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FORMATION OF HUMAN CAPITAL IN THE CONTEXT OF INVESTMENT COSTS.

Salamov Farrukh Fattoevich

Acting Professor of the Department of Economic Theory at the Samarkand Institute of Economics and Service.

Email: farrux_sies@mail.ru

**ARTICLE
INFORMATION**

ANNOTATION:

ARTICLE HISTORY:

Received: 11.06.2026

Revised: 12.06.2026

Accepted: 13.06.2026

the article is devoted to the analysis of a new stage of development of society, namely the information stage, increasing attention to the problems of information, accumulation of knowledge, formation of human and intellectual capital .

KEYWORDS:

investment, human capital, intellectual capital, subject, behavior of economic entities,

The emergence of a new stage of development of society, namely the information stage, increases the attention of researchers to the problems of information, accumulation of knowledge, and the formation of human and intellectual capital.

In the works of A. Smith, ideas were expressed according to which the useful skills of workers can be considered as part of fixed capital, that is, in this case, we are talking about the fact that the costs of acquiring new skills and abilities of the workforce are nothing more than investments in human capital.

An in-depth analysis of investment costs in the process of human capital formation can be found in the works of neoinstitutionalists . According to G.S. Becker, activities that contribute to the growth of future incomes through "increasing human resources," known as investments in human capital, can be represented in five main forms: expenditures on training and education, improving work skills, health care, geographic mobility, and the search for information on prices and incomes.

Monetary investments in a person provide a long-term production effect.

Investing in human capital is characterized by certain peculiarities related to the gap between the time of direct capital investment in expanded labor force reproduction and the potential for generating income from actual expenditures in the foreseeable future. It should be noted that the size of future compensation is quite difficult to calculate, as it depends on numerous nonlinear factors. These include not only exogenous factors caused by uncertainty

and risk ²⁶, but also endogenous factors that make the investment behavior of economic entities difficult to predict.

Investment decisions can be only partially rational; economic agents lack the cognitive resources to intelligently evaluate various scenarios. The economic model of behavior, which aims to maximize utility or profit, is being replaced by a completely different system of rules governing the investment process. Empirical observations demonstrate the inconsistency of the efficient markets hypothesis. According to research, ²⁷investment participants do not always act rationally, especially under conditions of uncertainty. Uncertainty is associated, on the one hand, with insufficient information about current and future processes, and on the other, with the virtually impossible to predict the actions and deeds of others. Past experience cannot be a key to the future. According to J. Shackle , investment decisions by economic agents ²⁸are more reminiscent of a game of roulette than a specific mathematical calculation of the probability of a particular investment project's success. Each investor has access to only partial knowledge, while complete knowledge is the prerogative of the market as a whole ²⁹.

The unpredictability of economic entities' investment behavior often stems not only from the multifactorial nature of their motivations ³⁰, but also from their information processing and decision-making. The most well-known theory is bounded rationality. In constructing a descriptive model of economic behavior, G. Simon believes that an economic entity seeks not the best outcome, but a satisfactory one, which may not maximize utility or profit. This is difficult to achieve, not least because there is no universal and consistent utility function, as proposed by the neoclassical school, that would allow for the comparison of disparate alternatives ³¹. The search for options continues until the first acceptable one is found, which is determined by the level of aspirations. The latter is dynamic, meaning it is constantly changing. The cognitive abilities of the economic entity itself must also be taken

²⁶A detailed analysis of risk and uncertainty can be found in the works of neo-institutionalist F. Knight . He distinguishes between "measurable" uncertainty, a situation in which one can insure against risk, and "true" uncertainty, which has an unlimited range of possible outcomes. Investment activities can be conducted with both the former and the latter in mind, and it is working under the latter type of uncertainty that constitutes the essence of entrepreneurial activity.

²⁷ Barberis N., Huang M., Santos T. Prospect Theory and Asset Prices // *Quarterly Journal of Economics*. Oxford University Press, vol. 116(1), p. 1-53 ; Khaneman D., Tversky A. Prospect Theory: Anglicize of decision and risk // *Econometrica*. 1979. vol. 47 (2), p. 263-291 .

²⁸Shackle, G. L. S. *Imagination and the nature of choice*/Edinburgh , 1979 . P.34-38 .

