ESTIMATION MECHANISM OF ACTIVITY RESULTS OF HIGHER EDUCATION INSTITUTIONS OF DIFFERENT TYPES UNDER MODERN CONDITIONS

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Abstract. Estimation of education is gaining momentum with the entry of private institutions, change in people's attitude towards education and the changing scope for the different courses being offered. The education service can be described as a high contact, consumer and people based service.

Keywords: marketing research, SWOT-analysis, market segmentation education services, consumers' segment, universities innovation activity.

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Introduction

Estimation of efficiency of performance of higher education institutions (hereinafter – HEI) under modern conditions of educational environment is urgent from the point of view of competitiveness and importance of development of strategic solutions as to search of possibilities of probable diversification of educational activity.

Efficiency evaluation of HEIs

At present in scientific research results special attention is paid to the problem of analysis of enterprise financial and economic activity and efficiency of its functioning (Kaleniuk, 2002; Bogolib, 2006; Niiazova, 2011). Economic reality of HEI functioning that conditions strengthening of control on the part of fiscal bodies over observation of tax discipline, introduction of statutory instruments and increased requirements to goods and services quality, respect of consumers' rights and uprising competitiveness among members of higher education market, for the purpose of achievement of maximum economic effect, promotes focusing on analysis of financial and economic activity and efficiency of key processes of HEI performance.

Thus, considering all processes providing creation of finished goods of any HEI one shall take into account that their estimation has to be focused on achievement of maximum social effect, but seeing that any enterprise's financial result is an important indicator of its performance, their estimation is urgent for achievement of maximum competitiveness level.

Financial results of HEI's activity as a state-funded organization is a final outcome of comparison of profits and deductions by special and general fund (deficit and surplus). As for private HEIs, a net profit indicator under report on financial results is a final result characterizing entrepreneurial efficiency.

Thus, for any HEI it's possible to estimate results of its financial and economic activity, but considering HEI's non-uniformity and specific nature depending on form of ownership, it's expedient to develop single approach to development of complex of parameters, which have to reflect all aspects of higher education institution's performance.

As shows analysis of domestic and foreign experience, much attention is given to allround estimation of HEI's performance efficiency on the part of state and public organizations. HEIs are entities of external estimation in view of financial, quality and and/or quantitative indices. To increase the level of control by results of activity of higher education system entities, estimation methods are being continuously improved.

Special attention was paid to estimation of HEIs in socialistic period of development of Ukraine. There was a system of regulatory documents and control bodies, which estimated educational institutions by their level of conformity to various normative parameters, as well as influence on activity of material production (Verkhogliadova, 2005):

- economic role of higher education institutions in increasing public production efficiency;

- comparative efficiency of different forms of staff training.

Foreign scientists regard HEI's activity estimation from point of view of residual financing principle, which characterizes higher education system as one of the most attractive directions of investment development (Petrunia, 2004).

Economic essence of state HEIs is, first of all, based upon their legal autonomy.

Detailed analysis of entrepreneurial activity in a higher education institution in the most general terms allows interpreting it as a process of creation of "new combinations of resources (natural, material and technical, labor, intellectual, informational)" to achieve maximum effect and the whole economic activity of HEI under market conditions is related to entrepreneurial activity with all possible consequences (Kratt, 2005; Malkhotra, 2002).

Consequently, in our opinion, HEI's entrepreneurial activity is innovatively oriented in competitive terms, focused on increasing the degree of educational process efficiency and educational services quality as a result of application of functionality of management of key factors of competitiveness, internal process and production resources.

Activation of HEI's entrepreneurial activity led to the development of market relations in the sphere of higher education and increased competition between such distinct market segments as state-financed and private HEIs. In contrast to the private HEI's, the activity of budget institutions is characterized by:

- availability of all-round regulatory educational procedures with a large number of indicative and directive indices;

- budget planning of expenses from budget sources of financing, targeted use of funds and strict financial discipline;

- cost-based principle of budget financing that does not foresee flow of revenues from own activity results (Riabova, 2011).

In contrast to the administrative management system, management stipulates higher level of managers and subordinate employees' freedom, promoting revision of old methods of economic management and introduction of new ones, opening before HEI a larger space for provision of rational operation under market conditions and simultaneously setting new problems related to determination of qualitative characteristics of management system and efficiency of their functioning processes.

