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Section I

**ECONOMIC DEVELOPMENT  
DURING AN UNCERTAIN, OBSCURE CLIMATE**



# THE ABSORPTION OF EUROPEAN FUNDS FOR THE ROMANIAN ENVIRONMENTAL SECTOR

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## **Abstract**

*This paper shows the impact of grants on the importance of access to funds to protect the environment and the structural funds absorption environmental sector in Romania.*

*Study research methodology is based on references to achieve the objectives pursued in this article.*

**Key words:** *European funds, absorption, access grants, environment, finance*

**JEL Classification:** M42

## **Introduction**

Environmental protection has emerged as humanity's only problem today, that when man conquered the entire area of the Earth, favorable life. Now, wealth and energy resources have been affected to such an extent that it sees the rapid depletion of some of them, and some essential conditions of human existence as water or air, signs of poisoning. Deduct the possibility that the future of humanity is questioned, if course not taken action to protect the planet. The man understood that he is part of nature, the Earth and its resources are limited, that the planet functions as a system and that the disturbances produced in one place can have repercussions for the entire circuit, including humans. Humanity can't give up but at high rates of economic development. The way to achieve these rates, while maintaining good environmental quality is exploitation so that they can regenerate and conserve the time.

Environmental protection initiatives first appeared about 200 years ago, the need to save endangered species. In time, reasons for the nature protection have diversified.

Since 1970, there were clear signs of disease on the planet: ozone depletion, global warming, acid rain, water pollution, air and soil. People began to understand the need for responsible behavior towards nature. But man's responsibility for

protecting the environment is so individual, especially collective: Nature undertake cooperation and mutual support local, county, national and especially international (Serban, 2011).

By joining the European Union, Romania has structural and cohesion funds, financial instruments designed and contribute to reducing economic and social disparities between EU Member States. For environmental infrastructure development and expansion, Romania benefits from the European Regional Development Fund and Cohesion Fund.

European Regional Development Fund to help eliminate regional imbalances in the Community, reducing the gap between the development levels of various regions and by leveling the less favored.

Cohesion Fund supports Member States to reduce differences in economic and social development and stabilize the national economy.

Accessing EU funds is subject to the preparation by Member States of official documents indicating areas for financial support from the EU.

EU grants allocated to certain countries through various programs. In Romania these funds for environmental protection are achieved through the Sectorial Operational Programme Environment.

Environment Sectorial Operational Programme is the document that sets strategy for the allocation of European funds for the environment sector in Romania, 2007-2013. The program was approved by the European Commission on 11 July 2007.

The total budget of SOP is about 5.6 billion euro, of which 4.5 billion is grant of the European Union and over 1 billion Euro national contribution is. The program was developed by the Ministry of Environment, as Managing Authority for SOP (SOP Environment). The program period is 2007-2013, its objectives and development needs of Romania after 2013, with investments that lay the foundations of sustainable development in environmental infrastructure.

### **SOP Environment**

Environment Sectorial Operational Programme (SOP) is closely linked to national strategic objectives set out in the National Development Plan (NDP) 2007-2013 and developed the National Strategic Reference Framework (NSRF), which is based on the principles, practices and objectives pursued at EU level. SOP is designed to lay the foundation and catalyst for a more competitive economy, a better environment and more balanced regional development. SOP is based on the objectives and priorities of environmental and infrastructure development of the European Union, reflecting both Romania's international obligations and the specific national interests. SOP continues the development of the environmental infrastructure at national level. Strategies were initiated in the pre-accession assistance, in particular the Phare and ISPA. In addition to infrastructure development through SOP is aimed at establishing effective management structures of the relevant services in terms of environmental protection. Also, SOP interventions in areas far less discussed, and efficient urban heating systems, risk prevention, reconstruction or implementation of Natura 2000 management plans.

The overall objective of SOP is to protect and improve the environment and living standards in Romania, aiming at compliance with the environmental acquis.

The objective is to reduce the gap between European Union and Romania on environmental infrastructure in terms of both quantity and quality. This should be translated into effective public services, taking into account the principle of sustainable development and the principle of "polluter pays".

SOP Specific objectives are:

1. Improving quality and access to water and wastewater infrastructure, by providing water supply and sanitation in most urban areas by 2015 and the establishment of effective regional structures for the management of water / wastewater.

2. Development of sustainable waste management by improving management and reducing the number of historically contaminated sites in at least 30 counties by 2015.

3. Reducing negative environmental impact and mitigation of climate change caused by heating systems in most polluted localities by 2015.

4. Protection and improvement of biodiversity and natural heritage by supporting protected areas management, including the implementation of Natura 2000.

5. Reducing the risk of natural disasters affecting the population, by implementing preventive measures in most vulnerable areas by 2015.

Technical Assistance (TA) will support the implementation and monitoring program and will contribute to achieving global support and specific objectives.

The program covers the period 2007-2013, but its objectives the development needs of Romania after 2013, by laying the foundations for sustainable economic development. POS will help fulfill the obligations that Romania has in the environment sector, offering investment opportunities in all regions of the country. The starting point for POS is the analysis of the current situation of the environment in Romania.

This is followed by the SWOT analysis, which is built based development strategy. SOP contains a description of the priority axes, areas of intervention and identification of projects and provisions for implementation.

Develop SOP was developed by the Ministry of Environment and Sustainable Development, as Managing Authority for SOP Environment, under the Ministry of Economy and Finance, the Authority for Coordination of Structural Instruments in collaboration with central, regional and local authorities and other partners involved in this field.

SOP is one of the seven operational programs under the "Convergence" objective for the programming period 2007-2013. SOP has been prepared in accordance with the third priority of the NDP 2007-2013 – "Protection and improvement of the environment", and the NSRF Priority 1 – "Development of basic infrastructure to European standards". SOP contains essential elements for successful implementation of the NDP and NSRF in environmental protection, basic objective is to promote sustainable development of the country.

Given the connection link between the environment and other economic and social sectors, SOP has been developed in close conjunction with other operational

programs and has taken into account to avoid duplication, achieve complementarity between programs and compliance with the Lisbon objectives.

SOP Development has considered the provisions of the communitarian acquis concerning the general procedures for the management of EU funds in 2007-2013, as provided for in Council Regulation (EC) Nr. 1083/2006 laying down general provisions on the European Regional Development Fund, European Social Fund and Cohesion Fund, repealing Regulation (EC) Nr. 1260/1999 and Commission Regulation (EC) Nr. 1828/2006 which lays down rules for the implementation of Commission Regulation no. 1083/2006 and Regulation Nr.1080/2006.

Funding areas to be supported by SOP Nr. 1080/2006 comply with the Regulations of the European Parliament and the Council on the European Regional Development Fund and Council Regulation Cohesion Fund no. 1084/2006. National and EU regulations and plans and programmatic environmental documents were also used in the preparation of SOP Environment.

### **Financial needs assessment for environmental investments**

In the process of developing plans to implement the environmental acquis, MESD has assessed investment needs to comply with EU environmental legislation in 2018 (coinciding with last year transition period granted to Romania) about 29 billion euro, of which approx. 18 billion is needed over the next seven years.

PHARE Technical Assistance for Environmental Assessment of costs and investment plans (RO 0107.15.03) project completed in 2005, confirmed the estimated cost already added additional estimates for operating costs increased. These estimates will be regularly updated once the detailed investment plans will be available in each region / county.

For 2007-2013, Romania intends to contribute about 4.5 billion FSC investment in the environmental contribution is well below the estimated needs for the same period.

The strategy also recommends measures to strengthen administrative capacity to mobilize private sector development and increase capacity of the portfolio of projects and to mobilize funds to finance projects at national and regional level.

### **The absorption of EU funds for environment of Romania**

Romania's EU allocates the amount of 4512.47 million for the Sectorial Operational Programme Environment 2007 - 2013. By Romania on March 18, 2011 according to data published on the website of the Romanian government, has absorbed only 8.18% (e.g. EUR 369.28 million) of the total allocation for SOP Environment, as shown in the table below.

Table no. 1

### Absorption of fund grants

Operational Programme	UE allocation of funds (millions of euro)	Payments to beneficiaries (millions of euro)	Payments to beneficiaries (millions of euro)	Unabsorbed funds (millions of euro)	Unabsorbed funds share	Unabsorbed funds share
POS Transport	4.565,94	474,88	113,93	4.452,01	97,50	2,5
POS Environment	4.512,47	1.539,28	369,28	4.143,19	91,82	8,18
PO Regional	3.726,02	3.064,01	735,07	2.990,95	80,27	19,73
POS human resource development	3.476,14	2.567,30	615,91	2.860,23	82,28	17,72
POS economic competitiveness	2.554,22	1.291,84	309,92	2.244,30	87,87	12,13
PO administrative capacity	208,00	55,91	13,41	194,59	93,55	6,45
PO technical assistance	170,24	52,85	12,68	157,56	92,55	7,45
<b>TOTAL</b>	<b>19.213,04</b>	<b>9.046,07</b>	<b>2.170,21</b>	<b>17.042,83</b>	<b>88,70</b>	<b>11,30</b>

Source: www.gov.ro

As can be seen from the table 2 below to 30 July 2011 for SOP Environment 440 234 projects submitted were approved, of which 208 projects were financed with the amount of 2077.56 million.

SOP number of projects is only 1.52% of the total number of projects submitted and the total projects submitted, only 53.19% were approved.

