

*Materials of Conferences***ECONOMIC MODELLING IN SYSTEM OF FORECASTING OF AGRICULTURAL PRODUCTION**

Gavrilkova N.Y.

Krasnoyarsk State Agrarian University, Achinsk branch, Achinsk, e-mail: Gny16@mail.ru

Economic-mathematical modeling as a reliable method of studying economic processes and systems has proved itself some time ago and is traditionally used to solve a range of economic problems that are linked to an optimal distribution and re-distribution of resources, calculations of rational parameters, and evaluation of alternative variants of developing enterprises, scientifically-grounded territorial location of production, explanation optimal proportions of productive systems, etc.

Productive function occupies an important place in an economy as a model that directly impacts the process of production. This method implies limitation of analysis by external, quantitative correlations without questioning its essence and qualitative content. Modeling represents a construction of mathematical model. It requires a strong idea on a purpose of function of a studied economic system and possession of information on limitations that define a range of available values of the managed variables. Analysis of the model should lead to definition of the best managing impact upon an object of management that provides for meeting all set limitations. Complexity of real systems can significantly complex visualization of objectives and limitations in an analytic view. Regardless of an extremely large number of variables and limitations that, from the first sight, should be considered while analyzing real situations, only a small part of them proves to be significant in describing the studied systems. Therefore, while modeling systems, we should identify dominant variables, parameters, and limitations.

The essence of strategic planning of agriculture is in explaining objectives of its development and defining a system of measures that are necessary for its realization in future. At state and regional level the following objectives are defined: provision of food safety, increase in provision of food to population, achieving parity of prices and buying ability and its support, protection of the environment, etc. At the level of an enterprise the strategic objective is receiving maximum income with minimum costs due to realization of products, defining a direction of specialization, priorities in development of production branches, increase in sale volumes, rational distribution of resources.

One of the problems that is difficult to solve without specific methodical approaches, is develop-

ing a strategy of a stable development of an enterprise. Such strategy should provide for a possibility of an attended, internally-balanced function of basic productive resources of the enterprise and its economic-physical parameters.

Multiple interrelated and mutually-defined indexes that should be considered while defining rational structure of production, have defined the necessity of developing optimization models. Thus, they can be used in forming strategy of development and making final managing decisions.

Nowadays there are many approved economic-mathematical models that allow one to solve diverse problems that are linked to the development of agrarian enterprises. Leaders of these organizations should define recommended direction in order to increase economic efficiency of the production. However, receiving a certain effect is possible only under optimal combination of of basic production resources.

Thus, alteration and correction of production elements according to calculations of an optimization model can have a positive effect over an economic efficiency of production the agrarian sector. It will provide for a creating of conditions for improvements in specialization and concentration of production over regions and categories of enterprises, increase in efficiency of production sectors, and economical distribution of the possessed resources.

Modeling allows one to significantly increase the quality of strategic, tactic, operative planning, and also consider their impact over parameters of the development of the predicted changes in terms of economic activity.

The work was submitted to International Scientific Conference «The problems of economic security, modeling and forecasting economic processes», Israel (Tel Aviv), April, 16-23, 2013, came to the editorial office on 20.03.2013.

THE BEHAVIOR OF ENTERPRISES IN THE CONDITIONS OF RISK

Dianova O.V.

Federal state budgetary educational institution of higher professional education «The Krasnoyarsk state agrarian University», Achinsk branch, Achinsk, e-mail: Dianovy@yandex.ru

Risk is a combination of the probability of occurrence of a particular event. Perhaps, as so many situations and types of risk can be identified.

The degree of risk is increased when there are in the country changes in the legislation and reforms in the political sphere. Non-standard situations in business shows that it is necessary to econ-

omists-financiers and managers familiar with the basic concepts and methods of control for all types of business risks.

