

**Mechanisms of interaction  
between competitiveness and  
innovation in modern  
international economic  
relations**

**Collective monograph edited by  
M. Bezpartochnyi**

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ISMA University  
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**Konkurētspēju un inovāciju  
mijiedarbības mehānismi  
mūsdienu starptautiskajās  
ekonomikas attiecībās**

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The authors of the book have come to the conclusion that it is necessary to effectively use the management approaches to regulate modern international economic relations, methodological tools for analyzing international competitiveness and innovation. Basic research focuses on assessing the level of intellectual capital, incentives for entrepreneurship, human potential and labor market regulation, monitoring of solid biofuels market, transparency of budget process, analysis of corruption in country. The research results have been implemented in the different models of investment activities of insurance company, ensuring economic equilibrium, international security, corporate strategic financial management, use of recursive modeling, management of national security strategy, introduction of innovations in agricultural sector, development of export capacity, formation of a strategy high-tech innovation development in the EU countries. The results of the study can be used in decision-making at the level of international business, ministries and departments that regulate international relations, ensuring security and overcoming risks. The results can also be used by students and young scientists in modern concepts of the formation of international economic relations in the context of ensuring the competitive advantages of actors and improving innovation policy.

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# MECHANISMS FOR ENSURING COMPETITIVENESS IN THE INTERNATIONAL LABOR MARKET AND PERSONNEL MANAGEMENT

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**THE IMPORTANCE OF  
INFLUENCE OF THE  
COMPETITIVENESS ON  
PERSONNEL OF  
ENTERPRISES**

**Statement of the problem.** The modern world economy is in a state of profound changes when traditional principles, guidelines for structuring and development of the national economy lose their effectiveness through processes such as globalization, active technological and informational progress. There appears a need to update theory and practice. In particular, the notions of "competition" and "competitive relations" require a more in-depth analysis. The issue of raising the competitiveness level of a modern enterprise and of maintaining a professional level of staff is a topical issue. Modern direction of development of the EU and Ukrainian economic space requires new standards for managing the enterprise competitiveness and the personnel work in a competitive environment.

Current trend towards global integration favors adapting national economies to the specifics of the international market, which requires new competitive relations, a new market structuring. At the present stage, competition is an important and effective mechanism that ensures high efficiency, proportionality and dynamism of market relations in various fields, in particular, the sale of goods or services.

**Analysis of recent research and publications.** The problem of competition in economic science is always relevant, although the

concept of competition, its methods and mechanism have been analyzed in detail by many researchers. In particular, these concepts were examined by such foreign and domestic scientists as A.Smith, D.Riccardo, D.S.Mile, A.Marshall, F.Edgeworth, F.Cournot, J.Robinson, E.Chamberlin, J.Keines, J.Schumpeter, F.A.Hayek, F.Knight, K.R.McConnell, S.L.Brue, M.Porter, G.L.Azoyev, D.Yu.Yudanov, I.Dahno, A.Galchinsky and A.Chuhno. Depending on their time each of them discovered certain aspects of competition. Competition itself is an integral part of market relations, so it is a subject to evolution; both the very concept and methods of achieving it in practice. That is, the concept of "competition" always requires additional study and analysis. Priority issue in the development of the economy is ensuring competitiveness, namely, achieving its high level. But we have a number of problems related to the imperfection of competition and antimonopoly policies, the uncertainty of competitive tactics and strategy. This is due to the lack of the necessary basis: the institutional structure, tools, corresponding personnel, experience, etc., which also requires a detailed study of such a market phenomenon as competition. Theoretical and methodological aspects of the personnel competitiveness and of their assessment methods were considered by a large number of scientists, namely, D.Bogynia, O.Grishnova, L.Kalashnikov, A.Kolot, E.Libanova, S.Sotnikova, R.Fatkhutdinov, S.Tzymbaliuk, etc. Analysis of the economic literature shows that, despite significant scientists' contribution into the development of the issue of ensuring the personnel competitiveness, the category of personnel competitiveness, and in particular approaches to assessing this personnel competitiveness require further profound research.

