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## Forecasting the enterprise development in the field of education in the Kyrgyz Republic

### Прогнозирование развития предпринимательства в сфере образования в Кыргызской Республике

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#### Abstract

The article is focused on the analysis of problems of development and forecasting of small enterprises in the Kyrgyz Republic in the field of education. The methodology of forecasting the gross income of small and medium-sized enterprises in the field of education is offered. An approach related to the use of the least-squares method as a forecasting tool is proposed. In this regard, the conditions of formation and functioning of the market of paid educational services in the Kyrgyz Republic, which are closely related to the definition of demand, supply and market prices for educational services are characterized. The results allow us to accurately determine the interval in which we can predict with maximum probability the future volume of the gross income of small and medium-sized enterprises in education from 2019 to 2023, which will slowly decline. It was also found that small enterprises in education have certain advantages over large educational institutions. They are more dynamic, faster and more efficient in responding to changes in the domestic market, both in times of growth and in times of crisis. The findings of the research reflect the actual situation. They are adequate and can be useful in assessing the effectiveness of business creation in the Kyrgyz Republic in the provision of educational services.

#### Аннотация

Статья посвящена анализу проблем развития и прогнозирования малого предпринимательства в Кыргызской Республике в сфере образования, предложена методика прогнозирования объемов валового дохода малых и средних предприятий сферы образования. Предложен подход, связанный с использованием метода наименьших квадратов как инструмента прогнозирования. В связи с этим охарактеризованы условия формирования и функционирования рынка оказания платных образовательных услуг в Кыргызской Республике, которые тесно связаны с определением спроса, предложения и рыночных цен на образовательные услуги. Полученные результаты позволяют нам точно определить интервал, в котором с максимальной вероятностью можно предсказать будущие объемы валового дохода малых и средних предприятий сферы образования с 2019 по 2023 годы, которые будут медленно снижаться. Также выявлено, что предприятия малого бизнеса в сфере образования имеют определенные преимущества перед крупными образовательными учреждениями, они более динамичны, быстрее и более эффективно реагируют на изменения внутреннего рынка как в период роста, так и в кризисные времена. Выводы, полученные при исследовании отражают фактическую

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ситуацию, то есть адекватны и могут быть полезными при оценке эффективности создания бизнеса в Кыргызской Республике в сфере оказания образовательных услуг.

**Ключевые слова:** малое и среднее предпринимательство, сфера образование, образовательные услуги.

## Introduction

The problem of the development of entrepreneurship in the economy in different ways is among the most discussed issues in the economic literature (Shams et al, 2020). In strategic terms, the development of entrepreneurship is a factor in the sustainable development of the national economy as a whole (Huggins & Thompson, 2015). Modern researchers distinguish manufacturing, commercial (trade), financial and credit intermediary, insurance and other types of entrepreneurship. This article focuses on the development of entrepreneurship in the field of education.

This research is relevant to the Kyrgyz Republic in light of the accession of the Kyrgyz Republic to the Treaty on the Eurasian Economic Union (EAEU) on August 12, 2015. That is, Kyrgyzstan became a full member of the union, along with Armenia, Belarus, Kazakhstan, and Russia. In this regard, the country's economy exposed structural problems in general, and in the education system in particular. For example, there are structural and institutional problems in education. For example, the Law of the Kyrgyz Republic "On Licensing and Authorization System in the Kyrgyz Republic" adopted in 2013 still does not have an appropriate nature of subordinate legislation, which would fully regulate the licensing of educational activities.

The main objective of the study is to quantify the services provided in the provision of educational services and using these ratios to develop forecast parameters for the future in order to predict the development of entrepreneurship in the Kyrgyz Republic in the field of education. This article analyzes the state of small and medium-sized enterprises in education in the context of the provision of educational services of various kinds. The volumes of gross income in the education system are calculated and the forecast benchmarks for the development of private entrepreneurship in the education system in the Kyrgyz Republic are defined. The results can be used by regional authorities to improve the system of labor market analysis, development of labor resources and labor potential of the population.

## Literature Review

The development of the education system is necessary because "... the education system is among the most important subsystems of society, ensuring the preservation and accumulation of human capital. (Avraamova and Loginov, 2014; Dissou et al, 2016). For the effective and rapid development of the education system, it is necessary to improve the market for educational services and stimulate the development of private education (Ratten, & Jones, 2021).