Find different types of risk is closely connected with the development of combinatorics and probability theory. In the Middle ages the development of mathematics was determined, in particular, the direct interest of the gambling – slot cards, dominoes (bony plates), the «loaded» the bones. The most lively began to study theoretical and methodological aspects of risk at the end of the XIX – beginning of XX century.

Risk management is the process of working out a compromise, the situation, which would satisfy all, aimed at achieving a balance between the benefits of risk reduction and necessary for this expenditure, as well as decisions about what actions to be taken.

If earlier for the command-and-planned economy the problem of risk simply ignored, that in the modern world more and more enterprises should be to create in its organizational structure of the unit as the risk management Department, which would be quite natural addition to the traditionally independent functional units.

Risk assessment is a set of analytical activities, allowing to predict the possibility of additional entrepreneurial income or a certain amount of the damage arising from the risk situation and the late adoption of measures to prevent risk.

To assess the degree of risk the risk management Department may apply both objective and subjective methods of risk assessment. The results can be presented graphically using the curve of probability of occurrence of a certain level of losses. To avoid business risks and the losses that may arise enterprises may opt out of the most risky operations on the market. When the «crusade of the risk of» we need to find reserves and sources of funds to cover potential losses. It may be the means of the enterprise or the attracted credit resources.

Each participant of the business has its own tastes and preferences, directed associated with the risk or receipt of compensation, and shall identify the risks, which is exposed to decide which of the risks are acceptable to him and, finally, to find ways and means how to avoid unwanted risks, as well as to be able to evaluate, in which the financial costs of this will go and does this have any meaning.

The system of risk management primarily involves their assessment, the results of which allow in the future to choose the optimal way of reducing risk.

One of the possible ways to reduce risks is to hedge, which means insurance business risks, the protection of property interests of enterprises in the implementation of dubious reliability of operations due to educated funds of funds by making insurance premiums.

The enterprises of the agricultural complex, are subject to risk themselves should create directly in the business entity insurance funds, to reduce the financial losses associated with the influence of economic, social, climatic, technological and other factors. This

will allow to promptly in the shortest possible time to overcome the difficulties. Definition of the structure of the provision for unforeseen expenditure is recommended to carry out on the basis of the identification of unforeseen expenditures by type of expenditure, for example, on wages in mind the downtime brigades, the additional costs of conversion in the case of a sharp change of the structure of freight traffic, subcontracts. Such differentiation will determine the degree of risk associated with each category of costs, which can then be extended to the individual phases of the production.

Effective way of neutralizing the risk – diversification, including the use of alternative opportunities and sources differ from each other, generating revenue at different levels of risk.

The most optimal way of risk management is their transfer to other persons by contract of factoring or guarantee. In these cases are concluded a contract with commercial banks, the credit organizations or third parties allowing to compensate for the resulting financial losses.

Success in the business world critically depends on the correctness and validity of the chosen strategy of economic and business activities and with the obligatory account should be taken of the probability of occurrence of critical situations.

The work was submitted to International Scientific Conference «The problems of economic security, modeling and forecasting economic processes», Israel (Tel Aviv), April, 16-23, 2013, came to the editorial office on 22.03.2013.

**FACILITAING MODIFIED RATE
OF COMPLEX PERCENT AS AN INDEX
OF ECONOMIC EFFICIENCY
OF INVESTMENTS INTO INNOVATIVE
PROJECTS**

Minakova I.V., Anikanov P.V.

*Southwestern State University,
e-mail: irene19752000@mail.ru*

In this article the authors reason facilitation of modified rate of complex percent as an index of efficiency of investments into innovative projects, as it allow one to compare a level of economic efficiency of innovative projects with market income rates of other investment tools.

According to modern popular indexes of economic efficiency of investments into innovative projects that have spread widely (clean money flow, recoupment period, and clean concluded income), it is impossible to define an expediency of investing into a project. None of these indexes has the totality of features that are typical for a universal index of economic efficiency of investments into innovative projects, particularly:

- 1) consideration of time factor;
- 2) comparing income rate of projects with different realization period;