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THE ECONOMIC IMPACT OF INTERNATIONALIZATION OF HIGHER EDUCATION

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ЭКОНОМИЧЕСКАЯ ЭФФЕКТИВНОСТЬ ИНТЕРНАЦИОНАЛИЗАЦИИ ВЫСШЕГО ОБРАЗОВАНИЯ

Four categories of internationalization of higher education have been allocated depending on the method for determining the economic effect. Educational hub – new trend in internationalization of higher education and the term which is offered by author – has been proposed. Main effects of the internationalization of higher education have been analyzed.

INTERNATIONALIZATION OF HIGHER EDUCATION. EFFICIENCY OF INTERNATIONALIZATION. EDUCATIONAL HUB. EDUCATIONAL PROGRAM EXPORT.

Выделены четыре подхода к оценке эффективности интернационализации высшего образования. Введено новое понятие – образовательный хаб, как новый тренд в интернационализации высшего образования. Приведены основные эффекты интернационализации высшего образования.

ИНТЕРНАЦИОНАЛИЗАЦИЯ ВЫСШЕГО ОБРАЗОВАНИЯ. ЭФФЕКТИВНОСТЬ ИНТЕРНАЦИОНАЛИЗАЦИИ. ОБРАЗОВАТЕЛЬНЫЙ ХАБ. ЭКСПОРТ ОБРАЗОВАТЕЛЬНЫХ ПРОГРАММ.

Internationalization of higher education is a general trend of twenty-first century. There are different approaches to evaluation of the efficiency of higher education; the main problem of these approaches is a high proportion of experts' personal assessment. The task of evaluating the efficiency of international part of education not sufficiently advanced today.

Internationalization of higher education in the world includes the following modern trends:

1. Increasing access. Comparing different reports dedicated to internationalization of higher education, such as CIMO annual report, OECD papers, EAIE conference documents, national reports, the increasing role of internationalization can be traced throughout. Every year more teachers, researches and students are participating in international educational programs.

2. Geographical educational borders are blurred. Programs and organizations such as ERASMUS, DAAD, CIMO, Fulbright give a lot of opportunities for a self-organized international studies. On the other hand – the Bologna process pushed forward the internationalization based on universities' level and it's developing successfully.

3. New attractive international educational centers have appeared. Generally recognized leaders in attracting international students, such as the U.S., U.K. are replaced by new ones. Modern students are looking more and more towards Asian universities and prefer South Korea, China, and Singapore. The same idea is reflected in the Studies, which were published in Financial Times newspaper, regarding ranking of the best programs of the leading business schools in the world. According to the article nine out of twelve world best Executive MBA courses are taught in Asian Universities [1].

The author of the article proposes a new term in the context of the above trends – educational

hub. Together with the existence of logistic hubs for goods and passenger hubs – the international airports, it seems reasonable to use the term «hub» for the internationalization of education. Educational hub (EH) is a country (city) of foreign students' concentration in order to obtain educational services. Specifics of EH are the following:

– generated in the areas of strong economic development;

– appreciable state support for science and education exists;

– developed export of educational services, programs;

– EH moves over time from one country (city) to another.

Examples of contemporary EH are: South Korea (Seoul, Daejeon), China (Shanghai, Beijing), UAE (Dubai, Abu-Dhabi).

In order to determine the efficiency of International Education, the next categories have been proposed:

1. Exporting / importing of educational programs;

2. Internationalization «at home»;

3. Students, teachers, scientists exchange programs;

4. Dual or joined educational programs.

Each category has to be evaluated separately, because the outcomes are different from one to the other.

The subject of this analysis has to be determined before proceeding with the evaluation of the efficiency of the categories listed above. In this study we have focused on the efficiency of the internationalization of higher education in terms of the State. We have to note that the international education cost-efficiency can be both positive and negative for the same state (country), depending on the direction of students', teachers', researchers' movement: in the country or outside. Along with the positive and the negative foreign trade balance of the country, we can determine the balance of sectors, including specific sectors, such as educational services. Traditionally there are countries – exporters of educational services (Canada, USA, Germany, Finland, France) and importers (Vietnam, Brazil, Ukraine, Kazakhstan, Lithuania). Considering general efficiency without shifting to the level of the cost approach to the assessment of efficiency, there can be also negative figures or risks such as the risk of brain drain, or reduced performance.

Generally, the simplest way to determinate the economical efficiency is to compare the results and the cots. Sometimes this methodology can be used in the field of educational economics. The cost approach determination of efficiency formula (1) compares results and costs. Results (outcomes) should be determined for a certain period of time, based on market research (on the scale from 1 to 10). An outcome in this context refers to the amount of incomes obtained from tuition fees, net of taxes and other mandatory payments.

$$E = \frac{\sum_{i=1}^{n} R_i}{\Sigma Z}, \quad i = 1 : n, \tag{1}$$

E – Effectiveness, according to the cost approach; Z – costs of the program (all costs related to exporting educational program); R – outcomes of the program during n years period of time.