At the present stage of development of the state-funded HEIs, there are conditions, under which they are no longer seen as the institutions financed entirely by public funds. The

following stable tendency is being observed: an educational institution is regarded as an enterprise that creates and sells intellectual creations of its employees – educational services - on the market. Consequently, certain trends were seen with the real objective prerequisites for development. The abovementioned situation is related to making HEIs more independent under current legislation in the sphere of internal organizational management, implementation of financial policy, determination of main development directions. At the same time there is a discrepancy between legal and actual conditions of financing of higher educational institutions, which prevents them to take real actions to large-scale development and expansion of material-technical base only at the expense of public funds (Granovetter, 1985). As a result, HEIs actively search for and involve non-budgetary funds. Thereafter in the analysis of HEI's financial and economic activity an efficient approach is required, which takes into account its specific nature as an enterprise.

HEI's activity is estimated by way of comparing results of work by purposes and used as a feedback mechanism in taking managerial decisions. For maximum efficiency estimation has to be carried out systematically and purposefully. The system of measures in collection of information should guarantee the possibility of a purposeful and detailed analysis on the basis of efficiency indices in some dimensions (perspectives). The set of indicators should be focused on the needs of the management system and not only consist of financial indicators. The flow of managerial information should be regulated and monitored (Saliga, 2005).

Both HEI's functioning environment (external and internal) and the results of its activity can be the subject of estimation. Depending on estimation purposes of its subjects interested parties may take a position near the HEI.

Availability of various indices in HEI's final financial reporting resulted into reduction of the whole estimation process to non-formalized indices as indicators of educational institutions' activity. For this very reason at the legislative level there was an attempt to introduce a unified estimation system based upon application of ranking scores, which irrespectively of HEI's form of ownership characterize its development level and are meant for comparative characteristic of the higher education system as a whole. But the offered system of criteria ignores the depth of all economic processes both qualitatively and quantitatively, because the impact of factors of external and internal environment causes transformational changes in all links of HEI's activity.

A set of indicators is a necessary tool for building an information base for monitoring operational efficiency using the method of proper control on the activities of the HEI's economic mechanism, identification and involvement of internal reserves (growth of operating profitability, the quality of the final product) and final achievement of victory in the competitive environment.

Development of the system of indices requires systematization of data of estimation of HEI's activity results and their classification. System view requires to cover all aspects of activity according to subject of mission. From the perspective of HEI's financial and economic activity results the main task of system approach consists in detection and description of complexity of the system and grounding of additional relations, which being included into the management system make it controllable within the required limits, simultaneously having preserved such separation limits, which promote rise of the system efficiency (competitive advantages) (Pankrukhin, 1995).

Consequently, one offers to group operating indices of HEI's financial and economic activity depending on the following classification features:

- cluster of hierarchic structure of management subject:

- operative - is determined by level of fulfilment of short-term purposes that does not require complex analysis, is expressed by an absolute magnitude and is used on basic decision-taking level;

- tactical – is an intermediate level, which characterizes level of fulfilment of short-term purposes and is used on tactical decision-taking level;

- strategic – is a complex index, which reflects qualitative side of HEI's operation in achievement of the strategic purpose (mission, strategy, special policy);

- competitiveness level:

- financial – it shows essential properties of formation of HEI's economic steadiness and stability or financial result of activity, because it estimates economic consequences if decisions taken and is an indicator of conformity of HEI's strategy;

- marketing – it determines availability and positioning on certain market segment of selected HEIs;

- financial and cost-based – it reflects qualitative level of process and product (goods, services) and conditions, which provide it;

- potential – it reflects characteristic of qualitative change of human (intellectual) capital, informational support and infrastructure of provision of permanent long-term rise of growth and development (Matviiv, 2005).

- scope of properties under research:

- partial – it reflects essential properties of the process, its value can be determined (calculated) in spite of other indices;

- generalized – it reflects a set of properties and it determined by a coefficient, percent or index that is calculated by means of several indices;

– ranking level:

- primary (main) – it measures conformity of activity result to the purpose set;

- secondary (additional) – it characterizes the reason of deviation of actual data from the target ones.

