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Emerging Markets Queries in Finance and Business

## A model of green investments approach

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### Abstract

In the European economy weakened by financial crisis and increasing global competition in business the sustainable business approach is considered to be the best solution. For many Romanian companies growing green is still a challenge. In this respect, the study's aim is to draft a model of green investments approach having in view eight sustainable relevant drivers and the underlines the implications of the green investments approach. The paper concludes with several recommendations for organizations necessary to move on from passive actions to active approach regarding the green investments in Romania.

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### 1. Literature review

Green investments are practically considered as being the expenses an organization is making for a positive impact on the environment. It includes the harming avoiding of the environment and restoring and maintaining the natural capital (renewable energy, bio fuels, forests, bio food and many others). The whole world is implied in different projects to make steps ahead in this field, moving towards the green economy, seeking for finding and implementing solutions by using equipments that lead to carbon neutral, advising the managers to control the technologies and training the people to respect nature and to develop the social responsibility. "Traditionally, private investment has come from the venture capital world, which typically has the requisite patience to invest in many projects for as long as the 10-year life of venture capital funds. More recently, this

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area of investment has attracted large hedge funds... It is estimated that the carbon credit-trading market may reach \$3 trillion by 2020". (Fusaro, 2008). Other authors are considering that the power sector becomes a net recipient of subsidies to support the absorption of the green house gases (Carraro et al, 2012).

The investment behaviour has strong dynamic characteristics influenced by invested fund, economic benefit, social effect, market demands, the governmental policy and so on (Hongwei et al, 2012). But, the sustainable investors might be concerned with climate change, alternative energy, human rights, diversity, community investing or other issues (Woll, 2013). In addition, the complex global business environment in which corporations operate today forces the managers to explore the perspective of the increasing corporate social responsibility (Werther and Chandler, 2011). Relevant models related to green investments have been proposed by the Millennium Institute (Basl, 2009), included in the UN environment program in 2011, however many models do not consider climate benefits and generally also co-benefits of mitigation measures, or equity issues (Metz et al, 2007).

The green investments' subject has been studied in different fields by surveys, as well (Inderst et al. 2012; Vas et al., 2011 and many others) emphasizing organizations and people perception on 'green' approaches.

In this context, it is useful to analyze the Romanian framework of the green investments and to draft a specific model. For many Romanian companies growing green seems to be a dream, knowing that important investments are needed to contribute to the low-carbon emissions, to identify low risk opportunities of development and to ensure confidence in the flow of finance.

The organizations' policies and strategies are mainly focused on investments in equipment for controlling the emissions, to recycle the materials, to reduce the natural resources consumption and waste, to label green products and so on, but, never the less, the green market offers greater opportunities for the green investment.

## 2. Purpose of study

The study's aim is to draft a model of the green investments approach in Romania, having in view eight sustainable relevant drivers, and to underline the main implications of the investments in the green economy for the organizations.

## 3. Methods

This paper is based on a survey questionnaire study conducted during February 2013, addressed online to 75 organizations acting in Romania, that are considering themselves belonging to the green industry (Portal, 2013). The questions have been addressed to the organizations' top management.

This paper is related with two Likert scale questions analyse:

- To what extent is considering that the sustainable drivers supported organization's changes to green by investments in order to respect the UE environment requirements and the environment protection standards?
- What is the opinion regarding the implications of organizations' investments in going green?

A number of 72 answers have been valid (96%) and is forming the sample.

Being a qualitative research, the sample has been formed by combining the purposeful sampling (belonging to the green industry) with the convenience sampling (availability and ease of the contacts) (Koerber, McMichael, 2008) and the process is not a random one. The answers have been statistically processed and the main findings are presented below.

The sample organizations' distribution by size is about balanced (54.2% large companies and 45.8% SMEs), as the main criterion used for the large companies is the number of employees being over 250. As According to the NUTS II level Romania is divided into eight development regions. All regions are represented in the sample with a distribution between 5.6% - 22.2%.

The organizations' answers distribution by industry is presented in the table 1.

