What is the essence of the theory of cyclical development of enterprises?
 - 5. Describe the concept of enterprise life cycle.
- 6. Describe the essence of the concept of evolutionary development of the enterprise.
- 7. Which are the most important prerequisites for Ukraine's transition to a model of sustainable development at the national and regional levels?
 - 8. What is the purpose of the restructuring of the enterprise?
 - 9. What is operational restructuring?
 - 10. What is the essence of strategic restructuring and when is it applied?
 - 11. With what is technical restructuring related to?
- 12. Which processes characterize the organizational and legal type of restructuring?
 - 13. Which indicators are used to evaluate the results of restructuring?

TESTS

- 1. The process of passage of economic and production system to a new qualitative state due to accumulation of quantitative potential, change and complication of the structure is:
 - a) economic development;
 - b) economic growth;
 - c) scientific and technical process;
 - d) there is no correct answer.
 - 2. Economic development reflects:
 - a) tactics to achieve a goal in the future;
 - b) strategy;

- c) concept;
- d) evolution.
- 3. Economic growth reflects:
- a) tactics to achieve a goal in the future;
- b) strategy;
- c) concept;
- d) evolution.
- 4. Theories of the firm are devoted to the study of:
- a) the essence of capital and income distribution;
- b) accumulation of capital and value creation;
- c) value creation, capital accumulation and income distribution;
- d) nature and accumulation of capital, value creation and income distribution.
- 5. One of the oldest theories of the enterprise is:
- a) technological concentration of the firm;
- b) institutional theory of the firm;
- c) classical theory of the firm;
- d) neoclassical theory of the firm.
- 6. The development of enterprises is interpreted as a sequence of passage from one state of internal and external equilibrium to another similar state, formed by current circumstances and factors this is the essence:
 - a) theories of directed development of enterprises;
 - b) theories of cyclical development of enterprises;
 - c) concept of the life cycle of enterprises;
 - d) concept of evolutionary development of enterprises.
- 7. Which theory of enterprise development is based on the criterion of economic efficiency that periodically tends to increase or decrease under the influence of internal and external factors:
 - a) theories of directed development of enterprises;
 - b) theories of cyclical development of enterprises;
 - c) concept of the life cycle of enterprises;

- d) concept of evolutionary development of enterprises.
- 8. The theoretical basis of which theory of enterprise development is law of diminishing returns of economic resources and nature of market development:
 - a) theories of directed development of enterprises;
 - b) theories of cyclical development of enterprises;
 - c) concept of the life cycle of enterprises;
 - d) concept of evolutionary development of enterprises.
- 9. A set of measures that has to ensure the growth of production and sales and improve financial state of the enterprise provides:
 - a) strategic restructuring of the enterprise;
 - b) operational restructuring of the enterprise;
 - c) economic restructuring of the enterprise;
 - d) political restructuring of the enterprise;
 - 10. The types of enterprise restructuring do not include:
 - a) organizational and legal;
 - b) technical;
 - c) economic;
 - d) financial;
 - e) managerial;
 - g) there is no correct answer.

TOPIC 16. COMPETITIVENESS OF PRODUCTS AND ENTERPRISE

- 16.1. The essence of product competitiveness.
- 16.2. Product quality and methods of its evaluation.
- 16.3. Standardization and certification of products.

16.1. The essence of product competitiveness

Businesses have to respond appropriately to actions of competitors and ensure competitiveness of their products under market conditions. Achievement of a competitive status is directly related to the promotion of manufactured goods to a specific group of consumers and depends on completeness of their needs.

Product competitiveness means a compliance of goods with market conditions, specific requirements of consumers not only for technical, economic and other characteristics, but also for commercial conditions of its implementation (price, delivery periods, sales channels, service, etc.). Competitiveness is often equated with product quality. In contrast to quality, competitiveness of the product is determined by a set of properties, which are of interest to a particular buyer and provide a specific need, and other characteristics that may not be taken into account.

Considering the essence of competitiveness of a product, it is necessary to emphasize the following aspects: competitiveness of the product can be determined only by comparing it with other products; competitiveness reflects the difference between this product and competing products in terms of the degree of satisfaction of a specific consumer need; in addition to quality indicators, it also takes into account costs of consumers on purchase and use of product to meet their needs.

A distinction has to be made between parameters and indicators of competitiveness. Competitiveness parameters are quantitative characteristics of product properties, which take into account industry specifics of its competitiveness assessment. There are the following groups of competitiveness parameters: technical, economic, regulatory (different types).

Technical parameters characterize technical and physical properties of the product, as well as the functions, which are performed by the product in the process of its use. Economic parameters determine the level of the price of goods and costs in the process of its maintenance. Regulatory parameters determine conformity of the product to established norms, standards and requirements, which are stipulated by the legislation and other regulatory documents.

Competitiveness indicators are a set of systemic criteria for quantifying the level of competitiveness, which are based on the parameters of competitiveness

(price, cost, profitability, capacity, etc.). Competitiveness is revealed through a system of qualitative and economic indicators. Qualitative indicators of competitiveness characterize properties of the product by virtue of the fact that it meets a specific need. They are divided into classification and estimating.