However, there is some debate about the methods of financing education. Proponents of fee-based education see it as an important channel for social mobility, as a means of expanding educational opportunities, and education of higher quality compared to free education (Avery & Hoxby, 2004; Ehrenberg, 2000; Ehrenberg, 2006). The arguments are as follows: the need to meet the increased educational demand, focus on the real needs of specific consumers of educational services, the stimulation of innovative educational processes. At the other pole of the spectrum, there is an opinion about the fee paid education as a limitation of access to educational benefits in connection with the lack of opportunities for certain social groups to finance education from their current income and savings, as a factor of increasing social injustice, social inequality, stratification of society. (Valeev & Valeeva, 2014).

The Kyrgyz Republic education policy reflects the following trends of modern socio-economic development of society (Marchenko et al, 2016):

- the acceleration of the pace of social development, which necessitates an increase in the level of preparedness of citizens for change;

- the transition to information, post-industrial society;
- increased intercultural interaction;
- the increasing number of global problems, which can be solved only with the cooperation of the world community, which requires the formation of modern thinking of the younger generation;
- the dynamism of economic processes, increased competition, and a reduction in the area of unskilled labor;
- increasing the role of human capital, etc.

The current mechanism of financing education in the Kyrgyz Republic provides educational institutions with wide autonomy in the use of additional financial sources. Expenses are made in strict accordance with the figures approved by the estimate of the institution. The items of the estimate are financed mainly at the expense of budgetary funds. Funds that were received as a result of the commercialization of the activities of an educational institution are subject to income tax. Providing universities with the legally established opportunity to conduct educational activities for a fee has led not only to an increase in extra-budgetary funding of educational activities, but also a widespread of commercial non-state higher education institutions (Yessenaliev, 2019).

The trends described above have led to the following contradiction: the withdrawal of the state part of the financial obligations has led to an incentive for educational institutions to enroll students on a fee-paying basis and reduce the number of state-funded positions. However, this situation comes into conflict with the constitutional rights of every person to receive free education. Also of note is the problem of the quality of paid higher education. In particular, admission on a fee-paying basis to a state or non-state university is greatly simplified, which automatically affects the quality of education and qualifications of specialists (Yessenaliev, 2019).

In general, it can be noted that over the past ten years in the Kyrgyz Republic there has been a tendency to reduce the practice of providing access to higher education, expressed in a reduction in the number of state-funded places in higher education institutions. It should also be noted that the lack of budgetary resources for financing education is manifested not only from a quantitative aspect, but also from a qualitative one, since the distribution of funds between levels of education and institutions cannot be called rational. All of the above necessitates the search for ways to solve the problem associated not only with the lack of budget funding for education, but also to improve the mechanism of budgetary financing of the sphere itself (Yessenaliev, 2019).

In this regard, supporters of the use and increase the practice of paid educational services by private and public institutions believe that the process of modernizing the education system should be regarded initially, not only as a social program, but as a business project. That is, in terms of economic benefits that brings the provision of paid educational services to the educational institution.

(Alves et al, 2016; Bhupatiraju et al, 2012). The implementation of this approach is possible only through the development of various forms of entrepreneurship in the education system (Yami et al, 2021). The current system of public education cannot respond quickly to the current needs of citizens in educational services, so the system of public education must compensate for its inflexibility and sluggishness of the possibility of providing paid educational services in both public and private educational institutions (Smolentseva, 2020).

## Methodology

The information and analytical data that were used in the preparation of this article were obtained from public sources posted on the official websites of the Ministry of Education and Science and the Ministry of Economy of the Kyrgyz Republic, the National Statistics Committee of the Kyrgyz Republic.

The considered task of forecasting the volume of gross income for the services rendered on education. This problem is reduced to estimating the parameters of a linear multiple regression model. In this case, we use the method of least squares (LOS), which allows obtaining such estimates of parameters, in which the sum of squares of deviations of actual values of the result indicator  $y$  from theoretical  $\hat{y}_x$  is minimal, i.e.

$$\sum (y - \hat{y}_x)^2 \rightarrow \min.$$

## Results and Discussion

According to the Statistical Committee of the Kyrgyz Republic, there were 10.9 thousand Small and medium-sized enterprises in Kyrgyzstan in 2018. Of these, 10.2 thousand are small and 700 are medium-sized. That is, on January 1, 2019 the number of individual entrepreneurs was 396 thousand (National Statistical Committee of the Kyrgyz Republic, 2021). Also, the number of employees in small and medium-sized enterprises (excluding peasant and private farms) in 2018 amounted to 81.2 thousand people. In turn, in 2018, small and medium-sized enterprises produced goods worth 72.3 billion Kyrgyzstani Som, which amounts to 33.9% of the country's GDP. (National Statistical Committee of the Kyrgyz Republic, 2021).

