

# The Human Capital Theory through the Prism of Financial Security of Finland's Education

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## Abstract

The paper is concerned with the questions of reproduction of the human capital in Finland and, in particular, investments into education. The paper shows the role of the state which provides realization of constitutional rights of citizens of this country to free educational services that empowers Finland to reach the leading position in the European innovative system.

**Keywords:** investments, financing, human capital, education, innovations, Finno-Ugric region, Finland

## 1. Relevance of the Subject of the Research

The problem of correlation of fundamental concepts of economic science and its applied aspects is complicated and multidimensional owing to complexity and multidimensionality of both separate theoretical postulates of economic science and applied elements of its realization. The use of systemic, historical, geographical, functional, complex approaches as methodology of scientific knowledge complicates the scheme of scientific research, but at the same time makes it fuller. Besides, the same fundamental theory of economic science can be considered from the positions of practically any applied economic science which also complicates the perception of fundamental principles. Within one scientific article it is impossible to investigate the whole scientific problem. At the same time steady interrelation of the theory and practice provides the synergy effect at realization of the main goal of economy performance that is the wise supporting the needs of a person and the state. Not the last role in this process is played by studying and assimilation of the best world practices, of course where it is possible. Indicators of social and economic development of successful world economies can serve as reference points for the aims of economic development of our country. And world financial practices as instruments of achievement of the mentioned purposes can be adapted with some known amendments.

As the central link of economy is the person, "the person – the consumer" and "the person – the producer", it is possible to assume that the theory of the human capital is a rather important fundamental concept of the economic science. At the same time it should be noted that the person as an economic subject cannot function out of the financial system of the state, and creation of the human capital which can be used for production of goods, works and services is impossible without the expenditure of material and monetary values. The human capital can be created and supported by realization of such social constitutionally fixed functions of the state as educational, public health, cultural and etc. In connection with this it is easy to present a logical chain "the person – the human capital – education – financing". Unfortunately, the comparative analysis of indicators of the development level of the human capital in our country and the countries with socially focused market economy allows establishing the fact that the level of development of the national educational system does not fully conform to the international standards. It is in many respects connected with low efficiency of financial security of educational system. In this connection studying of interrelation of indicators of the development level of the human capital and financial security of education of Finland as a world developed country with socially focused market economy is advisable.

## 2. Previous Study

Development of the concepts of the human capital theory has been studied by such researchers as E. L. Aksenova, T. Yu. Bazarov, O. Yu. Bryukhov, N. I. Gvozdeva, A. V. Koritsky, E. S. Kotyrlo, A. L. Kurakov, G. H. Shingarov.

The researches of N. K. Alimova, A. S. Borisov, T. L. Klyachko, V. K. Krutikov, O. N. Kusheeva, E. I. Skobleva and etc. are devoted to the problems of education financing.

The educational system of Finland is rather fully studied by I. P. Kulikova, D. A. Rubvalter, O. V. Rudensky, etc.

At the same time the interrelation of quantity and quality indicators of the development level of the human capital and education financing in the conditions of developed economies with similar to the Russian model of education financing (for example, Finland) is studied insufficiently.

### **3. The Object of the Research Is the Finland's Education System**

The subject of the research is theoretical and practical aspects of financial security realization of the human capital development in the world developed countries with socially focused market economy on the example of Finland. The research objective is identification of interrelation of quantity and quality indicators of the development level of the human capital and financing of education of Finland on the example of comparison of the integrated and private indicators of the human capital development and education financing, carrying out parallels between fundamental concepts of the human capital theory and the empirical data on financial security of education of the person throughout all life.

The scientific works of domestic and foreign scientists-economists devoted to actual problems of the human capital theory and education financing, information resources of the Organization for Economic Cooperation and Development (OECD) and the European Union (EU) formed the theoretical and methodological basis of the research.

When carrying out the research the following methods of scientific knowledge were used: synthesis, induction, deduction, system analysis, functional analysis, statistical methods, methods of expert estimates, etc.

### **4. The Main Part**

In the early nineties in Finland the era of innovative policy was proclaimed. Actually this approach was based on assimilation of the concept of national innovative system and the principles of "society of knowledge" admitted in OECD. That political stage aimed Finland at creation of conditions for the intensive growth of knowledge, developments and modernizations of the education system, for creation of conditions for increase of competitiveness of the nation, for the growth of the intellectual property volumes, national and international scientific networks and mechanisms of transfer and commercialization of technologies (Rubvalter & Rudensky, 2007).

With increase in the role of innovative development in economic growth the relation of the western economists to the problems of reproduction of labor changed. The center of attention of scientists was focused on the problems of creation of qualitatively new labor while earlier the main problem was labor availability. Structural changes in the modern market economy formed that objective basis on which there appeared the modern concept of the human capital (Koritsky, 2000).

