

ECO PROFIT - A NEW DIMENSION OF SUSTAINABLE DEVELOPMENT IN ECONOMIC AND FINANCIAL ANALYSIS

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Abstract:

The paper begins with a review of theoretical concepts including a conceptual delimitation of the term "sustainable development" from the first definition given in 1987 to concrete implementation of EU law and develop a strategy in this regard.

Aim of the work is to emphasize the importance of the transition from an economy focused on obtaining maximum profits in a responsible economy, which does not exclude profit, but prioritizes basic maintenance of ecological balance.

The innovative character of such a theoretical-methodological approach is limited only by the practicality of implementing the macroeconomic and microeconomic level.

It is noteworthy, however, increasing research activities in this field of sustainable development literature study clearly reflects a new direction in the economy, the paradigm shift is expected by all professionals, but was seriously hampered by the financial crisis.

Serious impetus was given to research done by the German company Puma, launched in 2010 through the development and publication of a profit and loss "green", taking into account the impact of the natural environment over activities, impact measured clear and published in financial statements of the company.

Starting from these considerations, I propose in this paper, introducing the term ECOPROFIT or profit obtained under maintaining fundamental ecological balances, justifying the need for, and practical possibilities to implement this concept in economic and financial analysis, accounting and fiscal management economic entities by developing a model of differential taxation of profits, depending on the impact the entity's economic activities on the ecological balance.

Key-words: *eco profit, sustainable development, income tax, ecosystem maximum profit.*

JEL Classification: *O11, O12, Q01, Q51, Q53, Q57, M41.*

1. Introduction

The concept of sustainable development has been widely introduced by the World Commission on Economic Development and the United Nations environment (1987). [6]

The report known as the "Brundtland Report", defines sustainable development as development that meets the requirements of the present without limiting the aspirations of future generations.

Sustainable development is a long term process and focus on immediately, it may have long-term negative consequences (Peter Brandon, 2012). [3]

At EU level, sustainable development has become objectively taken since 1997, when it was included in the Treaty of Maastricht.

In 2001 the Sustainable Development Strategy was adopted in Gothenburg, which was added in 2002 to Barcelona, the external dimension, and in 2006 was adopted the Sustainable Development Strategy of the European Union revised.

The 7 priority axes of the European Union Strategy for Sustainable Development reviewed in 2006 are [7]: climate change and energy, sustainable transport, conservation and natural resource management, sustainable consumption and production, public health, social inclusion, demography and migration, global poverty and sustainable development challenges.

Sustainable Development Strategy of the European Union aims to "achieve continuous improvement of quality of life" and the emphasis is thus on supporting the improvement of human welfare. Sustainable development is less a search for a balance, being a dynamic concept which recognizes that changes are inherent in human societies. [2]

The concept of sustainable development should be differentiated from that of sustainability. "Sustainability" is the property of a system by which it is maintained in a particular state over time.

The concept of sustainable development refers to a process involving changes or development.

There are people who go over the issues raised by biotechnology and sustainability, due to a lack of knowledge, and an unjustified views that there is a price to pay for this alternative approach (Siham and Liddle, 2011). [5]

In our country was adopted in 2008 National Strategy for Sustainable Development of Romania, which proposed the following strategic objectives in the short, medium and long term: incorporating the principles and practices of sustainable development into all programs and policies of Romania as a member of EU, achieve the current average level of EU countries in key indicators of sustainable development, significant near Romania's average that year of EU countries in terms of sustainable development indicators.

1.1. The Sustainable Society Index

Sustainable Society Index (SSI) is a new index, which manages to integrate for the first time the most important aspects of quality of life and sustainability of national company.

ISD was calculated for 150 countries based on data from various scientific institutes and international organizations.

ISD scores obtained allow a quick comparison between countries - with updated versions every two years - indicated by these countries over time.

In 2008 it published first Sustainable Society Index for Romania. The main structure of ISD consists of 22 indicators, grouped into 5 categories (Table 1).