For several years in a row in Kyrgyzstan, about 40% of GDP is provided by small and medium-sized enterprises. Salaries of those employed in small and medium-sized enterprises lag behind the national average, despite the fact that the average wage in the field is increasing. Also, despite the growth of investment, exports of small and medium-sized enterprises abroad have fallen tenfold since 2012. The volumes of gross income for services provided in education by small and medium-sized enterprises are shown in Table 1 (in order to predict the amount of gross income for services provided in education by small and medium-sized enterprises, let us write out a table.

**Table 1.**

*Volumes of gross income for services provided in education by small and medium-sized enterprises in the Kyrgyz Republic, million Kyrgyzstani Som (US dollar exchange rate: 84.62 to Kyrgyzstani Som(KGS) as of 17.05.2021)*

Years	2014	2015	2016	2017	2018
<b>Gross income</b>					
Education ( $Y$ )	246,3844	269,4388	356,3984	417,3493	512,9755
Small enterprises ( $x_1$ )	199,1027	215,2148	272,3461	309,9	386,8096
Medium-sized enterprises ( $x_2$ )	47,2817	54,224	84,0523	107,3842	126,1659

Source: National Statistical Committee of the Kyrgyz Republic (2021)

Next, let's predict the volume of gross income for services provided in education by small and medium-sized enterprises, for this purpose the volume of gross income in education ( $y$ ) will be presented as a linear regression:

$$y = a_0 + a_1x_1 + a_2x_2 \quad (1)$$

Applying to equation (1) the method of least squares (LOS), with respect to the parameters  $a_1$ ,  $a_2$ ,  $a_3$ , we obtain the system:

$$\begin{cases} a_0+276,67464 & a_1+83,82162 & a_2=360,50928 \\ 276,67464 & a_0+81158,2740 & 2a_1+25211,1164 & 9a_2=106373,425 & 4 \\ 83,82162 & a_0+25211,1164 & 9a_1+7937,95824 & a_2=33150,4728 & 7 \end{cases} \quad (2)$$

System (2) has a solution (since the determinant  $D = 123709,6192 \neq 0$ ):

$$a_0 = 0,1505; a_1 = 0,9982; a_2 = 1,0044.$$

Substituting these data into (1) we obtain a trend equation of multiple regression:

$$\hat{y}_r = 0,1505 + 0,9982x_1 + 1,0044x_2 \quad (3)$$

Let us first consider small enterprises.

Based on the statistical data in Table 1, let's make forecast calculations for the next 5 years. According to these data, elementary functions are most often used in the analytical replacement of dynamic series: linear, logarithmic, degree, exponent, polynomial, etc., as well as their various combinations.

If for the initial series  $U_i = f(t)$ , where  $i = 1, 2, 3, 4, 5$  it is possible to find a suitable time function, then the prediction by the method of extrapolation consists in calculating this function at future points in time  $t = 6, 7, 8, 9, 10$ .

To select the best formula for the analytical replacement of the original dynamic series of economic indicators, it is necessary to perform calculations in several steps.

At the first stage, we plot the graph of the initial time series and by comparing it with the graph of elementary functions (linear, logarithmic, power, exponent, polynomial) we choose the most appropriate. This means that inside the interval in question, the appropriate function must be very close than the others, and outside the interval, the function we choose must be very smooth. In our case, such a function turned out to be polynomial, namely a parabola:

$$\hat{x}_{1\text{calc}} = b_1 + b_2t + b_3t^2 \quad (4)$$

Let us calculate the coefficients:  $b_1 = 7,287$ ;  $b_2=3,2881$ ;  $b_3=186,65$ .