Table no. 2

### Situation of projects submitted, approved, contracts and payments during 2007 – July 30, 2011

OPERATIONAL PROGRAMME	PROJECTS SUBMITTED	PROJECTS APPROVED	Agreement / decision FINANCING	PAYMENTS TO BENEFICIARIES (total million)
POS Transport	96	51	46	552,02
POS Environment	440	234	208	2 077,56
PO Regional	7 833	2 190	1 855	3 814,34
POS human resource development	10 166	2 894	2 116	3 209,84
POS economic competitiveness	9 037	2 730	1 859	1 538,91
PO administrative capacity	1 305	332	315	76,18
PO technical assistance	87	74	69	72,92
<b>TOTAL</b>	<b>28 964</b>	<b>8 505</b>	<b>6 468</b>	<b>11 341,77</b>

Source: www.gov.ro

From table no. 2, we can see that the SOP is ranked second to last place on the submission of projects for the absorption of EU funds grants. Filling a small number of projects like environmental program may be a consequence of the fact that companies can access these funds is relatively low in Romania. Most beneficiaries can access these funds is the Romanian state institutions namely Intercommunity Development Associations (IDA) represented by regional operators, Intercommunity Development Associations (IDA) represented by the County Councils, local authorities or, in some cases, the service operators district heating, administrators and custodians of protected areas, Regional Environmental Protection Agencies (REPA's), Environmental Protection Agencies (EPAs), public authorities, NGOs, research institutes, universities, museums; National Administration "Romanian Waters" (ANAR) is the sole beneficiary of the project financing for the sector. From here the authors draw two conclusions:

1. Whether those responsible for accessing funds are not competent for the position they hold;
2. Whether the Romanian state is not interested to give people a cleaner environment.

### **Conclusions**

The environment provides us the necessary conditions of life, but it depends on us whether we want to use these as useful or essential if we want to bypass this aspect of our lives. Planet pollution worsens by the day and it seems that although we can attract a lot of European funds to improve the environment, authorities do not give much interest this harmful process. The transition from being a simple ecology scientific discipline problem in the common consciousness, national and international, is a sad reality today, when the natural balance of the entire planet destruction is imminent. Fight against pollution entire planet require international collaboration and cooperation and therefore depends on us if we live in a clean, healthy and unpolluted.

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## THE ROUTE OF JOINT OF THE TRANSNATIONAL CORPORATIONS AND GLOBALIZATION

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### **Abstract**

*Today's discussions on globalization are more alive and controversial. As is acknowledged as a fact, globalization is studied not only as an economic category but as a process, system, phenomenon. Currently, on international level, a variety of companies operate. From all of these, the transnational corporation represent particular interest, being designated as an "entity-key of global economic activity, a creative net worth to devote a large proportion of global resources needed to sustain economic growth processes. The new trend in the TNC's sites emphasize, efforts to promote corporate social responsibility that contributes to change the attitude of many corporations and individuals working for them. Company efforts are visible in contributions to community development and environmental impact. Corporations want to impose their own standards of development, which reflects some positive attitude towards regulations that support behavioral codes, which they argue. Globalization has opened the way for limited progress, offered alternatives to local development, has generated deep changes, a dimensional complex with sometimes unpredictable consequences on economic and socio-institutional development.*

**Key words:** *transnational companies, globalization, business, development*

**JEL Classification:** M<sub>10</sub>

### **Overview of contemporary reality**

Currently, many businesses and massively expanded marketing, supply and production in the global market, managing to create global structures which allow them to quickly transmit information and ideas from other corners of the world. Businesses face a competitive environment larger and more complex than in the past. Some believe that the world is run by giant companies, megacorporations, those who are not only interested to sell as many goods on international markets, but also to purchase, to produce various components and materials from or abroad. Therefore, transnational firms have to coordinate the functional operations across state borders by a rapid transfer of knowledge, helping them to increase efficiency.

To meet the challenges of business globalization, many companies form strategic alliances and other business merge even competing. Mergers, acquisitions and strategic alliances are logical and inevitable consequence of competition in a global economy without barriers, and becoming more integrated. We are witnessing a globalized economy combined with information technology, which enables TNC's sites to strengthen the control on a scale that has not been possible until now.

### **Literature review**

Transnational corporations is the corporation that operates in several states simultaneously, and over the years have managed to become the most powerful economic and political entities in the world, and more than this, some transnational companies that feature fundamental, have much more power than nation states within which acts [Karlner 1997]<sup>1</sup>. Transnational companies have emerged with the right to operate in almost all economic sectors and have developed over the last decades of the twentieth century, mainly in developed countries, with a brief economic history and a decisive and unexpected return to "business as usual", with economic and social benefits of this phenomenon [Glyn, 2007]<sup>2</sup>. Currently, transnational corporations are "key entities" economic activities as well as value creators agents, those who allocate global resources a lot of processes to support growth. In other words, states not only transnational main entities subject to impact, the challenges posed by globalization, but also as the main shaping force of this process. Helsam enthusiastically believes that transnational companies have a more important role, that were created to serve humanity [Heslam, 2004]<sup>3</sup>. Because of their economic power, transnational companies influence the global economy, have the power to choose and to decide whether a country can become a market or production needs of transnational corporations and other countries [Krugman, 2009]<sup>4</sup>, thereby controlling the space many economic markets. IMF defines globalization as "the increase in economic interdependence of countries worldwide through increasing volume and variety of goods and services transactions across borders, international capital flows more freely and faster, but also a wider diffusion technology. "[IMF, 2008]<sup>5</sup> Thomas Friedman analyzed the impact of the flattening world economically and argued that outsourcing operation, supply-Chaining, global trade and political forces have changed the world completely and permanently, in good and bad at once. He also argued that globalization is the rapid

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<sup>1</sup> Karlner Joshua, *The Corporate Planet: Ecology and Politics in the Age of Globalization*, Sierra Club Books, 1997, p. 54.

<sup>2</sup> Andrew Glyn, *Capitalism Unleashed, Finance, Globalization, and Welfare*, Oxford University Press, 2007, p. 31.

<sup>3</sup> Peter S. Heslam, *Globalization and the Good*, Cambridge 2004, p. 205.

<sup>4</sup> Paul Krugman, *A Country Is Not a Company*, Harvard Business School Publishing Corporations, 2009, p. 12-15.

<sup>5</sup> Julian Di Giovanni, Glenn Gottselig, Florence Jaumotte, *Globalization: A Brief Overview*, 2008, <http://www.imf.org/external/np/exr/ib/2008/053008.htm>

evolution and will continue to have a big impact on companies and the customers [Friedman, 2008]<sup>6</sup>.

### **Challenges in corporate governance**

Corporations today are open to everything new, able to respond rapidly to new information and changes in international markets, as these corporations adopt strategies based on the implementation of learning behavior. Equally important for TNC's sites is the ability to keep pace with the markets, they can adapt and respond to competition, may produce goods in conditions of efficiency, but also understand the phenomenon and to protect local companies, which is important to strengthen local communities both economically and as socially. Many transnational corporations have not done all it would be best to improve working conditions in developing countries. These companies have gradually come to understand one thing that home to them, I understood much more difficult. Providing better working conditions may actually contribute to increased labor productivity and lower overall costs – or at least limiting their growth [Stiglitz, 2005]<sup>7</sup>. Globalization of economy globalization require thought and work, which means the ability understand the world as a single market, the conditions and laws are very different. Manager with a true global mindset is one that has the capacity to adapt to national and regional particularities and which does not distinguish between inland and abroad.

Currently, globalization is contested by everyone. There are complaints about it, but not missing any praise. Globalization can be a force for spreading the good: the globalization of ideas about democracy and civil society has changed people's way of thinking, while political movements leading products worldwide to ease the debt burden. Globalization has led to hundreds of millions of people to achieve higher living standards, also, economic globalization has brought benefits to countries that have profited from it by identifying new export markets and attracting foreign investment. Stiglitz said that countries had benefited most were those who took their own fate and have realized the role the state can play in the development, abandoning the idea is also based on a market capable to solve their own problems [Stiglitz, 2005]<sup>8</sup>. Globalization has had beneficial effects on democracy, national elites trying to replace dictatorship with the dictatorship of international finance. Some countries were obliged to markets and international financial institutions to give up their sovereignty, which allowed the capital markets, including speculators whose concerns were short-term economic growth, and long term growth of a country with living standards, to "bring order", telling them what to do and what not to do. For millions of people say that globalization has not brought anything, or even a negative impact because of their moral situation worsened, their jobs were abolished, people become powerless before the force of globalization that could not control, while attending to undermine

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<sup>6</sup> Friedman, Thomas L., *The Dell Theory of Conflict Prevention. Emergin: A Reader*. Ed. Barclay Barrios. Boston: Bedford, St. Martins, 2008, p. 49.

<sup>7</sup> Stiglitz, Joseph E., *Globalizarea*, Editura Economică, București, 2005, p. 145.

<sup>8</sup> *Idem*, p. 112.

democracy and the erosion of their own cultures. Growth – including that induced by globalization – will lead to urbanization, undermining traditional rural societies. Retailers that operate internationally and have a great shopping devastate small businesses and communities in which business is carried on those.

Developing countries that have been most successful, most of East Asia, opened to the world, but they did it slowly and following certain steps. Countries have benefited from globalization to boost exports, and therefore to develop a faster pace. They are abandoning the protectionist measures carefully and consistently, when they have created new jobs. These countries have ensured that there is sufficient capital to create new businesses and jobs or even have themselves contributed to this effort. China has eliminated trade barriers not a very long time but at a distance from when already begun to travel the road to market economy, during which has grown extremely fast. However, globalization is just one of many forces that affect our societies and economies. Technological changes have increased the importance of skills in certain markets, so that those who benefit the Synthesis today are those who have or can obtain those skills. Changes in technology may ultimately prove a more important factor than globalization, even in declining wages of unskilled sector. [Stiglitz, 2008]<sup>9</sup>

### **Corporate social responsibilities and benefits versus private incentives**

Everyone knows the key role of transnational corporations in the globalization process, which is manifested by: bringing the same level of markets, technology and capital to developing countries with production capacity of developing countries. Corporate social responsibility is the obligation of a corporation holding beyond those legal obligations or restrictions imposed by economic, to conduct business so as not to endanger the welfare of local community and to pursue long term goals are to benefit society. A company that falls only within the limits defined by law and imposed by the market to fulfil his obligation strictly social (Social Obligation), while a corporation trying to adapt to changing social conditions is characterized by social response (social responsiveness). Only if the company seeks to assess what is right and what is bad for the company long term and acting accordingly can say that it shall conduct social responsibility (social responsibility).

