

Implementation of the State Economic Policy in the Field of Education

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ABSTRACT

The relevance of the analyzed issue is caused by the need to study the mutual development of higher education and basic factors of the production system. The purpose of this paper is the development of theoretical positions of state regulation of higher education systems, as well as the development of practical recommendations for the implementation of the economic policy at the present stage of development. The leading approaches in the study of this issue are historic-economic, institutional and evolutionary, econometric modeling elements allowing justifying the trend of the higher education development in the current period. It is proved that changes in economic policy conditions are associated with the implementation of irreversible transformations occurring in the factors of production. It is shown that these changes dictate cyclical fluctuations, as well as the evolution of the behavior and preferences of consumers. The contents of this article may be useful in the development of a state strategy to modernize higher education and the overall economic policy.

KEYWORDS

Economic policy of the state; factors of production; education

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Introduction

This article is identifying the relationship changes while implementing the economic policy and transforming the consumer behavior and preferences. If you start the process of changes in one link, you can observe a kind of multiplier

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effect, reinforcing these changes repeatedly in all spheres of economic activity. The structure of the modern economy has a dual character. On the one hand, there are new economic sectors that are dependent on the leading factor of production. However, this factor appears when the efficiency of a new sector starts to decline gradually going out at the average level of efficiency of the sector, which already cannot be increased by using old tools with the existing structure of the economy. You can also note that the time between crises is reduced, and the duration of the crisis - increased. The current processes - the debt crisis of leading economies, the inefficiency of the tools of monetary policy - a change in interest rates would not affect either inflation or the investment processes (possibly the economic growth), the continued widening of the gap between the richest and poorest (and the people inside countries and between countries) leads to economic and social issues and says that the general conditions for implementing economic policy of the state have changed and, therefore, there is an urgent need for modernization of the economic regulation system.

All economic entities implement the needs for education, although the tools may vary. And since education is an economic good, it creates significant positive externalities, and then the government can and should create an institutional environment that allows realizing the interests of households, firms and the state in the best way.

The issues of information and knowledge (Malykh et al., 2015; Aral et al., 2006; Hilbert, 2013), the formation of macroeconomic policy (Malykh, Polyanskaya, Kayumova & Shamsutdinova, 2014; Assenza et al., 2013) as well as government spending on education (Kühl & Andrade, 2004; Estache, Gonzalez & Trujillo, 2016; Gylfason & Zoega, 2003; Chandra, 2010; Hauner & Kyobe, 2008; Agasisti, 2011; Agasisti, 2008) are under consideration of a large number of researchers and analysts.

The problem of measured benefits production, which includes education, is discussed a lot in scientific circles. However, many aspects of this problem, such as the creation of an effective institutional environment cannot find a proper theoretical and practical lighting. In addition, the establishment of harmonized interests of the state and private entities also requires a separate scientific understanding that will create certain conditions for the implementation of the higher education programs to the changing needs of individuals.

The purpose of research is to develop theoretical positions of state regulation of higher education systems, as well as to develop practical recommendations on the implementation of economic policy in the field of education at the present stage of development. Achieving this goal involves the formulation and solution of the following tasks: to analyze the main trends in the higher education system, due to differences while implementing the interests of economic entities; to disclose the features of the maintenance of Russia's economic policy in the field of education at the present stage of the operation in terms of the modernization project, taking into account the development of the principles and requirements for its implementation; to identify and specify the possibility of economic regulation of the higher education system in the process of harmonization of the state and households' interests.

Materials and Methods

Research methods

In the course of research the following methods were used: theoretical (systemic, structural and functional, reproductive and dialectical materialist), empirical (social survey, observation), methods of mathematical statistics and graphic results.

Experimental research base

The experimental base of research was the following official data of Federal State Statistics Service of Russia, describing the development of economic activities for the period 2011 – 2014 by gross value added (rubles in current prices and in constant prices in 2011) and the average number of employed in the economy (people), the data of the Ministry of Education and Science of Russia on the use of intellectual property (including intellectual property); import and export of technologies (number of agreements); developed and used advanced technology (number of technology); the number of personnel engaged in research and development (persons); fixed assets of research and development (rub., in current prices).

Research stages

The study was conducted at several stages. At the first stage the authors examine theoretical and methodological issues about the nature of educational services such as measured good. The second stage involves the analysis and evaluation of trends in the development of higher education and its relationship with the transformation of production factors, on the basis of an econometric model. The final stage of the study is the formation of proposals of state policy in the field of education, taking into account the interests of households and society in general as providing implementation and reproduction of positive externalities.