HEI's estimation has to be subordinated to the purpose of the use of estimation results. Thus, as a result of carried out study several approaches to estimation of HEI's activity efficiency were distinguished depending on the aim set, which reflect the whole set of views and approaches to high school estimation process:

- economic – HEI is estimated as a business entity, ignoring its high public value and social orientation; information of accounting and other financial reporting is used, where conventional financial indices are used as main criteria;

- control - it stipulates quality estimation of educational process and educational services of HEI in view of conformity to minimum governmental and regional requirements, contains indices of control procedures (licensing, certification and accreditation);

- rating - a set of procedures is used for estimation of features, which determine selection of potential consumers of educational services in the competitive environment of higher education market;

- parametric - it stipulates development and introduction of quality management system of HEI on basis of ISO 9000, estimation and certification of a higher education system.

Thus, according to the results of carried out analysis of scientific research results and studies we can assure that existing estimation methods are mainly based upon analysis of one of the factors that is the source of getting competitive advantage (of financial, scientific, technical or qualitative nature). Capability of HEI to involve internal reserves and efficient management by competitive advantages is more efficient for formation of competitive advantages (Aleksandrov, 2006).

Therefore, the development of evidence-based methods of forming a system of performance indicators of entrepreneurial activity of the university gives you access to a high level of quality management and improvement of competitiveness of the university.

In this context plotting of an estimation profile characterizing HEI's activity degree of achievement of purposes set is of vital importance. System of balanced indices is an efficient tool of development of analytical solutions and comparison of their actual values with target reference points (Fadina, 2011).

Specific nature of the Balanced Scorecard ((hereinafter– BSC) in HEI's activity as governmental institution makes itself evident in the fact that such organizations first of all estimate social efficiency of their activity. Nevertheless, financial parameters are of great importance in estimation of conformity of expenses and degree of achievement of objectives of HEI's activity. BSC makes evident conformity of purposes under development and measures of general strategy of development, i.e. to strategic priorities and mission and helps to address the main issues: estimate activity results efficiently and implement the strategy successfully.

Functional mechanism of BSC use in HEI's activity as the system of strategy management and implementation consists in transformation of HEI's strategic purposes into the system of particular parameters of efficiency in realization of objectives.

Thus, the main objective of BSC formation consists in expression of HEI's strategic purposes through the system efficiency indices in achievement of objectives. BSC is an efficient tool not only for internal estimation (HEI's activity efficiency and transformation of its strategic purposes into certain measures), but for external – provision of information for licensing procedures, certification and accreditation.

As a result of analysis of key aspects of HEI's activity and investigation of scientific research results in this field, we offer estimation scheme of financial and economic activity results shown in Figure 1 (Obolenska, 2001).

Subjects of research of portfolio analysis are HEI's internal and external environment, whose estimation is directly related to financial results of the higher educational institution's activity, because their formation is possible only under the assumption of favourable synergetic influence of all factors of micro- and macro environment.

Use of SWOT matrix in the research of HEI's activity efficiency is related to simplicity of its practical use and universality of functional apparatus and maximum output of such procedures.

Comparative estimation of all threats and capabilities allowed identifying the main «narrow» places in HEI's operation and priority of taking corrective measures in problematic areas. Mobilization of all capabilities is related to HEI's internal potential that is a significant advantage for improvement of role of the educational institution in aggravation of competitive struggle for future students' contingent and extension of specific share on the definite market segment to provide high quality higher economic education.

Characteristic of the strengths and weaknesses of the HEI, indicates the actual state of existence and some organizational deficiencies affecting the formation of the reputation of the institution. The next stage of operating environment estimation is characteristic of influence of external environment factors provided STEP matrix is used (Dainovskiy, 2009). In Kraineva R.K.'s opinion, implementation of such tool is connected to priority of social and technological factors in HEI's activity, because their target orientation is related to public

nature of the activity and introduction of achievements of scientific research results into all industrial branches and socio-economic life (Kraineva, 2008).

