HUMAN CAPITAL FORMATION OF STUDENTS UNDER THE CONDITIONS OF EDUCATIONAL RISKS

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Abstract

Educational investments are importance during formation and development of students' human capital. However, the present investments are associated with risks, because the higher education development in the "liquid" society becomes extremely uncertain. It's argued that formation of the positive attitude to risks and selection of adequate methods for the negative effects minimization are required.

The analysis of educational risks impact on students' human capital formation is the paper objective. For this purpose the students' attitude to educational risks as well as their readiness to cope with these risks were studied, and the risks minimization methods, used by students, were determined.

The data of the mass survey of the Ural Federal District (UFD) students is the empirical basis of the paper (n=1 860, 2017).

It's shown that three fourth of students is regularly faced with educational risks. It's obvious, that there is a close correlation between the students' attitude to educational risks and their readiness to cope with them. It was concluded, that Russian students know few about different mechanisms for educational risks minimization and rarely use them.

However, it's possible to educate students for the use of different educational risks minimization mechanisms in case of nonlinear higher education model.

Key words: human capital, students, educational risks, educational risks minimization.

JEL Code: I23, J24, D81

Introduction

Educational investments are of primary importance during the human capital formation and development. A growing number of people throughout the world become conscious of the present aspect, which in its turn leads to an increasing demand for the higher education (Ghaffarzadegan, Xue & Larson, 2017). However, most often the human goal-oriented activity for destiny shaping does not produce the desired results under the conditions of the

"liquid" modernity. The life norms, patterns and strategies are no more self-evident and specified, but, conversely, they are transformed and distorted against the odds (Bauman, 2000).

It is in U. Beck opinion that for survival in the complex society the ability of risks anticipation and minimization by means of the higher education, in particular in the field of education, takes on greater importance. This particular ability becomes the key civilizational qualification, which according to Beck, should be formed by all socialization channels, including the institute of higher education (Beck, 2007). This competence permits the young people to identify the manifest and latent risks and their effects in the field of higher education and select the adequate methods of risks minimization. In other words, in the modern society the higher education, from the one hand, is a mechanism for the uncertainty risks minimization (Hogan & Walker, 2007) and, from the other hand, the higher education is risk-contributing itself, as far as it does not guarantee professional self-fulfillment of the graduating students (Badillo-Amador & Vila, 2013), their employments (Ghaffarzadegan, Xue & Larson, 2017) and socioeconomic status enhancement (Zamfir, Matei & Lungu, 2013). The presence of a wide variety of risks makes impossible an unambiguous prediction of the ratio between the higher education investments (both tangible and intangible investments) and the expected results of these investments.

The problem of risks in the higher education system and their impact on the students' human capital formation becomes more crucial for a social and economic thought. Usually scientists analyze the students' educational risks in the higher education system in the lens of the economic, academic and social risks, the factors, which determine these risks as well as the methods of risks minimization¹. For instance, reduction of direct and indirect costs is the basic method of the economic risks minimization. At the inlet to the higher education system it can be implemented by means of selection of the university, the special field and the place of training (Hemsley-Brown & Oplatka, 2016; Shiner & Noden, 2014), and during training it can be implemented by means of the university studies and labor activity integration (Troiano & Elias, 2014). The academic risks, in the scientists' opinion, can be reduced by means of the use of the efficient system of the career-oriented activities at school, selection of the special field corresponding to the inclinations and mental abilities, the high learning motivation, the pursuance of self-education and obtaining the continuing professional education (Malau-

¹ By the educational risks we should mean the dangers of mismatch of the young people expectations and the results of their involvement into the higher education system (risks at the system inlet) and training (intrasystem risks).

Aduli, O'Connor, Ray, Kruk, Bellingan, & Teague, 2017). Moreover, it should be mentioned, that the problem concerning the students attitude to educational risks is underexplored, which in the author's opinion is a significant omission.

Each national higher education system has its own risks minimization methods. For instance, in the Russian Legislation, these mechanisms are presented by the free choice of the educational institution, the special field, the mode of study and term of apprenticeship as well as the publicly-funded education (at the inlet to the higher education system). During training the mechanisms mentioned above are presented by participation in the academic mobility programs, management activities, volunteering as well as research and development activities, obtaining the continuing education, selection of the learning path, the ability of the apprenticeship term reduction as well as transfer from the off-budget education to the state-funded education etc.

