

## ***ECONOMIC CONCEPTUALIZATION OF ECOLOGICAL RISKS***

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*Abstract: The present paper conceptualized from an economic perspective the ecological risk, the definition of their scope, and the foregrounding of the ecological risk in a threefold: activities – risks – effects.*

*From this perspective the paper intertwines the theories and experiences in the field, and economic analysis, stressing, for obvious reasons, the way in which the evolutions and interpretations of the general phenomena have been reflected by the strategies implemented so far in Romania.*

*Keywords: globalization, environmental risks, pollution, environment*

### *Introduction*

Information about the current state of the environment no longer meet the requirements of complete and accurate knowledge of all the requirements and environmental effects of an event.

As a direct consequence of this, in a decision no longer operate with absolute certainty, with precise estimates of the evolution of a particular item or phenomenon environmentally makers resorting increasingly to estimate probable, uncertain notions as risk and uncertainty.

Most decisions are taken under risk and / or uncertainty, incomplete knowledge of one or more "variable" is a constant economic environment and a cause that explains to some extent the differences between the various environmental projects profitability.

Environmental risk is viewed as a phenomenon that arises from circumstances for which the decision-maker is unable to identify developments / events possible environmental and even probability (materialize) them, without being able to specify exactly which of these events will occur effective. It can be said that the environmental risk comes from the inability to accurately assess a particular event that is environmentally friendly way, identified as such by the decision-maker who will actually materialize and cause a certain level of risk.

Even if the estimated probability for effective materialization of a particular driver of ecological risk is high, the decision maker can't be sure if the event will occur is uncertain and not another;

it is even possible to produce a phenomenon whose probability be assessed at a low level or even an unforeseen event.

### *Scoping factorial ERA*

Environmental risk can be regarded in terms of ecological danger of an accident it creates a wrong decision in opposition to another decision that would have been better.

The social implications of environmental risks are taken into account in risk management, which, together with the environmental risk assessment, risk analysis forms. For example, relatively safe use of products in different ways and contexts unsafe own use logic of industrial development, generate and produce major risk. It is the extreme case of nuclear energy.

Interdependence between structures diverging perception of environmental risk is vital to the evolution of society, in which innovators play a fundamental role in opening up significant alternatives for development, but causes a "loss" of resources, given for a process societal, cognitive and pragmatic, deleted probably over 95% of innovative ideas, users innovations, be they investors and manufacturers, whose very purpose of disseminating, to choose innovations relevant to development and to give them meaningful social, narrowing but often dangerous scope of knowledge in for the promotion of profitability and efficiency.

Risks related to use products sometimes causes the elimination of these products by manufacturers, while risks of pollution so-called goods "free" as air and water have become grounds for criminal responsibility. As economic theory is about to abandon the concept of goods "free" accepting the introduction of the concept of inferred values to be accounted for, risk free should be accepted as risks caused by humans, which must respond generator thereof, in particular, the producer dangerous goods.

If in the event of natural hazards generated by metabolism of nature such as a flood or earthquake, there is often a mental preparation and acceptance of possible disaster and its consequences for the risks from praxis economic inadequacy of human acceptance may be entails risks, mental preparation entities must directly accountable entities that generated risk.

Avoidance of environmental risk by giving up certain activities generating risk appears to be an option wise trader, but it comes often at odds both with the ground maximize profits, gain and with the excitement that the economic entity, the managers, the politicians' live "thanks to economic success.

### *Risk diversification*

Risk diversification is one way to reduce the impact of uncertainty, hazard, such as for example the use of complementary alternatives for the production of agricultural goods. But maximizing economies of scale inherent in technological progress induced by industrialization, it is often incompatible with risk diversification.

Cultural context plays a crucial role in environmental risk perception. For example, the consequences of earthly disasters, earthquakes that can kill thousands of people annually, are more strongly felt than hundreds of thousands, millions of people die annually due to poverty or pollution. Obviously deaths due to poverty or pollution are not perceived so acutely that deaths caused by an earthquake.

Another dimension of environmental risk can be given considering that the basis of a decision, especially in matters relating to the cost and financing of the investment to diminish or eliminate environmental risks, own resources from future profits of particular importance both in terms their use and sizing the need for funding from other sources.

Realization of future profits lower than the average, considered as the reference level may lead to the emergence of crisis and adversely affect the activity of the economic subject.

