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PRICE DETERMINATION FOR EDUCATIONAL SERVICES BASED ON THE INVESTMENTS IN EDUCATION

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Abstract: The study aims at highlighting the link between educational marketing (product/service and price determination for educational services) and investment in education, using empirical models and customization of classic approaches (interpolation method) addressed to individual educational investment.
The methodology discussed in the paper, considers essential invariants of these educational investments, such as seniority - part of the work experience and period of studies. In the models presented, the level and the period of studies are quantified through transferable credits, expressing units of time, normal volume of working alleged student learning. It is also used a parameter which introduces an essential element of the quality of work - the psycho-physical characteristics of the fellow that are correlated with age.
Empirical study materializes on developing, while testing and validation of the models show that the rate of return to investment in education is a rationale for individuals to decide investing in their education. The study offers some customized recommendation to improve reverse marketing price policy of the educational services.
The study results lead us to the conclusion that education providers (colleges, universities, other training entities) and clients should take into account that education is an investment. The private return of investment in education - as argument of educational marketing (price policy) is increasingly important in the context of a fragmentary and dynamic market, led by strong competition.
Key words: educational marketing, educational services, price policy, the return to investment in education, seniority, period of study, psycho-physical characteristics
JEL CODE: I21, M39, C59

Introduction

Education is associated with economic and social processes, the more it affects a multitude of economic and social life issues, from productivity, salary, experiences, poverty, unemployment, culture, etc., to aspects that have to deal with national and regional features, says Pribac L.I, Anghelina A. and Blaga R.L. (2016) in the study *Return on investment in education*. *Case Study on Education in Romania*.
At the same time, contemporary market economy requires adopting some specific policies to the situation in which economic power is in a considerable proportion for the consumers and users hands, not to the producers. Moreover, Foxall showed

in the work coordinated by Thomas (1998) that in spite of their ability to choose between competing entities, industries and competing nations, the consumers ultimately influence the decisions about product, promotion, position in the chain distribution or prices - the marketing mixed elements. The systemic models of human behavior in the majority of cases, describe the consumer as an information processor (Foxall and Goldsmith, 1994).

Kotler (2006), detailing further the phenomenon presented above, describing *reverse marketing* concept as: "it comes from noting that those who take a more active role in influencing product, price, placement and promotion of a company are consumers; therefore reverse marketing is focused on the customer that is proving more proactive status in defining the terms in which the exchange is doing." To these matters Kotler et al. (2010) show that the more the fundamental marketing concept is oriented towards *values*, the more complex are the value propositions (functional values - the utility of the product/service, emotional values - the experience with that product/service and spiritual values - the longings and anxieties of the customers) and the interaction with consumers has evolved from transaction between a company and more buyers, to the individual relationship with them and is moving forward to collaboration between more companies and more consumers.

Speaking strictly about educational services, we can say that this kind of services does not compare to any other category of services regarding process character of the performance, because almost each activity can be decomposed into partial processes. The services shall be carried out based on specific instruments: curricula, syllabi, disciplines files, courses, seminars, laboratories etc.

Provider-customer relationship has a special character, enshrined in the laws, regulations, pedagogy, methods etc. Approached from the marketing perspective, these relationships are characterized by: a) the services subjects are the people, that could be satisfied through tangible actions; b) the relationship between supply and demand for education is firm and formalized, delivery is discontinuous; c) the contact between provider and customer ensures a high degree of customization, while system performance allows a limited one; d) the demand is represented by the number of pupils, students or trainees and it fluctuates annually on cycles (flexible) and the resilience of supply is low; e) the customer moves most often at the place of educational service tender, there is one place of delivery with multiple outlets (buildings, classrooms, laboratories, seminar rooms etc.); f) contact staff has a high impact on performance, while the equipment that contributes to the realization of the service has a low one.

