DOCUMENTARY: HYPOSTASES OF THE SUSTAINABLE DEVELOPMENT

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Abstract

Version with minor changes of the article published in issue no. 20 (2000) of Financial Bulletin (previous name of Financial Studies).

Keywords: sustainable development, ecologic variables, technological development

JEL Classification: F 64, Z13

1. General framework

Lately, the notion of sustainable development is frequently used revealing complexity and multiple hypostases of manifestation. Therefore, before actually presenting this subject we need to describe the concept itself both in its strictly limited, acceptable meaning, and in a broader meaning. Following are some defining particularities of the concept from the positive competitional and pluralist democracy points of view.

History shows us that sustainable development is not something new. Problems related to this concept have their roots embedded in the Christian origin dimension of the human being – *creatio ex nihilo*. At the same time, it is noteworthy that the archaeological discoveries prove the existence of concerns for sustainable development as far back as in antiquity. They are traceable in all ancient people such as the Sumerians, Maya or the Mediterranean people. The ancient world transmitted us the first ideas regarding the relations between the growth of the population and the economic growth on the one hand, and the biunivocal interdependencies between the use of resources and the sustainable functioning of the ecosystems, on the other hand.

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From this angle, it is very possible that the sustainable development is closely related to the continuous inheritance of the experience regarding the relations between the natural and the artificial, socio-economic environment, in which people manifest through action and aspirations (Oliphant, 1999). For instance, the famous words of Stefan the Great in the theatre show "Sunset" by Barbu Ştefănescu Delavrancea are emblematic for us, Romanians: „Moldova is not mine, nor yours; it belongs to the heirs of your heirs to the end of time".

The historic legacy was a bridge over time, a source of inspiration for the researchers of our days. For instance, the well-known US researcher Alvin Toffler, in his book "The Third Wave" considers that mankind experienced transformations marked by so-called "waves" (Toffler, 1980). The first wave was the agrarian revolution – the period of transition towards an organised manner of using the agricultural land, when the first peasants and the first traders appeared alongside with the first market-towns. The second wave – the industrial revolution symbolized by Watt's machine – appeared after prolonged efforts and "anthropocentric-Renaissance" sought, and after geographical discoveries, entailing a higher flow of resources from the colony-countries towards the western countries, the appearance of the first industrial funnels, of the first town workers, when the villagers migrated towards towns.

At that time, as mentioned by Bela Csikos-Nagy and Peter Elek, pollution was a *sine qua non* condition of development; the people considered that the nature which God created has own means for self-regulation and renewal. All these aspects are joined symbolically in the so-called *Situatione Dei* stipulation from the Roman Right Code, subsequently reviewed in the Napoleonic Code (Csikos-Nagy şi Elek, 1995).

Presently, the reality shows the impact of the third wave figured by Toffler: the IT revolution of knowledge. The explosion of IT networks, of the "ecologically friendly" standardized technologies and biotechnologies remind us of the enthusiasm and effervescence of the second wave.

However, as Ruth Hillary and Johan Thorensen show, next to the technological aspects we must not overlook the managerial and social aspects (Hillary, 1997; Thorensen, 1998). Within the context of transition towards the society needing to save resources and to

valorise the human capital, the integrated management of the natural resources and of the development of the productive, managerial qualities becomes necessary, being achievable by the cooperation between the managers, shareholders and employees.

2. Possibilities to approach sustainable development – concept, patterns, indicators

The best known definition of the sustainable development is that given by the Brundtland Report in the 1980 years under UN aegis within the debates on environmental and human development issues: sustainable development is meeting the necessities of the current generations while not compromising the capacity of the future generations to meet own needs.

However, the concept of sustainable development cannot be framed within a precise context because of its many dimensions and significances that are equivalent – one might say that there is no single, universal definition. Thus, the concept of sustainable development displays several apparently contradictory elements referring to the:

- Economic growth compared vs. the limits of the economic growth;
- Individual interests vs. collective interests;
- Intergeneration equity vs. intrageneration equity;
- Adaptability and elasticity vs. routine.

Nevertheless, these contradictions are part of a complex process that hosts the sustainability – development binomial: on the one hand sustainability which refers to the necessity to set a rational optimum for the use of scarce resources paying attention to the issues of social justice and equity and, on the other hand, development which presumes continuous and sustained economic growth ignoring the limited character of the natural resources.

When these concepts are joined they form a totally new antinomic, concept which means much more than the mere merging of the two concepts, showing its economic, social and ecological aspects.

Ecologically, the sustainable development is easier to understand because it refers both to the procedures to measure the physical and biological processes and to finding the possibilities to measure the continuous functioning of the ecosystems.

The economic definitions, too, refer to the conceptions that highlight the limits of the economic growth and the rare or limited character of the natural resources, as well as to the opinions that consider that these limits do not exist essentially within the so-called stock versus flow syntagm, free goods or non-free goods.