Results

In the course of research the authors reveal certain trends in the development of higher education system in Russia, due to differences in the implementation of interests of economic entities. We see a large extent of a mismatch. State puts and successfully solves the problem of reducing spending on education, encroaching on interests of the households. Reducing the number of universities and increasing tuition fees will make education as an elite good very soon, and a positive external effect will be less noticeable. The accuracy of the impact of structural changes in the Russian higher education system on development opportunities in the environment where knowledge becomes an important factor is not determined yet.

The main role of knowledge - is to stimulate the development of tools, the basis of knowledge - is experience. The qualitative change of the factor - an evolutionary process leading to the reduction or removal of the main conflict in the existing era, but identifying new contradictions, that as defining and establishing a new factor begin to develop with great force. Changes of the driving force of production in the post-war years of the last century - from capital to knowledge - have led to significant changes in the structure of the economy. Knowledge is not only a productive force, but the main subject and the main product of the labor. Because of this, there is the reorganization of

industries around the production of knowledge and the restructuring of the entire economy of the country around the sphere of production of knowledge and information. The main social conflict of this society is very different from previous ones, when there were contradictions between the different factors. The essence of this conflict - the contradictions within one factor – the labor. The accumulation of knowledge has divided the society into well-paid people, and poorly trained, low-paid staff. The most obvious contradiction is illustrated in different sectors of the economy - between the labor in the real and financial sectors. The contradictions within the labor associated with its intellectualization, and with the changes of investment forms - in the dissemination of knowledge. The system, organized use of knowledge in the production of knowledge becomes the new object of the economic policy.

Today we can note the existence of a temporary gap in the formulation and implementation of the interests of the household and the state. The household short-term interest is to enter a college and get a satisfactory set of competencies that will enable to find a job with decent conditions in the future (medium-term interest). State formulates other interests: medium-term - reforming the system of higher education - and long-term - economic growth on the basis of a better quality of human capital, in other words, on the basis of knowledge increment.

In the modern mixed economy the growing complexity entails the need for ever greater flexibility and adaptability of households and firms. With increasing labor skills, the employees need more intensive training. There are new kinds of specializations in different fields of production, designed to cope with all new challenges of the increasingly complex social and economic system. However, it is more difficult and expensive for the employee to switch quickly from one activity to another. There is a growing need for highly qualified personnel who have diverse skills and improved abilities to learn and adapt quickly. The employer and the employee are required to have all large cognitive abilities, as the economy becomes relatively less “machine-intensive” and more and more “knowledge-intensive”. In this case, we also see the different interests of households and firms. In the first case - a medium-term interest of profit maximization, in the second – a long-term interest in the preservation of jobs.

Since the behavior of the individual is the basis for the formation of all parameters and instruments of the economic policy, the changes that take place with the main link in the economy (human), should be examined and considered carefully. The perception, and therefore the implementation of the policy provisions will depend on how it (the policy) will be consistent with the views of the individual to the world in which he lives. And, then, human traditions, important habits, and customs must be taken into account. After all, if they run counter to the economic policy, it, even the most effective one, will not be implemented in real life.

Discussions and Conclusion

The problem of production of the measured benefits, which include education as well, is sufficiently discussed in scientific circles (Malykh et al., 2015; Aral et al., 2006; Hilbert, 2013), the formation of the macroeconomic policy (Malykh et al., 2014; Assenza et al., 2013), as well as public spending on education (Kühl & Andrade, 2004; Estache, Gonzalez & Trujillo, 2016; Gylfason & Zoega, 2003; Rohilla & Sharma, 2012; Chandra, 2010; Hauner & Kyobe, 2008; Agasisti, 2011;

Agasisti, 2008). However, many aspects of this problem, such as the creation of the effective institutional environment cannot find a proper theoretical and practical lighting. In addition, the development of harmonized interests of the state and private entities also requires a separate scientific understanding that will create certain conditions for the implementation of the higher education programs to the changing needs of individuals.

In the period from 2000 to 2014 a new structure of the higher education system was formed in Russia (Figure 1). In 2005 – 2005 there were significant changes. State and local government higher education institutions reduced the admission of students from 90.1% to 84.7%, while non-state increased from 9.9% to 15.3%.