In this context we can say that education should be treated as value – investment - especially for higher education (including curricula for different university degrees

and training courses and specialization). This approach is of major interest to the education consumer, society, but equally the education provider (colleges, universities). In terms of educational services markets, the providers must find adequate marketing policies to attract the applicants.
Therefore, the objectives of this study are to develop, test and validate some empirical models and customizations of classical approaches (interpolation method) of the return of private educational expenses, which can provide useful information to customer/users of such services, as well as education providers. Educational marketing (e.g. – product and price determination for educational services) helps people to choose between diverse educational services those which are appropriate for its background, wishes and budget.
The study contributes in an empirical manner to the development of human capital literature, underling in the same time, some of the marketing implications (product and price policies) of this research in the issue of educational service.

Literature review

V. Canals and M. Jaoul (2003) emphasizes in the study *Choix d'orientation et rentabilite de l'enseignement superieurune application micro econometrique a partir du modele descolarite de Mincer*: "If pursuit of the studies in higher education is for most individuals a financially profitable decision, this profitability varies considerably depending on the type of degree obtained, training pathway, certain individual characteristics and economic situation." Investing in the education of an individual may be full, partial or not at all State supported.
Without going into details just mention that since the 70's, almost every State has been facing difficulties in education funding, especially higher education. Along with the New Public Management theory, developed by Lepore (2008) which envisages the development of a complex model in which public management is mixed with private management issues of education, the education in general as well as formal education have become, in a constant manner, subjects to market mechanisms.
In this way, the funding of educational services of interested persons is covered totally, partially or not at all from public funds. Costs and any differences in costs being supported by each person, that came in on the educational system.
Becker (1975), Romer (1986), Mankiw, Romer and Weil (1992), Temple (2001), Hanushek and Woessmann (2009) and many others, demonstrate through their studies that differences between the individuals, when talking about earnings come from their education.
In this context, V. Canals, M. Jaoul (2003), quoting Mincer described in econometric manner, this reality:

- all individuals have identical capabilities and opportunities of getting a job;
- the jobs differ in scale that involve education;
- education takes time and every training year causes a delay in receipt of salary;
- the size of stable income throughout their working lives.

Concluding, even if the State covers part or all expenses, the person acquiring education will have to support a number of other costs arising in particular from limited non-involvement term of their work (while studying), with implications for loss of income related. If the activity at work is continued, the person in formal education will need to ensure, through an extra effort including assumed losses of salary for studying, exams, travel expenses for studies, books and other supplies.

Serge Simo Fotso (2008) shows that the model for calculating the return of individual investment in education's period, can be approached from examining how value is determined from the perspective of educational investment's return. It is generally not directly involved in the educational investment, excluding private return. The investment in education is expressed as social, private and public returns.

The *social return* is the rate of social benefits that society registers as a result of increased education level of the population and the cost of financing education.

The *private return* is the rate of private benefits as income that an individual has as a result of his educational path and direct and indirect costs related to them. A high private return, positively influences the recovery period (depreciation) of investments.

The *public return* determines the implications of Government actions that subsidize individuals studies and later collecting tax revenue surplus achieved by the individual through superior education.

On the other hand, P. Ebrahimi and F. Vaillaucourt (2010) in the study *Le rendement social et privé sur l'education universitaire au Quebec*, indicate that there are three ways to approach the value of the investment in education:

1) Compare the average value of the indicators: income from employment or unemployment rate between two groups of individuals, one more educated, another less educated.

2) It is estimated using the equation for??? the additions of related income for a year of extra education or obtain a diploma.

3) Calculate the rate of return associated with the level of education given in relation to another level.

Accordingly, any person interested in investing in education and ultimately to engage in the acquisition of educational services needs information about: the level of study (formal education, university degrees), types of study programs, their frequency, the way of the educational process, educational investment, study

period, the period during which they can be recovered, earns possibly made, after recovery of expenses, other information on the social position that higher education can offer to the individual.

The education bidders also need this complex information, although the parameters that influence the return to investment in education are difficult to assess. The provider of educational services to deal competition will consider appropriate marketing new product and price policies, on the basis of this information.

In terms of *product policy of the educational services*, Olteanu and Cetina (1994), Olteanu (2005), Cetina et al. (2006), Vorzsak (2006) states that the educational product design is done based on a technology in which the key elements are: a) defining the level of study (formal education, university degrees), profile and specialization; b) establish the curriculum; c) develop syllabi; d) developing modalities for supporting teaching and examinations (discipline files) for admission, year exams and undergraduate exams.