Classified indicators characterize the belonging of a product to a certain group and determine purpose, scope and conditions of use of this product. Estimating ones quantitatively characterize those properties that create quality of goods. They are used to standardize quality requirements and compare different samples of goods classified in one class according to classification indicators.

Estimating indicators are divided into: 1) regulatory (normative), which characterize patent purity of goods, requirements of their certification, compliance with international and national standards of quality, environmental friendliness, unification, safety, health protection and legislation; 2) comparative, which characterize functional features, reliability in consumption, ergonomic and aesthetic.

Economic indicators of competitiveness characterize total costs of consumers to meet their needs for this product. They consist of purchase costs (selling price) and costs, which are associated with the operation of the product: repairs, maintenance, spare parts, and energy consumption. In general, total amount of these costs acts for the consumer as the price of satisfaction of needs (consumption price). The level of consumer price for buyer is a component of product competitiveness and depends primarily on consumer properties of a particular product.

General rules for assessing the competitiveness of products are: analysis of the market for the sale of goods; analysis of competitors in the production and sale of similar goods; selection and justification of the most competitive analogue product as a basis for comparison; determination of necessary groups of parameters that are needed to be evaluated; establishing a set of indicators for relevant groups of parameters; selection of methods of calculation, definition and analysis of consolidated indicators by product groups; calculation of the integrated indicator of product competitiveness; development of measures to increase the competitiveness of products and its optimization by taking into account costs.

The competitiveness of the product has to be considered and evaluated systematically and continuously in close connection with the stages of the product life cycle in order to timely record the moment of declining competitiveness and make an appropriate decision.

Gaining of competitive advantages depends on how effectively competitive factors are used.

All factors can be divided into the following groups: main factors; providing and supporting factors; management factors.

Main factors are processes, which determine production and sales. It means that at the entrance to the production system there are flows of labor, material, technological, technical resources, as well as programs and plans of management processes. The output is the final product of a certain quality, quantity and range, which serves as an entrance for its implementation.

Providing factors include financing, supply, power generation, personnel selection. Supporting factors include maintenance and repair of equipment and infrastructure development of the enterprise.

Management factors determine such a scheme, where input is information, and output performs as parameters of various processes and resources that help shape the strategy of enterprise development.

The research of the impact of changes in certain factors on the competitiveness of the enterprise makes it possible to objectively assess its level and helps to determine further development strategy. Factors that shape competitiveness of the enterprise include: factors that shape the competitive advantages of the enterprise in production (quality, price, etc.); factors that are formed depending on the level of the business entity.

The whole set of methods for assessing competitiveness of the enterprise in modern conditions can be combined into the following groups:

1. The traditional method of assessing competitiveness of goods involves the calculation of individual and group indicators. Firstly, there is a need to highlight the most important characteristics of the product for the buyer: economic and consumer. Based on comparison of characteristics of the basic model and studied sample, coefficients of individual indicators of competitiveness are determined.

Secondly, there is a need to calculate the sum of coefficients of selected indicators for each group, according to the degree of their significance for the consumer. The calculated group of indicators of the consolidated index of competitiveness in terms of consumer and economic properties are compared with the basic indicators of product competitiveness.

The traditional method has such disadvantages: it includes quality and economic parameters of products, but does not take into account the way to meet consumer needs, which is an important component of product competitiveness; competitiveness parameters take into account only quality and price of the product, but parameters that may also affect competitiveness of products, such as state of fixed and working capitals, organization and efficiency of marketing activities, indicators of financial state of the enterprise. The method does not make it possible to predict the change in competitiveness in the future.

- 2. Production approach that is based on assessing the profitability of sales of specific products and their market share. According to this methodology, the more competitive is the product, which profitability and market share of the manufacturer is higher. The integrated competitiveness indicator is calculated for many products and each of them is assigned for a certain rank. The advantage of this approach is that evaluation process identifies those activities and product positions that bring company the highest profit that in turn helps in making strategic decisions in the field of sales policy. The disadvantage is that evaluation does not cover the analysis of reasons for a low competitiveness of products.
- 3. Matrix methods, which are based on the construction and analysis of two-dimensional matrices. These matrices are based on the principle of coordinate system, on one of the axes of which mark the indicators of assessing the state or prospects of the market, industry, strategic management area, and on the other indicators of competitiveness of respective business areas. The most well-known matrix method is the matrix of The Boston Consulting Group that is based on the

analysis of competitiveness by taking into account the life cycle of the product. Horizontally, this matrix shows the growth or reduction of sales on a linear scale, and vertically - relative share of goods or services in the market. At the same time, the most competitive are companies that occupy a significant market share.

This method has the following advantages: easy to apply and determine market share, as well as market growth rates; in the presence of information about sales volumes gives a chance to receive a reliable assessment of competitiveness. This method is suitable for the analysis of interaction of different directions of activity of the enterprise and for different stages of development of each direction of activity. However, matrix method has certain disadvantages: relative market share does not always correctly characterize competitive status of the enterprise; assessment of the competitiveness of the enterprise is carried out only by two characteristics; it is difficult to make management decisions because it eliminates the possibility of analysis of causes.

4. Marketing approach that involves taking into account not only requirements of the consumer to characteristics of products, but also assessment of a set of factors that determines the effectiveness of all marketing activities of the enterprise. Such factors include: efficiency of the supply system, organization of service and warranty service, reputation of the enterprise, etc.