Table 1. The organizations' distribution by industry

Industry	Frequency	%
Industrial processing	31	43.1
Merchandising	7	9.7
Transportation	7	9.7
Banking & Assurance	6	8.3
Construction	5	6.9
Agriculture	5	6.9
Energy	3	4.2
IT & Communication	2	2.8
Education	2	2.8
Others	4	5.6
Total	72	100.0

As the table 1 emphasizes, 43% of the sample answers are belonging to the industrial processing sector of the Romanian economy, such as: automotive, pharmaceutical, chemistry and others.

#### 4. Findings and results

The drivers have been included in the first question, the interviewed manager having the possibility of a free answer, as well. The statistics of answers are briefly presented in fig. 1.

As the fig. 1 emphasizes, the 'top 5' of the drivers that influences more than 60% the process of the organizations' investments to change to green is composed by: the market competition, the scarce material resources, the new government regulations, the smart technologies and the knowledge and innovation. The low carbon energy (37%), the green culture (22%) and the green finance (5%) have has a lower influence in the investments process. The free answer has not provided relevant issues.

These results are influenced by the industry sector the organizations' belong presented in the table 2.

The way the considered drivers are influencing the green investments in Romania is briefed described below:

- Market competition

Since Romania is part of the European Union the market competition is elevating. The international companies entered the domestic market by direct investments or the joined companies and their strategies for going green are transferred to the local branches. In order to face the competition the companies are implementing the environment protection standards.

- Scarce material resources

The scarce material resources determined the companies to save the materials by recycling, remanufacturing and other sustainable activities.

- New government regulations

The Governmental policies lead to align the national laws and regulations regarding the environment protection to the EU's requirements. In addition, the Government strategies provide for partnerships in the sustainable development investments with foreign Governments and domestic private sector.

- Low-carbon energy

More organizations are using the cleaner energy sources and never the less the opportunities for using green energy are going to be developed.

- Smart technologies

After a short period of time in the '90s, when the domestic companies used to purchase second hand technologies, in the present the companies' trend to acquire and use the higher world level of technologies to ensure the productivity, as well as the environment protection and recovering.

- Knowledge and innovation

Once the international companies entered the Romanian market the knowledge regarding sustainable development and the need for investments in the assets have been transferred. Many training programmes also have been organized for the green knowledge providing. The innovations in the new green products, technologies and processes also have been elevated to face the growing market requirements.

- Green culture

The culture for the green investments has been transferred with the foreign investments. The national culture is still in progress of transformation and this process takes time.

- Green finance

The main activities that have been developed in the last 20 years in the services sector are the banking and assurance ones, but the green investments financing is still low.

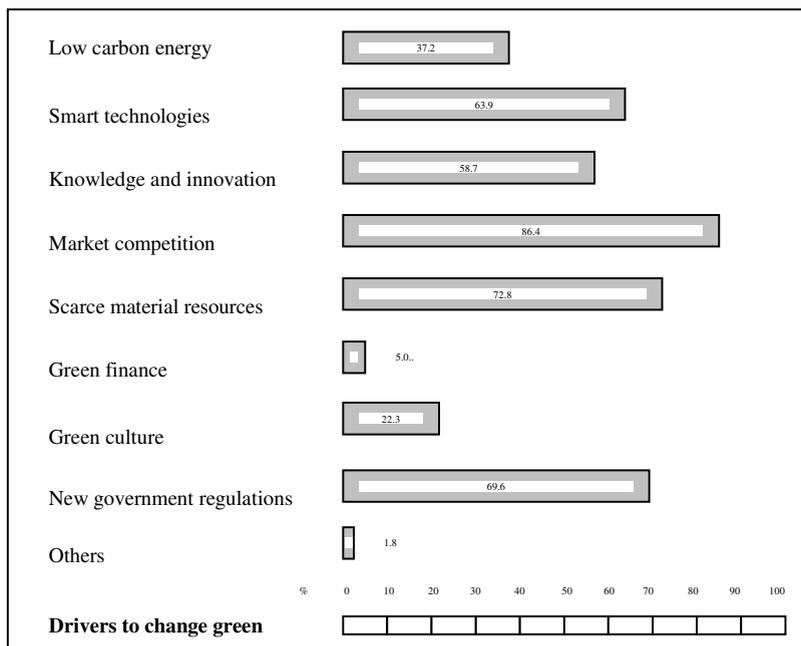


Fig.1. Weighted drivers to change green

The second question considered relates to the implications of investments in the green economy. The answers are briefly presented in table 2. As the table 2 underlines, the main green investments implications could be found in the new consumer markets (33%) and the higher investments value (19%). The SMEs' stability represents about 19% and the new jobs creation only 14%. Also the green investments determine the organization's management to apply new policies in reducing carbon (11%). Nevertheless the companies' social responsibility has enough room to be developed, representing in the sample only 7%.