**Statement of basic research materials.** Competitiveness is the presence of comparative advantages of one enterprise towards another. The problem of enterprises competitiveness becomes especially topical in the conditions of their functioning in economic competitive space of the international market. The head of a modern enterprise should pay attention not only to the level of profit and opportunities for further development, but highlight the importance of professionally high-quality personnel. The absence of a competitive workforce in the company will not enhance its competitiveness.

Contemporary globalization and creation of international markets, including the labor market, stimulate additional detailed research of market and market phenomena. Particularly topical is personnel competitiveness at the macro level. Macroeconomic level of research of

the human resources competitiveness covers entire population of the country, forming a personnel supply. Therefore, competitiveness of the personnel is a condition for ensuring competitiveness of an enterprise, competitive personnel and the national economy as a whole. Under these conditions, criteria for assessing personnel competitiveness consist in growth of public performance efficiency and satisfaction of needs. It should be noted that the qualitative characteristics of personnel competitiveness at the society level are related to the formation of human capital, namely, knowledge, experience, skills, health and all this contributes to the increase of labor productivity, efficiency of the labor market and society as a whole. Fig. 2.1 shows the groups of factors influencing personnel competitiveness.

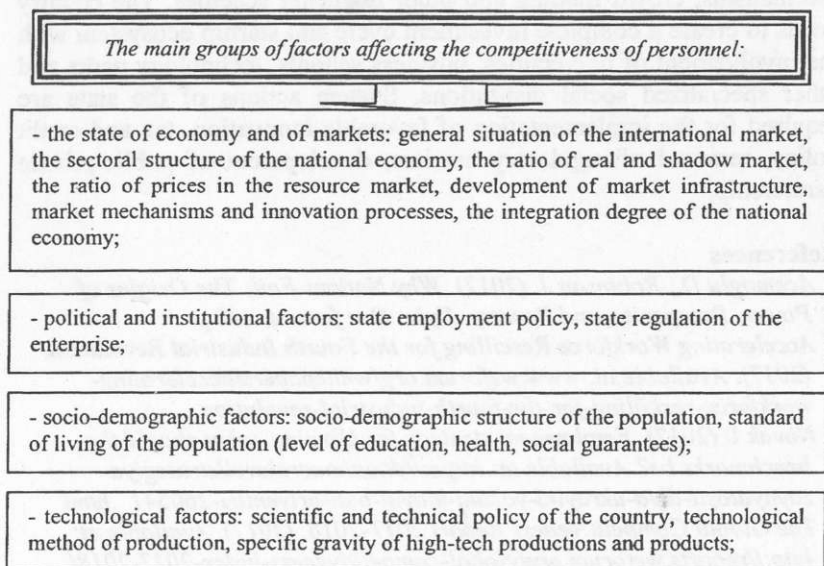


Figure 2.1. Factors affecting personnel competitiveness:

Considering competitiveness of a person in the labor market as an economic category, one can face complexity and ambiguity of this concept. Therefore, competitiveness of a person should be viewed from different points of view, namely, as a source of maximum satisfaction of an employee of the market demand for goods and services, as a property of ability to work, as a property of human capital, as the ability of the subject to manage competitive advantages.

Competitiveness characterizes qualitative side of the labor potential



of an employee; therefore, competitiveness level influences specificity of labor behavior and the degree of development of personal labor potential. Hence, according to O.Grishnova, competitiveness of an employee is correspondence of the labor quality to the needs of the market; opportunity to win in competition on the labor market, that is, more fully than other candidates to meet the requirements of employers as to the level of knowledge, skills, personal traits [4, p. 99].