The following stages of evaluation are distinguished within this approach: determination of consumer requirements for quality and economic characteristics of products; assessment of product competitiveness on the basis of characteristics, which are selected by the consumer; assessment of competitiveness of marketing activities of the enterprise in comparison with competitors.

The advantages of this method can be considered as the ability to predict the level of competitiveness in the future, as well as taking into account effective operation of the entire marketing system in the enterprise. The disadvantage of the marketing approach is the complex process of collecting information that is necessary for the analysis of external and internal environment of the enterprise.

The competitiveness of the product is assessed during the implementation of the following measures: a comprehensive analysis of requirements of foreign market (based on analysis of dynamics of quality of products that are sold there); development of main directions of products production, which are in demand; assessment of sales prospects (when entering foreign markets) and formation of the structure of export; setting prices for products; product certification; preparation of product advertising.

The competition is coercive for producers as it forces them to constantly improve the quality of products or services under the threat of being pushed out of the market. In modern market conditions to increase the competitiveness of enterprises it is necessary: reorientation to the innovative path of development of Ukraine's economy and creation of appropriate conditions for preservation and use of domestic scientific and technical potential; formation and implementation of state, sectoral, regional and local innovation programs which are aimed at increase of competitiveness of enterprise products; implementation of structural changes in the economic complex of regions on the basis of introduction of investment and innovation models by taking into account peculiarities of the potential of each of them; creation of an appropriate business environment and implementation of the corporate strategy of national enterprises that provides for the renewal of material and technical bases, and introduction of advanced production technologies; promoting the attraction of additional investments, including foreign ones, to modernize production and increase the competitiveness of products, while ensuring the compliance of forms of investment with the amount of funding; further development of entrepreneurship, firstly, small and medium business, strengthening of its competitiveness on the basis of application of cluster models; improvement of system of standardization and quality indicators of products, which will ensure its competitiveness in the domestic and foreign markets.

16.2. Product quality and methods of its evaluation

One of the most important indicators of the enterprise is product quality, which is characterized by a set of product properties that determine its ability to meet certain needs of consumers in accordance with its purpose. There is always a demand for quality products; they are sold at a higher price to receive more profit. Improving product quality ensures effective operation of the enterprise in market conditions, because it is equivalent to increase the volume of its production, but with much lower costs.

To ensure a proper quality in the process of production and consumption of products determine and constantly monitor its level, which involves the use of a certain system of indicators. The level of quality characterizes the degree of suitability of a particular type of product to meet needs of consumers. Product quality assessment involves determining its absolute, relative, prospective and optimal levels.

The absolute level of product quality is determined by calculating certain indicators without comparing them with the corresponding indicators of similar products. The relative level of quality is calculated on the basis of comparing the absolute indicators of product quality with the corresponding indicators of similar types, which are the best in terms of quality.

In the conditions of introduction of achievements of scientific and technical progress and increase of material welfare of the population the level of quality of production has to grow constantly. Therefore, there is a need to determine a prospective level of product quality that will ensure competitiveness of the enterprise in the future. Many factors, particularly requirements of consumers who use products, have to be taken into account when substantiating perspective quality indicators and establishing their specific levels for individual types of products; real opportunities to achieve established quality indicators at a given level of equipment and production technology; availability of methods and ways to determine quality indicators and control their formation in the production process.

Depending on the number of properties, which are characterized, quality indicators are divided into: unit, which characterize individual properties of the

product; complex, with the help of which a group of product properties is measured; generalizing, which characterize quality of the entire product of the enterprise.

Unit indicators are conditionally divided into the following groups: indicators of purpose (characterize the suitability of products for use and area of use); reliability and durability; manufacturability (characterize the efficiency of machine constructions and manufacturing technologies); ergonomic indicators (take into account a set of hygienic anthropometric, physiological properties of the person, safety requirements); aesthetic indicators (characterize expressiveness, conformity of style and fashion, originality, harmony); indicators of standardization and unification, which reflect the degree of use in the product of standardized and unified parts and assemblies; economic indicators (reflect costs of development, manufacture and operation of the product).

Complex indicators characterize a set of product properties, according to which it is divided into sorts, brands, classes.

In the process of economic activity, it is important not only to accurately assess quality of individual products, but also an overall level of quality of enterprise products. To do this, there is a need to use a system of general indicators, main of which are: coefficient of renewal of the range; share of certified products; share of products intended for export.

Methods of assessing a product quality are divided depending on the method of obtaining information into objective (measuring), organoleptic and calculated.

Objective (measuring) method involves the use of technical means of control during the assessment of product quality.

Organoleptic method involves the analysis of human perceptions of consumer properties of the product. The calculated method is used to determine the quality of newly created products.

Depending on sources of information, quality assessment methods are divided into: traditional (product quality assessment in specialized units); expert (used to assess aesthetic quality indicators); social (based on determining the quality of products based on the study of consumer opinion about it).

Statistical methods for assessing product quality are included into a separate group and based on the use of methods of mathematical statistics, and have selective character.

The economic mechanism of product quality management combines methods and techniques, which are aimed at ensuring the production and sale of high-quality products. The components of this mechanism are planning and forecasting of the production of high-quality products, stimulation and control of production, standardization and certification of products.

