THE CONCEPT OF THE PUBLIC-PRIVATE VENTURE FUND

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In the most developed countries, the limited resources of the state and private partners are united in public-private finance institutes (venture capital funds) for the development of priority sectors of the economy. The purpose of the article is to develop a concept of state support for venture financing in Ukraine on the basis of the public-private partnership and to build a model of the public-private venture capital fund.

The mission of “Agricultural” public-private venture fund is to financing projects of the agricultural sector by involving the state capital and private investors on an equal basis. Fund management should be passed an independent asset management company that was formed with experienced managers of venture sector. In our understanding, the role of government is to support the comprehensive development of venture business through providing an access to public information and promotion of a specific type of financing. We propose to finance projects according to four main development stages: startup period, a period of development, a period of expansion and period of maturity.

The impact of many factors on productive change is described by the ordinary linear function:

\[ y = a_0 + a_1x_1 + a_2x_2 + \ldots + a_nx_n + u \]  \hspace{1cm} (1)

Altering the formula 1 for calculating the future value of an investment venture fund “Agricultural” gets a linear equation:

\[ FV = a_0FV_{CT} + a_1FV_P + a_2FV_E + a_3FV_E \]

where \( FV \) – future value of cash flows from investments in venture projects; \( FV_{CT}, FV_P, FV_E, FV_E \) – the future value of cash flows under startup, development, expansion, and growth; \( a_0, a_1, a_2, a_3 \) – the percentage of projects that have achieved the planned IRR.

As a result of research, we determined the theoretical, technical, and financial component of the model, the result of which should be to create “Agrarian” public-private venture fund. Note that the mathematical model implementation indicates the fund as a result of revenue by 7.6% higher than the income from bank deposits for the relevant period. Therefore, we consider that the basic mathematical model can be used in a more detailed analysis and data revision.