

On the quantitative assessment, a Monte Carlo risk of investment in the production of wood pellets

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Formation of a favorable investment climate – one of the main objectives of economic policy. Policy successfully reach goal if business and government dialogue takes place regularly, and both sides understand each other well.

The parties understand each other better when they speak the same language. That language could be the results of experiments on computer-models. Usually, the developers of the investment project set all the parameters of the model as a single number. In analyzing the effectiveness of the project, they compare to only three options: pessimistic, most likely and optimistic. They do not assess the likelihood of risk to quantify. Such an approach is of little use in the context of current economic instability.

Analysis of the results of computer experiments Monte Carlo gives a much more useful information. This method makes it possible to identify those factors that have the greatest impact on investment performance. In addition, it allows estimating risks quantitatively.

Experiment with a computer model of investment in the production of wood pellets has shown that at present the most important risk factor is the exchange rate, loan rate, prices for finished goods and prices for wood raw material.

We have shown that the risk of loss from the investment in the production of wood pellets and their exports to Western Europe is large only at high prices for wood raw material.

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