16.3. Standardization and certification of products

Standardization and certification play a particular important role in the process of improving product quality. In Ukraine, legal and organizational principles of standardization are aimed at ensuring a unified technical policy in this area and regulated by the Law of Ukraine "On Standardization" (2001).

Standardization is the establishment and application of uniform rules in order to streamline activities in a particular area. It is carried out according to certain principles and results of standardization, which are reflected in special regulatory and technical documentation. Thus, standardization is the establishment of a set of norms, rules and requirements for product quality. The main task of standardization is to create a system of regulatory and technical documentation that defines progressive requirements for production that is manufactured at enterprises.

The result of standardization is regulations in this area. They establish rules, general principles or characteristics of different activities or their results. Such regulations are: a standard, a code of common practice and technical conditions.

A standard is a document that establishes for general and repeated application, rules, principles or characteristics, which relate to an activity or its results, in order to achieve the optimal degree of order in a particular area.

Standards are a master sample of quality to which manufacturers have to strive. At the same time, they set a quality limit below which products (works, services) are considered as off-test, i.e., non-standard. Standards also provide for the

differentiation of products by quality: categories, classes, sorts, in accordance with which there is a material incentive for producers. Compliance with requirements of standards ensures the production of products that are competitive on the world market, increases the level of unification, and contributes to preservation and protection of the environment.

State standards of Ukraine are set by the central executive body in the field of standardization of products, works and services, as well as for various elements of economic objects of state importance (transport, communications, energy system, etc.). State standards contain mandatory and recommended requirements. They require a mandatory consideration of the level of development of science and technology, environmental requirements, benefits and product safety for consumers.

A code of common practice is a document that contains practical rules or procedures for the project, manufacture, installation and maintenance, operation of equipment, structures or products. As it is seen, the code of common practice does not directly apply to products, but regulates the process of its manufacture. It can be an independent standard, or part of it, or a separate document.

Technical conditions are a normative document that sets out technical requirements that products, services or processes have to meet. Like a code of common practice, it can also be as a standard, part of it or a separate document.

An important element in the quality management system is a certification of products and issuance of a document for the company that is called certificate.

Product certification is an activity that is related to the confirmation of conformity of product quality to the established requirements. The purpose of certification is to prevent a sale of products that are dangerous for health and life of citizens and environment; assisting a consumer in the competent choice of products; creating conditions for the participation of enterprises in international trade. Product certification is also a procedure for obtaining a certificate.

The certificate is a document that verifies a high level of product quality and its compliance with requirements of international standards ISO 9000 series. If the

company intends to sell a product on the world market, it has to be certified, and its quality has to meet international standards.

Product certification in Ukraine is divided into mandatory and voluntary. Mandatory certification is carried out only in the state management system of economic entities to confirm a compliance of products with mandatory requirements of regulatory documents. Voluntary certification is carried out at the initiative of the manufacturer to confirm the conformity of products to requirements that are not required by law, and helps increase competitiveness of goods.

State policy in the field of product quality management is aimed at stimulating activities of enterprises to improve quality and competitiveness of products. Improving quality of products provides the company with the maximum possible profit and contributes to the fuller satisfaction of social needs.

CONTROL QUESTIONS

- 1. Distinguish the difference between parameters and indicators of competitiveness.
 - 2. What characterizes the economic indicators of competitiveness?
- 3. List the methods of assessing the competitiveness of the enterprise in modern conditions.
 - 4. Why is competition compulsory for producers?
 - 5. Describe the concept of product quality and a need to improve it.
 - 6. What is the absolute level of quality and how is it determined?
- 7. How are methods of product quality assessment divided, depending on the method of obtaining information?
 - 8. Which indicators characterize the level of product quality?
 - 9. Which indicators are used to assess the competitiveness of products?
- 10. What is the essence of standardization and its importance in improving of product quality?

- 11. Name types of standards and their characteristics.
- 12. Name international standards and feasibility of their use in Ukraine.
- 13. Describe the product certification and its economic significance.
- 14. Certification and its importance in the field of product quality management.
 - 15. What is the state policy in the field of product quality management?

TESTS

- 1. The set of product properties that determine its suitability to meet certain needs of consumers in accordance with its purpose is:
 - a) technical level of products;
 - b) product quality;
 - c) competitiveness;
 - d) usefulness of the product.
 - 2. Quality levels do not include:
 - a) absolute level;
 - b) relative level;
 - c) complex level;
 - d) perspective level.
- 3. By means of which quality indicators a group of properties of product is measured:
 - a) social;
 - b) generalizing;
 - c) patent law;
 - d) complex.
 - 4. Unit quality indicators do not include:
 - a) indicators of purpose;
 - b) aesthetic indicators;
 - c) grade factor;