²⁹ Hayek , F. *The Fatal Arrogance: The Mistakes of Socialism* / Moscow: Novosti, 1992. Pp. 227-230.

³⁰In contrast to utility maximization as a key driver of economic activity, including investment, an alternative motive may be coordination maximization, which is more dynamic. An entrepreneur with innovative traits derives pleasure from any activity, driven by aspirations that require a certain level of spiritual tension. Coordination maximization is limited by the unpredictability of the external environment; failures reduce aspirations; under such conditions , the agent requires the reliability that only behavioral inertia can provide (Foster , J. *Evolutionary (L. , 1987. P. 67-70 .)* Moreover, in real life, preferences often coincide in time with the choice of action, and sometimes preferences are recognized during or after the action itself. An economic agent can even act, ignoring his own preferences, sometimes succumbing to altruistic impulses. (March , J. *Bounded rationality, ambiguity and the engineering of choice*// Bell, J *Econ*. 1978, no. 2, pp. 596-597)

³¹ Simon , H. *Rational decision – making in business organizations* // *Les. Prih Nobel*. 1978- Stockholm , 1979 . P285.

into account. The human brain is not capable of collecting all the information, much less processing it and making the right choice. R. Heiner I am confident that in complex situations, following the rules of satisfactory choice is much more beneficial than attempting optimization ³². In general, the rationality described in the theories of G. Simon and R. Heiner is limited.

The above once again emphasizes that rationality is only one of the principles used in investment decision-making. For example, when trading on the stock exchange, only a small percentage of investors, primarily professionals, actually calculate their future income. The overwhelming majority of participants in this process rely on a routine model, meaning they make decisions based on the current situation, standard behavior patterns in specific circumstances, and the behavior of others.

According to prospect theory, developed by D. Kahneman and A. Tversky in 1979, investors regularly violate the assumptions of expected utility theory and rational expectations theory. Within the framework of behavioral finance theory, the decision-making criterion is not the level of wealth, but the economic agent's subjective assessment of their loss or gain resulting from investment activity ³³. Subjective assessments are akin to a "narrow frame" through which the investor views the entire spectrum of existing risks ³⁴. The operation of the narrow frame mechanism can be seen as an explanation for the phenomenon of the return on capital, as well as the limited participation of households in stock market activities ³⁵. For households, not only a quantitative assessment of expected investment returns is fundamentally important, but also "moral and ethical anchors"—that is, normative and value judgments that take the form of a narrative or justification. "That's why, in the case of moral anchors, people compare a story that has no quantitative measurements with the amount of profit they can make ³⁶."

Conclusion: The introduction of the latest technological advances, such as artificial intelligence, facilitates the process of forming an optimal investment portfolio that includes investments in various assets, thereby ensuring a balance of risk and return.

³² Heiner, R. The origin of predictable behavior // Amer.Econ.Rew.1983 No. 4. P .560-593.

³³Unlike M. Friedman and L. Savage, J. Akerlof, R. Shiller and D. Patinkin are confident that economic activity has not only rational motivation, but is also largely determined by irrational incentive impulses, which is the main cause of economic fluctuations and forced unemployment (Akerlof J., Shiller R. *Spiritus Animalis, or How Human Psychology Drives the Economy and Why It Matters for Global Capitalism* / Translated from English by D. Priyatkin. – Moscow: United Press, 2011. pp. 206-210; Patinkin, D. *Money, Interest, and Prices. Combining the Theory of Money and the Theory of Value* / Translated from English by E.V. Manevich. – Moscow: Economica, 2004. pp. 35-44).

³⁴ Benartzi S., Thaler RH Myopic loss aversion and the equity premium puzzle // Quarterly Journal of economics. 1995. Vol. 110 (1). - P. 73-92.

³⁵ Dimmock SG, Kouwenberg R. Loss-Aversion and Household Portfolio Choice // Journal of empirical finance.2010. Vol. 17(3). - P. 441-459.

³⁶ Schiller R. J. Irrational Optimism: How Reckless Behavior Drives Markets / Translated from English by E. Kalugin. - Moscow: Alpina Publisher LLC, 2013. - P. 235.

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