From the perspective of socio-economic development of corporate social responsibility, multinational company would have to make the following objectives: to maximize long term profit, not short term, to consider the local community as an interested party, giving back to society through various activities a share in the profits of his operations, to recognize the importance of protecting the environment, to behave proactively to protect, and to encourage employees to behave, and the protection of existing and prospective customers. Corporate engagement in actions of socially desirable long-term without improving market position by increasing recognition and appreciation from consumers. Corporate social responsibility is manifested in four levels of influence. The first level is the

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<sup>9</sup> Stiglitz, Joseph E., *Mecanisme Globalizării*, Editura Polirom, 2008, p. 172.

work related to standards, quality procedures, as well as harmful emissions and waste management. The second level is the market related to the standards of distribution, marketing and consumption, vendors, business relationships. The third level is the community, influenced by the manufacturing and distribution. The fourth level is public policy that can be influenced by public institutions and social infrastructure. Corporate social responsibility manifests a shift from stage at the option of necessity. So some corporations have specialized departments of social responsibility and 90% of the world's top 500 corporations have ethical codes of conduct. The corporate social responsibility is considered to be more and more corporations as a characteristic of a good business (and some studies show that firms socially responsible record better results in stock, compared to others), for many firms, in terms of management and employees, social responsibility is more moral than the economic. Such a company is regarded as a small community working together to achieve a common goal, i.e. the big part, cares for others, avoid negative publicity and can receive high-quality workforce that attracts and with good conduct: thus their employees feel better if working for a company is socially responsible. [Stiglitz, 2008]<sup>10</sup>

Unfortunately in this world where ruthless competition manifests itself, the motivations of companies is acting sometimes at the expense of those who have the best intentions. The reality is otherwise very well thought out and very carefully organized, as all companies, even those that pollute a lot and practicing bad policies to employees, hires public relations firms promote their corporate responsibility and their concern about the environment and to the rights of their employees. Thus, corporations are beginning to adopt through image manipulation and learned to support social responsibility even when not practical. The movement for corporate social responsibility is important but it must be accompanied by stronger regulation. Corporations that want to impose higher standards must develop a positive attitude towards supporting regulations that support the behavioral codes and these regulations would protect them from competition without fair play from those who do not comply with these standards regulations would help to prevent market monopolization. [Stiglitz, 2008]

Advantages: If companies are part of the community, the country of origin assume "sometimes" a moral responsibility for actions of their own, without being compelled by law or regulation, this recording some short public. The interests term profits are low the responsibility of government, embodied by adopting protectionist laws.

Disadvantages:

- enormous accumulation of capital,
- moral responsibility is reduced to transnational corporations that operate in other countries (not treat employees and the environment of the host country as it is a home in their).
- serious consequences on society. Developing countries need jobs that create corporations, even if the environment or the workers suffer.

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<sup>10</sup> *Ibidem.*

- ability to hide across borders
- move values from one country to another can be done fairly quickly if TNC's, and if a company is bound to pay a certain sum in a country, that amount is sometimes impossible to obtain.
- countries with more lenient / lax provisions in labor law and the environment are most sought by investors in this race to cut costs.
- made strong lobbying by corporations against environmental standards which reduces profits.
- creating favorable legal environment in poor countries.
- influence exerted by TNC's in developing links with international agreements, which led to distortion and greater social hierarchy and private motives.

The conclusion is that incentives are important, and governments and the international community must work harder to ensure that corporate motivations are closer to those of people they influence their actions, especially the least powerful in developing countries development.

If you look to the future, we can see everyone differently, or we can imagine him as we would like to be. The fact is that we make predictions about the future economic situation in light of current socio-political. An overview of the global space shows that Asia could produce strong waves in terms of savings, foreign exchange reserves, growth rates, expansion of exports and the accumulation of new technologies. Corporations in China and India increasingly acquiring more control stakes in other regions of the world crave global players' roles, and especially the control of exhaustible resources: oil and gas. Thereby Asia by increasing its economic power could alter competitive hierarchies of power would reduce the influence exercised in the West overall space. So, would change the trajectory influences regional alliances would end any other color, international organizations could also be influenced decisions. Another consequence could be linked to control strategic resources that will give a great battle with more or less noise. Besides depleting resource competition was launched worldwide by travel and alternative energy sources, because consumption is increasing due to economic growth especially in Asia and food prices suffer major fluctuations.

To inspire optimism for the future, there should be cooperation, regulation, communication, change among international bodies, eliminating conflicts of interest and prevent future instability. All they can define a different globalization in which we live or where we live, that globalization seen as an open concept that defines the behavior of companies and corporations as an openness to technological, economic and social progress of the search

Future of transatlantic relations will clearly be indispensable in many point of view of corporate structures, which have the objective of industrial policy, protectionism and not only selectively. If you look inside a corporation, one of the main future corporations' strengths derives from their capacity to build competitive advantage through knowledge transfer across borders [Chiru, 2010]<sup>11</sup>. Second, the

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<sup>11</sup> Chiru, C., „Tragedia societății de consum”, vol. *Criza e în noi*, coord. Costea, C., Popescu, C., Tașnadi, A., Editura ASE, București, 2010, pp. 134-148.



future would see this: In addition to the essential relations at regional or global, I can say that a corporation and changed priorities, not chasing the market because they have already won, no running even after accumulation, because they had doubts, but rather think how to exploit what they have gathered so far. Next step will be to corporations from my point of view that innovation, recreation and reinvention of the business, continuous improvement and progressive transparency, all started on the long term. To support such projects, corporations need ideas, people able, encouraging processes, principles and courage. Corporations will put greater emphasis on innovation, but the mere process of innovation but on value innovation. This process is based on the stock, which possesses the capability to operate from the inside out, all to create new applications and with it the creation of new businesses. Corporations will have to realize that the price of their assets consist largely of what is in the minds of people they employ.

In conclusion, I think of three possible scenarios on the future of corporations. A first scenario would be one in which a not too distant future corporations would come to rule the world, dividing it between them. Thus we live in a world that large corporations would go where it holds a monopoly position. In this context they should have the ability to control and manipulate the market. A possible form of monopoly position manifest for example control global production levels, limiting its growth amid a trend of consumption clearly leading to a price spike. A second scenario would be to limit the power of multinational corporations in the future. This could be achieved through legislative measures For instance local or regional trends and anticompetitive practices to limit or restrict the emergence and development of monopoly. A third possible scenario would counterbalance corporate power through incentives and support SME development. Moreover in some particular situations may even proceed to grind or large corporate reorganization in smaller companies, possibly narrower specialized competence in areas that can perform.

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# ROMANIA'S ECONOMIC GROWTH IN THE CURRENT INTERNATIONAL CONTEXT

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## **Abstract**

*Present and future economic growth is increasingly dependent on trends in the global economy. They lead to an intertwining of the economic progress at a national-regional-global level. In particular to bearing economic integration, globalization, globalization of economic, political multipolarity, expanding economy on a continental and global level, etc. The effects of these changes can be both beneficial and negative, so we proposed a study on the evolution of parameters characterizing both economic growth and the evolution of this growth in Romania in the current international context.*

**Keywords:** *economic growth, economic development, economic crisis*

**JEL Classification:** F<sub>50</sub>, O<sub>11</sub>, O<sub>52</sub>

## **1. Conceptual delimitations**

The entire development process is heavily influenced by contemporary trends in the global economy, and notably, an entire complex interdependency, economic integration organizations or sectors at the global economy, economic multipolarity, increasing the role of international corporations, the globalization of production and services, the presence of set of global problems, building a new international economic order. Each of them has beneficial and negative, so the scale of nations, but also for humanity as a whole, which explains the dialogue and idea disputes.

Growth is seen as a fundamental component of economic and social development, as a means of creating support materials for raising the living standard of citizens from one state. Romania had and still has need for sustained economic growth to create a modern material and technical basis, in any economic and social life. Qualitative changes taking place in all branches of national economy, social and economic structures, after joining the European Union should mark the transition to a liberalized economy performance. The overall effect will result in the development of domestic product, gross or net, per head, an indicator that must be on a level compared to that achieved by other European countries.

Classical theories of growth are being developed based on modern theories and ideologies.

This decrease in labor productivity leads to an equilibrium point where individuals can obtain only the necessary existence. If you try to overcome this

point and continue the human species reproduction, the excess will be disposed of population resulting from hunger, disease and wars. We are now talking about the *steady state*, a situation toward which all societies tend to, the irreversible end point of growth process.

## 2. *Literature review*

Industrial growth has occurred evident from the second half of the eighteenth century required a different explanation. The model developed by *Ricardo* and *Marx* therefore included capital growth as the main factor. Thus these many similarities with its predecessors and also led the pessimistic conclusions. Workers are those who act as a limiting factor in this situation. The accumulation of capital must increase the amount of existing capital for a worker. Increasing shortage of workers is that real wages charged to increase and capital productivity decreases. Income tax is reduced continuously until it becomes zero and stops the accumulation phenomenon. It comes back as a stationary state.

All these facts contradict the assumptions of classical models overall. Economic growth depends not only on growth factors – the quantity of land, labor and capital available – but also on improving the knowledge, technology and business organization.

*Robert Solow* and other modern economists have tried to measure the contribution of each factor to economic growth through the sources of growth accounting techniques.