Marketing optics can be found throughout the entire process, each element (study program) shall be individually designed according to relative (this word does not make sense here)??? to labor market requirements.

Implementation of the educational product includes all activities that ???shape the curriculum. It also includes activities that make up the actual content of the services performance and should be periodically analyzed in terms of the level of beneficiary satisfaction.

In developed countries different ways of assessing the behavior in the operation of the educational products are used. The most expressive is a similar indicator of *production sold and collected*, e.g. *the share of graduates in employees by businesses or other organizations in their field of study*.

Regarding the *price policy*, related generally to product policy, the literature review shows that they are considering developing several methods for fixing the price of a product. Among them, according to the specific educational service and also in terms addressed in this paper, we believe that the best *method would be based on the perceived value of the customer*.

In this method, organizations used different elements of the marketing mix, such as communication policy (advertising and sales force) to create perceptions of the value in the mind of the buyer. Thus, *value-based price* reverses the stages of fixing a price - starts at costs and then prices, the organization leading the price based on how buyers perceive the value of the product and how to recover it. Furthermore, the value and the proposed price influence decisions on the product design and costs that will be incurred.

In other words, price determination begins with needs analysis and value perception by the consumers and the price will match that. In our case, value can

be given by: the return of??? investment in education, the status that the individual acquires after graduating from the study programs, especially the salary that he/she obtains after the completion of a new stage in the ongoing process of education.
Brands, after Kotler (2006) are the strategic levers of those that act on the market today. If the consumers are more interested in costs (note - the case of education services, especially mass education), brands winners will be those that provide satisfactory value for the asked??? price.
All these aspects are possible today because "the distinction between learn, work and live disappeared - all are the same thing," says Ridderstråle and Nordstrom (2007).

Research methodology

In the context of literature review, defining the empirical models to show that the rate of return to investment in education is a rationale for individuals to decide to invest in their education as objective of this paper, we will use the contributions of P. Ebrahimi and F. Vaillaucourt (2010). In their study *Le rendement social et privé sur l'education universitaire au Quebec*, they have proposed to calculate the internal rate of return associated to the value of an investment in education equation:

$$\sum_{i=1}^{n} \frac{A_{i-}B_i}{(1+r)^i} - C = 0$$

where:
Ai - individual income during the period i, after finishing A study level,
Bi - individual income for the same period i, in the absence of investment that allows him to move from B to A study level.
Difference $A_{i-}B_i$ is the difference in earning, as a result of a higher level of education achieved by the individual.

The investment described above is made up of *direct expenditures* (tuition fee, travel and meals expenses, books and other supplies etc.), and loss of part of the earning generated by the labor disruption at study level B, which is represented by C - *indirect expenditures*.
Thus, the internal rate of return to investment in education associated with the complete high school graduation studies is related to secondary school level of education. The internal rate of return to investment associated with the graduate Bachelor of Science (BSc) or Master of Science (MSc) relates to the complete high school graduation studies. The internal rate of return to investment associated with the graduate study cycle – doctoral relates to Bachelor of Science (BSc) or Master of Science (MSc).

The internal rate of return to investment in education compares the remuneration acquired during the active life of the individual, after two different levels of studying.
Knowing that the A, B, C equation determines the internal rate of return to investment, we noted *r*. Rate noted *r*, correlates with the individual earnings, so with the educational investment that will be more bearable, if the rate of return to investment is higher.
There is also a direct correlation. The faster the educational investment is, the higher the individual salary.
Mincer (1997), Lemieux (2008) show about salary formulas, that they can be used based on the homogeneous rate of return to investment model or heterogeneous rate of return to investment model.
Thus, *the homogeneous rate of return to investment model* using the formula:

$$W_{it} = \alpha_t a_i + \beta_t S_i + \gamma_t X_i + e_{it} \quad (1)$$

where:
W_{it} - salary;
S_i - education;
X_i - seniority (work experience);
a_i - tacit individual characteristics (the quality of education received, inherent ability, motivation, personality of the individual);
e_{it} - the random component of the salary;
αt, βt and γt - coefficients.