Moreover, in the authors' opinion, several universal mechanisms of the educational risks minimization, which can be used by students according to the resident country, can be distinguished. The present methods can comprise: the high level of students' learning motivation and pursuance of self-education; students' consciousness of educational risks and the ability to analyze the information concerning these risks; readiness to cope with these risks by means of involvement into different social activities during training (scientific, public, labor activities etc.). The use of these risks minimization mechanisms by students will permit them to develop the wide range of non-technical skills and professional competences and enrich their human capital and competitive edge in the labor market.

The impact of the educational risks on the Russian students' human capital formation was analyzed in the present paper. The students' attitude to different types of educational risks, their readiness to cope with these risks as well as the educational risks minimization methods used by students are the research subject.

1 Method

The results of the mass survey of the Ural Federal District (UFD) universities' students have become the empirical basis of the paper. The general population comprised 51 higher education institutions. As the part of the study the quota sample was implemented. This sample was formed on the basis of statistical data on the educational community of the students from the UFD regions (the Sverdlovsk region, the Chelyabinsk region, the Tyumen

region, the Kurgan region, the Khanty-Mansiysk Autonomous region)*. The quota allocation by professional training aspects (engineering and technical, scientific, social and economic as well as human sciences) was performed inside each region. The public information, posted on the universities sites, was analyzed. The scope of students' sampled population was 1 860 people (the third and the fourth year students as well as the master's students were interviewed).

The feedback form was developed on the basis of analysis of research literature concerning the educational risks. This form allowed for evaluation of the students attitude to different educational risks types, the degree of their readiness to cope with these risks, the educational risks overcoming methods, used by students, within the context of the learning motivation and the educational environment.

The students' readiness to cope with occurring risks under the conditions of "liquid" constantly changing educational environment was measured by means of the following three indexes: the general attitude to cope with risks, the degree of self-sufficiency in risks overcoming and involvement into the activity, which allows for the risks effects reduction. The following activities were considered as the empirical indexes of the students practices directed at the educational risks minimization: participation in the academic mobility programs, research and development activities, volunteering and labor activities as well as obtaining continuing education.

The obtained quantitative data was processed in the SPSS Statistics software package.

The frequency method, the correlation technique and the cross-table (conjugation) method were used for statistical analysis of the information. The frequency analysis permitted to study the students' opinions distribution structure concerning 1) their evaluation of the educational risks; 2) the methods which they use for the risks minimization. The correlation technique based on calculation of the relationship existence (Chi-square test) and the correlation ratio (Cramer's coefficient) allowed for determination of the correlation between the indexes under consideration, in particular between the students attitude to the educational risks and their readiness to cope with these risks by themselves. The cross-table (conjugation) method permitted to analyze the relationship structure between the variables. The relations with asymptotical (two-sided) significance < 0.05 and the Cramer's coefficient > 0.200 were considered as substantial relations.

^{*}The Yamalo-Nenets Autonomous District was not included in the sample, because there are no independent higher education institutions in this region.

2 **Results**

First and foremost, it was determined, if the students had faced with the educational risks during training in the university. It was found out, that the three fourth of students had this experience during training in the UFD universities. It is seen from Table 1, that students have realized the mismatch of their expectations both at the inlet to the higher education system (when choosing the university) and inside the system (during training). In this case, almost half of students, which had already faced with the educational risks, were disappointed in the chosen special field. It should be mentioned, that the substantial relation between the experience of facing the educational risks and the respondents demographic profile (gender, higher education institution, special field) was not found out.

Tab. 1: The respondents' opinion on the educational risks, which they had been already faced with during training (percent of the answers number)

Educational risks	% of the answers	
	number	
Risks of the special field selection (disappointment in the special field, inconformity of the special field and the professional preferences)	48	
Risks of the university selection (inconformity of the chosen university to the needs, capabilities, ambitions, life goals and values)	28	
Risks associated with the training process (inconformity of the educational process organization level and quality to the expectations)	26	
Risks associated with the education result (inconformity of the gained knowledge and skills to the planned career and further project of life)	31	
Total	133	

Source: author's calculation; total is more than 100 %, as far as respondents could choose more than one answer.

The analysis of students' evaluation of the educational risks has shown the mixed attitude to them: 43 % of respondents perceive the educational risks as normal phenomenon, approximately 22 % of respondents consider the risks existence as an indication of the higher education degradation and crisis and 35 % of respondents were undecided. This points to the fact, that the Russian students are not capable of analyzing the manifest and latent risks in the field of higher education. According to the expectations, the adequate attitude to the educational risks (as a modern society norm) is a basis for students' readiness to cope with the risks themselves (Pearson's Chi-squared = 377.063^{a} , Asymptotic significance (2-sided) 0.0, V Cramer = 0.322, medium correlation).