Schumpeter gave an explanation of economic growth that is compatible and the law of decreasing returns other facts observed in reality: the wave of discoveries and inventions that occur periodically cause unforeseen increases profits from capital investment rate, so spread the new knowledge and new mimic technologies, the benefits begin to be reduced and with them, and investment rate until a new wave of discoveries bring new expansive phase.

Further more, Harrod-Domar's models emphasized the search for a stable growth rate that prevents periodic crises. They believed that the natural rate of increase should coincide with the rhythm of "efficiency unit" of labor. For *Von Neumann* this rate must be equal to real interest provided that all benefits to be reinvested.

In 1970, the Club of Rome, a private association composed of entrepreneurs, scientists and politicians, instructed a group of investigators from the Massachusetts Institute of Technology (MIT) under Professor Dennis L. Meadows to conduct a study on trends and issues that threatens the economy. The results were published in March 1972 under the title "Limits to Growth."

The study used more advanced techniques of analysis for the *systems dynamics* of the moment. First off all gathered data on trends in the first 70 years of the 20<sup>th</sup> century, a conjunction of variables: population, industrial and agricultural contamination, known mineral reserves. They created the formulas that relate these variables between them – industrial production with stocks of natural resources, contamination with industrial production, agricultural production with the

contamination, the population with agricultural production, etc.. – And proved that these equations are used to describe relations between the data fairly well known that they gathered. Finally, they calculated future values of these variables, getting some negative results, meaning that, as a consequence of diminishing natural resources in 2000 would have to produce a serious crisis of industrial and agricultural production that would reverse its evolution. With some delay the population would reach a historic top to start with that would diminish rapidly. In 2100 is planned to approach a *stationary level* of industrial and agricultural output per local lower than those existing in sec. XX and a population decrease to decency.

The term of **economic growth** summarizes this process and preserves one of the most exciting and controversial issues of the post-war period of economic thinking.

Some authors reduce growth only quantitative changes (Lewis), while others believe that it requires qualitative changes, including structural (S. Kuznets).

**Economic growth** is a process that expresses the overall upward trend of aggregate economic size in a time horizon, nationally and internationally, with favorable effects in terms of economic and social life.

In the literature, the concept of growth is used in two ways:

On the one hand, economic growth refers to increasing the social product and national income and thereby national wealth, including production capacity expressed both as absolute and per capita, including changes in the structure of economies. This sense of the term is used in the work of *S. Kuznets*.

On the other hand, economic growth means increasing national income per member and involves the analysis of quantitative aspects of this process, namely the functional relations between the variables involved in the endogenous growth model.

Economic growth takes place in a spatial and temporal framework. Over time, the macroeconomic results may record quantitatively, growth, stagnation and even decline. So, economic growth should not be understood as a linear process.

By its content, growth is a positive development trend of national economies, various international-global supervisees, medium and long term, but that does not exclude cyclical oscillations, even time of economic setbacks. We appreciate that the national economy, a supervise, recorded an economic growth it is based on the existence of real positive growth trend in an appropriate time horizon.

In conclusion, we can estimate growth as a process whose positive development achieved in the long term average, means the general trend of increase (in real terms and per capita) which does not exclude, however, short-term negative oscillations of the stagnation them. Being a dynamic process, economic growth is not reduced to mere quantitative changes (increase in gross national product or national income) of a technical nature (the relationship between volume and growth factors of production employed by VN), but requires a blend of technical processes, economic, social, political and cultural, which enhances or limit each other. It cannot be isolated from all social and economic processes, is a component of wider social reproduction, premise and result of economic and social development, material support of historical progress.

### 3. *Concepts and correlations for predicting growth*

**Economic growth** is a complex whole, which is manifested by an increase in economic size, with the transformation of its structures.

It is a component of sustainable development, a concept accepted by most scholars and people, synonymous with the development of viable, sustainable, humane, ecological. Continue to be problems of economic growth in recent decades: ecological dimensions, technical, scientific, cultural, demographic, military, etc.

To characterize more complex development using **human development index** (HDI), usually built with four indicators: life expectancy at birth, adult literacy rate, average length of schooling, GDP per capita. Is an upper limit to the weight of that country and show the best achievements in the world. In other situations, using several indicators. To this end, each developing country (or should develop) the annual report of human development (Pärnu, 2000).

The concept of economic growth can get a precise meaning only if it is possible to **quantify** it. This is resolved with the national accounts, operating with aggregate macroeconomic indicators.

The main indicators of this kind are gross domestic product (GDP) and national product (GNP), which in turn is linked with a number of exogenous variables and parameters are optional.

### 4. *Growth in the current international context*

Economic and social development issues more strongly interact in time and space, in the context of the growing role of all its component parts. Enhancing effect of driving the scientific-technical progress on a national show diminishing the relative importance of competitive local markets, increasing the role of national markets, regional, international and global. A shift also reflects the globalization of serious phenomena such as poverty in the midst of plenty, environmental degradation, loss of confidence in institutions, uncontrolled expansion of urbanization, employment job insecurity, alienation of youth and traditional values, inflation, unemployment, etc. Economics being increasingly required to include in its study of economic phenomena and processes at the macro scale open interdependence that globalization generates. Thus the foundations of a new economic theory of development from the perspective of rationality, in conditions of limited resources and hope, based on equal opportunity ethics generations coexist and succeed in life.

Each state has a national economy that is a universe in itself. On the other hand the process of *internationalization* and *globalization* of the economy induces a series of common features of most national economies of the world. These could be defined as a *complex economic aggregate*, being in a particular stage of development, autonomous entities, bringing together the national borders in an interrelated network of activities and micro, macro and mondoeconomics (Welfe, 2003).

According to most experts the most relevant parameters for *assessing the national economy* are: the level of development, spectral composition, structure factors and productive way of combining their internal-external ratio approach, financial strength of the State, nature of property or at least its dominant, traditions

and conditions of freedom, the specific forms of management and organization, etc.. Any attempt at classification of modern national economies requires a complex approach, multicriteria.

Since 2003 (Sapir Report), the European Union agreed typology “models” presented in the European Development famous work “The Diversity of Modern Capitalism” (Amable, 2003). According to this typology EU does not have nor wants to have a unique development model, considering that diversity does not result in reduced integration benefits, but rather enhances them. Currently, the European Union known four models of development (Dobrescu, 2005):

1. **The European capitalist model** (UK), characterized by increased market competition and a modest social protection in volatile market conditions of employment;

2. **The continental European capitalist model** (France, Germany, Netherlands, Austria, Belgium), characterized by massive involvement of the banking system in financing medium and long term projects, a more stable labor market and more attention by greater social protection granted, whilst an insufficient volume of investment in training and retraining processes of labor;

3. **The development of the European social-democratic model** (Sweden, Ireland, Finland), characterized by a system of monitoring labor market, year to maintain unemployment at a reasonable rate through macroeconomic and social protection system developed very well funded;

4. **Mediterranean model development** (Spain, Italy, Greece, Portugal), characterized by an effective system of monitoring and control of unemployment, but also by impaired social protection system.

Therefore, national interest that it should express a program or a post-accession **development strategy** can not allow the use of the term sui generis confusing the European model of development, presented as a well and accurate accounts of the future Romanian society.

#### 4.1. Economic increase in Europe

Two years ago, five of the ten new European Union member states from Eastern Europe – the three Baltic States, Hungary and Romania – seemed to be devastated by global financial crisis, being under threat of social protests and some massive devaluations. But now, these countries seem to give lessons of economic recovery in the euro area (Matei and Ungureanu, 2010).

Currently, these countries are on the road to a healthy tax system to economic growth, without encountering, in most cases, the major problems that many economists predicted.

The reason is that Eastern Europe's financial problems were caused by a standard cycle of credit growth, followed by a drop of it. These countries have attracted major foreign capital flows, but, ultimately, loans proved to be excessive. In addition, it was wrong and used in consumer and real estate investments, giving free rein in inflation.

Although public finances were in relatively good condition, except for **Hungary**, current account deficits have continued to rise, the “warming” of the economy reminding of the East Asian crisis from 1997-1998.

IMF forecasts an economic increase of 3.6% for Central and Eastern Europe in 2011. There are good prospects for growth in emerging Europe, in **Poland**, for example, and even the Baltic countries, where the most severe recession was now giving signs of recovery. The IMF forecasts a growth of 3.6% for Central and Eastern European region in 2011. **Germany** could be the engine for the removal of the Eurozone from the crisis, with the Nordic countries, **Netherlands**, **Austria** and **France**, but the prospects are less certain for the **UK**, although this country is on track.

The biggest problem is that there are countries in the euro area that are placed before the illusion of economic growth, an increase that cannot be supported by fact. A high level of spending was financed by foreign loans, which was the advantage of some firms, but was not sustainable, and those countries have lost competitiveness when adopting the euro.

**Greece** and **Ireland** are relatively small countries that can benefit from global economic recovery and increase rapidly, if they reallocate their resources quickly.

Several renowned economists, including Paul Krugman, Kenneth Rogoff and Nouriel Roubini have argued that **Latvia**, **Estonia** and **Lithuania** has to devalue their currency, as did East Asian countries, and **Russia**, in 1998, and **Argentina** in 2001. None of these countries did take such a measure, yet they got through the crisis.

The Baltic countries had no reason to devalue their coins, since they have the right target euro adoption as soon as possible. In addition, economic activities in these countries are in euros, mostly, and devaluation would have meant the collapse of banking systems that are quite healthy. Instead, these countries have opted to cut spending. In 2009, these countries have reduced public spending by 8-10 percent of GDP, including cutting public sector wages.

Despite expectations, especially after the experiences of **Greece** and **France**, social protests have been minimal and there was an increase in the popularity of extremist parties.

