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**INTEGRATION OF INTERESTS OF SUBJECTS
OF HIGHER EDUCATION SYSTEM AT MACROLEVEL:
PROFESSIONAL QUALIFICATIONS ASPECT**

A. Pochtovyuk, O. Kondratenko

Kremenchuk Mykhailo Ostrohradskyi National University

vul. Pershotravneva, 20, Kremenchuk, 39600, Ukraine.

E-mail: apochtovyuk@yandex.ru, olegeast@gmail.com

The trends of contemporary higher education system in Ukraine are shown. Professional qualifications compliance as a key mechanism to combine the interests of four subjects of such system are studied. The methodical recommendations are improved by determination of the main role of state in the regulation of license enrolment of students by education directions for the highest priority branches of national economy including machine-building industry.

Key words: higher education system, professional qualifications compliance, license enrolment, education directions, machine-building industry.

**СПОЛУЧЕННЯ ІНТЕРЕСІВ СУБ'ЄКТІВ СИСТЕМИ ВИЩОЇ ОСВІТИ
НА МАКРОРІВНІ: ПРОФЕСІЙНО-КВАЛІФІКАЦІЙНИЙ АСПЕКТ**

А. Б. Почтовюк, О. В. Кондратенко

Кременчуцький національний університет імені Михайла Остроградського
вул. Першотравнева, 20, м. Кременчук, 39600, Україна.

E-mail: apochtovyuk@yandex.ru, olegeast@gmail.com

Наведено тенденції сучасної системи вищої освіти України. Досліджено професійно-кваліфікаційну відповідність як ключовий механізм сполучення інтересів чотирьох суб'єктів даної системи. Удосконалено методичні рекомендації шляхом визначення головної ролі держави у регулюванні ліцензійного набору студентів за напрямками підготовки для найбільш пріоритетних галузей національної економіки (машинобудування).

Ключові слова: система вищої освіти, професійно-кваліфікаційна відповідність, ліцензійний набір, напрям підготовки, машинобудування.

THE RELEVANCE OF ARTICLE. In this article, it should be noted that mechanisms of integration of results of an assessment that are determined by various parameters, with reference to various, though to interdependent components of higher education system (HES), are not developed yet. Multiple-valued character of the higher education complicates aspiration to receiving a uniform unequivocal indicator. Therefore, different types of an assessment can supplement only, but not replace at all each other. In practice, we have interrelation of welfare of the nation (or level of gross domestic product of the country), a worthy standard of living of the population, the income of the enterprises as bases of investment development of national economy and existence of higher educational institutions (HEI) with an appropriate level of accreditation which carry out training of specialists of necessary quality and

qualification. At equally proportional change of results of activity of four subjects of HES (the personality consumer, society, the employer and a higher educational institution), excellent level of preparation of graduates is capable not only to satisfy requirements of employers and to increase economic efficiency of their activity, but also to affect industrial outputs and productions of non-material services. Equally, proportionality specifies that the percent or degree of satisfaction of interests of all four subjects of HES is equal to percent of compliance of the chosen profession and qualification of the worker.

MATERIAL AND RESEARCH RESULTS. Qualification is level of readiness, skill, and degree of readiness for performance of work on a certain specialty or a position that is defined by the category, a class or other attestative categories. Qualification of the worker is defined by such factors as level of the general and special knowledge, abilities, experience on this or similar position, necessary for mastering by a profession. The special commission assigns qualification based on all-round examination and experience of this worker, and legally fixed in documents, diplomas, certificates, etc.

Profession is a sort of labor activity of the person owning a complex of special knowledge, the practical skills received by vocational education, training or experience which give the chance to perform work in a certain sphere of production [1]. The professional standard establishes qualitative requirements to that the worker should know and should be able to do in a certain area of labor activity. Economic development depends on processes of improvement of the content of professional education that should not only correspond to modern equipment and technologies, but also to advance them.

Under ideal conditions of compliance of the qualification received in higher educational institutions and operating professional standards, there is actual a problem of definition of perspective requirement for specialists with the higher education. Scoping of training of specialists with the higher education and needs of economy for them for the perspective period is one of ways of improvement of state regulation of a professional labor market. One of the main tasks of modernization of the higher education is imbalance elimination between requirements of economy and volumes and structure of preparation and retraining of specialists by strategic planning of development of priority branches of economy and their balanced staffing. On the one hand, in modern conditions, unlike command and administrative planning, the volume of training of specialists decides on the higher education as need of economic development of the country, and actually need of the personality for education. It objectively does not coincide with economy possibilities in providing with workplaces of all experts according to the received specialty. On the other hand, feature of the modern period is that subjects of economic activity in the absence of accurately planned volumes of training of specialists with the higher education have possibility independently to form personnel, without attaching to distribution of graduates of higher education institutions to the enterprises, in establishments, the organizations [2].

