

THE IMPACT OF VALUE AND ENTROPY IN THE ECONOMIC LIFE OF THE CONTEMPORARY WORLD

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Abstract. *The last three centuries have witnessed a dynamic evolution compared to the previous centuries. The general vector of this dynamic was technical and scientific progress in all sectors of social action, which was marked in Western Europe and North America. Against this general background, training and strengthening, European national communities, together with the establishment of capitalist market economy were historical factors that have broken the socio-political system of feudalism. Competition between companies is based more on the level of service, there is great interest in using a measure of flexibility to indicate a firm's ability to meet customer requirements. Entropy is proposed as a measure of flexibility for production operations. This article assesses the study on the possibility of the theory by focusing on low value entropy theory. The article addresses a topical issue, with a major socio-economic impact and aims to analyze the importance of value and entropy in the world economy. The methodology was based on the analysis of bibliographic sources and the analysis of the relationship between value-entropy-economy led to concrete results, presented below.*

Keywords: *value, entropy, economic development, contemporary world*

JEL CLASSIFICATION: *A12, D80*

1. INTRODUCTION

The study of synthesis of theory evaluation were challenged in several aspects, criticized by both theorists and practitioners. Most problems have occurred due to the lack of proper theories. The evaluation theory is based on neoclassical economic theory. Because markets are an uncertain heritage, the evaluation theory must use probabilistic concepts such as the selling price and the usage in the exchange market value and the most efficient use. Comparison approach is to be used when calculating the sales prices. Modern statistical techniques must be applied and market simulation techniques [Cojuhari A, 2001].

Analyzing logical chain management to create value-estimation was reached in need to explain how value develops. The most explicit theory of this view, explaining the essence of value creation and its mechanism is represented by the value theory based on entropy [Bran F., 2015].

The starting point of this theory is the neoclassical economic theory. The value-oriented concept of utility theory has borne considerable changes in recent decades. On the other hand, the assessment theory, however, has not complied change, which created problems in practice. The combination of several methodology approaches- the cost by income and by comparison, is focused on neoclassical

economic theory, which means that the idea is clear from their correspondence of the market value cost, analyzed for a longer period of time.

Modern economic theory accepts that the cost and market value in a long time interval may tend to be only approximate, but it is also mentioned that in reality, there is no reason for insuring internal or equivalence of this approach long term [Coldwell D, 2016].

When dealing with this problem, the solutions must be adequate for the type of problems that occur and specific for each customer. These problems may involve, but they may affect reporting market value [Rădulescu et al., 2018].

Using the comparison approach sales prices are to be analyzed. Modern statistical techniques (from the standpoint of the market) and market simulation techniques (from the standpoint of the transaction, human behavior) must be applied [Bodislav et al., 2020].

2. THE CONCEPT OF VALUE

The concept of value has existed since the time of publication and the usage of trade, in all domains of activity. Economists have tried to define it in different ways, all having the common denominator subjective estimation of the size of assets [Negescu et al., 2020].

The study of the economic value of a concerned economist from the beginning of this discipline, trying to estimate the value of an individual good and then expand it to goods that can be changed [Bran P., 2003].

The study of value creation has become increasingly important as the world economy has grown, leading to development based on management value [Bran et al., 2019]. The value is created by the interaction of four factors associated with an asset. These factors are utility, scarcity, desire and purchasing power. The action of these factors appears for a good supply and demand. The main beneficiaries of the measures taken by management to increase value are shareholders [Bodislav et al., 2019].

The value of a property does not remain constant throughout its existence, but changes depending on various external factors such as inflation, interest rate, exchange rate, market prices, the economic environment, and internal factors such as internal management of the company, synergies and efficiency. Any management that wants to perform correctly seeks to allocate resources selected in order to create value over time at a level sufficient to recover all the resources used and to get a win, followed in risk conditions, imposed environmental and expected by shareholders. Resource allocation should lead to improving the economic position of shareholders, which creates value for shareholders.

Creating value for shareholders depends on coordinating segments: selection, implementation and monitoring of investments according to business strategy, a coherent and sustainable, based on economic analysis – to guide the operations of profitability after you have made a decision and after analyzing cost- benefit, ensuring business financing, comparing effort generated effects and the risks involved. Processes that trigger the mechanism for obtaining and managing value are: production process, consuming and the process of liquidation. These complex processes are a combination of primary processes: transformation, preserved and transfer.