On the other hand, there are always economical and non-economical benefits from the international educational program. Analyzing the second group of benefits one comes to the fact that categories like tolerance development, cross-cultural cooperation, international networking have to be included in the efficiency determination.

The Legatum Prosperity Index [2], which provides more comprehensive approach to the assessment of quality of life than the traditional HDI, consists of 8 groups of factors. For the purposes of this study, the author analyzed eight groups of the factors included in the index:

1. Economy;
2. Entrepreneurship and opportunity;
3. Governance;
4. Education;
5. Health;
6. Safety and security;
7. Personal freedom;
8. Social capital [2].

Eight key dependencies and key findings were based on analysis of statistical material Prosperity Index 2012. One of the relations is that higher-ranking countries are also the most tolerant.

Also, the level of internationalization of education is reflected in the group 4 «Education» and 7 «Personal freedom.» Analyzing the non-economic effects of the internalization of higher education, we are faced with the following:

– Marketing and promotion (students abroad promote home Universities, make country more open for foreigners);

– Increasing number of foreign students at «home» university, because a lot of student exchanges are usually implemented on the parity basis;

– Tolerance and cross-cultural development, international networking leads to successful international cooperation.

To estimate the outcome of these effects expert assessments have to be integrated. Application of fuzzy multi-unit method for the formalization of expert assessments is justified. For the prediction of the uncertainty in the models the likelihood of the event is often considered, which is treated as an opportunity or a risk to the process. Use of probability estimates is not entirely correct, as the single inhomogeneous origin events do not have the statistical representativeness, and talking about the frequency of their occurrence is impossible. The use of peer review is limited to the difficulties with the coordination of the data, analysis and interpretation. That is why the author considers it appropriate to implement fuzzy descriptions in the process of determining the effects of the internationalization of education.

Indirect economic effects are the following:

– International students expenses (accommodation, food, entertainment, transportation, tourism);

– Expenses for books, library, internet access;

– Expenses for insurance and registration;

– New working places;

– Additional language courses.

Direct economical effects are tuition fees, which can be different for native and foreign students in some countries. Direct economical effects can be estimated for categories 1 and 4. The efficiency of educational exports (imports) (category 1) can be defined by ROI (Return On Investment) methodology. Performance measure is used to evaluate the efficiency of the investment or to compare the efficiency of a number of different investments related to exporting educational program. To calculate ROI in case of the present analysis, the benefit (return) of an investment (forecast income from tuition fees) is divided by the cost of the investment (expenses for exporting/importing program); the result is expressed as a percentage or a ratio.

ROI methodology can be compared to the general cost approach determination of efficiency in case of evaluation of the efficiency of educational program export.

$$ROI = \frac{G - C_{ei}}{C_{ei}}; \quad (2)$$

G – gains from investment in the exported international educational program; C – costs of investment to the educational program.

Return On Investment is a very popular metric because of its versatility and simplicity. That is, if an investment does not have a positive ROI, or if there are other opportunities with a higher ROI, then the investment should be not be undertaken [3].

Then the economical effect of exporting / importing program can be defined traditionally: the amount of revenue from the program for the year, net of expenses. In case if some governmental or other support had place at the beginning of the program, additional indexes can be added to adjust the effect. Usually programs and organizations supporting export or import of the academic programs provide financial support for the first two-three years. These supportive amounts have to me mentioned in formula 1 as an «investments».

For example report of economical impact of international education in Canada shows convincing results [4]:

– The economic benefit of international students studying in Canada is substantial. Total expenditure of long-term international students in Canada amounted to about $5.5 billion in 2008. This translates to almost $4.1 billion in GDP contribution to the Canadian economy, and represents about 7 % of the GDP contributed by the overall education services sector in the Canadian economy.

– International education services supporting these long-term students contributed to 64.940 jobs in the labor market. This represents about 5.5 % of the total number of jobs in the overall education services sector in Canada.

– Those foreign students in short-term language training programs in Canada also contributed an additional $746 million per year in total spending to the Canadian economy. This is equivalent to about $509 million in GDP, 13.210 jobs, and $36 million in government revenue [4].

– In addition to capturing economic impact resulted from spending on tuition and fees and basic living expenses, we estimate that $285.240.000 per year can be attributed to additional tourism related activities, including international students and their family and friends [4].

Logically, the overall impact of the internationalization of higher education is the sum of the results by groups, analyzed above: non-economic effects, indirect economic effects, direct effects. From authors' point of view there is no need to list all the indicators to monetary terms, because for the further analysis different nature of the indicators obtained in the article is not an issue.

The conclusions of the article are the following:

1. There is a new particular trend in internationalization of higher education and the term which is offered by author – educational hub. Specifics of educational hubs have been formulated above.

2. Four categories (types) of internationalization of higher education have been allocated depending on the method for determining the economic effect.

3. There are three groups of effects, which can determine the economic impact of internationalization of higher education. Each group has is own way of efficiency calculation.

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