production, especially aktyvnoy s sostavlyayuschey, razrabotanы scientific proposals about A obosnovannыe Improvement Provision of technical material and selskohozyaystvennыh enterprises. Need Obosnovana development Financial leasing As most эffektyvnoho activities of Gosudarstvennoye support selskohozyaystvennыh tovaroproyzvodyteley and zavodov selskohozyaystvennoho mashinostroeniya. Investigation Own krestyanskyh farms showed that îíè funktsyonyruyut in terms slaborazvytoy material and Tehnicheskoe bazы, especially not hvataet technics kotoraja bы otvechala s Size - mini-tractors and sootvetstvuyuscheho loop machines.

Basic sredstva, indexation, material and Tehnicheskoe Provision, normatyvnaya the needs, fynansovыy leasing, Depreciation, selskohozyaystvennoe Mashinostroenie.

In paper the analysis of the modern state and prospect of development of logistical support is reflected in Ukraine. On the basis of research of problems in providing the fixed assets for an agricultural production, especially them active constituent, scientifically and reasonable suggestions are worked out in relation to the improvement of logistical support of development of agricultural enterprises. The necessity of development of the financial leasing as most effective measure of state support of agricultural commodity producers and plants is reasonable agricultural engineer. Research of the personal peasant economies showed that they functioned in the conditions of the enough poorly developed material and technical base, a technique that would answer their sizes - tractors and corresponding loop of machines is not especially enough.

Fixed assets, indexation, logistical support, normative necessity, financial leasing, depreciation, agricultural engineer.

UDC 658,589

METHODOLOGICAL ASPECTS OF EVALUATION AND ANALYSIS OF INNOVATION PROJECTS OF ENTERPRISES

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The article analyzes the scientific and applied aspects of modern methods of economic evaluation and analysis of innovation and investment projects in the process of innovation

activities of enterprises and proved the author's approach to solving some controversial issues in the plane of their practical application.

Innovation, investment projects, enterprises, discounted cash flow, net present value, internal rate of return.

Formulation of the problem. One of the most important requirements for sustained economic development of enterprises in various sectors of the economy is to ensure an acceptable level of quantitative and qualitative parameters of their material and technical base. In addition, in a dynamic market environment significantly increased requirements to ensure competitiveness, based on a high level of technological and resource support entities. These and other factors need to enhance innovation and investment. Equally important in the context of solving this problem has an adequate system of methods and procedures for the adoption and implementation of management decisions on innovation and technological upgrading of tangible assets of enterprises.

Analysis of recent research. Opratsovuvannya special scientific literature and summarize the most significant results show that the issue of investment analysis, including innovative projects are in the focus of attention of many domestic and foreign scholars. A significant contribution to addressing the subject area of neoclassical economic theory have domestic scientists I. Blank, V. Geyets, M. Gerasymchuk A. Gojko A. Peresada, P. Sabluk, Vladimir Savchuk. Among foreign authors should be noted scientific results contained in the writings of H. Birman, E. Brihhema M. Bromovycha, B. Klass, L. kruszwica, W. Sharpe, S. Schmidt.

Currently, the assessment and analysis of innovation has profound methodological and theoretical-methodological base. However, there are many controversial issues that require further research. Among them is to provide a variety of interpretations of economic content of individual indicators (criteria) assess the feasibility and effectiveness of investment innovation ambiguity using methodological tools of their calculation, lack of uniqueness on the admissibility and usefulness of existing models and assessment methods in the practice of innovation management of domestic enterprises.

The purpose of research: problem analysis of theoretical and practical aspects of the use of modern methods of analysis of real investment in the management of investment activity to justify their decision areas.

Results. Continuous implementation of innovation is a necessary attribute of competitive enterprise that develops dynamically. Provision of such dynamics requires the development and implementation of methods and procedures for evaluating the feasibility and efficiency of

innovation and investment projects. They also have relevant practical significance to implement such management functions as monitoring, control and regulation of the innovation process in all phases of the life cycle of projects implemented now.

We proceed from the understanding that innovation is the dominant component of the investment company and carried out mainly in the form of implementation of specific investment projects. Even if not formally designed as a feasibility study or business plan for its analytical and predictive parameters always fit the theoretical model of the project.

Source of innovation requires the use of significant amounts of financial resources to obtain them in a market economy is based payment. Capitalization of financial resources in the process of investing in innovative projects related to the withdrawal of a certain time of economic exchange, transformation of assets with more liquidity in less liquid form, leading to a loss of consumer qualities of capital accumulated in previous phases of the company. This significantly affects both the financial condition and the possible implications of administrative decisions. Given the significant time period of the investment process and operation created as a result of the asset objective nature in such a situation is a factor of uncertainty. Because of innovative enterprise process is quite complex and the scope of its general and functional management.