The quality of the human capital in the conditions of the "new" economy becomes the basis of competitiveness and economic development of regions and states. Therefore around the world educational organizations become more and more active and often make themselves as strategic participants of innovative systems. One of the purposes of the European social fund (supranational body of EU) creation is the improvement in the employment and the extension of the workplaces list by creation of the European education system throughout all life, the improvement of the human capital quality by reforming of educational systems and organizations.

The experience of Finland, for the last 2 decades taking the leading positions in world ratings of innovation and competitiveness, shows what exactly education is the basis of the high life quality developed in the country. In 2011 in the European scale of innovations Finland took the 4th place on the general innovative index, on the level of the human resources development they took the 2nd place (Kulikova, 2012).

In many respects these rates were reached as a result of the essential amounts of the higher education financing: education expenditures in Finland counting on one student in 2010 made 10 157 dollars a year. It is higher than in Israel, Italy, Spain, Russia. The amounts in these countries are 6 537, 8 690, 9 484 and 5 058 dollars respectively (Koritsky, 2000).

Along with the property of sufficiency education expenditures in Finland possess the property of efficiency. So, education expenditures as GDP (gross domestic product) share slightly increased in Finland from 6.3% in 1995 to 6.5% in 2010 that explains the growth by 0.1% of secondary education expenditures and 0.1% of preschool education expenditures which in 2010 made respectively 4.1 and 0.4% of GDP. This sort of stability points to the

effective use of the financial resources of the educational system. Practically at the same level of the real (corrected according to the inflation index) expenses during fifteen years quantity and quality indicators of the human capital development as the budgetary efficiency indicator either improve or remain at the reached high level which is confirmed by the ratings of the international organizations. Moreover the educational system of Finland is financed first of all from the government budget (Figure 1).

The human capital as it is defined by the representatives of the classical school of the economic theory consists of the knowledge, skills, motivation and energy acquired in the training course with which human beings are gifted and which can be used during a certain period for goods and services production (Borshcheva, 2011).

Accumulation of intellectual advantages is the reason of professional success achievement. No matter which material resources the system possesses they cannot be increased by themselves. Both the state and the firm develop owing to the energy and the intelligence of people. It is possible to assume that the value of the specified quality indicators of the human capital development level (professional knowledge, professional skills) directly depends on the financing indicators of such a segment of the educational system as "vocational training".

On the criterion "education and vocational training" Finland takes the 1st place in the world. It should be said that the country has high level of primary and secondary education of the population. In the country the average student of Finland gets a pre-university education within 12 years. During this period of time 104 596 dollars are spent for his/her training. Preschool and secondary education in Finland lasts for 6 years. During this period of time 45 747 dollars are spent for one student. On general education which lasts for 3 years an average of 35 114 dollars are spent for one student. An average student gets secondary education within a period of 3 years, the sum of financing of his/her training makes 23 735 dollars. A student in Finland gets higher education within a period of 4.78 years that in a financial equivalent makes 79 224 dollars (Figure 1).