At the same time, sustainable development also reveals a social dimension: although the limits of the biosphere and geosphere resources are not accurately known, the suggestion is that the limits of Earth's sustainability are inherently related to the approach of the social gaps confronting the people not just in terms of the strictly material meaning of wealth and poverty, but also in terms of egotism and possibilities of opening towards a true human solidarity. Thus, for the people, social sustainability appears much more urgent than the ecologic sustainability.

Within this context we must mention the human aspect of the sustainable development, which refers to the political and institutional framework of the society, remembering of the importance of the social interdependencies between the private goods and the public goods afferent to the triad **objectives – restrictions – options,** circumscribed to the political institutional strategic theory and practice.

In other words, given the complexity of the interdependencies within the natural environment, the option for sustainable development doesn't mean simply finding the means for somatic biological survival; it also involves exo-somatic qualitative aspects by the continuous aspiration towards solidarity and Christian kindness – the true element which gives a true meaning to the sustainability of the biosphere components, even to those that apparently have no benefit for the mankind.

Therefore, the continuous development of the planet, sustainable or not, will anyhow involve the transformation and interaction of the resources and people within an economic, social, politic, cultural and educational framework, which displays difficulties of approaching. The "ecologic" goods play an essential role within the process of knowledge and evaluation of the particularities and significance of the public and private economic goods.

Relations of interdependency between economy and ecology, between the economic and "ecologic" goods can be set by taking into consideration the particularities of the economic goods integrated into

the particularities of the economic variables of the consumption and production and of the ecologic variables known so far (of the material flows – energy and factors of energy reconversion).

One may notice, within this context, an interesting theoretical statement based on the principle of energy conservation – nothing is lost, everything is transformed. In other words, the human society doesn't produce and actually consume the goods: it keeps bestowing them different significances from the perspective of a true utility.

The economic, ecologic and social aspects of the sustainable development reveal the possibility of a practical representation of the sustainable development both in one dimension, economic, circumscribed to the indicator of the sustainable economic welfare (ISEW), as well as in multiple dimensions, socio-cultural, using myths (patterns) imagined by so-called ecologists and cultural anthropologists who tried in their way to express the relations of interdependencies existing between man and the environment.

a. Sustainable development in terms of the Indicator of the Sustainable Economic Welfare (ISEW)

Starting from the studies of A.C. Pigou (Pigou, 1932) one may integrate organically the economic, social and ecologic information within the national accounts system and within the GDP indicator of the sustainable economic welfare. Researchers such as Herman Daly and John Cobb (Daly and Cobb, 1989) developed the basic methodological model of such indicator - the Index of Sustainable Economic Welfare.

Essentially, they suggest that besides the well-known material welfare, identifiable using the system of the national accounts, we may also take into considerations other aspects such as:

- That production which is not relevant for the market;
- That production that is not intended for consumption, but which is necessary in order to compensate for the damages generated by the economic system itself (the so-called "defensive costs");
- The potentially identifiable welfare in the nature of the present production and consumption;
- The efforts of the public sector and of the households to achieve the potential welfare (in relation with the duration and intensity of work).

The methodology for the calculation of the indicator of the sustainable economic welfare runs along three stages:

- First, one calculates the basic consumption, which refers to all that was consumed under the given conditions of production, determined by the "market forces", as shown in the system of the national accounts. However, we may also take into consideration other aspects too, derived from the change of the private consumption structure and of the investments. The changes in these two items are deemed necessary in order to determine the information regarding the state of the economic welfare under the conditions of the autonomous character of the household activity.

- Second, the so-called deductible items must be calculated. They refer either to the economic activities which do not actually generate economic welfare but which are necessary for the maintenance of the welfare standard (defensive costs), or to the evaluation of statistical prognoses of the present production and consumption. The first group of activities includes the defensive ecological costs as well as the "social" costs, which show accounting difficulties; for the second group the calculation takes into consideration only those potential costs pertaining to the greenhouse gas effects or to the progressive depletion of the resources. The difference between the basic consumption and the deductible items generates a partial result called the gross indicator of the sustainable economic welfare (gross ISEW).

- Last, but not least, this result is weighted with an index of income inequality, either as the Gini coefficient, or as the Atkinson index, which produces the potential ISEW.

The critiques appear automatically.

At first sight, it may seem that ISEW would measure the sustainable economic and social welfare given the present socio-professional structure of the society and the state of the economic progress. Actually, it tries to measure both the production determined by the market, and the non-relevant production of the market, failing to take into consideration the premises mentioned in the beginning of ISEW analysis. Therefore, we may not speak of the sustainable economic welfare, but of an approximative estimation since there is no single way of measuring the economic welfare, this being one of the many possible variants. From this perspective, the incorporation of the "green" accountancy within the system of the national accounts might change the classical GDP into an ecologically-adjusted GDP.