Determining the analysis of innovation is to choose a system of indicators and measuring some of their members. Now some extent compete two approaches and corresponding methods: 1) absolute and relative effectiveness of capital investments which management practices used in the centralized Soviet economy; 2) static (simple) and dynamic (financial) methods grounded western science and finance used by many foreign companies. Key indicators and their quality characteristics are shown in Table. 1.

It should be noted that the first approach between indicators and other static methods there is a methodological similarities.

1. Comparison of methods for evaluating the effectiveness of individual innovation [2].

Specifications	The first group		The second group				
	the rate of return on investment	payback period	the payback period for the discounted cash flow (PPD)	net present value (NPV)	IRR (IRR)	modyfi-forged IRR (MIRR)	profitability index (PI)
Attitude estimatio	Indirectly through	It does not	Mediated Incremental	Directly	Direct - otsinyuy	Direct - otsinyuy	Directly

n finansyvyh resources	income		net cash flow		e price limit sources	e price limit sources	
Character evaluation	Relative	Absolute	Absolute	Absolute	Relative	Relative	Relative
Type of effect	Return	Time	Time	Incremental net cash flow	Price of financial resources	Price of financial resources	Incremental net cash flow
The period for which takes into account the effect	Average value	By the time of full recovery of investment costs	By the time of full recovery of investment costs	The entire life cycle	The entire life cycle	The entire life cycle	The entire life cycle
Considering the price of sources-financed re-sources	Excludes	Excludes	Recognizes	Recognizes	Playing a benchmark for comparison	Recognizes, serves a benchmark for comparison	Recognizes
Taking into account the risks	Excludes	Excludes	Recognizes	Recognizes	Recognizes	Recognizes	Recognizes
Taking into account inflation	Excludes	Excludes	Recognizes	Recognizes	Recognizes	Recognizes	Recognizes

Some authors believe that the advantages of the first technique in the availability and reliability of input data, ease of calculation, there is no need to predict operating costs, prices, income, duration of the project, the possibility of determining the absolute efficiency of the total investment amount of a single investment project, the possibility of estimates comparative effectiveness of any number of alternative projects and selecting the most effective [1]. This assertion consider controversial.

Competing techniques have the tools and determine the absolute and relative performance. And the use of the methods of the first group does not exclude forecasting operating costs (cost), price and profit. In

fact the same elements that are included in the analysis and forecasting of cash flows.

Many quests research indicates that a significant drawback assessment methods investments are ignoring changes in the value of money over time, and in fact - the cost of attracting financial resources. Quite common in the scientific literature is the opinion states that methods for evaluating the effectiveness of discounted cash flows is no alternative, and as the best among them is called the net present value method*(NPV).* In practice, managing vice versa - the preferred method IRR *(IRR)* three times more companies than method *NPV* [3, s.327]. Other methods of investment analysis, according to the authors of academic books, do not pay attention. In favor of this recommendation is given, this argument: "Various methods of calculating payback ratios occasionally used in the evaluation of proposals, but these methods have serious drawbacks, because we do not consider" [3, p. 315]. A similar frequency of use of indicators to measure investment can be found in other publications [4, p.132].

It is interesting to note that the information that is alternative in nature and refutes previous statement is not noticed by national researchers. A well-known expert on financial management companies Alfred M. King says, "a survey conducted in the 70's and 80's and even 90's, showed that most business organizations continue to use now*discredited* (Underlined by us - FP) simple payback method "[5, p. 343-347].

In imperfect methods for evaluating investments based on discounted cash flows indicate the famous American theoretician of strategic management Igor Ansoff. He prefers a rate of return on investment on the grounds that it is "1) ... common and widely used tool for measuring business performance; 2) unlike other indicators allows you to bypass still unsolved problem of determining the factors that influence the rate of discount for use of capital in the future; 3) the rate of return on investment is a convenient tool for comparing projects in different business areas "[6].

Qualitative characteristics parameters listed in Table. 1, provide the basis for general recommendations concerning the choice of some of them for the analysis of innovation and investment projects. If his goal is to determine their overall effectiveness, then this method to better use NPV. To evaluate the acceptability of different options for the structure of financing sources of the project more acceptable method is the IRR. When comparing projects or options to choose parameters significantly affect the adequacy of the volume of funds used to finance them. When they are together not significantly different, it is necessary to apply the method of NPV, otherwise - PI.

General performance basis using discounted net cash flows: a) the length of the project life cycle; b) the value of net cash flows on certain time periods of financial resources; c) the discount rate, ie the average price of financial resources for specific areas of use.