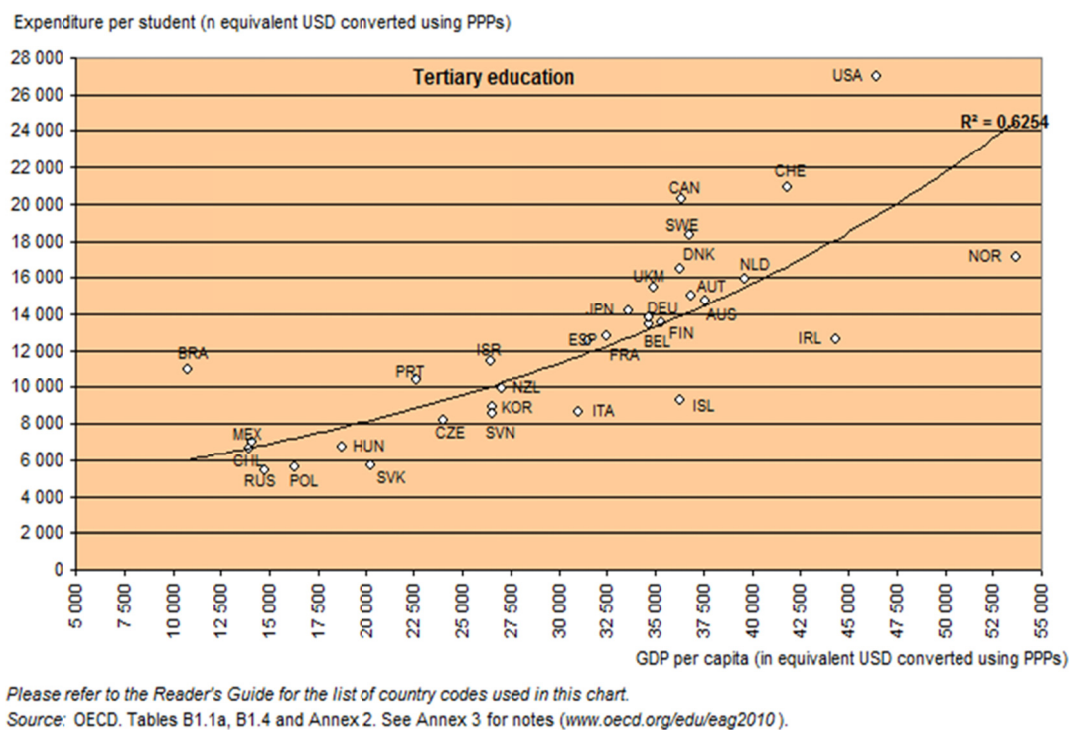


Figure 1. Expenditure per student among the world (Tertiary Education) (Education at a Glance, 2010)

It is possible to make 4 assumptions concerning the demand for higher education:

- Probability of entering a higher educational institution for the people focused on the current consumption is less than for the people focused on the income generation in the future (with other conditions being equal);
- In most cases people become students at young age;
- The number of students of commercial higher educational institutions decreases with the increase in expenses for training (with other conditions being equal);

d. The number of students being trained in higher educational institutions will increase if the difference in earnings of people with higher education and school graduates increases (again with other conditions being equal) (Koritsky, 2000).

Among the students of higher education institutions 62% belong to the category of the employed, 35% belong to the unemployed, 36% – to the disabled. The assessment of formal possibility of entering higher education institutions and its realization showed that from the total number of students on the programs of secondary education 93% got the corresponding diplomas and the opportunity to continue their education at the first step of the university education of Finland, that is 89% of men and 97% of women. 70 % of the applicants got enrolled in higher education institutions of the country according to the results of the entrance examinations, that is 61% of men and 79% of women. At present the analyzed indicators are the ones of the highest over the countries of the Finno-Ugric region. For comparison: in Hungary only 64% of students received the school-leaving certificate and 57% of applicants entered the universities (<http://www.oecd.org>).

Available statistical data testify that Finland as on the year 2008 is in process of transition to the educational standards developed within the Bologna Process. So, according to requirements of the Bologna Process only 56% of the qualified experts were trained, that is 47% of bachelors (the first step of training lasting 3-4 years), 7% of masters (the second step of training with a general duration of 4-8 years) and 2% of doctors.

For comparison: the other country of the Finno-Ugric region Estonia during the same period almost completely passed to the new educational standards according to which 94% of the qualified experts are trained and certificated, that is 74% of bachelors, 16% of masters and 3% of experts within the prolonged first step.

At the same time also belonging to the Finno-Ugric countries Hungary as on the year 2008 trained only 3% of certified experts according to requirements of the Bologna Process, that is 1% of bachelors, 2% of doctors (Education at a Glance, 2010).

It should be noted that in Finland students only in certain branches of knowledge are trained on masters programs, namely: in social sciences, including economic and jurisprudence (in particular, in the fields of knowledge connected with business, law, tourism and other service trade).

Programs in the field of medicine, veterinary science and the program of dentists training belong to special educational programs of licentiate preparation which are beyond the competences of the Bologna model. Those programs are made on the basis of a particular university and last: the first step – for 4 years, the second step (particularly licentiate) – for 1–2 years, doctoral studies – for 5–6, 3–4, 3–6 years depending on the chosen specialty (Figure 2).

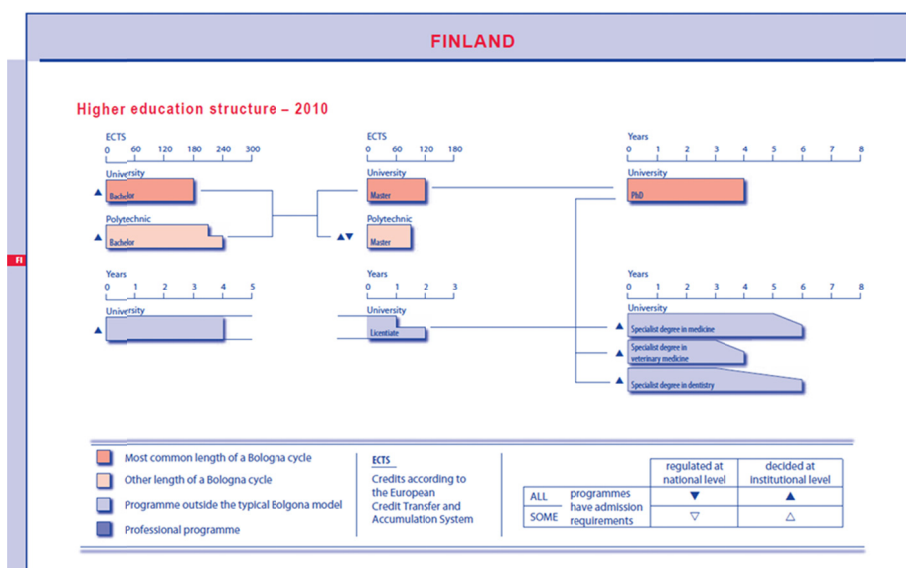


Figure 2. Higher education structure in Finland (Education at a Glance, 2010).