The new EU members are in a better state than the old ones, however, three countries in the region needed the help from the International Monetary Fund, namely Hungary, Romania and Latvia. The IMF has shown that they've learned the lesson from the crisis in East Asia and imposed more relaxed conditions, and allocating money to finance the budget deficit, given that the problems were temporary and not structural.

As a result of these measures, new European Union member's state is better than the old member countries of the eurozone. Of the 12 countries that were part of the euro area in 2001, only two, **Finland** and **Luxembourg**, have public debt below 60 per cent of gross domestic product, compared with nine of the ten countries have entered recently. Only Hungary has a higher public debt. Otherwise, Eastern European countries have problems with private debt, which, however, have avoided transforming them into public debt.

**Germany** could be the engine to remove the Euro Zone from the crisis, among other countries that are going very well, namely the Nordic countries,



**Netherlands, Austria and France**, but the prospects are less certain for the **UK**, although the country is on track. There remain serious concerns in the financial system and still must be overcome and resolved sovereign debt crisis of systemic risks associated with it.

It is difficult to predict the impact of the new regulatory framework applied by the EU, which is a real revolution in the field. Countries that are on their way to a deeper integration in Europe, but are not yet members of monetary union, have a wider set of economic policy instruments available and fiscal policy should remain an important element, which's application must be pragmatic enough.

#### **4.2. Economic growth in Romania**

Two years after the beginning of the crisis, Romania has not managed to find another way to recovery. From the speech "the crisis won't reach us", Romania had the largest economic decline in Central and Eastern Europe.

But the global crisis, which included extensive areas on the planet, revealed not only many drawbacks of globalization without global economy undermine the objective of first order in 2000. It highlighted the numerous shortcomings of our economy, not to deny the leap made by Romania for nine years one after another, from 2000 until the summer of 2008, the duo led growth-deflation. But crisis hit and us too as a worldwide hit, forcing us to resort to emergency measures and restrictions. Under the impact of the crisis, our society has begun to learn a new lesson. We saw in particular that we need profound changes. Until now, because half-measures, the formation of a critical mass assurance for change was not formed, in order to foster an optimal ratio between gains and losses in the economy.

Now however, in 2011, after two years of recession, it takes action to mitigate the power of the crisis. Diagnosis and treatment of this crisis is today a fundamental concern. Two landmarks are fundamental: how GDP will be doing and how much capital this year and we rely on in future years. That is why we are looking in the mirror of a world obsessed with the financing of economic growth, trying to find our answer to the question about how we will (or will not) succeed, we are not close to sources of capital. One response that we can not ignore is the economic, political, social and psychological climate in the country.

The fourth quarter 2010 witnessed the slowdown in the rate of decline of real GDP to -0.6 percent (a pace three times slower compared to that seen in the previous quarter). The seasonally adjusted data series shows that this outcome was attributable, on the one hand, to the slight quarterly recovery in the current period (+0.1 percent) and, on the other hand, to the base effect associated with the quarterly contraction of economic activity in October-December 2009 (-1.4 percent).

Turning to domestic demand, the annual growth rates of the two main components saw mixed developments. Specifically, the downward path of final consumption steepened (to -2 percent versus -1 percent in the preceding quarter), due to both private and government consumption, while the pace of decline of investment decelerated markedly (to -4.7 percent from -15.5 percent).

The annual changes in the GDP volume and its components were determined against the gross series. The changes from the previous quarter are calculated based on the seasonally-adjusted series. In 2010, government final consumption shrank by 4.5 percent in annual terms, in conjunction with larger staff adjustments in the public sector (www.bnr.ro, 2011).

**GDP by Expenditure**

*percent; against same period a year ago*

	2010	2010
	Q3	Q4
<b>Gross Domestic Product</b>	<b>-2.2</b>	<b>-0.6</b>
Final consumption	-1.0	-2.0
Households	-1.1	-1.7
General and local governments	-0.2	-4.5
Gross fixed capital formation	-15.5	-4.7
Exports	11.3	17.1
Imports	7.8	12.2

Figure 1

*Source:* National Institute of Statistics, Ministry of Public Finance,  
National Bank of Romania.

The marked slowdown in the fall of gross fixed capital formation was due, on the one hand, to the current upturn (+0.5 percent, after four consecutive quarters of declines) and, on the other hand, to the base effect associated with the 2.4 percent contraction in 2009. All the main components contributed to the slowdown in investment demand – the volume of equipment purchases (including transport means purchased by companies and institutions) was only 0.4 percent lower than that reported in 2009 (compared to an annual decline of more than 9 percent in July-September 2010), construction activity relative to new construction works saw the halving of the pace of decline (to -11 percent), while capital repair works witnessed a trend reversal.

Similar to the other quarters of 2010, the economic growth recorded by the main trade partners led to the rise in Romania's exports of goods and services, the national accounts data indicating an even faster **real growth rate** (by 5.7 percentage points, to 17.1 percent). Imports also showed an accelerating **growth rate** (to 12.2 percent), but its pace was slower than that in the case of exports, amid the slight recovery of domestic demand for intermediate goods (+1.9 percent) and certain categories of finished products – capital goods and durables.

As far as supply is concerned, the slower pace of decline of real GDP was bolstered by three economic sectors (industry, agriculture and construction), while the annual dynamics of the gross value added in the services sector fell deeper into negative territory by 0.4 percentage points.

In the last part of 2010, industry continued to show the best performance as concerns gross value added, the annual 5.8 percent rise covering three consecutive periods of positive quarterly changes.

In this context, it is worth noting the significant contribution made by the postponement for 2010 of harvesting certain crops – a spillover effect of the heavy rains in July, which prevented the “according to schedule” harvesting of grains. Actually, in 2010, gross value added in agriculture was 1 percent lower than a year earlier.

In January 2011, the industrial output volume rose 11.9 percent in annual terms, thus peaking at a 12-month high. Favorable results were also manifest across manufacturing, owing mainly to signs of rebound in domestic demand for Industrial products.

### GDP by Origin

	<i>percent; against same period a year ago</i>	
	2010	2010
	Q3	Q4
<b>Gross Domestic Product</b>	<b>-2.2</b>	<b>-0.6</b>
Agriculture, forestry and fishery	-7.6	7.4
Industry	4.2	5.8
Construction	-14.8	-7.0
Trade and transport	-6.5	-2.9
Financial activities	2.6	1.2
Other services activities	-0.3	-4.8
<b>Gross value added - total</b>	<b>-2.4</b>	<b>-0.4</b>
Net taxes on product	0.6	-3.1

Figure 2

*Source:* National Institute of Statistics, Ministry of Public Finance, National Bank of Romania.

The chemical industry witnessed the fastest pace of increase in the production volume, up 56.5 percent year on year, primarily on account of external demand from non-EU countries, Turkey in particular. Signs of a recovery in activity surfaced in other industrial subsectors as well, especially in pharmaceuticals, metallurgy and the manufacturing of computers and electronic and optical products. The outlook for February-April is further favorable, returning to positive territory (0.2 points) for the first time since the summer of 2008.

In the latter half of 2010 it became increasingly obvious that developments in registered unemployment departed from the trend in the number of employees and January saw a further drop in the former to 6.74 percent despite ongoing layoffs during the reported month. Average net wage economy-wide was virtually unchanged in January, concealing opposite developments in the public and private sectors. On the one hand, the annual dynamics of public sector wages fell deeper into negative territory given that the effects of implementing Law No. 285/2010 cancelled themselves out – the 15 percent pay rise versus the October 2010 wages was offset by the decision not to grant in January 2011 the so-called “13th-month

wage” for the previous year. On the other hand, the annual growth rate of private sector wages gained momentum, with industry and private services displaying the most significant pick-ups.

The annual dynamics of receipts from market services rendered remained in positive territory in January, although decelerating markedly compared to the December 2010 reading amid more sluggish activity on the “hotels and restaurants” segment.

The annual rate of increase of domestic market producer prices held steady at 8.4 percent in January 2011, amid ongoing pressures related to developments in external commodity prices.

The annual inflation rate came in at 6.99 percent in January 2011, down 0.97 percentage points versus the previous month, amid favorable base effects manifest in the case of tobacco prices, fuel prices and administered prices.

However, current developments point to rising inflationary pressures, as the month-on-month inflation rate inched up to 0.77 percent against 0.53 percent in the previous month. The major determinants in this direction were the scant domestic supply of fruit and vegetables, the upward trend in global prices of agri-food commodities, as well as the higher excise duties on fuels.

## *5. Conclusions*

In the euro area, the split between northern and southern flank is more evident, both economic dynamics and prospects of the two countries bouquets are different. The reform of the economic governance in the EU is trying to find an answer to this fracture from several findings: it needs a mechanism for sovereign debt crisis management, coordination of policies and new rules on national economic policies are necessary.

If the priority of the past decade has been the accession of Romania to the European Union for the next five years the new model of sustainable economic growth and adoption of the euro is entered in the list of challenges.

It is not yet clear how the new model will show growth for Romania, but a consumption-based growth achieved on capital inflows and debt, as it existed in the years before the global economic crisis, is no longer a viable solution given the reluctance of foreign investors in countries that live on debt finance.

Potential exports to help the economy are limited given their low share in GDP, about 30%. It demonstrated in 2010 when despite having had a good evolution, exports have failed to lead the economic recovery.

The food crisis in the world (which was announced by the developments in commodity prices in 2007-2008) highlights an asset of extraordinary value for Romania: the good quality of the land. In a study on reforming the EU budget and EU shown the value of agricultural land in Romania. It is an asset that must capitalize on it with great skill in obtaining EU funds to modernize the countryside, the CAP reform.