- d) economic indicators.
- 5. To determine the overall level of product quality indicators are used:
- a) the coefficient of renewal of the range; a share of products intended for export;
 - b) the efficiency of machine designs and technologies for their manufacture;
 - c) suitability of products for use;
 - d) all answers are correct.
- 6. Depending on sources of information, quality assessment methods are divided into:
 - a) organoleptic, calculation, expert;
 - b) traditional, measuring, registration;
 - c) social, traditional, expert;
 - d) measuring, social, organoleptic;
 - 7. Factors for ensuring the competitiveness of products do not include:
 - a) price;
 - b) sales channels;
 - c) the level of human resources;
 - d) the level of capital stock.
- 8. One of the important elements of quality management, which involves assessing conformity of products to certain requirements and issuance of a certain document is called:
 - a) standardization;
 - b) certification;
 - c) patenting;
 - d) no correct answer.
- 9. The amount of additional income from production and sale of high quality products is characterized by:
 - a) the annual economic effect of improving product quality;
 - b) the total economic effect of improving product quality;
 - c) economic efficiency of product quality improvement;

- d) additional income.
- 10. Economic ways to improve product quality are characterized by:
- a) correct personnel policy, work motivation;
- b) improving organization of production and labor, methods of technical control;
 - c) quality forecasting and planning system;
 - d) all answers are correct.

TOPIC 17. ECONOMIC SECURITY OF THE ENTERPRISE

- 17.1. The concept of economic security of the enterprise and its definition.
- 17.2. Assessment of economic security of the enterprise.
- 17.3. Enterprise security service.

17.1. The concept of economic security of the enterprise and its definition

The economic security of business entities is important in market conditions.

The economic security of the enterprise is a prevention of internal and external negative influences (threats) in order to ensure its effective and stable functioning and dynamic social development.

The most important factors that influence the economic security of the enterprise are: degree of perfection of the legal framework; level of taxation; access to world's markets; investment attractiveness of region and state.

Economic security of the enterprise is a state of protection of its vital interests from unfair competition, incompetent decisions, and imperfect laws, ability to resist these threats and realize the purpose of activity.

The main purpose of economic security management is to ensure productive work of operating system and rational use of resources, a certain level of staff activity and quality of economic processes of the enterprise, as well as to stimulate the growth of its production potential.

The main functional goals of economic security include: maintenance of technological security and achievement of high competitiveness of technical potential of the business entity; high-quality legal protection of all aspects of the enterprise's activity; protection of the information field, trade secrets and achievement of necessary level of information support of work of all divisions of the enterprise; effective organization of security of the company's personnel, its capital and property, as well as commercial interests.

The organization of economic security of the enterprise provides forecasting and planning of economic security by functional components; implementation of functional analysis of the level of economic security; general assessment of the achieved level of economic security.

According to the sources of security threats to the enterprise, they can be divided into internal and external. External threats to the operation of the enterprise include:

- activities of special services of foreign countries in order to obtain information about economic processes in the field of entrepreneurship; work of security services and formations of business entities in order to seize the property of the enterprise and their markets.

Internal threats to the security of the enterprise include: illegal or other negative actions of the personnel of the business entity that threaten its operation and development; violation of the established regime of protection of information with limited access for third parties; violation of the order of use of technical means; other violations of rules of security, record keeping, which create preconditions for the implementation of illegal goals of competitors; low level of information and analytical support of management on potential risks from internal and external threats.

Formation of economic security of the enterprise involves identification of the most important risks, which are divided by areas of detection, forms of investment and their sources.

Risks by spheres of detection include:

Economic - risk that is associated with changes in economic factors in the process of business or investment projects.

Social - risk of strikes, implementation of unplanned social programs under the pressure from workers and other similar risks.

Political - risk of various legal restrictions on business, which are associated with changes in economic policy.

Ecological - risk of ecocatastrophes and various natural disasters (earthquakes, forest fires, floods), which negatively affect economic activity of the enterprise.

Risks in entrepreneurial business by forms of investment:

Risks of real investment - are risks that are associated with violation of schedules of supplies of necessary materials and components, a significant increase in prices for investment goods, improper selection of contractors and other factors that reduce effectiveness of the investment project.

Risks of financial investment are associated with unconsidered choice of financial instruments for investment, financial difficulties or bankruptcy of individual issuers, unpredictable changes in investment conditions. Risks of investing in financial instruments include: risk of loss of profit; risks of reduced profitability (interest rate, credit, stock exchange and selective risks; risks of loss of liquidity; risks of bankruptcy).

Risks by investment sources:

Systemic risk - all activity participants are exposed to this type of risk. It is largely determined by changes in stages of economic development of the country or business cycles of financial market development.

Non-systemic risk - this type of risk is inherent in a certain investment object or activity of a particular investor. It can be associated with unqualified project management, increased competition in a certain segment of investment market, irrational structure of investment resources, negative consequences, which can be largely prevented through effective management of investment process.

The level of economic security of the enterprise largely depends on the personnel, its intelligence and professionalism.

Protection of employees and intellectual property covers interconnected and, at the same time, independent areas of activity of business entity. At the first stage of the process of protection of this component of economic security, threats of negative actions and possible harm from such actions are assessed. Among main negative effects on economic security of the enterprise are insufficient qualifications of employees of certain structural units, their unwillingness or inability to bring maximum benefit to their company. This may be due to low level of personnel management, lack of funds for remuneration of certain categories of personnel of the enterprise or their irrational spending.

The process of personnel planning and management is aimed at protecting the appropriate level of economic security, encompasses the organization of system of selection, hiring, training and motivation of necessary employees, including material and moral incentives, prestige of profession, social benefits.