A priori considered that the length of the life cycle of assets which are the subject of innovation, knowledge. Such certainty is possible only when the purpose of these innovations is the creation or acquisition of a separate asset. When directing investments to create a number of assets, setting the length of the life cycle has certain difficulties. We consider it appropriate to take account of the estimated lifecycle of the project.

The most difficult part of the forecast-analytical calculations are cash flows. In most scientific publications on the subject of forecasting methodology served simplified without revealing its specifics. Typically, the methodological basis of calculation is the accounting approach to costing or to the statement of cash flows. This technique does not fully meet the requirements of the analysis of innovation. In particular, ignored that "economists proposed method of financial planning shows future incoming and outgoing cash flows as a result of [the adoption of] decisions, with emphasis on growth parameters or the differential effects of the decision" [7, p. 44] In other words, cash flow planning must take into account the changes of costs and revenues associated with the project. The neglect of the methodological requirements leads to substantial error that calls into question the correctness and even correct conclusions about the acceptability of the test area of financial resources.

If you do not take into account the Incremental stream, the two types of errors. First. In the planning process the entire amount of indirect (indirect) costs will be distributed, including for the products of the project, methods adopted in the practice of accounting. This ignores the fact that most of these costs is a matter provides enterprise project or rejects it. Therefore, routine calculations of the elements of cash flow can include only specific increase in costs caused by the project. Second. Projects that have negative cash flows generally fall outside the scope of the assessment methods based on discounted net cash flows. In scientific terms, the definition of discount rate does not present difficulties - as the basis for its determination in favor of alternative model of cost. Our position on this question is to use in this context, cumulative method. However, there is a need to make some clarification.

Adjusted for inflation using the Fischer-known formula, which establishes the relationship between the real and the nominal value of money is acceptable in the case of a homogeneous inflation. In terms of the same so-called structural inflation, which is characteristic of transitional economies, this approach leads to significant errors and

inadequate grounds for making financial decisions. We believe that the best solution to take account of inflation issue is the valuation adjustment items in the projected cash flows of individual rates of change. Although the risk has sufficient methodological and methodical apparatus, but in domestic practice its use has certain difficulties. So for this purpose it is necessary to use expert method.

Conclusion. The transition to new economic conditions requires them to use appropriate methods for assessing the appropriateness and effectiveness of innovative projects. Featured in the literature methods have their positive and negative sides. Valuation techniques for discounted cash flows are much more informative. In the process of calculating the information obtained to determine the necessary amount of financing the project and the maximum acceptable value of financial resources. In the selection of methods and evaluation criteria should be based on the logic of economic pragmatism - a more sophisticated methods should be applied in cases where they provide real economic benefits.

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In Article proanalyzyrovanы nauchnыe and prykladnыe aspects sovremennыh Using methods эkonomycheskoy estimates and analysis Innovatively-investment projects in the process control ynnovatsyonnoy deyatelnostyu enterprises and obosnovanno avtorskoy approach for decision otdelnыh dyskussyonnыh voprosov a plane Virtually s application.

Innovations, Investments, projects, enterprise, dyskontyrovannыe denezhnыe flows Chistaya tepereshnyaya The cost, Internal Rate of Return.

In paper the scientific and applied aspects of the use of modern methods of economic evaluation and analysis of innovative-investment projects are analyses in the process of management by innovative activity of enterprises and reasonably authorial going near the decision of separate debatable questions implant their practical application .

Innovations, investments, projects, enterprises, discounted cash flows, net present value, internal rate of return.

UDC 621,923

Development of mathematical models of deformation LOADING OF WORKING WITH VIBROOBROBTSI AGRICULTURAL MACHINERY

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The mathematical model of deformation loads at vibroobrobtsi work of agricultural machinery that allows for the transition of power in plastic and pruzhnoplastychnu strain, allowed to analyze the impact of processing parameters and set the frequency of the load has virtually no effect on the changes in the working layer, while the amplitude and time have a significant impact strengthening the processes.

Formulation of the problem.

This method is widely used to strengthen local critical parts, but a number of issues devoted to defining the optimum treatment regime based on an analysis of theoretical models of the process have been insufficiently studied. Existing models relate mainly to the deformation process and does not take into account the peculiarities of vibration tools.

The purpose of research - Development of a mathematical model of deformation under load vibroobrobtsi work of agricultural machinery

Material and methods of research. To strengthen the vibration treatment applied to specially made stand with a frequency of 10-35 Hz deformation (700-2000 cycles per minute), 0,25-0,75 mm amplitude with