How are decisions taken in the Union is an interest to us in the highest degree. We are talking about the decision-making process itself (if one takes into

account the voices of all member countries) and specific interests of economy structural problems that are confronting the large economic gaps. Through this dialogue, we must avoid that part of the structural and cohesion funds allocated to Romania to be redirected to other uses.

Further on, globalization puts into question both the possibility of developing or adapting to their external requirements, as well as those related to benefit from *new* economic growth in all components, because as P. Drucker wrote “The economic resource is no longer the capital, and no natural resources, no work. It is and will be **knowledge**”.

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# THE REGULATORY FRAMEWORK OF TRADE FINANCE: FROM BASEL I TO BASEL III

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## ***Abstract***

*The global crisis revealed several weaknesses in the international framework of banking regulation. Consequently, the Basel Committee on Banking Supervision (BCBS) proposed a package of measures to strengthen the resilience of the banking sector. Besides the positive effects they have on financial stability, the new regulatory provisions affect the ability of banks to provide trade finance. Therefore, the banking industry considers that regulators have not taken into account the low-risk profile of activity. Starting from this premise, the paper consists of three parts. In the first part, the role and objectives of the BCBS are presented; the second part is designed to review the most important trade instruments and to underline the tendencies in trade finance; finally, the last part highlights the regulation of trade finance under the Basel I, Basel II and Basel III regimes, and some unintended consequences of the Basel III framework.*

**Key words:** *Basel III, trade finance, global crisis, regulatory framework of trade finance, international trade*

**JEL Classification:** G<sub>21</sub>, G<sub>28</sub>, F<sub>10</sub>

## **Introduction**

Under the current conditions of intense competition in the international market, trade finance represents a significant tool that contributes to the development of international trade.

Due to evolution of information technology and increased globalization, open-account arrangements became more and more important. However, bank-intermediated trade finance still covers a great part of global trade. Moreover, the global financial crisis has strengthened the position of traditional trade finance instruments compared to open-account payments.

But the regulatory measures proposed by the Basel III have some negative implications for trade finance, which due to increased costs of capital and liquidity has become more onerous for foreign trade companies. At the same time, banks are not anymore stimulated to provide trade finance, as long as with the same capital cost, they can invest in more risky but more profitable assets.

In order to avoid these adverse consequences, the International Chamber of Commerce in Paris (ICC), the banking industry and the trade community recommend a more favourable regulatory treatment of trade finance. Their argument is based on the historical low-risk profile of the activity.

## Literature review

The international regulatory treatment of trade finance regime was developed within the BCBS (1988, 2004 and 2010) under the Basel I, Basel II and recently Basel III framework.

Asmundson and others (2011) highlight the role of bank-intermediated trade and the shares of global trade covered by the various forms of trade finance. Negruş (2008) and Lewis (1988) cited by Howells and Bain (2008) provide some classifications of off-balance sheet operations.

The provisions regarding regulation of trade finance gave birth in the speciality literature to numerous debates. For example, the ICC (2009), the ICC Banking Commissions (2009), Auboin (2010) argued that under the internal-ratings based system of Basel II, the regulatory treatment of trade finance has worsened. Consistent with its role of promoting international trade, the ICC (September 2010, 2011) has developed several documents that argue for low-risk profile of trade finance operations, highlighting the adverse effects that the new regulatory framework of Basel III has on trade finance. Finally, the ICC (2011) recommends regulators a revision of the proposals on trade finance.

### 1. The role and objectives of the Basel Committee on Banking Supervision

The Basel Committee on Banking Supervision (henceforth named the Basel Committee or the Committee) was created in 1974 following the triggering of three banking crises, which generated consequences at the international level (Herstatt Bank crisis, Germany; Franklin National Bank crisis, the U.S. and the British Israel Bank subsidiary crisis in London). These crises have revealed that the development of international banking and increasing interconnections between banks in different countries require international action to coordinate banking regulations. The main objective of the Committee is to prevent banking crises with international impact, thereby strengthening international financial stability. According to this objective, the Committee has developed several documents that form the basis for establishing rules of banking regulation and supervision in many countries throughout the world.

Although initially the Committee was composed of representatives of the G10, Luxembourg and Switzerland, the composition of the Committee was later expanded with the development of banking globalization, now comprising 27 members from both developed countries and emerging economies.

The Committee's work focuses on three main areas.

(1.1.) The first area is related to the *adoption of general principles for the supervision of banks' foreign establishments*. Essentially, these agreements established two fundamental principles:

- no foreign banking establishment should escape supervision; and
- the supervision should be adequate.

In order to fulfill these objectives, the foreign establishments of banks were classified into three major groups: branches, subsidiaries and joint ventures or consortia. Also, sharing the responsibilities between authorities from the origin country and those in the host country has been achieved taking into account the following aspects: liquidity, solvency and foreign exchange operations and positions.



The documents adopted emphasize the importance of permanent cooperation between supervision authorities from the origin countries and those from the host countries. At the same time, within the supervision of international banking, one can notice the tendency to reinforce the principle of supervision from the origin country. Also, an adequate supervision imposes adopting the principle of consolidated supervision. According to this principle, the supervisors from the origin country must monitor the exposure risk of the banks under their responsibility for all operations, no matter the territory where they are located. These principles are reflected in the document adopted in May 1983, entitled „Principles for the supervision of banks' foreign establishments“. Improving the rules regarding the supervision of banks' foreign establishments was realized in 1990 (the document „Information flows between banking supervisory authorities“), 1992 (the document „Minimum Standards for the supervision of international banking groups and their cross-border establishments“), 1996 (the document „The supervision of cross-border banking“).

(1.2.) The Committee's second area of interest, and the most important achievement, is *the establishment of minimum capital requirements* for internationally active banks. This action was motivated by the fact that, seeking to improve their profits, at the beginning of the 1980's, international banks were engaging in risky activities that were not correlated with their capital. Taking into account that the level of international credit had risen, and the interdependencies between banks situated in different countries were becoming more important, it was recognized that the crisis of one bank could affect the stability of the whole international banking system. After many consultations that started in the 1980's, the Basel Committee published a document in July 1988 regarding the bank capital measurement and the capital standards, entitled “International Convergence of Capital Measurement and Capital Standards”, which is known in the literature as the 1988 Basel Capital Accord, or simply, the Basel I. According to this document, banks have to hold capital equal to at least 8% of their risk-weighted assets.

The limitations of the 1988 Accord, the evolution of international banking, the increasing complexity of banking risks and progress in banking risks assessment have determined the Basel Committee to bring a series of improvements to the capital adequacy requirements of banks. As a result, in June 2004 the final form of a new accord was published: “International Convergence of Capital Measurement and Capital Standards – a revised framework”, a document known as the Basel II.

Starting from the premises that the stability of the financial system can be ensured through the coordinated action of three elements – efficient risk management, activity of the supervision authorities and the transparency of information regarding the bank activity -, the Basel II Accord is based on three pillars:

- *minimum capital requirements*;
- *a prudent supervisory review process*;
- *market discipline*.

In accordance with Basel II, the basic principles regarding the calculation of the minimum capital requirements, as well as the definition of capital, remain the same as in the previous version. However, the calculation methodology of risk exposure has been radically modified. Moreover, operational risk was introduced when calculating the capital adequacy ratio. To measure risk, banks may choose between two options: a standardized approach, similar to the Basel I methodology, and an internal rating approach, approved in advance by national supervisors. This method allows assessment of the risks in a diversified manner, enabling better correlation of minimum capital requirements with risks taken.

More recently, the global financial crisis has risen for the regulatory and supervisory authorities around the world a series of concerns on regulatory framework of financial and banking activity. The main *limitations of the Basel II Accord* that were revealed in the context of the crisis, which began in 2007, are<sup>1</sup>:

- the minimum Tier 1 capital requirement ratio to risk-weighted assets of 4% was inadequate to absorb the credit losses (Tier 1 capital is core capital);
- the ratings agencies that had the responsibility to assign risk-weighting of banks' assets proved to be vulnerable to potential conflicts of interest;
- the capital requirements are pro-cyclical;
- the Basel II Accord stimulated the process of securitization, which in turn, enabled banks to reduce their capital requirements and increase their leverage.

Besides, the Basel II Accord did not give attention to liquidity, and therefore, many banks did not hold sufficient liquidity buffers.

Consistent with its mission, the Basel Committee has developed a set of measures for reforming the banking regulation, known as the Basel III framework. The main *reform measures* comprised in these documents have in view:

- raising the quality, consistency and transparency of the capital base;
- better risk capture (especially the risks concerning the capital markets activities);
- the introduction of a leverage ratio;
- the introduction of measures meant to build up capital buffers during good times, which are to be drawn from in periods of stress;
- the introduction of a global minimum liquidity standard for internationally active banks.

According to the provisions established by the Basel Committee, these standards will be gradually introduced, over a long period of time until the year 2018.

(1.3.) The third major contribution of the Basel Committee was a set of *principles, considered to be fundamental to ensure an efficient banking supervision*. The document which includes these standards, called „Core Principles for Effective Banking Supervision”, was published in 1997, following a close cooperation with authorities from outside the member states of the Committee. The document was revised in 2006.

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<sup>1</sup> Fabiani, Riccardo, *The Business Impact of “Basel III”*, A D & B Special Report, October 2010.

## 2. Trade finance instruments. Tendencies in trade finance

In the specialty literature, there is no consensus on the definition of trade finance. According to the ICC<sup>2</sup>, trade finance refers to short-term sources of financing aimed to fill the time-lag between the production of goods and the receipt of payment. By supplying trade finance, banks contribute to the expansion of international trade.