In the sense that the environmental risk is only in terms of loss of balance environment, it needs to be addressed in opposition to the possibility of a win for the environment. Financial result following a decision may result in a gain or a loss. In the first case it is the "chance" while in the second case it is the "risk".

Following a decision will set goals to be considered. After knowing these objectives are to characterize the extent (boundaries) them.

If the first stage decision by choosing a wrong objective environmental risk can occur. In the case of the second stage by choosing an erroneous limits may also manifest environmental risk. On the third step, even if correct decisions, manifest circumstantial factors can cause loss of balance environmental and ecological risk manifestation conclusion.

In these circumstances, area of ecological risk is relatively extended to the opportunity, in other words to "safety".

To reduce this ecological risk area special attention should be paid to the hierarchy of objectives. One can observe an oscillation between two objectives: the income and safety legislation.

The choice between the two objectives differ according to each economic subject. Thus the objective of promoting economic gain some subjects (maximum) while others adopt a cautious attitude that promotes safety objective (maximum).

Safety is usually associated with certainty, and forecast worsening of a given situation, risk or uncertainty of a change.

The relationship between risk and uncertainty farming is a complex relationship. Unlike risk, uncertainty is described as a situation of possible environmental events to occur and the less you can predict the likelihood of their occurrence, with significance defined incomplete mathematical variable.

Uncertainty requires very vague anticipation of some items so you can't make any prediction about what will happen. Arguably the defining uncertainty one thing is certain: "nothing is certain or predictable".

The situation is uncertain where the decision should be but do not know enough or any subsequent developments related ecological and probabilities.

Regarding the concept of ecological risk, they can make certain anticipations of events that may occur and the associated probability of their occurrence. Potential profit to be pursued following a challenge made by the economic agent must be proportionate to the environmental risk assumed.

Organic uncertainty has two components: one objective - an objective ecological uncertainty (often identified with the concept of ecological risk), and a subjective component - ecological uncertainty subjective.

The subjective character of uncertainty in that estimate must be assessed on a certain occasion generating risk assessments and perceptions are based on our own decision based on the information available at the time and the experience it has in that area.

Uncertainty objective may be equated to the situation in which all possible outcomes are known and the majority of those involved in the decision making process are unanimous in predicting the same probability of occurrence of each of the identified environmental effects based on data from previous developments.

With certainty economic issue is not subject to any environmental risk, the known effects of an event environment and their impact on future business results. Environmental uncertainty and risk, once introduced into the equation decision affects the quality and accuracy of estimates on future developments of the subject of economic activity.

### *Conclusions*

The vulnerability can be modeled mathematically future profits under uncertainty ecological objective as a function of the particular nature of the event itself, and subjective conditions of uncertainty is a function of ecological two variables listed.

However, managers' assessments of the conditions of conducting future actions are mainly subjective. For a better justification of the decision and reduce the number of unknowns must be operated with an improvement in the quantity and quality of information, to achieve a "conversion" of uncertainty in environmental risk.

The essence of environmental risk decision-maker is given the inability to accurately predict future results to be obtained as a result of action taken. In other words, the environmental risk factor is that probability may be associated with a possible result when the decision maker knows all the possible future effects of the decision.

Organic uncertainty arises when the decision maker knows all the possible future effects but they may be associated, for various reasons, no possible outcome probability factor. The uncertainty comes in most cases the absence of information from its poor quality or because of certain failures decision maker's information system.

One thing is certain: regardless of the method used, the environmental risk can't be eliminated entirely, remaining always a degree of irreducible uncertainty.

Uncertainty of an action is given to those environmental risks which can't be identified at a time, while the degree of environmental risk is identified given the environmental risks.

In an economic environment, as the share of varying environmental risk is higher, the purpose of the actions undertaken is uncertain. Even if the decision maker can know most of the environmental risks posed by his actions, uncertainty may not disappear entirely.

Environmental risk is a multidimensional concept whose level can't be reduced to one item at a figure. It is important to determine an acceptable level of environmental risk that the decision maker is willing to and take.

The acceptable level of environmental risk refers to the risk "high" that the decision maker is willing to and take. There is no single acceptable level, but this is different depending on the concrete conditions of each economic activity or decision maker's attitude towards environmental risk.

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