Competitiveness of an employee is the ability to attain individual achievements in work that contribute to fulfillment of organizational goals. Competitiveness of an employee is determined by the quality of labor, corresponding to the market demand for functional quality of work, by the level of potential and actual work efficiency of workers as well as by the ability of professional development. There is a selection of the most capable workers in terms of compliance of their human capital with the quality of work. But it is not expedient to speak about the quality of labor force as the only and main component of the workforce competitiveness, because along with quality there are very important quantitative and cost characteristics of the workforce.

So D.P. Bogynia understands competitiveness of the workforce as the totality of not only qualitative, but also of the valuable characteristics of a specific product "labor force", which provides satisfaction of the specific needs of employers [1, p. 137].

The researcher described three levels of skills characterizing employee's competitiveness as follows: a set of qualities characterizing ability to work; having skills of searching and finding the necessary work; ability to persuade the employer in prerogative with other candidates; compliance of labor force quality with requirements of the workplace; ability to meet specific needs of the buyer of labor [5, p.198].

It should be noted that competitiveness of an employee in the external labor market is affected by various factors that are directly related to the following characteristics of the labor market, namely:

- offer of the labor market – with the number of candidates for the post, their professional and personal qualities and conditions of the offer;
- demand in the labor market – with the number of required personnel for the post with necessary professional and personal qualities, as well as with the terms of employment;
- assessment and solutions of the employer – with assessment technologies used by the employer in selection and recruitment [6, p.

209].

However, it is necessary to pay attention to the concept of “staff competitiveness”, which includes a set of competitive advantages of all employees of the organization. Competitiveness of the personnel is the ability of each employee of the enterprise, both individually and together, to react in a timely manner to external economic changes of the environment, to adapt quickly to them and to create products that meet all requirements of the consumer with the least expenses of all kinds of resources. That is why each organization should be interested in the training and development of its staff and the rational use of their competencies to achieve set goal, to maintain competitive advantages and to gain leadership in the foreign market. To do this, it is necessary not only to make the most of its employees, but also to develop corporate culture and corporate spirit, so that in turn, employees become interested in enhancing organizational competitiveness to the extent that they find it possible to increase their individual competitiveness. A person can identify one’s abilities, successfully develop them in the learning process, and then realize them during the work activity only when a person is interested in this work, realizes and accepts company’s goals for implementation.

In order to maintain a high competitive level of personnel, it is necessary to constantly favor its development. Accordingly, personnel development should be continuous, including professional training and advanced training. One of the main areas of development of enterprise personnel is the organization of interrelated processes developing competitive and personal abilities of an employee. Development of personnel contributes to the growth of skills, competences, knowledge of the employee; it increases intellectual, spiritual, professional level. All this in turn increases competitiveness of the hired employee in the labor market. One of the reasons for insufficient attention to the development of personnel is that the training of personnel within an enterprise needs own expenses, which is not enough in the enterprise [4].

Thus, we propose to draw attention to the assessment of personnel competitiveness on the basis of seven qualities, based on the formula recommended by Fatkhutdinov R.A. [9, p. 274-275]:

$$K_{\text{ср}} = \sum_{i=1}^n \alpha_i \sum_{j=1}^m \alpha_j F_{ij} \cdot 1 \quad (2.1)$$

where  $K_n$  is the level of personnel competitiveness;

$i = 1, 2 \dots n$  is quantity of experts;

$j = 1, 2 \dots 7$  is quantity of personnel qualities;

$\alpha_j$  – cogency of  $j$ - quality of the personnel;

$\beta_{ij}$  – evaluation by  $i$ -expert of  $j$ -quality of the personnel according to 5-mark grading system;

where  $K_n$  is level of personnel competitiveness;

$i = 1, 2 \dots n$  is number of experts;

$j = 1, 2 \dots 7$  is number of evaluated qualities of the personnel;

$\alpha_j$  – weight of  $j$ - quality of personnel;

$\beta_{ij}$  – an  $i$ -expert assessment of the  $j$ -quality of personnel according to 5-mark grading system.