For analysis of methods, by means of which students are ready to cope with the occurring risks under the conditions of "liquid" educational environment, we asked the respondents to determine their general strategy for solving the problem mentioned above. As it is seen from Table 2, approximately two thirds of respondents expressed readiness to be receptive to the challenges and change their educational strategy according to them, though it presents definite challenges.

Tab. 2: Methods by means of which students are ready to cope with the occurring risks
under the conditions of "liquid" constantly changing educational environment (% of the
respondents number)

The indexes of students readiness	Yes, it	Yes,	No, but it is	No, I can't and	Total
to cope with the occurring risks under the	is easy	though it	necessary	don't want to	
conditions of "liquid" constantly changing		is not easy		study under	
educational environment				these	
				conditions	
Constantly change the educational activity	21	42	23	14	100
mode					
Constantly prove the competitive	18	49	22	11	100
performance					
Constantly change/correct the educational	17	45	25	13	100
path					
Have a rapid response to the changes in	24	44	21	11	100
the activity terms and rules					

Source: author's calculation

Then we studied the real behavioral practices used by students, which in our opinion permit to minimize the educational risks. These practices comprise participation in the academic mobility programs, research and development activities, volunteering and labor activities as well as obtaining continuing education. From the five possible methods of the negative educational risks effects reduction, the Russian students most often use the labor activity during training (30 %), rarely students choose the continuous professional education (12 %) (see Table 3). The remaining mechanisms (participation in the academic mobility programs, research and development activities, volunteering) are used much less often (they are used by less than 10 % of respondents).

Tab. 3: Distribution of the respondents answers concerning their participation in different social activities during training (% of the respondents number)

	% of the respondents
Types of social activities, in which students participate	number

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Participation in the academic mobility programs	5
Participation in the research and development activities (on a continuous basis)	8
Participation in volunteering (on a continuous basis)	7
Participation in the labor activities (at the present time)	30
Obtaining continuing education	12

Source: the table is drawn up by the author on the basis of the respondents answers concerning the degree of participation in the different types of social activity during training

The obtained data suggests that the readiness to cope with the educational risks claimed by students is not relevant to the real activities directed to these risks minimization. But what is the reason for this divergence? Why do not students use the risks reduction methods existing in the Russian system? According to the authors' opinion, the reasons of the following situation lie in the personal attributes of students and, primarily, in the knowledge gaining motivation: only 29 % of respondents mentioned the high significance of knowledge gained in the university and the ambition for the knowledge increase (Shabrova & Kuzminchuk, 2017).

Secondly, the following situation reasons lie in the objective organization and management conditions, created in the Russian universities. In particular, these conditions can comprise the absence of real academic freedoms and informational transparency concerning the possibilities of the human capital development within the framework of training in the university. For instance, more than 60 % of respondents have mentioned the absence of freedom of choice of disciplines, the teaching staff etc., and 70 % expressed an opinion that that they have no information concerning the possibilities of training in the shortened timeline. Moreover, students have practically no opportunity to influence the aspects, mentioned above, as far as they are limited in the real access to participation in the university management.

Conclusion

The performed analysis of the educational risks, existing in the Russian higher education system, and their impact on the students' human capital formation allows for the following conclusion: the young people have rather low level of abilities to forecast and minimize the educational risks, which adversely affects the human capital formation. In spite of the fact, that the majority of students have already faced with the educational risks (both at the inlet to the higher education system and inside the system) and that students express their readiness to cope with these risks, they quite rarely use the real behavioral practices that allow for the

educational risks minimization. The reasons of the following situation lie in both the personal attributes of students (their motivation and attitudes) and in the objective organization and management conditions, created in the Russian universities.

The author suggests that the goal-oriented formation of abilities to forecast and minimize the educational risks will make a difference in the current situation. It is possible only in case of the higher education model change. It is assumed, that in case of transition to the nonlinear higher education model, based on the openness, flexibility, participatory and free choice principles, the qualitative changes in students' motivation and social activity will take place (Zborovsky, G. et al., 2017). Thanks to this process the favorable conditions for providing the wide possibilities for students' human capital development will be created.

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