Table 2. The organizations’ distribution by the green investments implications

Green investments implications	Frequency	%
New consumer markets	24	33.3
Higher investments value	14	19.4
Stability for SMEs	10	13.9
Jobs creation	9	12.5
New policies in reducing carbon	8	11.1
Social responsibility	5	6.9
Others	2	2.8
Total	72	100.0

Having in view the relevant sustainable drivers and the implications of investments in the ‘green’ that have been considered in the questionnaire, i.e. low-carbon energy, smart technologies, knowledge and innovation, market competition, green buildings, green finance, green culture and new government regulations, the ‘Green Investments Model Approaches’ has resulted (fig.2).

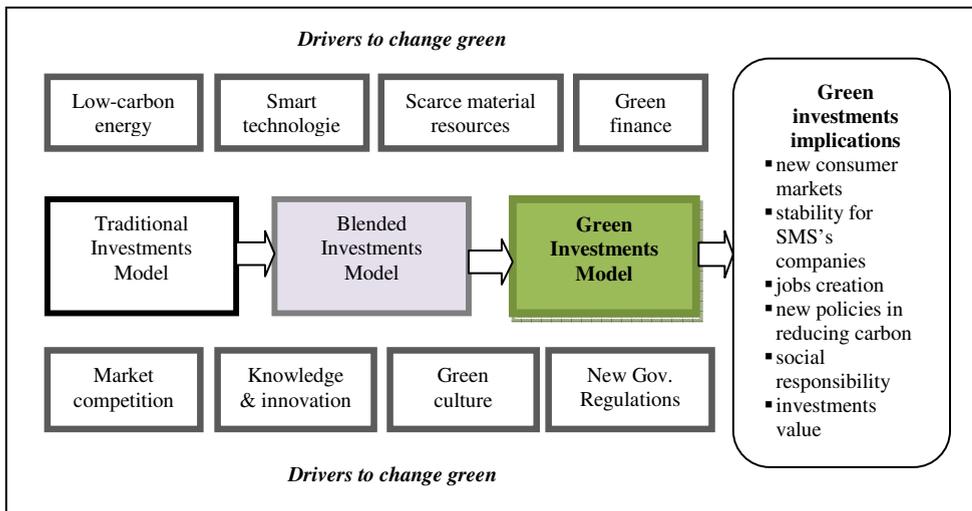


Fig. 2. The “Green Investments Model Approaches”

The drivers considered have influenced the investments models in the green industries and the change of the investments processes from the traditional model to the blended model and finally to the green model. The Green Investments Model Approaches (GIMA) is proposed to be a framework for further studies and management strategies design.

**5. Conclusions and Recommendations**

The study is offering an overall image regarding the green industry sector in Romania. The research has not been focused on the sample representatives, but to the obtaining a general view on the selected subject. The two

questions analyzed in this paper underline the main drivers that have influenced the development by investments in the green industry. The main drivers considered by the interviewed organizations have contributed to the process of organizations' investments to green in different weights. These results may be considered for further studies. However, the implications of green investments approach might be found in forming new consumer markets, ensuring stability for small and medium sized companies, developing new policies in reducing carbon in order to maximize the value of investments and greater social responsibility.

Several recommendations for organizations necessary to move on from passive actions to active approach regarding green investments in Romania are given below:

- creating new jobs, as the unemployment rate is still high;
- greening the industries, based on the using of the clean energy;
- developing the ecosystem services sector;
- developing the organizations' social responsibility with the implication of the communities on the environment protection and recovering.

Besides, it is an urgent need for the Parliament to adopt a new law of green investments support by tax-breaks and subsidies with the condition of the new jobs creation.

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