Table 1. Sustainable Society Index Structure

Nr.	Indicator	Score
1	Healthy Life	7,2
2	Sufficient Food	10,0
3	Sufficient to Drink	5,7
4	Safe Sanitation	9,4
5	Education Opportunities	7,7
6	Gender Equality	8,1
7	Air Quality	6,0
8	Surface Water Quality	2,9
9	Land Quality	3,9
10	Good Governance	5,2
11	Unemployment	5,4
12	Population Growth	8,3
13	Income Distribution	7,4
14	Public Debt	8,3
15	Waste Recycling	2,1
16	Use of Renewable Water Resources	8,9
17	Consumption of Renewable Energy	1,3
18	Forest Area	7,0
19	Preservation of Biodiversity	4,2
20	Emission of Greenhouse Gases	5,5
21	Ecological Footprint	6,0
22	International Cooperation	8,3

Source: <http://www.romaniadurabila.net>

The general score obtained by Romania in the SSI-Romania-2008 is 5.7 on a scale of 0 to 10.

1.2. Profit and Loss Account "green"

PUMA is the second largest sportswear manufacturing company in Europe and third in the world.

PUMA collaborated with PricewaterhouseCoopers and Trucost to conduct the first Environmental Profit and Loss Account (EP&L) for 2010, published in 2011.[4]

The EP&L serves as a strategic, risk management and transparency tool. The account quantifies the value of ecosystem services and the negative impacts, focusing on GHG emissions, water use, land conversion, other air pollution and waste resulting from core operations and along its entire supply chain. Environmental impacts were valued at € 145 million for 2010.

Only € 8 million of this total derived from PUMA's core operations, and the remaining € 137 million from PUMA's external suppliers. PUMA is heavily reliant on the use of water for the production of raw materials and their processing.

By recognizing the extent of economic risk derived from negative environmental impact PUMA is able to quantify the benefits of integrating sustainability into its global supply chain

The main output from the EP&L is the quantification of the value of the environmental impacts (€ 145 million for 2010), which present an economic risk from environmental factors such as water availability, rising raw material costs and further constraints in production.

In practical terms this amount would translate as a negative financial impact on business. Using the tool (EP&L) allows PUMA to reduce this financial loss thus strengthening its operating margin through an early view of emerging risks, enabling the company to respond strategically to protect long-term shareholder value.

2. Eco profit - necessity, impact, implementation

The new paradigm of sustainable production economy requires rethinking some of its basic theories. Production of goods in quantities not getting older, but the real "useful" in terms of quality of life should be the new paradigm, not maximizing profits, but their balance.

Constant search for new sources of profit was always motivated by the need to survive in the market. Agriculture used the same business model as the industry, transforming traditional agriculture into a farming business (agribusiness) in pursuit of maximum profits.

Fundamental characteristics of industrial design to which we refer are simplification and mechanization. Profits were mediated by industrialization naturally associated with each concept of the economy, such as division of labor, opportunity costs, comparative advantage, economies of scale.

Peter Drucker believed that we are in the midst of a great transformation, the transition from industrial society to post-industrial society (Drucker, 1994). [1]

Any system that degrades the environment must lose the ability to produce, he losing the value society should recognize him.

Economic viability requires maintaining control over resource use. An entity can not survive economically loses sustainability feature. Sustainable development (sustainable) in the economy must integrate three main goals: environmental health, natural, economic profitability, social and economic equity.

Analysis profit obtained by an economic entity, regardless of size or type, requires, in the globalized economy and accession to the principles of sustainable development, a strict delimitation of the concept of profit in the classical sense by the concept of eco profit or "profit obtained in the ecological conditions".

Under these conditions, economics in general and particularly economic and financial analysis must fundamentally rethink traditional concepts of profit and profitability in the economy, by considering the fundamental causes capable of destroying ecosystem restoration capacity.