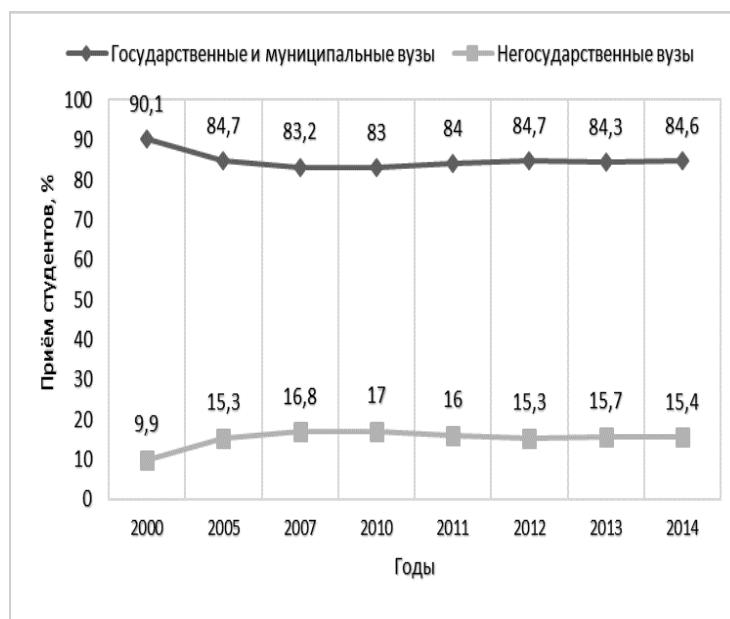


Figure 1. The number of students of higher education institutions in Russia
Source: It was made by the authors who used: Statistical Yearbook: stat. coll. / Rosstat. M., 2015, p. 318-320.

The stability of this structure of the higher education system reflects a certain convergence of interests of economic entities. The company has set up a new activity - the provision of educational services - which brings good returns. Housekeeping has found a way to get a profession and improve the social status at a lower cost. The government has been able to reduce the burden on the state budget in terms of spending on education.

Table 1. Focus on the work of graduates enrolled in full-time education at the expense of the budgets of all levels

	2005	2007	2010	2011	2012	2013	2014
The number of graduates of full-time tuition	341,9	382,7	393,6	379,1	364,3	354,8	344,0
including:							
who got a job placement	166,6	196,1	186,1	180,1	172,8	166,7	149,6

who did not get a job placement	23,8	21,9	28,3	27,8	20,3	21,4	22,3
who were granted the right to free employment by the graduate's request	96,3	100,9	93,7	87,9	90,7	83,8	86,8
who continued their education at the next level, full-time education	44,6	52,2	61,9	58,5	58,6	61,3	64,5
who joined the army	10,6	11,5	23,6	24,7	21,9	21,7	20,8

Source: It was made by the authors who used: Statistical Yearbook: stat. coll. / Rosstat. M., 2015, p. 314.

The analysis of the dynamics of the higher professional education development shows us a number of trends (see Table 1 and Figure 2). Firstly, the reduced number of students studying at the expense of the federal budget, from 2924.6 in 2005 to 1990.5 students in 2014 (32%) with about the same rate annually. Secondly, the number of students with a full refund of tuition fees is characterized by the multidirectional dynamics. A significant increase of 51% from 1468.8 in 2000 to 2982.6 students in 2005 was due to the increased volume of supply of educational services, as well as the growth of real incomes of households. The demographic factors added additional influences contributing to the growth of the number of students in 2012 to 19.8% as compared to 2011 (from 2998.6 to 3737.4 students). The negative dynamics of 2013 - 2014 was due to the deteriorating economic situation in the country, rising tuition and reducing the household income.

Thirdly, during the period under review the budget spending of the entities of the Russian Federation and municipal entities on higher education programs was stabilized at low levels. The obvious reason is the lack of budgets of regions and municipalities. Also it was affected by their inability to predict the needs of regional economic systems for various specialists and to form, on this basis, the personnel policy.