The rate of return to investment has three dimensions: individual characteristics, namely education and work experience.
The heterogeneous rate of return to investment model, showing the same source is based on the formula:

$$W_{it} = \alpha_t a_i + (\beta_t b_i) S_i + (\gamma_t c_i) X_i + e_{it} \quad (2)$$

where:
W_{it} - salary;
S_i - education;
X_i - seniority (work experience);
a_i - tacit individual characteristics (the quality of education received, inherent ability, motivation, personality of the individual);
αt, βt and γt - coefficients;
e_{it} - the random component of the salary;
b_i - the compact random of the rate of return to investment in education, i.e. the rate of return heterogeneity;

c_i - the compact random of the experience rate of return, i.e. the rate of return heterogeneity.
Recognizing the theoretical and practical value of using the private return and computing the individual salary models of Mincer, as basic information to calculate the return of individual investment in education's period, we will propose further simplified computing models of investment in education.
Regarding customizations of classical approaches for the private return of investment in education, the interpolation method could be useful.
Interpolation is a process for estimating values between two or more data (points) known. Admitting, for example, that we might know the coordinates of two points A (x_0, y_0) and B (x_1, y_1) of a system of points that could be considered to be situated on a straight line, the equation of the line passing through known points using formula:

$$\frac{y - y_0}{y_1 - y_0} = \frac{x - x_0}{x_1 - x_0} \quad (3)$$

Thus, for all given x_k - representing the seniority (work experience) in the activity domain, from the equation it can be determined y_k - representing the salary to the seniority (work experience) x_k, that is of interest to estimate individual educational investment.

Findings

The empirical formula of a computing model for the private return of investment in education

The assumption that we accept (fig.1) refers to finding that individual performance is highest at the age of 40 years (or around that age).

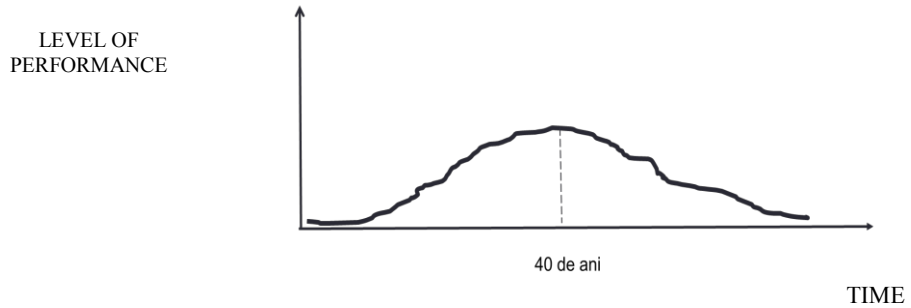

Figure 1. Representing graphical correlation between individual performance and time
Source: self-processing

Educational investment depends on personal earnings which generally increase with the age, while individual performance reaches its maximum at 40 years old. The explanation of the *evolution - involution of the performance value* shown in fig.2 where for the x value of the age less than 40 years old, the vectors like *seniority (work experience)* or *psycho-physical characteristics* and also *the resultant* of them are breeders. Instead, for the x value of the age past over 40 years old, although *the seniority* increase, *the psycho-physical characteristics* decrease and the *resultant* decrease too.

V_i *the individual performance value*, expressed to the person's age x_i is:

$$V_i = M_i / |x_i - 40| \quad (4)$$

where:

M_i - *the individual performance parameter* expresses at the same time *seniority* in the activity domain, but also *the formal education that benefited the individual*.