Thus, the measurement of the sustainable development using ISEW method may be regarded as being prospective

b. Sustainable development from the socio-cultural anthropological perspective

The myth or the imagined model looks like a perception of a system formed of the elements of the surrounding economic and physical reality, on the one hand, and of the imagined ideal, on the other hand.

C.S. Holling, Peter Timmerman, Michael Thompson, and Steve Rayner are among the specialists concerned by the aspects circumscribed to the matter-concern binomial. They revealed the necessity of considering the cultural factors too, next to the economic and ecological factors (see Clark and Munn, 1986).

When analysing such ecological patterns of cultural inspiration, one must take into account that they actually and potentially generate a specific relativism in knowledge by the fact that the ideas about the sustainable development may be placed within different hypostases and configurations, limited, nonetheless. Thus, there are at least four possible situations, each pattern relying on specific hypotheses and imperatives regarding the approach of the ecological problems confronting the human society. Because each pattern deals with just one side of the surrounding world, a drop into the ocean, they should be accepted as being perfectible; they cannot be considered as the single point of view.

1. The individualist pattern

The first pattern claims that the nature is robust and that the economic system is merciful regarding the impact of anthropic action because nature is presumed to have enough resources.

Graphically, this pattern is represented by a sphere that is moving within a pool with two sides which actually reflect the fact that irrespective of the changes affecting the environment, it will always return to the bottom of the pool.

In this very accessible form the pattern approaches the subject of the global ecological changes supposing that the green technology is the only one that will prevent, correct and restore the social and ecological balances.

This is the individualist-autonomous point of view about the world; the invisible hand is the only regulating drive for this system.

This point of view is supported largely by companies and industrial branched adept of the ecologic-industrial transformation, being considered by experts such as James W. Dudley, as “leading branches of the values”, suggesting the idea of a plan of disseminating the “green” technologies via the market drive mechanisms. Thus, the institutions designed to manage the global ecological transformation promote market efficiency and environmental protection through the economic policy of *laissez-faire*.

2. The egalitarian pattern

The second pattern is totally opposed to the first pattern: nature is very frail, vulnerable to an irreversible collapse because of the ecological degradation or exploitation of the natural resources.

Graphically, this pattern is represented by a sphere in an unstable balance over the convex pool.

At this state, the pattern illustrates the ecological transformation as manifestation of the multiple environmental effects of the human activity.

The continuous development within a materialist conception is presumed to lead, ultimately, to the irreversible destruction of the planet. This point of view is essentially egalitarian and is supported by the ecologist movement, which claims the need for a radical change of the society. Such conception mitigates either for the return to nature, abandoning the industrial development, or for the development of a universal ecological code of strict moral principles.

The most convinced ecologists suggest a radical transformation based on the revaluation of the economic, political and social interdependencies and building harmony between man and the environment. As Eduard Goldsmith, founder of „The Ecologist”, says, ecology is the only support preventing a failure that would doom the world.

3. The hierarchical pattern

Within this acceptation, nature is considered robust, but within particular limits.

Graphically, this pattern is represented by a sphere which is rather stable in its central point, but the sides of the depression do not exclude that the sphere runs towards either side.

This point of view has a hierarchic-administrative significance, meaning that the ecological degradation and the use of natural

resources must be surveyed, administered by an institutional body. An ecological disaster may be avoided by an adequate scientific understanding of the ecological limits and using standard operational procedures. This view is widely spread in many countries and it aims at a particular bureaucracy that is to administer the process of ecological transformation.

The strategy proposed by the Brundtland Report is such an example, by the ecological transformation that may be managed „top-down" within an institutionalized framework, such as the UN, for instance.

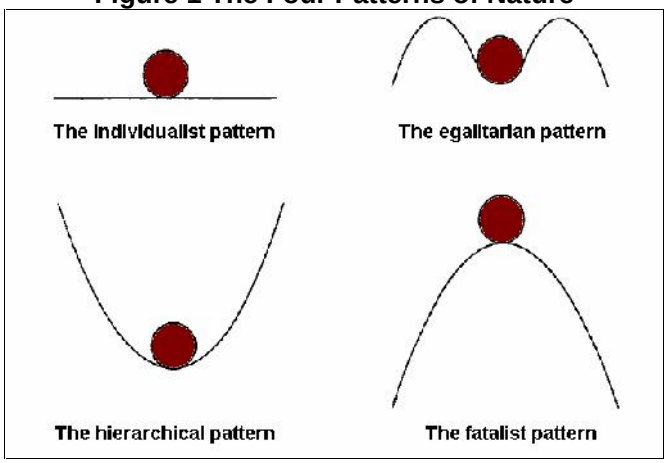
4. The fatalist pattern

This pattern considers nature as chaotic, unpredictable, doing as it pleases.