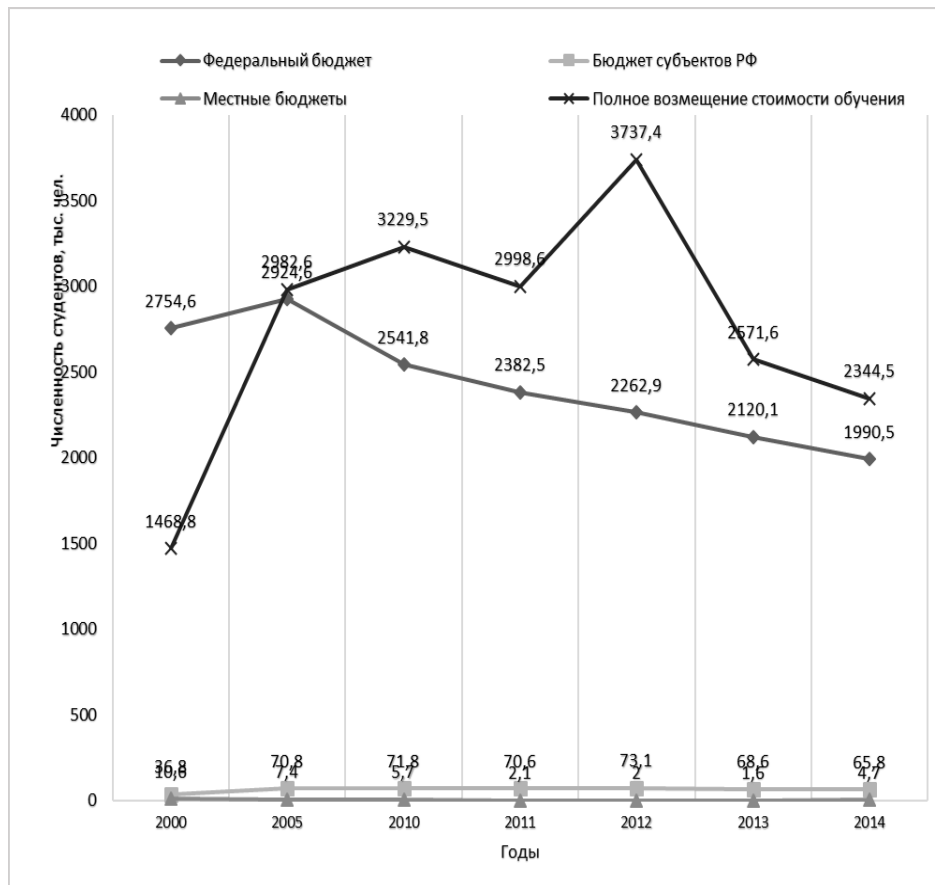


Figure 2. The number of students in Russia, enrolled in higher education programs by source of funding.

Source: It was made by the authors who used: Statistical Yearbook: stat. coll. / Rosstat. M., 2015, p. 296-300

There is a tendency to reduce the number of students studying at the expense of budget funds of all levels and the increase of the share of students studying at their own expense talks about changes in family and the company priorities. On the basis of available statistical data it is difficult to draw a conclusion about the interests of such entity as a company and make adjustments to the economic policy, taking into account this economic entity.

So, more than a quarter of graduates trained at the expense of the budgets of all levels get the right to determine their place of employment. Less than half of all graduates get the job placement, and less than 10% do not receive the job placement. Consequently, the correlation between the education market and labor varies considerably, and not in the direction of improving the quality and effectiveness of education.

Comparing the data of Figures 1 and 2, we see that if we keep the share of state and municipal universities, fewer students can count on “budget places”. The state maintains a monopoly in the market for educational services and regulates prices using administrative methods. Thus, the monopoly inflated

price does not reflect the actual quality of education and causes financial difficulties for households, whose income is constantly shrinking in the crisis. The company also does not receive stimulation of its activity in the part of targeted training, because it is much cheaper and faster to choose an employee from a large number of graduates. It chooses the best, without investing anything in the development of the higher education system.

The company's disinterest is mostly clearly reflected in the employment rates of graduates (Figure 3).