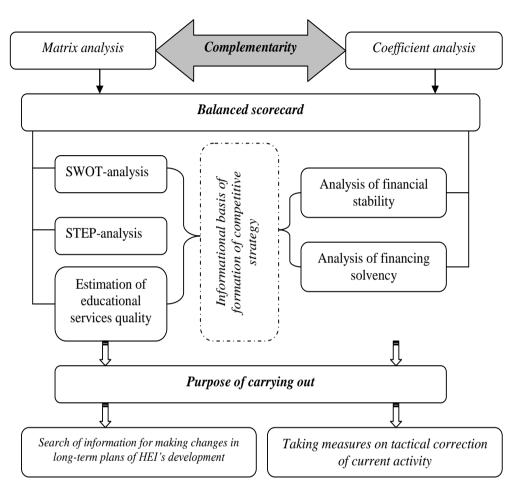


Fig. 1. Estimation scheme of financial and economic activity results [author's development]

Analysis of the quality of educational services is carried out using the matrix of "market growth - market share" that allows the institution to assess its own position from standpoint of attractiveness of some educational and training programs and their position in a definite market segment, namely:

- portfolio of educational services under research includes sufficient quantity of products in attractive spheres of educational activity;

- offered educational services are sufficiently cost-efficient products that allows to develop perspective directions and put up investments into diversification of the activity;

- portfolio of educational services provides both adequacy of income and sufficiency of monetary flow;

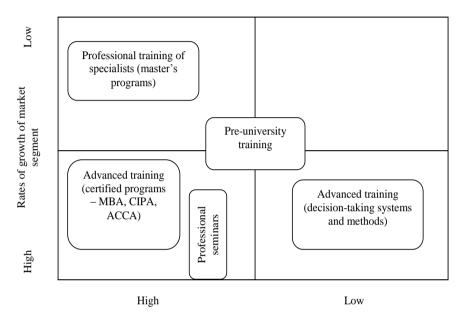
absence of uncompetitive service in the portfolio under investigation.

It should be noted that there are the following advantages of implementation of the offered mechanism:

- it is source of information for taking decisions on broadening or contraction of certain directions of educational activity;

- it is an important argument against emotional solution of the problem of resources distribution necessary while rendering educational service.

Consequently, let us show the actual state of the market and economic profile services provided by ^{LIET} in Figure 2.



Relative share on the market

Fig. 2. Matrix of analysis of portfolio of HEI's educational services of economic profile [author's development]

The analysis of the portfolio of services, allows asserting the correctness of the choice in formation of professional educational competence of future specialists. Positioning on the market segment with high specific share and significant growth rates is evidence of reliability of formation of supply on the educational services market that is formed under requirements of modern market environment and modern tendencies of formation of management mechanisms of socio-economic processes both on micro- and macro level. Thus, the selected strategy and appropriate tactics of HEI's governing body are absolutely justified, because implementation of such policy ensures achievement of high result in the competitive environment that is revealed through rating positions, employment indices, international cooperation indices, high scientific potential (Antoshkina, 2005).

Estimation of non-formalized indices allowed completing the list of all factors affecting formation of modern HEI's activity within the framework of national market of higher economic education. Analysis permitted to estimate the state of the rendered services portfolio through the prism of influence of external and internal factors forming HEI's stable

position and guarantee getting professional advantages in the sphere of practical competence.

Consequently, the next stage of financial and economic activity estimation is quantitative analysis using the complex of indices characterizing financial position of the HEI under investigation.

For example, A.M. Grin and A.S. Baitov, for estimation of state-financed HEI's activity efficiency offer to calculate indices of financial stability and paying capacity and M. Meier emphasizes that «for estimation of activity efficiency high precision indices in the balanced system of indices are necessary that permit to estimate cost efficiency of educational programs and financial stability of the organization» (Grin, 2005; Meyer, 1998). To our mind, it is necessary to agree with the offered approach, because these indices will reflect financial aspect of HEI's activity and enable the institution to maintain steady positions, which were estimated earlier using non-formalized analysis.

Conclusions and suggestions

In our opinion, the most expedient is structuring the balanced system of indices with coefficients characterizing financial state of the subject of research and with elements of matrix analysis that will supplement coefficients calculated against financial indices for complex estimation of the HEI's functioning in the educational sphere. Independence of choice of indices for results estimation system assumes objectivity in identifying the true picture of the functioning of the HEIs.

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