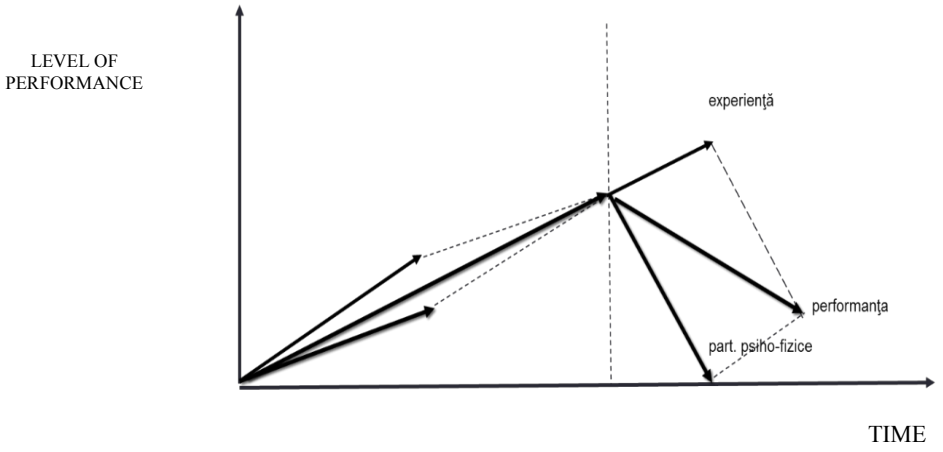

Figure 2. The cycle evolution - involution of the performance value
Source: self-processing

We quantify, in what follows, *the individual education* in the university system by the number of transferable credits (ECTS) accumulated during the period of studies.

Regarding *the number of transferable credits (ECTS),* Voiculescu (2014) shows that they are conventional numerical values expressing the normal volume of work

alleged for the student who is learning. Calculation of credits (ECTS) based on estimated work time necessary for the learning activity in all its forms: courses, seminars, labs, self-study, preparation of the assessments exam sessions, engineering studies and final exams.

Given the above, we go on testing and validating *the model for the private return of investment in education*.

For example, consider an 18-week semester quoted at 30 credits. At a time of learning of 40 hours a week, resulting a total credit of 720 hours, with a corresponding value of the unit of credit of 720 hours / 30 credits = 24 hours or 3 days' work / credit.

The number of days for the 180 credits, as it is generally stipulated in the undergraduate education for professions in the social sciences is of 540 days, 8 hours per day. If we consider that the average number of working days in a year is 250 (including vacation and sick-leave), then the 180 credits is 540 / 250 = 2.16 years.

The value of a year of effective work, taking into account that the average number of working days in one year is 250 days, i.e. 68% of a calendar year. In addition, the duration of production activity, generally represent 33% of the duration of a day, 8 hours of work from 24 hours a day.

With these data M_i in the formula (4) becomes:

$$M_i = 2.16 + 68\% \circ 33\% \circ vi = 2.16 + 22\% \circ vi \qquad (5)$$

where *vi* is an individual seniority (work experience) in years.

A more general formula (6) is the sum of S - *monthly earning (net salary per month), according to* M_i - the individual performance parameter, expressing at the same time *seniority in domain of activity*, but *the education that benefited individual and age* x_i *start the return of individual investment in education*. A *constant k* will be determined, so that the salary of the person to be at least the minimum wage at age 0 (onset).

The percentage pi% salary represents *the percentage that a person is willing to spend monthly for the return of individual investment in education*. Possibly the calculations made by the person concerned, the percentage pi% varies depending on momentary interests.

Seniority of an individual expressed in years - vi is calculated assuming that the trainee is committed immediately after graduation to work in the domain he has been trained.

Thus we have:

$$S = (\Sigma Mi / | xi - 40 | \circ k) \circ pi\% \quad (6)$$

The sum S is performed for the values i, from 0 to n, followed it last term, the n-^{th,} be that which is calculated where S reaches high enough to equal at least the full educational investment accordingly study program followed.
We will test and validate the above calculation formula (6) assuming that the person has completed the educational investment at the age of 25 years.
The value pi% percentage we take at 10%. At a minimum salary of 925 lei net savings in the first year of activity with 0 years seniority, the person will get a monthly salary net of:
[2.16/(40-25)] ◦ k = 925 lei, from which we get the value of k = 6424, the approximate value.
We calculate the amount of all terms, as follows:
For i = 0 (seniority 0 years), monthly net salary is of 925 lei, out of which the person is willing to invest in education 92.5 lei per month.
For i = 1 (seniority 1 years), monthly net salary is calculated from
(2.16 + 0.22):14 ◦ 6424 = 1,092 lei, out of which the person is willing to invest in education the amount of 109.2 lei per month.
For i = 2 (seniority 2 years), estimated monthly net salary formula (5) is:
(2.16 + 0.22◦2):13 ◦ 6424 = 1,285 lei, out of which the person is willing to use 128.5 lei per month, to recover the educational investment.
The amounts calculated annually for the return of individual investment in education accumulate until the costs are theoretically covered.
The empirical formula of a computing model for the private return of investment in education tested and validated has the advantage of including in the calculation of remuneration, using the model of Mincer (1997), the period of study quantified by credits (ECTS), seniority in the activity domain, but also the psycho-physical peculiarities of the individual expressed by the age.
The limit of the empirical formula is that not only it provides an estimate of the investment in education, but it also has several components while difficult to say, for example, the minimum wage and especially the government sector wage policies are unpredictable on the long term.
Another limitation of the formula is given by the situation in which an estimated return to investment in education can be achieved only after the age of 40 years, formula (4) can be used to express individual performance, but not to express the amount of monthly net salary, which decreases by applying the formula. In this situation corrected formula required by adding a term that enhances the value of seniority, experience, according to social practice.