In Finland, as well as in other countries affected by the Bologna Process, the all-European system of students' study accounting works. According to this system students of the universities who have passed the first step of the higher education (bachelor degree) get 180 credit units. Those who have passed the second step (master's)

get 120 credit units. The third step (the doctoral studies program) is calculated as at 4 years. These characteristics are the most typical for the educational systems created within the Bologna Process.

The bachelor degree program at polytechnic universities guarantees from 210 to 240 credit units, the master's program does 90 credit units, the doctoral studies programs at polytechnic universities are absent. Educational programs of polytechnic universities are also created according to the requirements of the Bologna Process, though they are not typical.

As for sufficiency of higher education financing in the "society of knowledge" this indicator substantially defines the innovation and the competitive ability of the country, the development of the intellectual knowledge-intensive production market and the level of demand for this production. On the other hand, it increases the number of researchers in the country (Rubvalter & Rudensky, 2007).

The scientific policy of Finland is aimed at internationalization of science, first of all the basic one (fundamental). The model of the human capital considers voluntary mobility as the investments at which short-term expenses are made for the purpose of reaping long-term benefits. If the current value of the benefits (given to a present situation of time) connected with mobility exceeds monetary and moral expenses then the decision about the change of a place of study is rational. If the discounted stream of benefits does not compensate expenses people will hold back on such actions (Koritsky, 2000).

In 2008 3,1% of the Finnish students studied abroad of which 2.8% did bachelor degree programs, 6.6% did doctoral studies programs, about a third of Finns study in Sweden, the fifth part study in Great Britain, 7% – in the USA. Besides, in higher education institutions of the country there are 3.7% of overseas students, of which 3.3% do bachelor degree programs, 8.8% are trained on masters programs. More than half of the overseas students in Finland are Estonians. Social and engineering sciences are the most popular among them, 2/3 of the students choose these specialties (Education at a Glance, 2010).

In this regard mobility of students and researchers is encouraged and stimulated. So, the center of the international mobility created within the Ministry of Education aims at internationalization of the trainings and the researches by means of establishing of closer connections between higher education institutions of Finland and other countries. The center stimulates the academic mobility of the Finnish students and university researchers to create a reputation of the country with fine scientific and social opportunities for university graduates. For this purpose in particular various grants are provided for students and researchers of universities and scientific research institutes from abroad. It should be noted that the expenses on the higher education in Finland include the expenses on research work which make 5 388 dollars per 1 student a year.

Involving Finnish and overseas students, who have graduated the universities in the sphere of scientific researches in Finland, are considered to be one of the important problems of the education system and the scientific policy. As the solution of this problem Finland provides foreign researchers with the same privileges and the access to budget financing (grants) which the Finnish students and university researchers have (Kulikova, 2012).

Two times a year (in January and in October) the academy of Finland holds competitions according to the demands for receiving financial support. The academy can finance the demands for receiving research grants, including personal ones, on the projects having high scientific level, and also grants for training or work payment within international cooperation with foreign researchers. Depending on the character of the project financing is provided for salary compensation, fees, the indirect expenses going for employees' salary payment, travel expenses, purchase of the scientific equipment, holding seminars, invitation of foreign researchers and, certainly, the direct expenses on carrying out the research project. The value added tax becomes covered at the expense of the grant. Grants can be provided for carrying out researches or doctor's works abroad, and also to the foreign researchers coming to Finland for a period of up to 1 year. Finland is interested in foreign researchers' involvement. This is one of the most important directions of policy both in the sphere of research and education.

Research projects of the academy are those projects which are financed for the purpose of hiring scientific and other staff, purchasing the equipment and the materials and also other expenses connected with the researches. The purpose of such financing consists in reaching the world level of researches and involving in them foreign experts with not less than doctor's degrees on the territory of Finland.

Foreign researchers are invited by the Finnish leader of the conducted research, by the interested institute or the university. The university or the research institute can appeal to the Ministry or to the academy to provide additional resources for the invitation of the foreign researcher to Finland on condition that this researcher will take an active part in the work of the research group which is carrying out the project. It is considered that he/she

can bring his knowledge and his know-how to Finland. Financial resources for invitation of a foreign researcher are provided in the form of a grant for the term of not less than 3 months. Shorter visits are also possible in certain cases. In addition to the provided grant the academy can refund for the foreign researcher the expenses on transport, as well as transportation costs for the accompanying family if the visit duration is not less than 6 months.