The first stage includes analysis of technology market for the production of products that are similar to the profile of the enterprise or project organization (collection and analysis of information on features of technological processes in enterprises by producing similar products; analysis of scientific and technical information on new developments and technologies, which are able to intervene in the industry technology market).

At the second stage is carried out: a) analysis of commodity markets by profile of products that are manufactured by the enterprise and markets of substitute goods; b) assessment of prospects for the development of product markets of the enterprise; c) forecasting of possible specifics of necessary technological processes for the production of competitive goods.

The third stage is devoted to the development of technological strategy for the development of the enterprise (manufacturer), which has to include: identification of promising products from the group (nomenclature, range) that is manufactured by the enterprise; planning of a complex of technologies for production of perspective

commodity positions; budgeting of technological development of the enterprise on the basis of optimization of expenses under the program of technological development, for a choice of alternatives, processing of own developments or acquisition of patents and necessary equipment in the market; development of the general plan of technological development of the enterprise (with reflection in it of a choice: an alternative variant of technological development of terms and volumes of financing; responsible executors); drawing up a plan of own corporate innovations in accordance with the plan of technological development of the enterprise.

The organization of economic security of the enterprise includes the following components: information, technical and technological, financial, personnel, environmental and power.

Information component - company's services perform certain functions, which together provide collection and protection of business information. These include: collection and analysis of information that is relevant to a business entity; forecasting of trends in scientific and technological, economic and political processes; assessment of the level of economic security of the enterprise and development of recommendations for its improvement.

The company constantly receives flows of information that differ in sources of their formation (origin). It is established to distinguish: open official information; probable non-confidential information that is obtained through informal contacts of the company's employees with media of such information; non-confidential information that is obtained through the use of special technical means.

The prompt implementation of measures for collection and protection of information is carried out by a consistent implementation of a set of works, specially: collection of various types of necessary information, systematization of information that is obtained by relevant service of the enterprise (organization) for further analysis. To do this, information classifiers, internal databases and directories are created.

The analysis of received information includes comprehensive processing of received data with use of various technical means and methods of the analysis. In

the process of analytical work, forecast calculations are performed on all aspects of information activities and possible behaviors of competitors by using different modeling methods.

The protection of information environment of the enterprise traditionally includes measures to protect business entity from industrial spying by competitors; technical protection of premises, transport, correspondence, negotiations, documentation from unauthorized access of interested legal entities and individuals to confidential information; gathering information on potential initiators of industrial spying and taking necessary precautions to stop such attempts.

In the process of improving technical and technological base of the enterprise, measures are constantly taken to ensure its safety. Technical and technological component - is a process of protection of technical and technological base of the enterprise, and involves implementation of such measures, which are divided into several stages.

Ecological component includes problem of ensuring ecological safety of economic entities that provides for compliance with national (international) standards of minimum permissible content of harmful substances, which enter the environment, as well as compliance with environmental parameters of manufactured products.

The algorithm of process of protection of ecological component of economic safety of the enterprise consists in carrying out the following successive actions: calculation of effectiveness of measures that are taken to ensure ecological safety of the enterprise; development of alternative directions for the implementation of measures to comply with environmental safety standards; practical implementation of planned activities in the process of activity of respective business entity.

The organization of economic security of the enterprise includes a power component that provides for practical actions of a special unit to protect property, products, information and personnel of the entity. Phenomena (actions) that negatively affect the level of the power component of economic security are determined by relevant factors. The main ones are: inability of competing companies

to achieve advantages by correct methods of market nature, i.e., by improving quality of their products, reducing current costs for its production, improving of market research, etc.

The set of violent actions in the process of organizing economic security includes: physical and moral influences that are directed against a particular individual; practical actions that are aimed at preventing damage to property, including threats of reduction of company's assets and loss of financial independence; preventing the impact on information environment of the entity.

17.2. Assessment of economic security of the enterprise

The degree of adequacy of assessing economic security of the enterprise, reality of the set of necessary measures to prevent and eliminate danger, appropriate to the scale and nature of threats, depends on the accurate identification of threats and correct choice of measures of their manifestation.

The criterion of economic security of the enterprise has to be understood as a set of characteristics (features) on the basis of which it is possible to draw a conclusion about the presence or absence of economic security of its activities. In order to quantify the level of economic security of the enterprise there are several approaches to choose criteria:

- indicator approach state of economic security of the enterprise is determined by a system of indicators that represent the threshold values of indicators of the enterprise in various functional areas. The state of economic security of the enterprise is assessed by comparing actual and reference (regulatory) levels of indicators;
- resource approach economic security is determined on the basis of the state and level of use of corporate resources in certain areas of use. Corporate resources are considered as business factors that contribute to the achievement of business goals;

- program-target approach assessment of economic security of the enterprise is based on the integration of a set of indicators in terms of several hierarchical levels (cluster, multidimensional analysis, etc. are used);
- cross-functional approach economic security of the enterprise is determined by results that are obtained from the cooperation of all business participants (profit or other results). In addition, a comparison of business development costs (reinvested earnings) and costs required to ensure economic security are used.

The assessment of the level of economic security of the enterprise is carried out on the basis of determining the total criterion through weighing and summation of individual functional criteria. They are calculated on the basis of a comparison of possible amount of damage to the enterprise and effectiveness of measures to prevent this damage.