Trade finance covers several payment arrangements between importers and exporters: open account payments, cash-in-advance and bank-intermediated trade finance. These payments vary from arrangements strictly between importers and exporters (open account, cash-in-advance) to insurance services, to credit from banks (bank-intermediated trade finance). Bank-intermediated trade finance allows exporters and importers to use banking system to: (i) verify delivery of goods; (ii) guarantee payment for goods; and (iii) provide liquidity for the transaction. The most familiar form of bank-intermediated trade finance is the letter of credit<sup>3</sup>.

Unlike domestic trade, a number of issues arise in international trade because the importer and the exporter come from different countries, and often, they do not know each other very well. In addition, others difficulties are related to the fact that in the two countries involved in international trade relations, there may be different regulations, customary and local traditions, as well as cultural and language differences. International trade transactions also mean taking new risks, including currency risk and country risk.

(2.1.) The traditional way to overcome the lack of trust between the importer and the exporter is through the use of *letter of credit* as a means of settlement. The letter of credit is the operation by which a bank undertakes, in accordance with instructions received from its importer customer, to make payments to the exporter upon the presentation of documents meeting the terms and conditions of the letter of credit. A letter of credit provides safety to all parties involved:

- the *exporter* is certain that he receives payment provided that he delivers the goods and submits shipping documents, in strict compliance with the terms and conditions of the letter of credit;
- the *importer* is certain that payment is made for a good, which at least formally, is in accordance with contractual requirements;
- the *bank* that undertakes to pay – the issuing bank – retains a pledge on documents, which gives it control over the underlying goods, and sometimes, its also guaranteed by a deposit made by the importer.

In addition to the advantages they present, the letters of credit have a number of disadvantages related mainly to the high costs involved and the cumbersome procedure to cash. As a result, the dominance of letters of credit in all international

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<sup>2</sup> International Chamber of Commerce, *Report on Findings of ICC-ADB Register on Trade & Finance*, Document No. 470/147 (Rev), Paris, 21 September 2010, p. 7.

<sup>3</sup> Asmundson, Irena, Thomas Dorsey, Armine Khachatryan, Ioana Niculcea, and Mika Saito, *Trade and trade Finance in the 2008-09 Financial Crisis*, IMF Working Paper WP/11/16, International Monetary Fund, January 2011, pp. 54-55.

payments began to erode over time in favour of open account payments, which are more flexible and adapt better to the current conditions of international trade.

(2.2.) An *open account arrangement* means that the importer pays the value of the goods delivered by the exporter at a specified time from delivery. Usually, this term is 30, 60 or 90 days from the date of the transport document. From a technical standpoint, open account payments do not raise any problems, being characterized by simplicity and low costs. The entire risk of operation is borne by the seller, who also provides liquidity in the transaction. Therefore, open account arrangements are used in international trade relations based on trust and transactions developed over a long period of time.

The development of open account payments was due to an increased trust between importers and exporters, as a result of strengthened traditional trade relations between the European Union (EU) and North America, the EU enlargement, the intensifying financial globalization process and the increased trust between partners in developed countries and partners in less-developed country. Last but not least, intense competition in the international market requires exporters to show flexibility in choosing the method of payment. Consequently, as the importer is able to pay for goods after delivery, open account became an important marketing tool used by exporters to maintain customers and promote sales. The evolution of information technology also had an important role because it allowed the development of fast and safe transfers between different parts of the world.

However, the global financial crisis has strengthened the position of the letter of credit, given the comfort which it offers to both exporters and importers. At the same time, during the crisis, open account payments have decreased in importance due to increasing risks.

(2.3.) *Cash in advance* requires the importer to pay before delivery of the good. Unlike open account payments, in this case, all risks are borne by importer, who provides the liquidity. Often, payments in advance allow buyers to obtain some discounts on the traded goods.

According to estimations made within the International Monetary Fund by Asmundson and others (2011, p. 54), in 2008, the shares of global trade covered by the various forms of trade finance were:

- cash in advance – 19%-22%;
- bank trade finance – 35% -40%;
- open account – 38%-45%.

Another trade finance instrument is a *bank guarantee*. Conducting international trade requires risk-taking by both importers and exporters. To cover against these risks, importers and exporters often resort to various techniques, among which, bank guarantees are very important. By providing a guarantee, a bank makes a commitment to pay on behalf of one of its customers – the importer or the exporter – to the guarantee's beneficiary in case its customer fails to fulfill its payment obligations towards the beneficiary.

### **3. The international regulatory framework of trade finance. Adverse consequences of the Basel III regime on trade finance**

Many of the trade finance-related activities are circumscribed to traditional off-balance sheet items, which are an extension of the bank's basic operations (e.g., opening and confirming letters of credit, issuance of letters of credit stand-by, issuance of bank guarantees). Historically, these operations have been performed for a long time; for example, the letter of credit was widely used after World War I, when unlike previous periods, the share of transactions carried out between partners who do not know each other personally increased.

As a result of tougher competition, disintermediation, development of information technology, increasing volatility in financial markets, and a change in investment preferences after the 1980s, off-balance sheet operations have acquired new dimensions, both quantitative and qualitative. In quantitative terms, the volume of these operations has greatly increased and extended to new financial markets (first in developed countries and later in other countries), and in terms of quality, off-balance sheet operations have been diversified and refined.

Therefore, off-balance sheet transactions occurring after 1980 are a manifestation of the financial innovation process. One of the most important reasons for off-balance sheet growth was the increased competition for deposits and credits, which decreased the income from interest. As a result, banks were forced to find new solutions to maintain and improve profitability. In this context, they turned attention to off-balance operations, which allowed them to obtain fee income. Negruş (2008, p. 462) classified off-balance sheet operations into three groups:

- operations on a commission basis (i.e., sale and purchase of securities);
- operations on future payment commitments;
- trade related off-balance sheet transactions (i.e. letters of credit, foreign exchange operations).

Another classification of off-balance sheet operations distinguishes between financial services and those giving rise to contingent claims (Lewis, 1988, cited by Howells and Bain, 2008, p. 533). The first category includes services such as investment advice, portfolio management, insurance broking or credit/debit card services. The second category includes guarantees, securities underwriting, hedging transaction, etc.

Initially, regulatory and supervisory authorities did not give due attention to risks related to off-balance sheet operations. Until adopting the 1988 Basel Accord, an important role in the development of off-balance sheet operations played the fact that, under many national regulations, off-balance sheet transactions did not involve capital allocation. Later, as the authorities became aware of the risks borne by off-balance sheet operations, these were included in the calculation of the capital adequacy ratio, by using conversion factors. Use of the conversion factors constitutes recognition of the fact that not all balance-sheet operations necessarily convert to on-balance sheet exposures.

(3.1.) According to the *Basel I regulations* (paragraph 42), all off-balance sheet commitments are converted into credit risk equivalents by multiplying the

nominal principal amounts by conversion factors, the amounts obtained then being weighted according to the nature of the counterparties.

Short-term engagements such as documentary letters of credit collateralized by the underlying shipments received a conversion factor of 20%. The low value of this conversion factor was seen as recognition of the fact that a letter of credit involves low risk for both the issuing bank and the confirming bank. Other off-balance sheet trade products, like performance bonds or standby letters of credit, received a 50% credit conversion factor.

(3.2.) Under the standardized approach of the *Basel II regime*, the regulatory treatment of off-balance sheet items in trade finance is similar to the Basel I framework. However, under the internal-ratings based system of Basel II, the regulatory treatment of trade finance has worsened<sup>4</sup>:

- one of the issues raised by banking community was the fact that Basel II regime focuses on counterparty risk rather than product or performance risks. This approach disadvantages trade finance, which is treated as any form of unsecured lending, such as overdrafts;
- another issue was the rigidity in the maturity cycle applied to short-term trade lending. According to Basel II, a one-year maturity floor will be applied for all lending facilities. As trade finance lending is generally short-term in nature (between 0 and 180 days maturity) and capital requirements increase with maturity length, the capital cost of trade finance is artificially inflated;
- finally, a difficulty faced by banks was the lack of historical and performance data to assist in validating risk attributes.

(3.3.) Starting from the premise that off-balance sheet items are a source of potentially significant leverage, the package of measures adopted by the *Basel III regime* establishes that all off-balance sheet transactions are to be included in the calculation of the leverage ratio. This measure was taken because in the context of global crisis, the securitization process had negative effects on financial stability. Initially, securitization was seen as a way to improve financial stability, as it allowed spreading the risk over a large number of investors. However, after the sub-prime mortgage crisis, securitization was seen as a way to hide the risks, being considered one of the factors that triggered the global financial crisis. By securitization, banks turn loans into financial instruments (asset-backed securities) that move off balance sheet. This practice allowed them to reduce the capital costs established by the Basel II rules and also to originate new loans and get additional incomes. At the same time, securitization enabled banks to take on growing risks.

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<sup>4</sup> International Chamber of Commerce, *ICC Banking Commission Recommendations on the Impact of Basel II on Trade Finance*, Document 470/1119, Paris, 24 March 2009; ICC Banking Commission, *Rethinking Trade Finance 2009: An ICC Global Survey*, Document No. 470-1120 TS/WJ, Paris, 31 March 2009; Auboin, Marc, *International Regulation and Treatment of Trade Finance: What Are the Issues?*, Staff Working Paper ERSD-2010-09, The World Trade Organization, Geneva, February 2010.

In order to calculate the leverage ratio, all off-balance sheet commitments, including those related to trade finance, received a uniform 100% credit conversion factor. In concrete terms, in contrast to Basel II, the new regulations provide banks to set aside five times more capital for letter of credit (from 20% to 100%). In other words, letter of credit received the same treatment as "toxic" off-balance sheet financial instruments, even if there is no evidence that these exposures have ever been used as a source of leverage. The argument used is based on the fact that the exposures are supported by transactions involving either movement of goods or the provision of services<sup>5</sup>.