The academy serves as a contact point of Finland for a number of the international organizations, subsidizing participation of the Finnish researchers in international research projects. Financing for these purposes can be received in the following cases:

- For vocational training and the work of the Finnish researchers abroad;
- For training of the Finnish researchers at EU institutes;
- For payment for the foreign researchers invited to work in Finland;
- For payment for researchers interchange;
- For international conferences hosting;
- For business trips on the purpose of cooperative projects preparation in the field of scientific researches (Rubvalter & Rudensky, 2007).

In the process of educational services realization the government provides various forms of the state support. Pupils and students receive free academic materials, hot meals, medical and stomatology services, free transport and housing services if needed. The state support in this or that form is got by 55% of students of higher education institutions. At the same time the most part of financial resources of pre-university education is spent on direct (foundation) educational services (3.24% of gross domestic product, or 6 430 dollars for 1 pupil) and only 0.4% of gross domestic product or 786 dollars are spent for additional services. In higher education this balance makes 0.98 and 0.65% of gross domestic product respectively.

Financial resources of education in Finland, as well as in other countries of the world, are divided into investment (capital) expenditures and operating costs. The most part of operating costs comprise labor payment expenses. The capital and operating costs on education are shared according to education types. At realization of financing of pre-school, secondary and secondary professional education capital expenses make 8.7%, for higher education they make 3.4%. The share of operating costs in the total amount of financial resources of pre-university education makes 91.3%, for higher education it makes 96.6%. The share of a salary in operating costs of pre-university educational institutions makes 65.6%, for higher education organizations it makes 62.5% (Education at a Glance, 2010).

While forming the human capital "the overall accumulating effect" is observed. Its essence is that in the course of training characteristics and abilities of the person who studies and also of the person who teaches improve and increase which leads subsequently to the income growth both of the first and of the second (Borshcheva, 2011).

According to the concepts of the human capital theory if educational preparation is connected with receiving some additional earnings exceeding the cost of preparation it is possible to characterize the costs of education acquisition as the increasing cost. But to state that it is the capital, that is the self-increasing cost, would be ridiculous. The value of qualification does not increase itself: the indispensable condition for it is the work of its owner. The adjustment of the differences in the number of hours per year done by the person considerably reduces the economic effect of secondary education and almost does not affect higher education output in any way (Koritsky, 2000).

Before the year 2007 the salary of university researchers was based on the sizes of salary which were established for the employees working in the state sector and depended on the period of service in this sector of economy (Rubvalter & Rudensky, 2007). In 2007 in Finland a new pay system for pedagogical personnel was accepted. Before the year 2007 the salary was calculated according to the fulfilled working hours of the academic workload and the experience of the teacher. In the new system the salary depends on the extent of educational tasks performance assigned to the teacher, that is on resulting effects of his work, professionalism and experience. To the main earnings stimulating payments can be added according to the results of work of the whole educational institution.

At present the salary of an average Finnish teacher of preschool organization counting on one pupil makes 2 433 dollars, that is 126 dollars more than a similar indicator in OECD. The difference is caused by the following major factors:

- 1) Salary;

- 2) Fulfilled hours of advisory character;
- 3) Number of hours of the academic workload;
- 4) Size of the academic group.

The contribution of the 1st factor to the general indicator makes 5 dollars, of the 2nd factor – 674.0 dollars, of the 3rd factor – 383 dollars, of the 4th factor – 411 dollars. The salary share counting on one pupil of preschool institution in gross domestic product of Finland makes 7.5% that corresponds to an average similar value on OECD. The contribution of the 1st factor to the salary of an average Finnish teacher of preschool institution counting on one pupil makes (–0.3%), of the 2nd factor – (–2.1%), of the 3rd factor – 1.2%, of the 4th factor – 1.3%. The salary of an average Finnish elementary school teacher of a secondary educational institution counting on 1 pupil makes 3 970 dollars that is 1 020 dollars more than a similar indicator in OECD. The contribution of the 1st factor to the general indicator makes (–29 dollars), of the 2nd factor – (–451 dollars), of the 3rd factor – 673 dollars, of the 4th factor – 828 dollars. The salary share counting on one pupil in gross domestic product of Finland makes 12.2% that is 2.9% higher than on OECD in average. The contribution of the 1st factor to the salary of an average Finnish elementary school teacher of a secondary educational institution counting on 1 pupil makes (–0.4%), of the 2nd factor – (–1.4%), of the 3rd factor – 2.1%, of the 4th factor – 2.6%.

The salary of an average Finnish high school teacher or a teacher of a professional establishment counting on 1 pupil makes 2 711 dollars that is 738 dollars less than a similar average value in OECD. The contribution of the 1st factor to the general indicator is (–54 dollars), of the 2nd factor – (–229 dollars), of the 3rd factor – 547.0 dollars, of the 4th factor – (–1 109 dollars). The salary share counting on 1 pupil in gross domestic product of Finland makes 8.3%, that is 2.6% lower than in average on OECD. The contribution of the 1st factor to the difference between the average salary in OECD and in Finland makes (–0.1%), of the 2nd factor – (– 0.7%), of the 3rd factor – 1.7%, of the 4th factor – (– 3.4%) (Education at a Glance, 2010).