A creative value-creating interface achieves a time-based performance optimization focused on a viable business model, related strategies that deliver a long-term competition. This will result in positive cash flows that are higher than capital cost, superior returns for shareholders, superior remuneration for managers and employees, loyalty from suppliers and customers, easy access to credit.

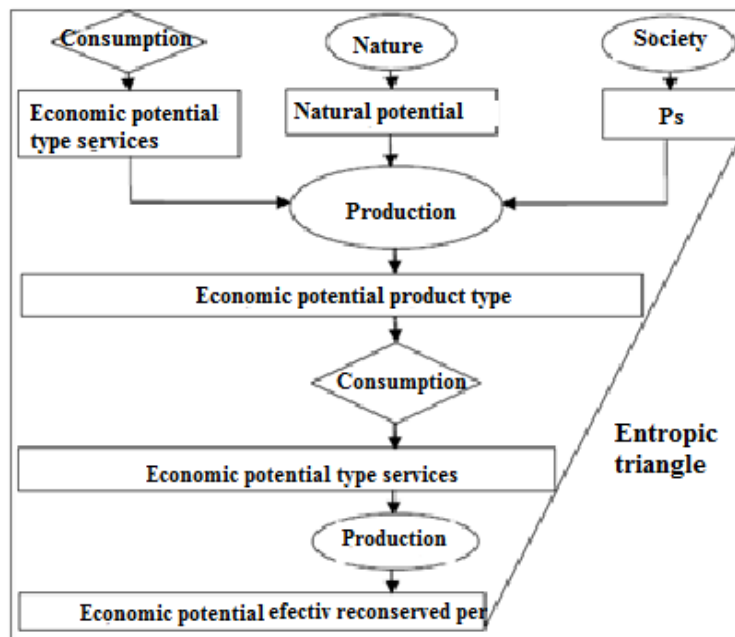


Figure 1- Mechanism to obtain the value

Source: author, after Bran P., Dimtriu R., (2003), *Economic value*

3. VALUE AND ENTROPY IN THE GLOBAL ECONOMY

Specialty studies show that the series industry that deals with chemical mixtures, some food, transportation and commercial operations are required. For example, 17 phases are needed, starting with wheat over by a truck and ending with plastic packaging thrown (as waste). All this wasted energy will produce as little as 130 calories which are obtained by a consumer, when the food is served [Daly H.E, 2008]. By using energy from some renewable sources that are related to industrial processing, packaging, distribution and operations at the residence of the buyer for the preparation of consumption. Separately, these aspects, processed food industrial chemical admixtures completed, may raise a number of health problems for the consumer.

Industrial food processing is typical and so are other major industries such as petrochemicals, land and air transport, synthetic fibers, etc. All these industries seem to be generating more products and facilities. Compared to the multiple values that consume the precious energy resources of the planet [Bran F., 2011].

The relationship between socio-economic and natural environment and, particularly, the current imbalance between those entities has been understood and treated in different ways. There are three concepts outlined in this context: geocentric, bio-centric and anthropocentric. Retaining elements of rational conceptions is shown by referring to the fundamental works about the natural environment. The increase of economic relationship, may be done (there are serious attempts to do so) in a design which contains integrated synthesizers, imperative reconciliation of man with nature and with himself and human action, still in keeping with the very nature of humanity can be given.

The coordinates of this concept should be: respect for the laws of nature in economic activity; respect for ecological balance, health Earth; Action broad, coordinated economic progress generally beneficial to human activities and generally all economic processes are inevitably an entropic process [Coldwell D, 2016].

Living organisms need low entropy resources to combat their own entropic degradation. But while all species depend on the sun to access this low entropy, man has learned to use other sources of low entropy, such as fossil fuels and minerals.

4.CREATING VALUE AND SIZING

The action definition of value, must solve the problem of physical media. Scientific theory in economics, called support, is working as socially necessary labor time, the utility or satisfaction. The entropy value theory (TVE), chooses a different type of physical support, more general, support represented by low entropy or level of organization existing systems, simple or complex [Roy P , 2014]. Secondly, it was necessary to establish a definition of the relation that does not come into conflict with the requirements of the general laws of nature. The TVE does not exclude the final event in the life of a system.