Computing model by linear interpolation for the return of individual investment in education

Interpolation described by the above formula (3), as a method of estimating the values of two or more known data, allows us to go testing and validation of *the computing model by linear interpolation for the return of individual investment in education*.

We admit, for example, that for education, a person working in the educational system through a Master level degree program, tuition fee is determined by 6,900 lei. A teacher with 8 years seniority, on the salary scale has a net salary of 1,421 lei / month (amount that can be written by simplifying representation by interpolation 1.4 thousands lei). At the age of 20 years seniority, it would have a net salary of 1,721 lei (amount that can be written by simplifying representation by interpolation 1.7 thousands lei), according to www.docere.ro/salar/.

We admit that 10% of the monthly net salary is intended to cover the Master's tuition fee. In this situation it is necessary to study the time for the return of individual investment in education and the desirability of such fees.

The points used for writing straight line interpolation equation are:

A (8;1.4) and B (20;1.7).

The equation (AB) is:

$$y = (x + 48) / 40 \qquad (7)$$

Calculation of column two, line one - from no. 1 table, for example, be calculated as follows:

x in the equation (7) is 10, so y = (10 + 48) / 40, i.e. y = 14.5 of which 10% is calculated.

The final result: 1.45 being found in the second column of table no.1.

Thus, table no. 1, accepted assumptions, leads us to the conclusion that a person who has started Master courses, having 10 years seniority in education as activity domain at the start of the studies, less than 4 years manages to cover such a fee. A person who begins training after 14 years seniority in education as activity domain, takes the same situation.

The limits calculated by linear interpolation results can be improved if we take into account any salary increases that are obtained during their studies or graduating with Master through a new assignment, due to government sector wage policy.

Discussion

Multiple effects that education causes in economy and society, marketing orientation of contemporary organizations to individual values of the customer / users of educational services created us the opportunity to develop computational models for calculating the return of individual investment in education. Using these models, we can establish approximate and according to certain conditions, specific tuition fees for education programs. These models can generate more specific recommendations of reverse marketing - *value-based price* reverses.

Table 1. Estimated educational investment results in Master level, calculated based on computing model by linear interpolation for the return of individual investment in education

Seniority x *(years)*	***Recovery of tuition - 10% of monthly net salary*** *(hundred lei)*	***Recovery of tuition - 10% of annual net salary*** *(hundred lei)*	***Amounts accumulated***
10	1.45	17.14	17.14
11	1.47	17.6	35
12	1.5	18	53
13	1.52	18.2	71.2 > 69*
14	1.55	18.6	18.6
15	1.57	18.8	37.4
16	1.6	19.2	56.6
17	1.62	19.4	76> 69**

* Situation where the tuition costs of Master's level are recovered, in case of a person who enrolled in this program of study with a 10 years seniority

** Situation where tuition costs of Master's level are recovered, in case of a person who enrolled in this program of study with a 14 years seniority

Source: self-processing

The computing model for the private return of investment in education described above, starts highlighting the individual performance value (the number of transferable credits – ECTS - of chosen study program and seniority) and monthly net earnings, that he will get after graduation. This model could be applied to the calculation of specific tuition fees to higher education and beyond, using the age of the beneficiary, the studies completed and those that he will follow, chosen study program they wish to specialize (number of transferable credits or number of hours of qualification, training, specialization), seniority he has completed in the activity domain (if applicable), and the percentage of actual monthly incomes that he is willing to allocate for education.