Classical assumptions concerning the degree of availability of education in Finland are partially leveled as the educational system of the country is financed mainly from the state funds (5.5% of gross domestic product). The significant role in labor reproduction in socially focused market economy is played by the public consumption funds considerable part of which is spent on the production of free education services, for professional education. The Expenses of labor reproduction include both the cost of material benefits and services bought by the population at the expense of salary or monetary payments from public consumption funds and the cost of the services provided by the state to the population free of charge or on favorable terms (Koritsky, 2000).

The payment for preschool, secondary, secondary professional and higher education in Finland is not taken from the citizens, the expenses for higher education of the private sector in 2007 made only 0.1% of gross domestic product. The basic budget financing of universities is fulfilled through the Ministry of Education. After World War II Finland accepted the system of higher education financed by the government. The main objective was to provide education to all citizens irrespective of their social and economic status and the birthplace.

At the levels of the full secondary and higher education the legislation of Finland involves partial payment by the students using educational services. However this process is regulated by the government and is not an obstacle to realization of the right for education of any citizen of the country. The total amount of public financing makes 97.5% of education financing, and financing of educational services from private monetary funds is insignificant in Finland and in 2007 made 2.5% of the total amount of education financing (Education at a Glance, 2010; <http://www.oecd.org>).

The part of the expenses for education in the consolidated budget of the country makes 12.5% (in average on OECD this indicator makes 13%). The most part of the expenses goes to preschool, secondary and secondary professional education (7.9%). The expenses for higher education make 3.9%. The most part of the expenses of the consolidated budget for education financing goes the public educational institutions (86.3%) while 6.8% are spent on private educational institutions. On the forms of indirect public educational financing of the private sector there are 6.9% (<http://www.oecd.org>).

From the total amount of the government financing for the direct government higher education financing 84.3% are spent, for the subsidies to students and their families – 15.3%, for other subsidies to the private sector – 0.4%. The structure of financing of preschool, secondary and secondary professional education develops in the following way. The direct government financing makes 96.9%, the subsidies to students and their families – 2.9%, other subsidies to the private sector – 0.2%.

On the levels of the budgetary system of Finland the government financing in 2007 was distributed in the following way: before the procedure of the interbudgetary alignment the share of the government budget for

higher education financing makes 87%, the share of local budgets – 13%, after the procedure of the interbudgetary transfers distribution – 79.6 and 20.4% respectively. When financing preschool, secondary and secondary professional education the balance changes in favor of the local budgets: before the procedure of the interbudgetary alignment – 42.5% (the share of the government budget) and 67.5% (the share of the local budgets), after the procedure of distribution of the interbudgetary transfers – 9.5 and 90.5% respectively (Education at a Glance, 2010; Eurydice, 2011; European Commission, 2011).

There is a common point of view that income taxes do not promote accumulation of the human capital. James Hekman's analysis disproves this idea. If the income tax reduces the percentage rate and lowers the loan price and if the missed earnings as the element of investment expenses can be written down as debts, then higher income tax rates encourage the investments into the human capital and can increase the real value of the future earnings (Koritsky, 2000).

One of the indirect forms of government financing of education in Finland is the right for the tax concession for parents of the child who is not 17 years old in case if the child it is a pupil or a student. The privilege expires when the child comes at the age of 18 (Finnish Ministry of Education, 2005). The share of indirect budget financing of education from the consolidated budget of the country is much higher for higher education (15.7%) than for preschool, secondary and secondary professional education (3.1%).

Thus, in Finland financing of educational processes is a state domain. Students who belong to the category of low-income citizens get the budgetary financial support. The financial support is realized in the forms of educational grants, housing services and educational commercial finance. The educational grant is the taxable income; its size depends on the type of educational institution, the age and the marital status of the student, the housing conditions in which he/she lives. The major factor is the student's financial situation.

The state support is provided for students of full-time tuition of the main educational program, high national (ethnic) schools, vacation schools or usual secondary schools in which the study lasts at least 8 weeks. Besides, the budgetary support is provided for the study abroad. The amount of support fluctuates from 21.9 to 259 euros per month. Government financing of housing services covers to 80% of their cost and is ranged from 26.9 to 171.6 euros per month (European Commission, 1999). Students who do not conform to the requirements of the competition for housing subsidies can apply for a free hostel. Besides, the Society of Students' Housing organization in Finland offers students accommodation at lower prices than on the market. As a rule, the price of housing services in this case fluctuates from 120 to 220 euros for a month.