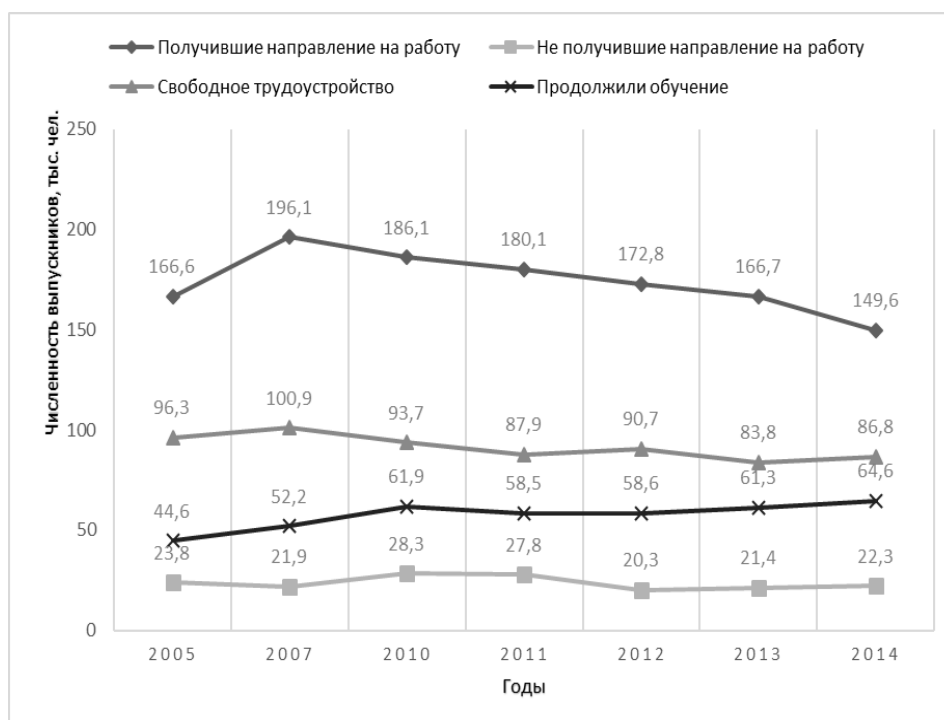


Figure 3. Focus on the work of graduates enrolled in full-time education at the expense of the budgets of all levels.

Source: It was made by the authors who used: Statistical Yearbook: stat. coll. / Rosstat. M., 2015, p. 310-312

With a relative stability in the number of graduates who did not receive the job placement (84 - 94 thousand in 2010 - 2014) and who had a free employment (22 - 28 thousand in 2010 - 2014), the number of graduates, who got the job placement, was reduced from 186.1 thousand in 2010 to 149.6 thousand in 2014. It may be also noted that the pace of this reduction is constantly increasing. The lack of work graduates replace by education to some extent (58 - 65 thousand in 2010 - 2014).

The nominal salary growth does not allow the household to fully implement its need for formation (Fig. 4). It chooses cheaper programs, or a decision on higher education is postponed.

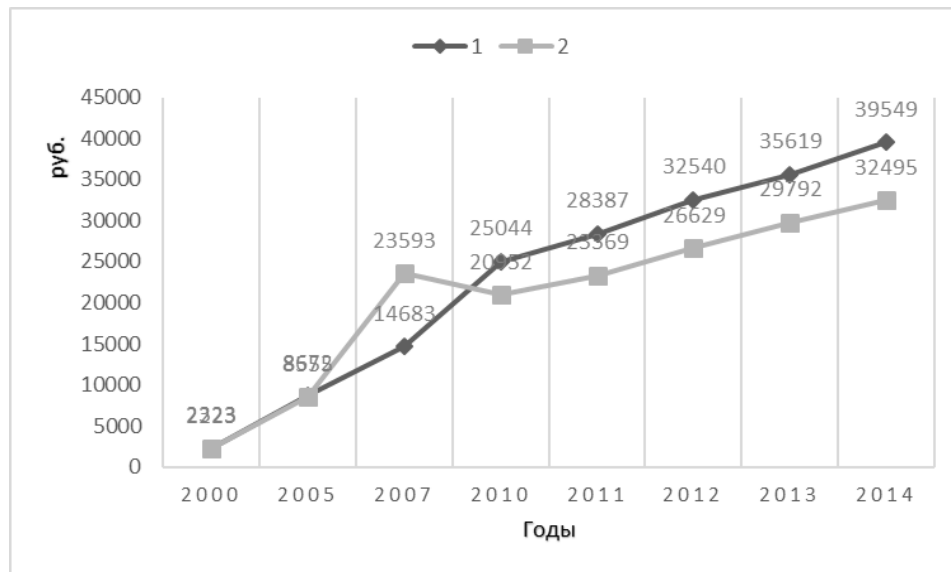


Figure 4. The average monthly salary in Russia:

1 - the average monthly salary of personnel engaged in research and development, rub.;

2 - the average monthly salary in the whole in the economy of Russia, rub.

Source: It was made by the authors who used: Statistical Yearbook: stat. coll. / Rosstat. M., 2015, p. 356-358

The research results confirm the validity of the author's hypothesis that changes in the conditions of the realization of the economic policy are associated with irreversible changes that occur in reality - such as changes in the production factors, which in the chain order lead to changes in the cyclical development, changing behavior and preferences of consumers. When we start the process of changes in one link, we are witnessing a kind of a multiplier effect, reinforcing these changes repeatedly in all spheres of the economic activity. So it makes sense to carry out a detailed analysis of the impact of all factors on the policy challenges posed by the government.

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