Graphically, this pattern is represented by a sphere which moves in any direction horizontally, with no vertical disturbances, advancing infinitely on the horizontal.

This pattern is essentially fatalist expressing the impossibility of a significant transformation or content transformation, life being led by odds not by work or skill. From obvious reasons, the followers of such opinion do not quite support their opinion because the management strategies are reduced to the survival of the strongest.

Figure 1 The Four Patterns of Nature



Source: C.S. Holling, in Clark and Munn (eds.), 1986

If one of the four hypostases would really be complete we might presume that all its opponents would trust that perspective either by testing it experimentally, of by accidental surprise.

However, these points of view show that the analysis of the relation between the society and the environment is particularly complex and invites to meditation and reflexion.

Depending on the conceptions on the perspectives of the environment, the different groups will fundament their own strategy on the sustainable development.

These views may receive both appreciation and criticism. It is important, however, that each of these patterns attempted in its own way to show the importance of being aware of the incertitude regarding the natural resources, the need to implement strategies for resources management and the important impact of the technical progress. Therefore, the topic of the sustainable development is rather difficult and it invites at contemplation, to the good and balanced understanding of the phenomena and processes.

3. Romanian contributions to the topic of sustainable development

The Romanian scientists too were concerned by the sustainable socio-economic development, with influences pertaining to the spirit of the time and to the specific field of activity.

Overall, the most reputed Romanian author is undoubtedly Nicholas Georgescu Roegen with his book “The law of entropy and the economic process” published in Romania too in 1971. Essentially, the author highlights the importance of integrating the economic science with other disciplines (mathematics, physics, biology and philosophy), within the context of approaching the economic and social development as complex process with an irreversible entropic-dynamic character, of considering the impact of the wastes and their incomplete recycling.

From another perspective, and under the influence of different circumstances, the opinion formulated by the economist Mihail Manoilescu (in Dinu, 1993) concerning the delicate issue of the economic development from the angle of making the budget. He highlights the essential aspects of the budget construction starting from two “extreme” acceptations – **budget balance at any cost** and the so-called **golden budget**. The first one shows that the

appreciation of the national currency and the conception of the budget balance at any cost with the purpose to "enhance the leu" were done by a formal balancing of the budget. Irrespective of the budget structure, the monetary construction selected its "victims of sacrifice" among the large mass of the producers, and the budget cut was "selecting" the political clientele of the state servants. A strange understanding of things can be noticed, where the misery of the producers is associated to the misery of the employers in order to achieve the objective of currency appreciation: "misery plus misery equals prosperity!" Such conception proved tragic at that time just because it underestimated the role of the state; the author considered it anti-organic, thus anti-political. The second "extreme" acceptation supports meeting the needs of the state at any cost and recommends paying the employees in gold, at least equally with the pay before World War One, by acknowledging the depreciation of the national currency in relation with the gold. In the opinion of Mihail Manoilescu, the conception of the budget in gold "overestimates the possibilities of the state, whose role is hypertrophic because it legitimates its exigencies independently of the level of energy and force of the national life at a particular moment". In other words, the first conception of the budget balance at any cost illustrates the image of the begging-state, while the budget-gold formula illustrates the image of the wasting-state. Given their hardly measurable impact on the Romanian society of that time, Manoilescu proposed the so-called "**budget of the maximal effort of the real power of the nation**".

Unlike the two points of view mentioned above, the new philosophy started from the necessity to appreciate the honest work of the people and to assume the responsibility of the state institutions as depository of a wealth of goods in the form of the cultural heritage of the nation and of the patrimony of the public, social institutions. The state is accountable for the material, patrimonial management within the limit allowed by the pace of the economic life as factor that determines the level of tempering state expenditure.

The essence of this conception highlights the idea that in principle it is only allowed to cover the budget deficit in relation with cashed revenues, while borrowing is not allowed for supporting the governmental administrative body. This imperative doesn't exclude borrowing itself; it only means that the money must be used for productive purposes, public investments, with education and culture

having priority; the public employees must be paid fairly for fair work. From this perspective, the duty to work together with becoming aware of the government's responsibility as manager of the national patrimony of traditions, monuments of human and national resources, may be essential characteristics which actually provide content to the sustainable development. **However, presently, it seems that the real economic substance has been sent to the back worldwide, while the speculation lacking any real economic content appears in the forefront, which leads rather to catastrophe than to development**.

The socio-economic development is not a mere technological process of administration and utilization of the natural physic resources; it is also relevant in the social plan, from the ontic and axiological perspective of the organic integration between the natural and artificial economic, social, cultural and educational environment. As Professor Gheorghe Manolescu highlighted, the natural, physic and human resources "continuously change their form and content within the context of a borderless asymptotic positive economic finality" (Manolescu, 2000).

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