# Creative Class Formation: International Comparisons, Statistical Evaluation and Forecast

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#### **Abstract**

The article investigates the problem of creative class formation. The authors present creative class as a part of middle class to a great extent influencing the innovative component of country development. Higher education institutions are treated as the main place where creative class is formed. In every country the system of higher education and its programs defines what will be the quality of creative class while entering the economy. The authors conduct the international comparative analysis of the systems of undergraduate and postgraduate education targeted on distinguishing the main tendencies of developing the European education. The method of complex comparative analysis of Russian and European systems of higher education and statistical modeling of graduates' employment regularities is developed and tested.

Keywords: comparative analysis, elite mobility, higher education system.

#### 1. Introduction

Professor Richard Florida, the economist and social scientist, identifies creative class as a "key driving force for economic development of post-industrial cities". We agree with him, as it is the choice and behavior of creative class that makes a huge economic impact: on one hand, being the main tax-payer, creative class (as part of the middle class) constitutes its main human resources power, participating in forming the national wealth and the national profit; on the other hand, it is the main consumer and takes part in forming the volume and structure of demand, and through this demand it sets the focus and requirements of the innovative development of economy.

Creative talent is forecasted to be the focus of global economic competition this century. For many cities and countries the problem of elite exit strategy is arising – when creative class is moving away and uncreative is coming from the neighboring regions. Maybe at present not so evident, but the future prosperity of many places depends on the proper social and economic policy.

National governments and city administrations are facing the problem of establishing the environment that can attract and retain creative class representatives by accommodating their needs. At the same time another strategic aim is to improve the existing education system, as it is the key function of universities and institutions to prepare the specialists in the necessary quantity and with the up-to-date required qualifications and creative innovative thinking to meet the real demands of the market. "Our focus is building new institutions that can unleash and tap the creativity" puts Florida [1] as further development of economy depends on the college and university graduates and their qualifications.

For the Russian Federation it is important nowadays to increase government regulation of both social results of educational activity and its internationalization process. Therefore, it stipulates the necessity to provide objective evaluation, distinguish the quantitative regularities of higher education functioning on the basis of international statistical comparison.

Statistical analysis and modeling the regularities of undergraduate and post-graduate education system development in the countries – leaders of the sector, the influence of

gender and social factors on the training and future employment in the two level higher education system will make it possible to develop and analyze the possible scenarios of higher education system development for Russia, where higher education system is in transition period (previous education system – specialist diploma, 5 years, nowadays - Bachelor diploma, 4 years and Master diploma, 2 years).

The aim of our research is to provide the theoretical grounding and develop the methods of complex comparative analysis of Russian and European higher education systems and statistical modeling of graduates' employment regularities.

#### 2. Results

The analysis of QS World University rankings reveals that American and British universities occupy the leading positions among the top 200 world universities. Due to the total number of universities represented in the ranking the USA leaves Great Britain behind. As for the share of the universities of one country represented in the ranking with regard to the total number of higher education institutions within this country, Great Britain takes the lead over the USA. This proves the high level of education quality in the country in general and efficient educational policy, in most cases determining world standards. Thus British higher education system was chosen for comparison as the basis for revealing the tendencies of European higher education and evaluating the quantitative dependence of the university graduates employment on the student contingent distribution.

To compare the higher education systems of Russia and Great Britain we took into account the specific differences in basic notions – higher education institutions typology, structure and forms of higher education – while distinguishing the quantitative regularities of British higher education development and accomplishing the international comparative analysis with Russian higher education system.

The system of statistical indices characterizing the student contingent in Russia and Great Britain, their further education and employment was formed. It contains factor indices, characterizing the contingent of students: distribution of students due to education programs levels, distribution of students due to program forms, gender contingent, citizenship; performance indices, characterizing graduates employment: total number of graduates, number of graduates employed in companies, number of graduates continuing education, number of unemployed graduates, others.

Data sources of the research are Higher Education Statistics Agency of Great Britain and Federal Service of National Statistics of Russia.

The application of cluster analysis method made it possible to give the detailed characteristics of the higher education market in Great Britain, three clusters were distinguished: cluster 1 – leaders of the ranking, cluster 2 – the lowest position in the ranking, cluster 3 – middle position in the ranking. Principal component analysis of the students and graduates structure on undergraduate and postgraduate levels was accomplished in every cluster – numerous correlating characteristics were transformed into a smaller number of implicit, but objectively existing factors.

Correlation and regression analysis was used to distinguish and evaluate the influence of the most significant factors of structural and dynamic changes in the student contingent on the future possibility of their employment.

On the basis of the developed key statistical indices characterizing university activity, comparative evaluation of the efficiency of modern higher education in Russia and Great Britain is accomplished.

The vitality of the two level education system (Bachelor degree and Master degree) is explained by the opportunities it gives to the graduates: firstly, you can earlier enter the labour market and be in-demand, and secondly, make the informed choice about the necessity to continue education and what major to choose for Master degree.

Bachelor programs graduates of British top universities are equally in-demand as the graduates of Master and Doctorate degrees of Russian universities, that proves the high level of professional skills focus even on the under-graduate level. Female

students prevail on all kinds of programs of different levels in British universities. Post-graduate studies in Russia are popular with male students because of the benefit it gives – denial of determent of call-up.

In Britain full-time education programs are more popular on under-graduate level, part-time form is more often chosen for post-graduate programs because of the possibility to combine studies with work and the flow on in-coming international students. In Russia both forms are popular on all the education levels.

Irrespective of high education fees in British universities, the popularity of their programs with foreign students is stable. This allows to draw the focus of university administration on providing high quality programs and not cutting the costs, decreasing the fees and by this attracting a greater amount of students. Employees are looking for high level professional competences and skills, creative mindset, and not just the university diploma.

The greater share of international students is represented on the post-graduate programs, domestic students in most cases are satisfied with Bachelor degree, whereas international students continue studying for higher degree in order to get more competitive advantages for future employment.

University graduates with higher degree or the degree got in prestigious universities are better employed. The interesting exception make the university graduates with Master or Doctorate degrees got in top universities, it can be explained by their great ambitions and difficulty to find the suitable job.

### 3. Conclusions

The efficiency of undergraduate and postgraduate education in Russia was evaluated in accordance with the parameters characterizing European university education, qualitative and quantitative characteristics of modernizing Russian education were analyzed, content and structural transformations were revealed. Russian society should get the idea and evaluate the perspectives of higher education development in comparison with other EU countries. The analysis of the result achieved in other countries – leaders of the sector, makes it possible to forecast future perspectives for Russia.

However, in the situation of our quickly changing world, international elite mobility and the influence of this mobility on the economic development of the countries the problem of improving the existing higher education system and focusing it on the real demands of market and society is of crucial importance for both economically developed and developing countries.

## References

Florida, Richard L. The flight of the creative class: the new global competition for talent. HarperCollins Publishers, New York, 2007.

Kolodko G. Globalization and catching-up in transition economies. University of Rochester Press, NY, USA, and Woodbridge, Suffolk, UK, 2002.