The total criterion R_c of economic security of the entity is calculated:

$$Rc = \sum_{i=1}^{n} k_i d_i$$
,

where k_i — value of separate (unit) criterion for the *i*-th functional component; d_i — share of significance of the *i*-th functional component; n — number of functional components of economic security of the enterprise.

The assessment of the level of economic security is carried out by comparing calculated value of the total criterion with real value of this indicator for the enterprise (organization). After calculating the impact of functional components on change of this indicator there is a functional analysis of measures to organize required level of economic security for individual components using the appropriate algorithm. Results of functional analysis are made in the form of a special tablemap.

During the filling of a table-map, negative phenomena that affect several components of economic security are taken into account separately for each of them, while the cost of repetitive measures for different functional components is taken into account in the budget of the enterprise (organization) only once.

Evaluation of effectiveness of relevant structural units of the enterprise (organization) with using data on costs of preventing possible negative effects on economic security and extent of averted and caused damage gives an objective assessment of effectiveness of all structural units.

A specific assessment of effectiveness of structural units of the business entity in terms of economic security is carried out by using the following indicators: cost of the event; amount of damage averted; amount of damage caused; effectiveness of measure (as the difference between averted and damage caused, divided by cost of the measure).

In order to minimize losses from implementation of threats to economic security in the enterprise, it is advisable to use the following methods:

- 1) warning: forecasting the state of the environment; monitoring changes in business environment; active targeted marketing, etc.;
- 2) evasion: rejection of unreliable partners; rejection of risky projects; risk sharing between several partners, etc.;
- 3) localization: creation of venture enterprises (projects); separation of risky areas of business into autonomous business units; creation of system of "filters" in the enterprise;
- 4) dissipation: integration of activities; diversification (sales, supply, investment, business areas); risk distribution over the time.

An alternative to application of these methods is a method of "compensation for losses" from implementation of risks of economic activity of the enterprise: creation of a system of reserves (self-insurance, insurance of economic risks, search for guarantors, transfer of risks, etc.).

Depending on specifics of the enterprise and in accordance with actual and regulatory values of its technical and economic indicators and magnitude of their deviation from the limit values of economic security indicators, state of the enterprise can be characterized as:

a) normal, when the level of economic security indicators is within limits, and the degree of use of available potential is close to technically sound standards;

- b) pre-crisis, when it exceeds threshold value of at least one of indicators of economic security, and others have approached their threshold values and, thus, lost technical and technological ability to improve production results due to failure to apply a preventive nature;
- c) crisis, when there is a transition of thresholds for most key indicators of economic security and there are signs of irreversibility of decline in production and partial loss of capacity.

The mechanism of economic security of the enterprise is a set of managerial, economic, organizational, legal and motivational tools of harmonization of interests of the enterprise with interests of subjects of external environment by means of which reception of profit is provided.

Creating necessary conditions for economic security of the enterprise, i.e., the only organizational and technical complex, in the process of forming which concept of guaranteeing security of business is being developed. It is based on a list of mandatory measures that are aimed at developing an action plan for protection of the object: determining composition of security service, its place in organizational structure of the enterprise, its competence, rights and powers, options for action in critical situations.

The whole complex of economic security activities is entrusted to security service of the enterprise (if there is any at the enterprise) as the main link of economic security system. This activity can be coordinated by one of the deputy heads of the enterprise. The economic security service of the enterprise in the process of activity performs control and coordination functions to ensure coordinated work of structural units to achieve a goal of entrepreneurial activity.

17.3. Enterprise security service

Autonomous security services are setting up at large and medium-sized enterprises, and economic security of the operation of small firms can be ensured by specialists of territorial organizations by signing contracts.

The security service of the firm performs a certain set of tasks. The main ones for any firm are the following: ensuring the safety of production, economic activities and protection of information that is considered as a trade secret of the firm (enterprise, organization); organization of work on legal and engineering protection of trade secrets of the company; organization of special record keeping, which prevents unauthorized receipt of information classified as a trade secret of the company; identification and localization of possible channels of leakage of confidential information in course of normal activities and in extreme situations; ensuring the protection of products and technical means that are necessary for production or other activities, premises, office equipment; ensuring the security of all activities, including negotiations and meetings in framework of business cooperation of the firm with other partners; protection of marketing situations from illegal actions of competitors; ensuring the personal safety of management and leading managers and specialists of the firm.

The list of specific tasks that are related to the safety of the firm, depends on industry characteristics, but has to be sufficient and reasonable. The set of specific tasks that face security service of the firm, determines a certain set of functions that are performed by it.

Regarding the admission of employees to protected information: a list of information that constitutes a trade secret of the enterprise is developed together with specialists. Measures are developed and implemented that provide access to security information only to those persons, who need it to perform their official duties; system of organizational and technical measures that regulate the mode of activity of the enterprise is being developed.

On office work: controls provision of established procedure for reproduction of documents, their storage and use; ensuring compliance with the rules of sending documents that contain trade secrets of the enterprise; develops and implements measures to anticipate the disclosure of information in the conduct of office work.