The developments of the representatives of the school of the human capital who study how the terms of training of workers and their skills and abilities influence their salary, efficiency and economic growth of the enterprises are of great interest. In many branches of economy the increase of the general and especially professional education not only gave profit to businessmen, but also corresponded to the interests of the workers, increased their satisfaction with work and production devotion. Scientists came to the conclusion that economic return of the expenses for employees training considerably exceeds the investments into the new equipment. Numerous confirmations of these conclusions and the awareness of business representatives about them gave strong impulses for intensive development of the sphere of vocational education at the enterprises of the countries of the West (Borshcheva, 2011).

Therefore the government support of education in Finland is available also to people who are constantly working at the same place for not less than 1 year, with the length of service of not less than 5 years and who pass professional development course from 2 months and more in the Finnish educational organization. The term of a subsidy does not exceed 18 months. Its size makes 998 euros at the salary equal to 1 600 euros (Eurydice, 2011). At professional development training courses in Finland 44% people of working age were trained at least one time, that is 54% of employed, 18% of unemployed, 14% of disabled (Education at a Glance, 2010).

Statistical data show rapid growth of the state and private investments into education. The necessity of defining of the most rational directions of investments of this money caused the development of not only the functional analysis of the development mechanism of the human capital, but also the improvement of these investments efficiency assessment techniques. The main criteria of such assessments are the comparison of "the current value of the future income flow" of a person with the investments into him/her and the calculation of "the internal norm of the return" which for effective investments has to exceed a bank percentage rate of long-term loans (Koritsky, 2000).

From the point of view of the government expenditures the educational loans are less expensive than educational grants and other forms of the budgetary support as their recipients at least return them completely even if they do not pay the interest rate.



In EU there are three main forms of the government support of educational loan services.

1. The government is the warrant of the percentage payments and the return of the loan to the creditor from the financial sector which grant the educational loans to students at the commercial percentage rate (Norway).
2. The government subsidizes the part of the interest rate by establishing reduced rates for the entire period of payments or for the fixed period (Belgium, Denmark, Luxembourg, Sweden, Liechtenstein).
3. The government pays all the percentage payments of the loan or adjusts them to the consumer price index (Germany, France, Great Britain) (European Commission, 1999).

The educational loan in Finland is a widespread form of the government support of education. Its sum as a rule makes 160–360 euros per month. The interest rate, the terms of the return and other conditions of the credit contract are coordinated between the student and the bank. The warrant of the repayment of the loan is the government therefore the bank does not demand any other forms of loan security. The interest rate is partially capitalized (is added to the loan sum) during the whole study term. Thus, the student regularly pays only a part of one percent interest rate twice a year. After the grace period the interest rate increases to 3.5–4.0% (Finnish Ministry of Education, 2005). The similar mode of payments on the educational loan is available to all low-income students who do not get other types of government support. Besides, the student can get tax relief for the interest rate of his educational loan.

Other forms of government financing of secondary education in Finland are free food and other non-educational services. Students who have to get to educational institutions too long can apply for financial support in the form of travel tickets for public transport. Students' cafes get budgetary subsidies and sell dinners at a lower price. Students of universities pay a contribution to medical services of 31.62 euros once. This contribution is included in the Students Union Fund and allows the use of the services of the Finnish students' medical organization.

## 5. Conclusions

Thus, the educational system in Finland is well developed and receives financing that matches the international standards which is explained by the current GDP growth of the country and which causes the high quality of educational services. Finland has one of the highest education levels in Europe that gives the chance to this country to get the leading position in the European innovative system and, therefore, to ensure a strong position in scientific and technological sector of the European community.

Education in Finland gives benefits and causes considerable public and personal expenses. The benefits are earnings increasing, consumer expenses efficiency, increasing satisfaction with work and leisure, transferring of the acquired useful qualities to the following generations. The expenses are divided into monetary expenses for education, losses of earnings during study and the moral expenses connected with getting education.

The theory of the human capital allows to reveal and estimate the influence of various factors on making decisions about the investments into education and about the efficiency of these investments. Empirical researches and statistical data show high probability of confirmation of the conceptions and the conclusions of the human capital theory. It explains the higher probability of getting education by younger and more capable people, by the people focused on the future, i.e. possessing the lower norm of preference in time; the increase of the percentage of women who get higher education; the increased migration of people with higher education level and many other observed phenomena of the Finnish life.

The current trends of higher education development in Finland are characterized by the following features:

- Orientation to international cooperation (training programs in English are realized in all higher education institutions of Finland, all Finnish universities have cooperation contracts with foreign countries, the international students exchange is supported, learning at least one foreign language is compulsory);
- Clustering development (in 2007-2012 6 strategic centers of science, technologies and innovations in priority branches of economy with participation of universities were created; the organizational model of the Program of expertise centers creation in 2007-2013 was reoriented to clustering, strengthening of the regional specialization and cooperation between the expertise centers made its basis);
- Development of interuniversity interaction, integration and the merge of higher education institutions (creating of university consortia of the Finnish universities; creation in 2007 of Cross-Border University – the university consortium which has included 4 Finnish and 6 Russian higher education institutions with government financing of Finland) (Kulikova, 2012).

