# DIGITALES ARCHIV

ZBW – Leibniz-Informationszentrum Wirtschaft ZBW – Leibniz Information Centre for Economics

Gulicheva, Elena

#### **Article**

Program-target method of pricing for international educational services

# **Provided in Cooperation with:**

Czech journal of social sciences, business and economics

*Reference:* Gulicheva, Elena (2017). Program-target method of pricing for international educational services.

This Version is available at: http://hdl.handle.net/11159/797

# Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics Düsternbrooker Weg 120 24105 Kiel (Germany) E-Mail: rights[at]zbw.eu https://www.zbw.eu/econis-archiv/

#### Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte.

https://zbw.eu/econis-archiv/termsofuse

#### Terms of use:

This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence.



Article history: Received 10.05.2016, last revision 25. 12.2016; accepted 10. 01 2017; doi: 10.24984/cjssbe.2017.6.1.3

# PROGRAM-TARGET METHOD OF PRICING FOR INTERNATIONAL EDUCATIONAL SERVICES

#### Elena Gulicheva

National Research University "Moscow Power Engineering Institute"

# Marina Osipova

National Research University "Moscow Power Engineering Institute"

#### **Abstract**

The main goal of this paper is to show how the price of educational services may be estimated and calculated. The authors analyze the experience from Russian universities in their educational services and provide alternative methods for cost estimation.

Our findings are important for the improvement of decisions in educational services export strategies which use various combinations of marketing instruments and financial justification of international academic projects. In addition, the results of this paper may be helpful in enabling universities and higher education providers to design eventual prices that could be charged for the educational services.

**Keywords:** innovation, education, educational services, internationalization, international cooperation

JEL classification: I23, I25, I22

## Introduction

Innovative programs of Russian national research universities are based on the system integration of the higher education both within the country and abroad, in particular, in case of educational services export organization (Postnikov et al., 2015; Hazelkorn, 2015).

Continuous expansion of the international contacts (in quantity and quality), increase in the number of foreign students, increase in a share of master-students as well as Ph.D. students are important in export activities (Strielkowski and Lisin, 2013; or Rist, 2016). And also, no less significant matter is increase in profitability of a university. University's purposeful activity on mentioned direction enjoys support of governmental authorities.

In conditions of high competition within the market of educational services pricing is one of the most important competitive factors of the university's educational programs (Inklaar et al., 2014; Wright, 2015). On the one hand, the price should satisfy the needs of the university. On the other hand, it assists to solve the problem of educational services export expanding and quality of higher education improvement in order to increase the attractiveness of the Russian higher professional education system for foreign students.

Educational services are the object of commodity-money relations within the global educational market. Features of educational services for foreign students are listed below (Knight, 2015; Asaad et al., 2015):

- social protection (nowadays education promotes population protection against unemployment);
- social mobility (social value of education has increased. Education is important channel of movement in society which increases vertical social mobility)
- adaptation (it means approach of foreign citizens to the international markets of high skilled work)

Educational services represent an exclusively mixed benefit. Therefore, they combine lines of the pure public benefit and the pure private benefit. Educational service is a useful type of work, directly satisfying the person's need for education. In addition, educational service may be material allowing satisfying educational requirement with person independently (textbooks, training programs, grant, etc.)

# **Pricing methods**

Pricing is a process of establishing prices depending on product cost, prices of competitors, a ratio of supply and demand and other factors. Basic principles of pricing are the following:

- Price of the service must be higher than its cost price;
- Price is determined by market opportunities;
- Implementation of services at this price should yield the maximum profit for a certain period of time

Main objective of pricing within market conditions is ensuring timely and sufficient price reaction to receive the maximum sales volume with the minimum loss of a commodity unit profitability.

Economic value of prices can be expressed by the performance of the registration, stimulating and distributive functions of those prices.

Function of the account and measurement of social activities expenses appears from a price entity as monetary value of goods cost. However, market price may deviate costs of production as recognition of the expenses public importance happens by collision of economic interests of sellers and buyers. Sellers seek for maximizing price, and buyers seek for minimizing price (Pavlova et al., 2014; Wright, 2015).

Price assessment occurs not in the sphere of production, but in the sphere of product sales within market economy.