From here

$$\hat{x}_{1\text{calc}} = 7,287t^2 + 3,2881t + 186,65 \quad (5)$$

Let's calculate the calculated values:

$$\hat{x}_{1\text{calc}(2014)} = 197,225 \quad (\text{million KGS}); \quad \hat{x}_{1\text{calc}(2015)} = 222,374 \quad (\text{million KGS});$$

$$\hat{x}_{1\text{calc}(2016)} = 262,097 \quad (\text{million KGS}); \quad \hat{x}_{1\text{calc}(2017)} = 316,394 \quad (\text{million KGS}); \quad (6)$$

$$\hat{x}_{1\text{calc}(2018)} = 385,266 \quad (\text{million KGS});$$

The approximation error is  $\varepsilon = 2,106\%$ , and the average value  $x_1$ :  $\bar{x}_1 = 276,67464$

To prove the statistical significance of equation (5), let's determine the correlation index, which shows the closeness of the relationship (6), for which we calculate the total and residual variance:

$$\sigma_{x_1}^2 = \frac{1}{5} \sum_i (\bar{x}_{1i} - x_{1i})^2 = 4507,1935.$$

$$\sigma_{\text{res}}^2 = \frac{1}{5} \sum_i (\hat{x}_{1i} - x_{1i})^2 = 42,2757.$$

Then the correlation index:  $\rho_{x_1} = \sqrt{1 - \frac{\sigma_{\text{res}}^2}{\sigma_{x_1}^2}} = \sqrt{0,991}$ .

Hence, the determination index, which characterizes the proportion of variance of the resultant indicator  $x_1$  is equal to:  $\rho_{x_1}^2 = 0,991$ .

Let's calculate Fisher's F-criterion:  $F_f = 330,33$

Tabular value of Fisher's F-criterion at level  $\alpha = 0,05$  and the numbers of degrees of freedom:  $x_2 = 3$ :  $F_{\text{tabl}} = 10,13$ .

Comparing, we are convinced that the actual value of Fisher's F-criterion is much higher than the tabulated one, i.e.  $F_f = 330,33 > 10,13 = F_{tabl.}$ , which means that the trend regression equation (5) is statistically significant, so you can use it to make predictions:

$$x_{1pr(2019)} = 468,7106 \text{ (million KGS); } x_{1pr(2020)} = 566,73 \text{ (million KGS);}$$

$$x_{1pr(2021)} = 679,323 \text{ (million KGS); } x_{1pr(2022)} = 806,49 \text{ (million KGS);}$$

$$x_{1pr(2023)} = 948,231 \text{ (million KGS);}$$

Let us carry out similar calculations on the gross income indicators of medium-sized enterprises in the field of education.

Here as a trend function is more suitable a power function, so we take:

$$\hat{x}_2 = c_1 x^{c_2}, \text{ where } c_1 = 42,291, c_2 = 0,6416, \text{ respectively:}$$

$$\hat{x}_2 = 42,291 x^{0,6416} \quad (7)$$

Let's calculate the calculated values:

$$\hat{x}_{2calc(2014)} = 42,291 \text{ (million KGS); } \hat{x}_{2calc(2015)} = 65,9764281 \text{ 2 (million KGS);}$$

$$\hat{x}_{2calc(2016)} = 85,5793436 \text{ 8 (million KGS); } \hat{x}_{2calc(2017)} = 102,927078 \text{ 3 (million KGS);} \quad (8)$$

$$\hat{x}_{2calc(2018)} = 118,770096 \text{ 5 (million KGS).}$$

Approximation error  $\varepsilon = 8,812\%$ , average value  $\bar{x}_2 = 83,8216$ .

Let's show the statistical significance of the regression equation (7).

The total and residual variance, respectively, are:  $\sigma_{x_2}^2 = 1381,39$ ,  $\sigma_{res}^2 = 47,99$ , and the determination index  $\rho_{tx_2}^2 = 0,97$ .