This technique is the most practical for a real acting company in the world market. An assessment of the personnel competitiveness can be done based on its competitive advantages. The list of personnel qualities and their weight are shown in fig. 2.2. The assessment methodology is to determine a clear scale of criteria for each employee, to define a system of indicators for each employee and their objective assessment according to certain criteria. In the proposed method a mark grading system of assessment is used for determining the qualitative characteristics of employees. Thus, in the case of assessing competitiveness of the entire workforce of an enterprise, the application of such an approach is more proper, but not entirely inappropriate (for example, how to calculate the subjective characteristics of the entire workforce in the aggregate), since comparing the obtained value of the competitiveness with indices of other enterprises can only be provided when other enterprises apply the same scale and assessment methodology.

Competition on the labor market, unlike economic competition, is very rigid and can lead to negative social and economic consequences. First of all, competitiveness of the workforce is influenced by market conditions, reflecting relationship between demand and supply of labor. In Ukraine, in 2017, the number of unemployed was 9.6%, in 2015 - 9.1%, in 2013 - 7.3%. The growth of unemployment in our country is associated with the migration processes to other European countries and throughout the world in general. The distortion of the market pricing mechanism on the resource market due to low wages as compared to capital does not cause any interest of economic entities to produce low-performance equipment, which impedes the development of the personnel competitiveness.

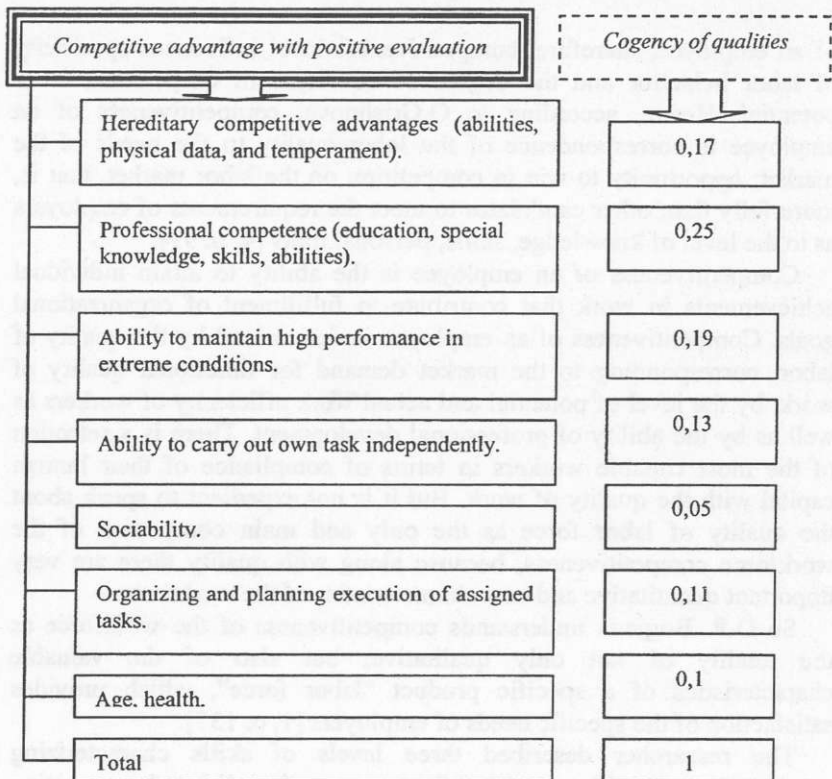


Figure 2.2. Weight of the qualities of personnel

The reduction of wages in the economic space, the distortion of its economic content and essence, the failure to take into account the labor expenses of the cost of vocational studies and training created negative preconditions for studies, retraining and constant advanced professional education. Low wages, lack of decent employment according to professional qualifications and professional profile on domestic labor market lead to a decrease in competitiveness of people with high qualification, high professional level and scientific degree. Highly skilled labor force on domestic market is not demanded, therefore, there is labor migration, in addition, it has become a source of cheap labor force, performing low-skilled or generally unskilled jobs.