Pricing at the level of producer consists of specific educational service pricing, proceeding from its production cost and obtaining a certain benefit taking into account market conditions. There are five main approaches and peculiarities of pricing at service market (Wright, 2015; Inklaar, 2014):

- 1. Cost approach
- 2. Approach based on sales income
- 3. Approach based on parametrical methods of pricing
- 4. Market pricing approach
- 5. Approach based on methods of psychological pricing

There are results of the main methods of pricing comparative analysis based on abovementioned approaches in the Table 1. **Table 1**: Merits and demerits of training pricing methods

Table 1: Merits and demerits of training pricing methods		
Method type	Merits	Demerits
Cost approach		
Total cost	<ul> <li>Guarantee of ensuring full coverage of all costs and obtaining planned profit</li> <li>An opportunity to set price limits</li> </ul>	The sum of constant overhead costs carried on prime cost is overestimated
Direct (marginal) cost	<ul> <li>An opportunity to set price limits</li> <li>It is easy to justify a price reduction</li> <li>Calculation of variable costs relies on more reliable information</li> </ul>	<ul> <li>Often some types of intangible assets aren't considered</li> <li>It is static (doesn't consider future expectations, doesn't consider profitability level)</li> <li>Risks are not considered</li> </ul>
Approach based on sales income		
Sales income approach	<ul> <li>An opportunity to consider the long-term prospects of higher education institution development</li> <li>An opportunity to consider the strategic prospects of higher education institution activity</li> <li>An opportunity to consider risks</li> </ul>	<ul> <li>Difficulties in definition of a capitalization rate</li> <li>Need of the capitalized size adjustments</li> <li>Risk when forecasting the income</li> <li>Difficulty in definition of a discount rate</li> </ul>
Approach based on parametrical methods of pricing		
Specific price approach	Comparison with the competing higher education institutions	<ul> <li>The opinion of buyers on parameter importance is not considered</li> <li>Only one service parameter is considered</li> <li>Supply and demand are completely ignored.</li> </ul>
Expert method	<ul> <li>Receiving quantitative estimates when the absence of statistical data</li> <li>Qualified solution of a pricing matter</li> <li>Speed in obtaining results</li> </ul>	Reliability of research results are depended on expert competence     Subjectivity     Labour input within collection of information
Correlation and regression analysis	<ul> <li>Revealing existing dependence between change in price and change of technical and economic service parameters.</li> <li>Estimating coefficients more precisely, excluding partially the subjectivity</li> </ul>	<ul> <li>Increase in parameters conducts a serious complication for price dependence coefficients calculations</li> <li>Price can be too high or too low in comparison with competitors and their prices.</li> </ul>
Market pricing approach		
Service importance approach	Consumer perceptions of a service importance (not cost) estimation is taking into account	Awareness and qualification of consumers are insufficient
Tender pricing	Receiving necessary financial result at the minimum expenses of financial means	Service can be sold at the lower price than expenses     The difficulty of services introduction at higher price, than at competitors
Approach based on methods of psychological pricing		
Method of prices division	Complicated calculations and investments are not required	The longer the number of price indicators, the more difficult it is for the buyer to compare.
Method of price gifts	Complicated calculations and investments are not required	Certain additional expenses are required

Source: Own results

# Program-target approach of pricing

Critical analysis of the formal data flows connected with educational services export has provided us with the overall quantitative and qualitative vision of a university's activity plan preparation with the preliminary contract price calculations and, as a result, with a contract preparation on the basis of that price (Figure 1).

Besides the official data, the experts' opinion of economists and managers working on marketing within dynamics, logics and organized sequence in the process of establishing the international contacts and educational services export has been taken into account during the analysis fulfillment (Rist, 2016; Strielkowski, 2013; Kirkwood, 2013).

That data, according to the experts' opinion, serves both as initial and final stages for the approximate (extended) choice of concrete aim (aims) and plan primary target definition for a coming period (periods) or within targeted international contracts (according to preliminary contracts drafts).

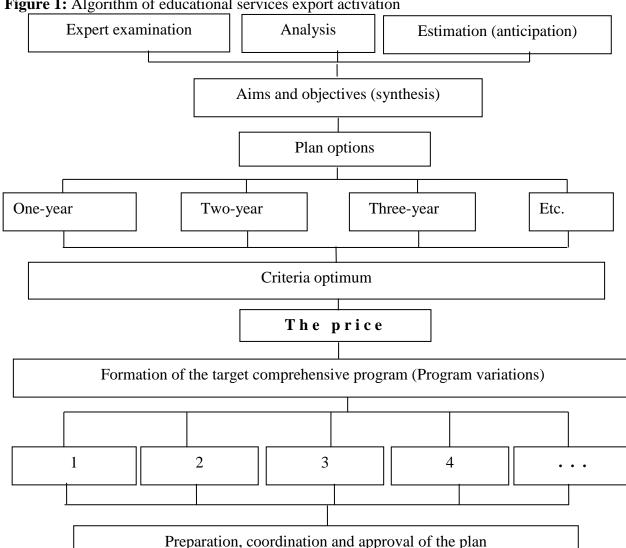


Figure 1: Algorithm of educational services export activation

Source: Own results

The criteria optimum of the educational service cost according to the program-target approach are calculated according to the developed algorithm presented in Figure 2.