$$F_f = 96,99, F_{tabl} = 10,13 \Rightarrow F_f > F_{tabl}$$

The trend equation (7) is statistically significant, so we can make predictive calculations:

$$x_{2calc(2019)} = 133,508770 \text{ 6 (million KGS); } x_{2calc(2010)} = 147,388248 \text{ 2 (million KGS);}$$

$$x_{2calc(2021)} = 160,572249 \text{ (million KGS); } x_{2calc(2022)} = 173,176895 \text{ (million KGS);}$$

$$x_{2calc(2023)} = 185,288282 \text{ (million KGS).}$$

Using equation (3) and calculated values  $x_{1p}$  (6) and  $x_{2p}$  (8) we obtain the calculated values for (y)

$$\hat{y}_{calc(2014)} = 239,492326 \text{ 4 (million KGS); } \hat{y}_{calc(2015)} = 288,384535 \text{ 1 (million KGS);}$$

$$\hat{y}_{calc(2016)} = 347,723873 \text{ 4 (million KGS); } \hat{y}_{calc(2017)} = 419,345654 \text{ 2 (million KGS);}$$

$$\hat{y}_{calc(2018)} = 504,003620 \text{ 2 (million KGS);}$$

Approximation error  $\varepsilon = 2,90\%$ .

Let us calculate the predictive calculations:

$$y_{pr(2019)} = 602,099892 \text{ 3 (million KGS); } y_{pr(2020)} = 713,880689 \text{ (million KGS);}$$

$$y_{pr(2021)} = 839,510445 \text{ (million KGS); } y_{pr(2022)} = 979,105789 \text{ 5 (million KGS); (9)}$$

$$y_{pr(2023)} = 1132,75319 \text{ 4 (million KGS).}$$

Taking into account the approximation error, let's calculate the confidence intervals of the predicted parameter:

**Table 2.**  
*Calculation of confidence intervals of the predicted parameter.*

Years	Gross income in education (forecast)	Confidence interval	
		lower	upper
2019	602,0998923	584,6509	619,5489
2020	713,880689	693,1923	734,5691
2021	839,510445	815,1812	863,8396
2022	979,1057895	950,7311	1007,48
2023	1132,753194	1099,926	1165,581

Source: compiled by the authors

The obtained values allow us to accurately determine the interval in which with maximum probability we can predict the future volumes of the gross income of small and medium-sized enterprises from educational services for the relevant periods.

This problem is studied from different positions, by different authors, but each researcher has his own logic of considering the problem. For example, Gamidova (2003) characterizes the development of entrepreneurship in education as follows: "A particularly acute issue is the creation of an organizational, legal, economic and regulatory framework for the formation of the market of educational services and the development of entrepreneurial activity in this area. Radical transformations are taking place in school, specialized secondary and higher education in Russia. The essence of these transformations consists in: elimination of state monopoly; development of educational services market; formation of non-state business structures of various organizational and legal forms along with state institutions; development of elements of entrepreneurial activity in the system of state education".

Another Russian author Beshkinskaya (2009) The authors of the present report emphasize qualitative parameters: "An in-depth analysis of the current state of the vocational education system from the perspective of the possibility and necessity of solving the tasks of staffing innovative economic development within its framework" is necessary. The market environment of educational services in the Kyrgyz Republic is a set of five stages of education for the population of the country: pre-school education (kindergartens, tutoring centers, preparatory school groups); general secondary education (schools, gymnasiums, lyceums); vocational education (colleges, vocational schools); higher education (universities, institutes, academies); postgraduate vocational education.

Thus, the gross income of small and medium-sized enterprises from education services to 2023 will increase regardless of the types and level of educational entities in the field of educational services of the Kyrgyz Republic, that is to say about the sustainable development of all forms of entrepreneurial activity in education.

And, therefore, the amount of gross income of small and medium-sized enterprises from educational services, according to our forecast in 2023 will increase by 2.25 times, compared with 2018, despite the

fact that the growth rate from 2019 to 2023 will slowly decline. The rate of decline in growth will respectively be: 119,46%, 118,57%, 117,60%, 116,63%, 115,69%. That the market can saturate simply over time, and not as a result of an increase in the number of private organizations providing educational services. Moreover, market saturation can occur even against the background of a sluggish reduction of state educational institutions and so on. But when it comes to the market of educational services and small businesses we need specific techniques.

## Conclusions

The large-scale shifts that are taking place in society have a great impact on the educational system as well. And well understood by our older generation, the so-called "free education" is almost gone from our lives, a clear trend of changing demands from consumers of educational services.

To date, paid education is manifested in a variety of forms and methods of education, aimed at different levels of training and income of students. And, therefore, the volume of the gross income of Small and medium-sized enterprises from education services, according to our forecast in 2023 will increase by 2.25 times, compared with 2018. By analyzing the education market, we can see that the market can saturate simply over time, and not as a result of an increase in the number of private organizations providing educational services. Moreover, market saturation can take place even against the background of a sluggish reduction of state educational institutions and so on. But when it comes to the market of educational services and small enterprises we need specific techniques.

