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THE SYSTEM OF PERFORMANCE OF EVALUATION INDICATORS OF INVESTMENT IN HUMAN CAPITAL OF INDUSTRIAL ENTERPRISE

Tymoshenko K.V., the teacher of the Department of Tourism in Simon Kuznets Kharkiv National University of Economics

The evidence of ongoing globalization processes and the shift toward an information-based economy has elevated the importance of human capital in recent years. The challenges have promoted many countries and organizations to seek new ways to maintain competitive advantage. In response, the prevailing sense is that the success depends in large part on the people with higher levels of individual competence.

Lifelong learning education, and health are very important investment in human capital. The individuals with higher education have higher incomes in comparison with individuals with secondary education. Education is one of the most important development factors of the modern knowledge based economy. However, educational and scientific development requires the long-term and huge investment. This investment also should be assessed from the social aspect. On the one hand investment in human capital should be stimulated; on the other aspect it should assess their effectiveness.

The prime role in formation of human capital devolves not only for government organizations, but also for private companies. The role of these companies can accept many forms. The most popular are training courses and staff training in workplaces. The companies, which spent lot of money for staff training, use the following principle: the increasing employee's marginal productivity after trainings should be bigger than their marginal wages, but in the future it shoul exceed the incomes, that he will get working in another company. The cyclical character of human capital asserted when the employee will be redundant, i.e. on retirement.

The evaluation of investment in human capital can be categorized into two main types:

- *The evaluation of human capital from the financial perspective* (Baier et al., 2006; Becker, 1964; Haveman et al., 2003; Kendrick, 1976; Kuznets, 1961; Mulligan & Sala-i-Martin, 2000; Schultz, 1971; Weisbrod, 1961);

This method is based on the investment return indexes and present value of the planned profit. The definition of physical capital reflects the analysts' main economic concept, which is analogous to the assessment of physical capital in the country: "the value of human capital stocks is the discounted current value of productivity and referred to the potentially productive activities" (Haveman, 2003). In the case when the value of physical and human capital income flow is expressed as productive assets, the income flow of physical and human capital is measured similarly. The individuals' earnings reflect the value of human capital. Using this method the efficiency and earnings are evaluated. According to Becker (1964) the assessment of human capital value may be based on the rule when the value of assets is equal to the sum of discounted income flow.

It means that the assets value of human particular age should be equal to the profit of discounted sum in the future. Schultz (1961, 1971), using this investment method, sought to understand the investment process and to identify the incentives to invest in human capital. In order to achieve the objective mentioned above he calculated the returns of investment in higher education of the different social groups. Initially, he dealt with the formal higher education. Having obtained the progress in scientific researches, he developed a theory of human capital and renewed it by such factors as education, training in work place, health care system, migration, family factors and information about economic resources. Despite the fact that proposed different forms and techniques of higher education trainings, the modern scientists referred to this approach. In order to describe functions of human capital it is necessary to distinguish these functions according to the types and impact of investment, individual human abilities and the results of a single investment unit. The specific formation processes of human capital, which depend on the specific of individual abilities, are proper to each individual. The same resources, used for

human capital formation, may provide different values of human capital for various individuals. In essence, this approach is used to estimate the costs of human capital.

- *The avaluation of human capital by evaluation of different variables* (Benhabib & Spiegel, 1994; Hanson, 1996; Globerman & Shapiro, 2002; Noorbakhsh et al., 2001; Warner, 2002).

According to this method the human capital is analyzed from the development perspective, so, for more precise evaluation, it offers more possibilities. This method does not take into account actual economic results of human capital, the benefit of variables intensity is assessed instead. In order to evaluate a complex phenomena, the method of gathering the points, which is able to clarify the different issues, is used. Thus, the indicators of human capital are developed in such a way and are based on the present status of the specific circumstances. When the indicators of human capital are compared between the countries, the rank of variables contributed to human capital is analyzed and estimated (which is also known as positively correlated with economic prosperity). According to this method, the developed indicators could integrate the various social, political and economic variables to the entire unit.

In order to perform the assessment effectiviness of investment in higher education in Ukraine , two main methods are proposed:

- Internal Rate of Return (IRR);
- Return on revenue (ROR);

Performing the assessment of investment in higher education effectiveness by IRR method, the following variables should be evaluated: the earning gap between those with and without higher education; number of years the individual spends studying; retirement age and the direct costs for higher education. Using this method the efficiency is calculated according to the individual's life-cycle age. IRR method is comparable to the discount rate, which compares the flow of the discounted benefits to the flow of costs in particular point of time.

Performing the assessment of investment in higher education effectiveness using ROR method, the earning gap of the individuals with and without higher education, duration of study and direct costs for higher education is evaluated. This

method estimates only the difference over particular periods, but does not evaluate the increase of annual earning. In this method the individual life cycle is not analyzed. The advantage of short-term period method is that the statistical data of employees' earnings can be used for the calculation of investment ROR.

Different methods of quantitative estimation of human resource investments are applied in real life. So, the economic effect from higher education will equal the difference in the lifelong earnings of a person who has a university degree and a person who has only secondary education.

The orientation of Ukraine's economic policy course on progressive achievement of knowledge's innovative economy in modern conditions can be carried out due to human capital accumulation which is constant in time and intensive in its nature and which realization is possible by investment. Education is a factor of the modern knowledge economy development which enhances the economic growth due to the increase in labour productivity, faster assimilation of technological changes.

References

1. Becker, G. S. (1976). The Economic Approach to Human Behavior. Chicago: University of Chicago Press.
2. Gryshchenko, I.M. Uzunov, V. M. and Denysenko, M. P. (2013), Theoretical and methodological foundations of investment and innovation security of the national economy of Ukraine, KNUTD, Kyiv, Ukraine.
3. National Rating Agency (2015), "Index rating of countries' investment attractiveness", available at: http://www.ra-national.ru/ratings/world-raitings/index-raiting/
4. Nanivska, E.V. "Alternative sources of higher education funding in Ukraine", Proceedings of the II International research and practical conference conference "Innovations and traditions in contemporary scientific thought", [Online], available at: http://intkonf.org/nanivska
5. The human capital report 2015. [Online], available at: http://reports.weforum.org/human-capital-report-2015/