The basis of the innovative development of higher education of Finland in the last decades was made by some principles which have provided the efficiency of the carried-out transformations:

- Systematicity and consistency of the government policy; strategic orientation of the reforms taking into account the common social and economic goals of the country (regular drawing up plans and development programs);
- Up-to-date assessment, adjustment and modernization of the development programs; understanding education as the bases of not only the national innovative system, but also of the society culture (in Finland there is the Ministry of Education and Culture);
- Development of higher education taking into account the general education system, support of the lifelong education;
- Involvement of a large number of participants into the carried-out transformations;
- Careful study and adaptation of foreign experience (Sweden, Japan, the USA, etc.) taking into account the national features (Kulikova, 2012).

The influence of the Bologna Process on qualitative and quantitative characteristics of education in Finland was expressed:

- In establishment of a three-stage cycle of educational process (bachelor degree, master's degree, doctoral studies);
- In introduction of new tools (European Credit transfer and Accumulation system, international diplomas common qualification standards, social orientation of higher education and population education system throughout all human life, students mobility).

The most part of the financial resources of the educational system of Finland is made by the government budget that allows to provide availability of educational services to all the citizens of the country with simultaneous preservation of these services compliance with the state standards.

Special attention in education financing in Finland is paid to the development of preschool and pre-university education that allows providing the release of the working potential of women of childbearing age.

The most part of the financial resources of the Finnish education is spent on the teaching staff salary that provides the competitive beginnings in the market of educational services and makes the teaching profession demanded among people with high professional qualities.

In Finland the system of government financing of the additional services which are not connected with the statutory activity of the educational institution is well developed which allows the access to educational services for people belonging to the category of low-income.

Thus, as a result of the carried-out research it is possible to draw a conclusion that quantity and quality indicators of the development level of the human capital in Finland are in direct dependence on quantity and quality indicators of the education financing. The established interrelation becomes a subject of deeper studying and the factorial analysis with the use of economic-mathematical methods in the future researches.

## References

- Adults in Formal Education: Policies and Practice in Europe.* (2011). Brussels, Eurydice.
- Borshcheva, Y. A. (2011). *Investments into personnel training in the structure of the human capital* (No. 3). The PAGS Bulletin.
- Education at a Glance 2010: OECD Indicators.* Retrieved from <http://www.oecd.org>
- Equity in Education. (2005). *Thematic Review. Country Analytical Report.* Finland. Helsinki, Finnish Ministry of Education.
- Financial Support for Students in Higher Education in Europe. Trends and Debates.* (1999). Brussels, European Commission.
- Koritsky, A. V. (2000). *Introduction in the theory of the human capital.* Novosibirsk, SybUCC.
- Kulikova, I. P. (2012). *The evaluation of the experience of the education system reforming focused on the interests of the national economy (in respect to Republic of Finland)* (No. 3). Society: policy, economy, law.
- National system overviews on education systems in Europe and ongoing reforms.* (2011). Brussels, Eurydice.
- Organization of the education system in Finland 2009/2010.* (2011). Brussels, European Commission.
- Rubvalter, D. A., & Rudensky, O. V. (2007). *Finland: science, technologies, innovations. Information and analytical bulletin CISS* (No. 4).

Structures of Education and Training Systems in Europe. Finland (2011, 2009/10 Ed.). Brussels, European Commission.

*The average age of entry into tertiary-type A (academic) programmes in Finland.* Retrieved from <http://www.oecd.org>

*The percentage of 20-29 year-olds in education in Finland.* Retrieved from <http://www.oecd.org>

*The percentage of four-year-olds in early childhood and primary education in Finland.* Retrieved from <http://www.oecd.org>

*The percentage of students in government-dependent private tertiary educational institutions.* Retrieved from <http://www.oecd.org>

*The percentage today's young people expected to graduate from tertiary-type A (academic) programmes in Finland.* Retrieved from <http://www.oecd.org>

*The proportion of 25-64 year-olds who have attained only lower secondary education.* Retrieved from <http://www.oecd.org>

*The proportion of upper secondary students enrolled in vocational or pre-vocational programmes.* Retrieved from <http://www.oecd.org>

*The share of private expenditure on all levels of education below tertiary.* Retrieved from <http://www.oecd.org>

*The share of private expenditure on all levels of education.* Retrieved from <http://www.oecd.org>

*The share of private expenditure on tertiary education.* Retrieved from <http://www.oecd.org>

*The share of women expected to graduate from tertiary-type A (academic) programmes during their life time.* Retrieved from <http://www.oecd.org>

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