On issues of transmission and reception of information by technical means of communication: organizes reception-transmission of security information and open correspondence; chooses effective and economical communication measures depending on the nature of information that is transmitted. Calculates and analyzes incoming and outgoing correspondence, promptly delivers to recipients.

On issues of ensuring protection of property of the personnel of the enterprise, fire safety control: develops documents regulating the access regime, and draws up and issues all types of passes on the territory of the enterprise; controls execution of documents for the import and export of tangible assets; organizes checkpoints. Operates technical means of protection, develops and implements measures to ensure the personal safety of personnel; monitors state of fire safety, provides measures to avoid violations.

On the issues of engineering and technical support of the enterprise security: develops requirements for premises, where operations with security information are conducted, relevant documents, products, as well as material values are stored. Carries out certification of premises and objects of storage of material values. Organizes installation and operation of technical means of protection, including means of counteraction to technical intelligence; organizes special inspections and special research.

On issues of information security, takes measures to select personnel that is capable of working effectively with foreign companies; participates in preparation of documents and materials (programs, contracts) on foreign economic activity, organization of negotiations with foreign specialists.

Provides organizational and methodological guidance to protect trade secrets in the structure of units. Provides consultations for employees of the enterprise on organizational and legal issues of economic security and ways to protect information. With the involvement of specialists, company studies all types of activities of units in order to identify and close possible channels for dissemination of security information and economic damage.

The security service of the enterprise organizes an investigation into facts of disclosure of trade secrets, loss of documents or products that contain such

information. Connects with law enforcement and other state bodies for protection of trade secrets.

Regulatory documents that define organization of security services of companies identify specific objects that are subject for protection from potential threats and unlawful encroachments. These include: personnel (executives; staff who have information that constitutes a trade secret of the firm); material means of production and financial resources (premises, buildings, equipment, transport; currency, valuables, financial documents); information resources with limited access; means and systems of computerization of activity of firm (enterprises, organizations); technical means and systems of protection, protection of material and information resources.

The security service of the company has to ensure the overcoming of a critical (crisis) situation that may arise due to the conflict of interests of the company and its competitors. To manage security, large firms create crisis groups, which include: the head of the firm, a lawyer, a financier and the head of security service. The main purpose of the crisis group is to counter threats and realize the purpose of the firm.

CONTROL QUESTIONS

- 1. Describe the essence of economic security of the enterprise.
- 2. What is the most important factor that influences economic security of the enterprise?
 - 3. What threats of the enterprise by sources of origin do you know?
- 4. Describe the essence of risks and their division by areas of identification, forms of investment and their sources.
 - 5. What determines the level of economic security of the enterprise?
- 6. Which components of the organization of economic security of the enterprise do you know?
- 7. What has to be understood by the criterion of economic security of the enterprise?

- 8. Which indicators are used to specifically assess effectiveness of the structural units of the entity?
 - 9. What is the set of tasks performed by security service of the firm?
 - 10. Name a list of specific tasks to ensure safety of the firm.

TESTS

- 1. The state of protection of vital interests of the enterprise from unfair competition, incompetent decisions, imperfect laws, and also ability to resist these threats and realize the purpose of the activity are:
 - a) economic development of the enterprise;
 - b) economic stability of the enterprise;
 - c) economic security of the enterprise;
 - d) all answers are correct.
- 2. The risk that is associated with changes in economic factors in the course of business or investment project is:
 - a) economic risk;
 - b) social risk;
 - c) environmental risk;
 - d) political risk.
- 3. The risk of various legal restrictions on business, which are associated with changes in economic policy of the state is:
 - a) economic risk;
 - b) social risk;
 - c) environmental risk;
 - d) political risk.
- 4. What kind of risk is determined by changes in stages of economic development of the country or business cycles of financial market development:
 - a) systemic;
 - b) unsystematic;
 - c) risk of financial investment;

- d) risk of real investment.
- 5. In order to quantify the level of economic security of the enterprise use the following approaches to choice of criteria:
 - a) indicator approach;
 - b) resource approach;
 - c) program-target approach;
 - d) between functional approach;
 - e) all answers are correct.
- 6. What approach to choice of criteria for assessing the level of economic security of the enterprise implies that economic security is determined on the basis of the state and level of use of corporate resources in certain areas of use:
 - a) indicator approach;
 - b) resource approach;
 - c) program-target approach;
 - d) between functional approach;
- 7. Assessment of the level of economic security of the enterprise is carried out:
 - a) on the basis of a general criterion;
 - b) on the basis of a cumulative criterion;
 - c) on the basis of a functional criterion;
 - d) there is no correct answer.
- 8. On the basis of definition of aggregate criterion through weighing and summation of separate functional criteria the estimation is carried out:
 - a) the state of economic security;
 - b) the level of economic security;
 - c) stages of economic security;
 - d) provisions of economic security.
- 9. Methods of minimizing losses from implementation of threats to economic security in the enterprise are:
 - a) warning;

- b) evasion;
- c) localization;
- d) dissipation;
- e) all answers are correct.
- 10. What method of minimizing losses from implementation of threats to economic security in the enterprise involves integration of activities and risk allocation over time:
 - a) warning;
 - b) evasion;
 - c) localization;
 - d) dissipation.

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Додатки

ECONOMICS OF ENTERPRISE TEXTBOOK

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