Therefore, at macroeconomic level the quantitative content of factor of professional qualifications compliance consists in definition of requirement of economy in specialists with the higher education and providing the country with staff with the higher education.

Youth reception in HEI are the integrated indicator that includes many factors, which influence its quantitative parameters, and are regulated by the state via the mechanism of legislative and normative legal acts. As in modern practice there are some sources of financing of reception and training of specialists with the higher education (funds of the state budget (state order), local budgets, ministries and other central executive authorities, individuals and legal entities), exist features and a certain specifics of methods of definition of reception of youth on education. Actual is the question of justification of methods of students accepting:

- at the expense of the state budget (state order);
- for funds of individuals and legal entities;
- the general indicator of reception which includes reception volumes by the state order, reception volumes for funds of individuals and legal entities, local budgets, the ministries and departments in which submission there are higher educational institutions.

The state regulates a certain part of students accepting in HEI according to the priorities of development of economy and for providing intellectual potential of specialists in fundamental and applied sciences that are the strategic directions of any developing country. The main tools of state regulation of education is the method of orders according to which the Ministry of Education and Science of Ukraine, the ministries, other central executive authorities in which submission there are higher educational institutions. Led by the Ministry of Economics they form and place the state order for training of specialists for funds of the state budget annually the next academic year, considering that the declared specialists should be required in four-six years.

Determination of volumes of reception on the state order in the different directions is expedient for carrying out within educational and qualifying levels (the younger specialist, the bachelor, the specialist, and the master). Due to the object of research is education in higher educational institutions of the III-IV levels of accreditation, methodical approaches will concern only reception scoping on qualifying levels "specialist" and "master".

The direction is a training of specialists in a higher educational institution for receiving basic and full higher education of a certain qualification. Now «specialist» and «master» prepare specialists in educational and qualifying levels on 48 directions. Each separate speciality includes some related specialities in the structure. At the same time, on specialties to carry out perspective researches is inexpedient, because of release of specialists of many specialities under the influence of organizational and technical factors disappear and on their place appear new [2].

Within these educational and qualifying levels, those directions on which next year enrolment of students will increase or will decrease are corrected. At definition of the directions that are subject to adjustment, it is necessary to consider prospect of

priority branches of economy and the corresponding need for specialists. On the other hand, to provide stay of rates of reception in those directions which specialists in the next years will be superfluous on a labor market. Finally, reception volumes by the state order in all directions within educational and qualifying levels "specialist" and "master" are summarized.

Accepted volumes of students in the directions usually is determined by the state order under the influence of a number of variable factors the basic among which is the structure and prospects of development of priority branches of national economy. Dynamics of volumes of reception on qualifying levels specialist" and "master" in higher education institutions of the III–IV levels of accreditation should correspond to change of economic realities. Only in this case the satisfaction of interests of all subjects of HES at macro level is reaching through the accounting of their possible economic requirements.

Thus, diagnostics of the main purpose result of realization of mission of the higher education at national level is come to definition of degree of compliance of structure and dynamics of an enrolment of students in the existing directions and structures and dynamics of development of branches of economy, their percentage share in country gross domestic product.

Each country surely defines the list of those branches that are priority for its development. As a rule, this list is individual for each country and changes on the periods of development of each state. Such change of strategic priorities in economy development is connected mainly with a number of political, economic and social factors. The major among them are:

- difference in natural, labor, scientific, technical, technological, information resources;
- level of the technical and economic, organizational and economic relations, feature of the relations of a property and economic mechanism of the country;
- type of the chosen economic system (traditional (a national economy), market, mixed, transitional (transformation), command and administrative);
- existence of the accumulated experience, specialization and traditions of development of branches of economy;
- feature of development of technological ways in each country;
- innovative and investment priorities of development of the state;
- external economic position of the country etc. [3].

So, for the USA strategically important branches of economy are metallurgy; electronic, electro-technical, oil, chemical, automobile, aviation mechanical engineering and instrumentation; mining; chemical and food industries, production of hardware; Germany – the mining, metallurgical, chemical, machine-building, food, ship-building, textile, oil refining industries; Italy – the defensive, machine-building, textile and sewing, iron-and steelmaking, chemical, food, engine-building industries, tourism.