## Bibliographic references

- Alves, H., Fernandes, C., & Raposo, M. (2016). Value co-creation: Concept and contexts of application and study. *Journal of Business Research*, 69, 1626–1633. <https://doi.org/10.1016/j.jbusres.2015.10.029>
- Avery, C., & Hoxby, C. (2004). Do and should financial aid affect students' college choices? In C.Hoxby (Ed.), *College choice* (pp.239-299). Chicago, IL:University of Chicago Press.
- Avraamova, Ye.M., & Loginov, D. M. (2014). Role of School Education in Development of Human Capital. *Economy of Region*, 9(2), 53-62. Retrieved from: <https://www.economyofregion.com/archive/2014/49/2287/pdf/> (in Russian)
- Beshkinskaya, E.V. (2009). Socio-economic foundations of formation and development of the system of professional educational training of entrepreneurs (PhD thesis in Economics). Moscow International Higher Business School MIRBIS (Institute), Moscow, [https://static.freereferats.ru/\\_avtoreferats/01004665405.pdf](https://static.freereferats.ru/_avtoreferats/01004665405.pdf)
- Bhupatiraju, S., Nomaler, Ö., Triulzi, G., & Verspagen, B. (2012). Knowledge fows – Analyzing the core literature of innovation, entrepreneurship and science and technology studies. *Research Policy*, 41, 1205–1218. <https://doi.org/10.1016/j.respol.2012.03.011>
- Dissou, Y., Didic, S., & Yakautsava, T. (2016). Government spending on education, human capital accumulation, and growth. *Economic Modelling*, 58, 9-21. <https://doi.org/10.1016/j.econmod.2016.04.015>
- Ehrenberg, R.G. (2000). *Tuition rising: Why college costs so much*. Cambridge, MA:Harvard University Press.
- Ehrenberg, R.G. (2006). The perfect storm and the privatization of public higher education. *Change*, 38, 47-53.
- Gamidova, M. S. (2003). Development of the market and entrepreneurship in education. *Structuring the economy*, (1), 103-109.
- Huggins, R., & Thompson, P. (2015). Entrepreneurship, innovation and regional growth: A network theory. *Small Business Economics*, 45, 103–128. <https://doi.org/10.1007/s11187-015-9643-3>
- Marchenko, L.Y., Korotenko, V.A., Tretiakova, T.A., & Petersone, B. (2016). Management in the Education System of the Kyrgyz Republic. *Analytical Review*. Bishkek: BIOM.
- National Statistical Committee of the Kyrgyz Republic (2021). *Statistics of the Kyrgyz Republic for 2018*. Available at: <http://stat.kg/ru/statistics/> (in Russian).
- Ratten, V., & Jones, P. (2021). Entrepreneurship and management education: Exploring trends and gaps. *The International Journal of Management Education*, 19 (1), article № 100431. <https://doi.org/10.1016/j.ijme.2020.100431>
- Shams, S.M.R., Vrontis, D., Chaudhuri, R., Chavan, G., & Czinkota, M.R. (2020). Stakeholder engagement for innovation management and entrepreneurial development: A meta-analysis. *Journal of Business Research*, 119, 67-86. <https://doi.org/10.1016/j.jbusres.2020.08.036>





- Smolentseva, A. (2020). Marketisation of higher education and dual-track tuition fee system in post-Soviet countries. *International Journal of Educational Development*, 78, article № 102265, <https://doi.org/10.1016/j.ijedudev.2020.102265>
- Valeev, A.A., & Valeeva, L.A. (2014). Free Education: Pro and Contra. *Procedia - Social and Behavioral Sciences*, 131, 66-69. <https://doi.org/10.1016/j.sbspro.2014.04.081>
- Yami, S., M'Chirgui, Z., Spano, C., & Barykina, O.G. (2021). Reinventing science and technology entrepreneurship education: The role of human and social capitals. *Technological Forecasting and Social Change*, 164, article № 120044. <https://doi.org/10.1016/j.techfore.2020.120044>
- Yessenaliev, B.B. (2019). *Economic and Statistical Analysis of Education Financing in Kyrgyzstan*. Bishkek: Altyn Tamga.