The computational model described above in some technical limitations (described on paper), can identify the approximate tuition fee of the chosen study program and

cause costs recovery (the entire period of study), achieving a customization of educational services according to the needs and wishes, psycho-physical features and availability of time and money of the individual.
This model has broad applicability due to the multitude of variables that can operate. It can be used in customizing tuition fees for a wide range of occupations and jobs, but cannot apply to persons over age where individual performances are reduced (around the age of 40 years).

The computing model by linear interpolation for the return of individual investment in education has the advantage that it is easier to apply, because a reduced number of variables required to or by the potential beneficiary. It needs the following variables: seniority of those who register to follow other study programs and monthly net salary relating to seniority, seniority and monthly net salary that beneficiary will have when he finishes the education period. The model may be useful for calculation of tuition fee and return on investment for university degrees like: Master, Doctorate or for establishing training tax of lifelong courses. It is easily applicable to occupations and positions that have the State as employer or other sectors in which wages are determined on the basis of salary scales defined according to seniority.
Using computational models and their presented results allows the educational service providers to formulate recommendations pertaining to some elements of the marketing mix like product (education service) and the price of the product/service:

- the profile and the study program that can be followed by the potential beneficiary relative to tuition fee that he is willing to pay;
- the teaching and non-teaching activities (related services and facilities) generating personal experiences of the potential beneficiary of education, according to the chosen study program (work practice, volunteering contracts, internship, participation in conferences, student symposiums, access to virtual student communities, accommodation, meal and entertainment facilities);
- the way the student will participate to the curriculum - frequency, limited frequency or distance learning.

Customized educational services by the tuition fee, the educational provider (universities, colleges, training entities) will have to pay particular attention to how its resources are optimized to the requirements of individual customers to ensure effective services, establishing:

- the curriculum and syllabi approved and accredited according to specific national legislation of higher education and lifelong learning;
- the structure and annual teaching (tenured and associate) and non-teaching staff who will operate according to accepted curricula;

- the annual need of course rooms, seminar, laboratory, research centers and libraries, access to virtual knowledge communities;

- facilities and related services provided (dormitories, canteens, gyms etc.) by contracting suppliers that can annually make available some of these services;

- the annual need of courses, seminars, laboratory supplies, practice partners etc.;

- the communication plan of the educational provider's brand; through this, the educational provider could develop a good and very good reputation in a particular specialization, depending on the customization of tuition fee achieved, such as a higher education institution focused on education in social sciences, training entity oriented on vocational training courses or training institution for people with disabilities and communicate general and specific information of the chosen study programs;

-the social media platforms focused on collaboration (open sourcing) will allow user access (beneficiaries of the educational process) to share knowledge accumulated in the virtual environment and providing sources of innovation.

These recommendations can be achieved by creating information technology applications using the above presented computing models of the return of education investment and asking the consumer (students) about the information presented as input variables of the two models. The applications will be used efficiently by the vocational guidance counselors that activate at university and high school levels (educational providers), considerably reducing the education dropout rate and balancing supply and demand skilled labor market.

Conclusions

In the increasingly common situation where the nature of education has fundamentally changed and continues to change (the future of education is outside traditional university's campuses, the technology revolutionizing education and the businesses create their own universities), the private return on investment in education is an intense value perceived by the consumer and the provider of education because the educational investments are incurred wholly or partly by the individual. A prior study of the return of individual investment in education with implications on pricing policy of the provider is important.

The study results may help educational provider (universities, colleges and other training entities), in setting balanced, attractive and motivating customer tuition fees within the context of a market-oriented cost, more fragmented and marked by strong competition.

The solutions proposed in this study do not fully resolve the problem of customization of the tuition fees from pricing policies based on how consumers

perceive the value of the product and how to recover it, but fail to provide simple solutions to a prospective manner that generates recommendations for reverse marketing policies, concept that could be addressed more intensively by universities and other service providers specializing in education.

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