In the Program of development of investment and innovative activity in Ukraine accepted by the Cabinet of Ministers of Ukraine on 02.02.2011, key branches of economy in which investment and innovative projects are realized, combine in fuel

and energy, agro industrial, housing-and-municipal, machine-building complexes and transport infrastructure. The program is carrying out in two stages. At the first stage (2011-2012) it is supposed to create favourable conditions for attraction of investments, and on the second (2013-2015) – to involve investments for the purpose of ensuring development of high-technology key branches of economy, in particular space branch, introduction of information and communication technologies, bio- and nanotechnologies, production of modern materials, pharmaceutical products and medical equipment etc. [4]. According to the Draft Law of Ukraine “On Amendments to Particular Laws of Ukraine concerning stimulation of attraction of investments”, the government in general has reduced number of priority branches of economy with investment projects for the period from 2013 to 2032, to four ones. These are agro industrial, housing-and-municipal, machine-building complexes and transport infrastructure [5].

The state support of investment activity is provided to economic entities who realize the investment projects in production, storage of foodstuff, production of computers, electronic and optical production, cars and the equipment, the electric equipment, automobile and other vehicles, processing of waste products, construction, reconstruction and technical re-equipment in the sphere of transport infrastructure, a heat supply, water supply and a drainage systems.

As object of research should be a branch or branches of economy that have priority status within last 10–12 years. It is possible to note that the understanding of a key role of priority of machine-building industry finds expression at the state level. The machine-building industry is considered as the largest complex on which activity competitiveness of national economy both on internal, and on external the markets depends. Practically in all developing countries it is given particular attention to mechanical engineering, due to this branch creates technological basis of national economy. Degree of technological independence of national economy and its competitiveness depends on competitiveness of machine-building enterprises in the world [6].

The machine-building complex is a set of the industries making automobiles and the equipment for all elements of a national economy. The machine-building industry in Ukraine is represented by metallurgical, mining, hoisting-and-transport, energy, ship-, air - and motor industry, production of cars and mechanisms for the chemical and petrochemical, light and food industry, agricultural, construction and road mechanical engineering and production of cars for municipal services, production of machines and tools, cars and the equipment for armed forces.

It is quite clear that change of volumes of the state order in the education directions in higher educational institutions of Ukraine should correspond to degree of priority of branch of mechanical engineering. Interrelation research between development of mechanical engineering and dynamics of an enrolment of students as future specialists in this area should start with the list of the necessary directions of training of specialists and masters.

The review of foreign experience shows that definition of perspective needs of the state in specialists with a certain skill level performed by a limiting of total places for

students at the higher school considering personnel, financial, information and other resources with distribution of the licensed volumes of reception among the best institutions on a competitive basis [7]. License volumes of an enrolment of students by each direction of training is a limit which state defines within educational and qualifying levels for each higher educational institution separately. Together with the state order, the license enrolment is the additional instrument of regulation of requirements for training of specialists and masters for the priority branches of economy.

CONCLUSIONS. Therefore, professional qualifications compliance of the graduate of a higher educational institution should putted by the state at a stage of satisfaction of requirements of economy in specialists with the higher education. As in Ukraine as the most priority branch of economy is machine-building industry, for macroeconomic research this branch is chosen. Degree of professional qualifications compliance will mean degree of satisfaction of all subjects of HES (the personality consumer, society, the employer and a higher educational institution). The result of realization of mission of the higher education is achievement of specialization of future specialist that is connected with the certain field of knowledge, tool or equipment used, and with manufactured products or provided services with detailed circle of professional tasks and duties.

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**СОПРЯЖЕНИЕ ИНТЕРЕСОВ СУБЪЕКТОВ
СИСТЕМЫ ВЫСШЕГО ОБРАЗОВАНИЯ НА МАКРОУРОВНЕ:
ПРОФЕССИОНАЛЬНО-КВАЛИФИКАЦИОННЫЙ АСПЕКТ**

А. Б. Почтовюк, О. В. Кондратенко

Кременчугский национальный университет имени Михаила Остроградского
ул. Первомайская, 20, г. Кременчуг, 39600, Украина.

E-mail: apochtovyuk@yandex.ru, olegeast@gmail.com

Приведены тенденции современной системы высшего образования в Украине. Исследовано профессионально-квалификационное соответствие как ключевой механизм сопряжения интересов четырех субъектов данной системы. Усовершенствованы методические рекомендации путем определения главной роли государства в регулировании лицензионного набора студентов по направлениям подготовки для наиболее приоритетных отраслей национальной экономики включая машиностроение.

Ключевые слова: система высшего образования, профессионально-квалификационное соответствие, лицензионный набор, направление подготовки, машиностроение.

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