Eco profit is able to provide the current viability of a business, legitimate economic future usefulness of its products, especially the maximum possible reproduction of existing environmental conditions a priori in that area.

Eco profit not exclude the gain, but is limited to a reasonable level for investor and human society, to which it belongs, a voluntary renunciation of profit in favor of the natural balance of nature preserve future profits of the investor.

Thus, between the notion of profit and time horizon considered for running a business there is a causal link.

This causal link make always long-term profit to coincide with eco profit and short-term profit to represent a maximum profit. Going forward the causal thread, long-term profit appears as a responsible company and short-term profit as irresponsible.

Must be scientifically established standards generally accepted in the world, in terms of minimum limits, including a man-modified ecosystems may be "natural balance". Allows post-industrial society "transformation" of natural ecosystems in the intrinsic capacity faster than their natural recovery, where the emergence of numerous natural disturbances.

Categorization of natural ecosystems as natural support human activities aimed at obtaining maximum profits reduce and even cancel importance which they presented in complex natural and anthropogenic factors that contribute effectively and significantly to the production of economic goods.

Endowed with a amazing capacity of self regulation, these ecosystems are particularly vulnerable to sudden intervention of the anthropogenic factor, can control external balances being much less damaged than internal power their recovery.

Planet on which we live is a wonder of diversity, so in this courageous enterprise, must started from a minimum standard, applied and recognized universally.

Once established this standard, you can easily adjust the activity of economic entities, so that the final state of the environment in which it exists is as close to its original state (the perfect natural balance).

So we can determine the maximum values of production of economic goods (different from case to case) threshold for natural balance, which is capable of overcoming the natural balance of each ecosystem break in hand, and long-term quantitative decrease and especially the quality of production (when production is based on natural productive capacity of the environment).

If the ecosystem is simply support the natural production of economic goods is not irrelevant, because the entity permanently interact with their natural environment, of purely ecological imbalances sooner or later affect the efficiency of productive entities.

Unlike the theory, practice putting obstacles obvious nature of these goals just application, especially in countries where the theory of maximum profit is more tempting than sustainable economy in the long run (the case of developing countries).

So if short-term activity is diagnosed as profitable provided that the income substantially exceed their costs incurred to obtain in the long term the equation changes.

In the long term we determine eco profit, follows:

$$\text{ECO PROFIT} = \text{total natural justified revenues} - \text{total expenses}$$

Natural justified revenues are revenues whose realization is able to cover the expenses incurred, plus the value required to emit a restart at least the same level of above production process, continuing the natural balances fundamental ecosystem own question.

No doubt, however, that the issues raised by ECOPROFIT are particularly complex in bringing important changes in the economic, social, political and especially religious society.

Eco profit notion of targeting macroeconomic side, overall and microeconomic side related to practical application in each economic entity concept. Macroeconomic side harmonizing tax legislation as environmental legislation.

In the long run, the correct application of sustainable economy (and the renunciation of maximum profit in favor of the eco profit) state budget that will be more balanced and can count on the resources of nature and the tax on dividends, less high as value, but what is, in my opinion, fundamentally - term certain collectible.

How the phenomenon of saving money is recognized by all economists as a source of healthy growth, I can say with responsibility that voluntary renunciation of profit that natural disturbances causing obvious (possibly obtained shorter intervals of time) in favor of the obtaining ecological profits high times, saving money is the natural equivalent ".

Economic and financial analysis have to capture those direct and indirect factors whose influence can cause profiting justified in terms of natural (organic), especially those that can generate through their influence causal or accidental deviations from this principle durability.

Sphere of economic and financial analysis of the economic entity, extending from the result itself to the environment they have created, and the pursuit of financial balances to the complex balance, financial and environment.

Starting from the considerations set out above, should that economics, not only, to find models to quantify the overall losses in a particular ecosystem as a result of mindless environmental interventions, and the manner of intervention (administrative arrangements, tax, etc..).