In the competition process the personnel pursues identical goals, namely maximizing profits through achievement of consumer

preferences. However, the ways and means of achieving this common goal are quite different. Therefore, in a competition struggle, the winner is the one who was first to achieve certain competitive advantages and had seized a stable market segment. But conquest of advantages is not only the beginning, but it is much more difficult to stay in a competitive environment preserving its original position. Even more difficult is to assess the degree of competitiveness, that is, to identify the nature of the competitive advantage in comparison with others. Thus, the level of competitive advantage needs to be evaluated relative to the corresponding leading firm. If certain requirements are met, the level of competitive advantage can be estimated as the ratio of the level of profitability of an enterprise compared with the same indicator of the leading firm, calculated on a certain perspective.

In general, competitive advantage is the level of effective use of all kinds of resources at the disposal of the firm. Thus, the concept of competitive advantage can be defined as those features and properties of the product, which create a certain advantage over direct competitors for the firm. Accordingly, the notion of competitive advantage of personnel can be defined as characteristic features of the personnel, its qualitative and professional qualities.

It should be noted that the competitive advantages of the personnel are a concentrated manifestation of the advantages over competitors in the economic, technical, organizational spheres of an enterprise, which can be measured by economic indicators. Competitive advantages based on economic factors are determined by the following:

- the best general economic situation of the markets in which the company operates, which is reflected in high industry average profit margin, small payback periods of capital investments, favorable price dynamics, high level of per capita income, lack of non-payment, inflation processes, etc.;
- stimulating government policy in the area of investment, credit, tax and customs rates in the analyzed commodity area;
- objective factors that stimulate demand: a large and growing market capacity, low sensitivity of consumers to price changes, weak cyclicality and seasonality of demand, lack of substitute goods, etc.;
- the scale effect manifesting in the fact that enterprises with larger volumes of production can expect to have significantly lower unit cost than enterprises with unitary, small and medium-scale production types.

Competitive advantages are inextricably linked with the competition of personnel. They arise precisely when and where competition arises.

The more comprehensive the competition on the labor market is, the more significant the competitive advantages for commercial success are. Their peculiarities and mechanism of formation are the fundamental basis of ensuring competitiveness. It should be understood that it is necessary to study the state of the competitive environment of the enterprise when developing a strategy for the development of personnel, a new service of quality product. That is, an enterprise should analyze not only the structure and dynamics of changes in competitive forces, but also thoroughly examine individual competitors in order to fully imagine the strategy of their competing product, if it is possible. At the same time, it is imperative to take into account the fact that both the company and its competitors operate in an ever-changing competitive environment, in which a change in the strategy of behavior of individual subjects of competition may take place; new competitors may appear; individual opponents may disappear from the competition arena; new forms of training for personnel and more modern personnel assessment system can be offered.

**Conclusions.** Competitiveness of the personnel of an enterprise can be determined only as a result of its comparison with other participants, and is a relative indicator. It reflects the difference in personnel from the personnel of a competitive enterprise on the satisfaction degree of professional level. In order to find out the competitiveness of any employee, it is necessary not only to compare with others, but also to take into account the costs of his studies, internships and further activity. It should be noted that the task of a country is to form a culture of competitive relations, which will promote business development, introduction of new principles of entrepreneurial activity. The main task of competition policy should be to strengthen competitiveness of the national producer not only within the national economic space, but also internationally, due to rapid integration. A significant place is occupied by the study of competitors and the conditions of competition in the industry; it is necessary for the firm in the first place in order to determine what its advantages and disadvantages are as compared to competitors and to draw conclusions for the company to develop its own successful competitive strategy and to maintain a competitive advantage.

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### **PERSONNEL PAYMENT ORGANIZATION OF MACHINE-BUILDING ENTERPRISES IN MOTIVATION AND STIMULATION FORMATION**

One of the most important preconditions of ensuring effective management of the company is the implementation of effective motives and incentives to arrange the payment of personnel. Development of the optimal system of motives and incentives will boost the work activities of personnel, which is particularly important in conditions of unstable