The TVE model, with other models correlation theories, emphasizes different values, but the value model based on entropy encompasses and other models, preserving the real potential value of the product produced [Roy P, 2014].

The Theory of Value Entropy must recognize potential service type by accepting this potential in a future production process. Entropic brings value theory severe restrictions regarding the conduct of economic processes as entropy value law action. This law requires that economic processes, but also some processes in society and the protection and restoration of the environment, confirm the economic potential preserved over economic processes.

Drew level economic potential and worked depended on ways of attracting (work, science and technology, geographical discoveries, war, etc.), the organization and endowment of economic processes (force property, technical equipment, management), and how they were distributed and used result useful products and services. Changes in society and the economy have made the mechanism for obtaining value, fecund period of time to get into difficulty attracting this situation of the whole society.

The productivity of this mechanism is reflected in the way of building tools, the evolution of society, the diversification of economic and social activities in environmental damage, social and political events in the world. In order to establish these effects on a system so complex such as a company, the TVE checks their model, its main paradigms succeeding in high society walking the arrow of time [Bwanakare S., 2017]. This model allows us to shape future economic aspects of human societies, post-industrial society or information.

Scientific research has confirmed that the pace of economic growth recorded after World War II has the main factors education and technological innovation, the last, also a product of the human mind educated! Output power with as much information must be accompanied compulsorily and in advance of consumer education information. Only in this way we will ensure effective and efficient circuit attracted by value in the future society

Table 1- Comparative analysis of value creation theories

Comparison criterion	Theories examined		
	Value – Work	Value – Utility	Value – entropy
Creating value	in the production process	in the consumption process	the consecutive combination of production – consumption – production

Principles	of outstanding productivity of marginal productivity of proportionality	of utility of the replacement progression and regression competition demand and supply	expectations or forecast of inclusion of compliance of dependence on the external environment of the economic division
	Of the most efficient use		
Types of characteristic values	Value for use of existence; Value of reconstitution	Market value Replace Value Investment value Liquidation value	Market value Value for existing use Value of reconstitution Replace Value Investment value Liquidation value
Factors of influence on value	Economic factors: rhythm of growth economy; fiscal policy. Heritage components Physical state	Heritage components Physical state Financial condition Seismic factors Environmental factors The factors of supply and demand	Economic factors Political and social factors emplacement Heritage components Physical state Financial condition Seismic factors Environmental factors Factors of supply and demand, competition Patrimonial rights

Source: Bran P., Dimtriu R., (2003), Economic value

By examining the theories of value as a whole, from a valuation point of view, we notice considerable differentiation. Thus, the creation of value is explained either by the production process, by the consumption process or by the consecutive combination of the production – consumption – elements.

The current principles on which the estimation of value is based in its totality are characteristic only of the value-entropy theory, while the other theories explain only some of the principles. The same can be noticed on the types of values as well as the factors that influence the value.

4. CONCLUSION

The theoretical thinking of Roegen is a synthesis of the clarified explanations on the relations between nature and the human species. This synthesis explains not only the eternal evolutionary character of the economic process, but also the political and social aspects of inequalities between social classes or between nations. Law II of Thermodynamics is the supreme principle, governing economic activity. Not recognizing this principle and ignoring the need to reorient economic policy around directly leads to the economic and ecological disaster of the planet.

With the exception of a small number of economists, led by N. Georgescu- Roegen, everyone else agrees with the theory that resources in the general economic environment will never be exhausted. It is supposed that new technologies will always find a way out (solving), identifying and

exploiting untapped resources, even considering the resource base as inexhaustible. The mechanism to obtain value through complexity deserves attention from everyone, whether working in the field of economic, technical, cultural, political, or social, requiring the contribution of each participant in society. The gain value in the fight against the laws of nature and the economy proves to be the result of both the worker and the engineer, economist, professor, sociologist and painter, etc. Only associating the mechanism for obtaining value processes in the natural environment and society, we can identify the "value" of all processes and can respect the work of all professionals and participants in those processes.

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