The beginning of process Cost accounting on prime cost components and analysis objects Material expenses Remuneration of labor and charges Energy cost Amortization Incidental expenses, including costs associated with the business trips abroad Other charges Prime cost no Cost limit exceeded Calculations of profitability Preliminary price (prices) no Agreement on contract price yes The end of process

Figure 2: Cell chart of the calculations of a contract price on educational services

Source: Own results

#### **Conclusions**

Special commission consisted of the relevant university's departments staff develops the plans projects sketches for the set period (a year, two years or more) according to preliminary arrangement or under partial agreements being in work process on project coordination. Variation choice reasonability leans at the same time on a number of tasks, corresponding to the created principles of a university development strategy:

- synthesis of strategy and purpose (major final task, defined by the necessity and possibility of knowledge quality improvement, first of all, for the purpose of active educational services export);
  - technical (technological) progress of computer hardware and software products;
- professional ethics and communication culture in educational activities (moral environment, speech culture, second-language skills, etc.);
  - maximum cost advantage (financial result).

The best option of the target program and the adopted project plan have to correspond to the synthesis of tasks, the time factor, available financial resources (first of all, for the innovative program those will be finances for the purchase of equipment for the educational process), and also remuneration of professor staff labor. Any critical reason for the variation choice is a contract price corresponded to a university's outlay parameters and sufficient for obtaining the desired profit (income) on educational services export.

In case of chosen actions variation approval, the same commission or employees of university relevant services develop more general target comprehensive program for a long period of time (estimation of the purpose, task and further ways of university development). In any case, all further plans and assumptions are based on an optimal price satisfying interests of contracting parties within the matter of educational services export.

## References

- Asaad, Y., Melewar, T. C., & Cohen, G. (2015). Export market orientation behavior of universities: the British scenario. *Journal of Marketing for Higher Education*, 25(1), 127-154.
- Hazelkorn E. (2015). Rankings and the reshaping of higher education: The battle for world-class excellence. Springer, 304 p.
- Inklaar, R., & Timmer, M. P. (2014). The relative price of services. *Review of Income and Wealth*, 60(4), 727-746.
- Kirkwood, A., & Price, L. (2013). Examining some assumptions and limitations of research on the effects of emerging technologies for teaching and learning in higher education. *British Journal of Educational Technology*, 44(4), 536-543.
- Knight, J. (2015). Internationalization: A decade of changes and challenges. *International Higher Education*, 50.
- Pavlova, E., Lisin, E., Stepanova, T. (2014). Sustainable development: from global idea to the strategy of the company. *Czech Journal of Social Sciences, Business and Economics*, 3(3), 25-32.
- Postnikov, S. N., Minaev, N. N., & Andrienko, A. V. (2015). Governance of the Russian Higher Education System in the Light of an Innovative Development Path Selected. *Mediterranean Journal of Social Sciences*, 6(6 S7), 228-237.

- Rist, D. W. (2016). The export of legal education: its promise and impact in transition countries. Routledge, 212 p.
- Strielkowski, W., Lisin, E. (2013). International migration, remittances and intelligent analysis of semi-structured data from the open sources. *International Economics Letters*, 2(2), 6-11.
- Wright, R. E. (2015). Marketing of Higher Education: Price and Quality. *The Journal of Applied Business and Economics*, 17(2), 66-70.

#### **Information about the authors:**

Elena Gulicheva (gulichevayg(at)mpei.ru) is an Assistant Professor at National Research University "Moscow Power Engineering Institute", Department of Economics in Power Engineering and Industry, Krasnokazarmennaya 14, Moscow, Russian Federation.

Marina Osipova (osipovams(at)mpei.ru) is a doctoral student at National Research University "Moscow Power Engineering Institute", Department of Economics in Power Engineering and Industry, Krasnokazarmennaya 14, Moscow, Russian Federation.