Implementation of these goals can be solved in two ways:

- a) the establishment of a universal tax on the profits made from activities with obvious negative impact on the natural balances in the form of differentiated rates depending on the degree of intervention on the ecosystem (relatively, medium, serious, dangerous)
- b) increase at the level of share of each country's tax (also to profit from activities with obvious interference in ecosystems balances) at a rate determined by the additional economic impact

of these on the overall environmental balance in that country or geographical area in question).

In the second mode, that impact can be determined based on models aimed at changing the general environmental conditions in a particular geographical area, as a result of this complex natural resource by a particular entity in a particular economic time. Such a model can be summarized as follows:

$$P_{net} = P_{imp} - I_p$$

$$I_p = P_{imp} \cdot (C_i + K_e)$$

P_{net} - net profit, P_{imp} - taxable income, C_i - tax rate established under the laws of each country, K_e - additional rate tax (for obvious natural imbalances generating activities).

Of course the most laborious part is the determination of the value, closer to reality, for additional tax rate (K_e).

A model for determining the amount of additional tax rate (K_e) can have the following form (Table 2):

$$K_e = a\% + b\% + c\%$$

Table 2. The value of additional tax rate

Symbol	Explanation	Values (%)		
Impact on the ecosystem level:				
a %	Relative		1	
	Medium		3	
	Serious		10	
	Dangerous		50	
Recorded history causing ecological imbalances:				
b %	Medium imbalances		5	
	Major imbalances		10	
Clearly defined disease frequency:				
c %	Low		1	
	Medium		2	
	High		5	

Thus, if entity A (Table 3) recorded at the end of a financial year N, a taxable profit of 500 million RON, and the impact of this company on the ecosystem can be classified as follows:

- impact on the ecosystem level (serious = 10%),
- recorded history causing ecological imbalances (imbalances medium = 5%),
- clearly defined disease frequency (high = 5%).

Thus, if entity B (Table 3) recorded at the end of a financial year N, a taxable profit of 500 million RON, and the impact of this company on the ecosystem can be classified as follows:

- degree of impact on the ecosystem (dangerous = 50%),
- recorded history causing ecological imbalances (major imbalances = 10%),
- clearly defined disease frequency (high = 5%).

Table 3. Determination of net profit according to K_e

Specification	Entity A	Entity B
Pimp (RON)	500.000.000	500.000.000
C_i	16%	16%
K_e total, of which:	20%	65%
A	10%	50%
B	5%	10%
C	5%	5%
($C_i + K_e$)	36%	81%
I_p (RON)	180.000.000	405.000.000
P_{net} (RON)	320.000.000	95.000.000

And finally net profit economic entity A will be of 320 million RON.

In the absence of additional rate tax (20%) would have recorded a net profit of 420 million RON, that is 100 million RON more.

In the case of entity B, if additional tax rate was 65%, and the net profit only 95 million RON. So entity B should pay a tax of 405 million RON (with 325 million RON more, than the absence of additional rate), which should at least in theory, to discourage the anti ecological behaviors.

Conclusions

Issues raised by sustainable development is complex, shareholder opposition is quite evident in most cases, it involves reducing short-term profits and hence dividends.

Developing models to capture and to potentate the positive effects of development that takes account of the environment is a challenge for researchers, most results are evident today in the organic agriculture, but there are sufficient indications that, the industry is reposition to this overall goal.

Such models do not solve the problem itself, how the state will use additional proceeds for the purposes of allocating their environmental projects of national political interests, is often under the influence (short term).

Economic entities use their interrelated activities or geographical areas jointly in this case should be set as close to the reality of the impact of each entity separately, according to their share in the general activities of the area, or based on market share of each of them.

The model presented in this paper is only the tax implications on the management of economic entities, thus trying to encourage development that takes account of environmental ecosystems.

Is undoubtedly a first step in this direction, a challenge for researchers, and future developments in the global economy will be decisive for such research.

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