Considering that the regulatory treatment of trade finance under the Basel III framework is not correlated with the low-risk of this activity, the banking community, foreign trade companies and other stakeholders have expressed concern about the negative unintended effects the new provisions may have on international trade. Arguments in favour of low-risk of trade finance exposures are the short tenor of transactions and the fact that, unlike other credits, the goods underlying the transactions are guarantees for bank.

In supporting the low-risk profile of trade finance, the ICC conducted an analysis that includes data on 5,223,357 transactions provided by nine international banks with operations covering a wide range of jurisdictions. Data are provided for a period of 5 years (2005-2009) and for five product types: (1) import letters of credit, (2) export confirmed letters of credit, (3) guarantees and standby letters of credit, (4) import loans and (5) export loans. The findings of this study are:

- *short tenor of trade finance transactions*. The average tenor of all products is 115 days. Moreover, off-balance sheet products (import letters of credit, export confirmed letter of credits, standby letters of credit and guarantees) exhibit average tenors of less than 80 days;
- *low defaults across all trade finance transactions considered* – i.e. 1,140 cases out of 5,223,357 transactions. This value is lower for off-balance sheet trade products – only 110 cases of defaults from a total of 2,392,257 transactions;
- *low level of defaults throughout the downturn period* – in 2008-2009, only 445 defaults were reported from a total of more than 2.8 million transactions;
- *good recovery rates for all product types*;
- *limited credit conversion from off-to on-balance sheet* (due to high rates of discrepant documentary presentations in case of letters of credit, high rates of expiry without payment, and non-payments after default, in case of guarantees and letters of credit)<sup>6</sup>.

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<sup>5</sup> Auboin, Marc, *International Regulation and Treatment of Trade Finance: What Are the Issues?*, Staff Working Paper ERSD-2010-09, The World Trade Organization, Geneva, February 2010, p. 17.

<sup>6</sup> International Chamber of Commerce, *Report on findings of ICC-ADB Register on Trade & Finance*, Document No. 470/147 (Rev), Paris, 21 September 2010.

One of the most serious *consequences* of the new regulatory framework for trade finance and hence for the development of international trade is the increased costs that customers have to pay to obtain such products. According to estimates made by the International Chamber of Commerce (2011, p. 66), the new provisions adopted by the Basel Committee could lead to an increase in trade finance pricing of between 15% and 37%. Consequently, this pricing increase could lead to a 6% reduction in the volume of trade finance. Foreign trade companies that rely on traditional methods of financing represent the most affected segment; these are small and medium enterprises and traders who have partners in developing countries, where the letter of credit continues to be used predominantly. As a result of the more stringent capital requirements, the banks involved in trade finance could adopt several strategies that could range from a reduction in trade finance volume to orientation toward riskier activities that, while requiring the same capital allocation, could be more profitable.

Because of these unintended effects on international trade and hence economic growth, the ICC recommends regulators a *revision of the proposals on trade finance*, as follows<sup>7</sup>:

- use for off-balance sheet trade products of the same conversion factors assigned by the Basel II Accord;
- key risk attributes to be determined on the basis of industry benchmarking (since many banks faced difficulties obtaining data to produce validated estimates of risk for trade lending). For this purpose, ICC proposes the use of the ICC Register;
- exemption of trade finance products from the one-year maturity floor applied to lending facilities.

## Conclusions

The global financial crisis determined the Basel Committee to propose a new regulatory framework for banking activity, designed to strengthen financial stability. Measures adopted by the regulatory regime Basel III introduce several improvements compared to the old regulations.

However, regulatory measures proposed by the Basel III have some negative implications for trade finance. One of the main concerns of the banking community is the fact that off-balance sheet trade products received a 100% credit conversion factor in calculating the leverage ratio, like all other off-balance sheet operations. This treatment does not distinguish between off-balance sheet trade products, characterized by low-risk, and other more risky operations. The provision regarding the application of a one-year maturity floor for all lending facilities is another issue, because banks have to set aside more capital for trade finance lending.

Under these conditions, banks may choose to restrict their trade finance activity in favour of other activities that, while involving the same regulatory cost,

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<sup>7</sup> International Chamber of Commerce, *Rethinking Trade and Finance: Global Survey 2011*, ICC Publication no. 710E, Paris, March 2011, pp. 70-71.



may lead to higher profits. Because trade finance is particularly important for international trade development, restricting trade finance implies negative effects on international trade flows. The strongest impact will be felt by commercial partners that conduct operations with firms in developing countries because these transactions are based on traditional methods of financing, such as letters of credit. Small and medium enterprises will be also affected because traditional financing instruments support their activities on foreign markets. To avoid an increase in the costs of letters of credit, foreign trade companies are encouraged more and more to use open account payments. But this practice can lead to increased defaults if the counterparty and country risk have not been properly evaluated. In order to avoid these adverse consequences, trade finance has to receive a more favourable regulatory treatment.

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# GLOBALIZATION AND SUSTAINABLE DEVELOPMENT – THE NEED FOR STRONGER INTEGRATION AND INTERNATIONAL COOPERATION IN THE ENVIRONMENTAL AREA

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## **Abstract**

*The rapid expansion of economic integration (an important driver of globalization) led to the need of synchronizing national level policies on a variety of issues. One of the areas that require coordination is our fragile surrounding environment. This paper argues that central to this initiative is the need for international cooperation. The study is mainly based on theoretical and conceptual arguments which explore the multifaceted relationship between globalization and sustainable development (the core objective of the paper). We will firstly demonstrate the ways in which globalization affects the environment, then debate upon the encountered challenges (relying mainly on the need for cooperation) and finally discuss and recommend collective global action as a solution to maximize the opportunities globalization posits to sustainable development. The authors will also rely on practical examples and data to offer consistency to the debate.*

**Key-words:** *globalization, sustainable development, integration, international cooperation, environment.*

**JEL Classification:** F<sub>18</sub>, O<sub>13</sub>, O<sub>44</sub>, Q<sub>51</sub>, Q<sub>54</sub>

## **Introduction**

Irrespective of being a globalization promoter or sceptic, policy-makers and the academia agree on the fact that globalization means communication and connectivity. Why do environmental concerns matter? Because globalization is, in fact, profoundly affecting the global environment, thus it becomes an ecological issue as well. Demonstrating the connection between the two phenomena and exploring their causes, consequences and solutions is the scope of this paper.

The problem of addressing environmental challenges is not new; challenges are posed for a wide range of countries. Issues such as carbon dioxide and greenhouse gas emissions, polluted waters, invasive species, deforestation or desertification have constantly been on national agendas in the last decade. In this context, the influence of the European Union, United Nations and other important international actors affected the institutional context and pushed forward for an expansion towards decentralization and regionalization (within states), together with cooperation (between states). We may, therefore, argue that environmental

concerns gained importance, at least partially, due to and through the forces of globalization.

This article does not deny that the primary responsibility for sustainable development solutions should rest with national governments or local communities. In turn, it highlights that ecological problems are, without doubt, global in scope and should be addressed using international cooperation for setting objectives and correlating data, with national, regional and local authorities of each states being actively involved for establishing customized plans, putting them into action and monitoring them over time. To do this, more than the traditional notion of state sovereignty needs to be involved.

Usually, sustainable development encompasses the need to balance the economic, social and environmental aspects for a future wellbeing of all. Golusin and Munitlak Ivanović (2009) present an interesting approach in their article. They stress the importance to measure the role of the institutional system for the sustainable development phenomenon, apart from the social, economic and ecological aspects usually evaluated. This hypothesis that institutions matter for the contemporary success of environmental policy will be explored throughout the article. In our view, a sustainable model at the global level relies on the governance perspective (thus implying new mechanisms for international cooperation apart from the existing governmental structure of the countries).

In this context, this paper explores in-depth the relationship between globalization and the environment, seeking to answer the following questions: (1) How and in what ways does globalization affect the environment? (2) How does the national setting and environmental regulation affect globalization (particularly its main driver – economic integration) (3) What are the challenges faced by national governments in the environmental area and how could international cooperation be used to overcome them? (4) What institutional implications does international cooperation lead to and how can it be seen as a solution to maximize the opportunities offered by globalization to environmental concerns?

The next section will explore existing views derived from the literature review on interdependencies between globalization and the environment and on the recommended level of action (national, regional, European or global). Afterwards, we will present the prerequisites for international cooperation in the area of sustainability, as well as suggested solutions and practicalities for its implementation. The paper concludes with a series of theoretical and practical results of the study, also providing ways to further expand the research.

### **Literature review**

Globalization can have both positive and negative effects on the environment. It can increase environmental problems as well as provide new opportunities for addressing them (Bran, 2010; Jobs, 2003; Speth, 2003). Environmental choices can also shape the path of globalization as national regulatory choices may act as barriers to liberalized trade or trigger a convergence toward higher international authorities and set targets.

Several scholars argue that the EU leadership in international environmental policies is best explained by a “regulatory model” (Kelemen, 2004; Raustiala, 1997; De Sombre, 2000), which combines the effects of domestic institutions and international regulatory competition. According to the model, national governments became an “intermediary organism” and information provider towards the EU. This novel model lies at an intersection between the top-down and bottom-up perspectives. Our approach suggests national authorities to collaborate with the regional and local level actors to “steer” their involvement in developing environmental related projects, to then measure regional performance, gain an overview of the national performance and report further to the supranational level.

In the social and political sciences literature, the paper’s subject can be related to the paradigm shift from a focus on the enforcement role of public institutions (“the government”) and a current more flexible and encouraging role they have by “over-shadowing” other market actors and involving them in the process of policy formulation and implementation (the notion of “governance” and the “hollowing-out of the state”). (Milward and Provan, 2000; Peters, 1997; Stoker, 1998)

### **International cooperation in the area of sustainability – prerequisites, solutions and practicalities**

The surrounding environment and global resources have as a main characteristic the fact that they are “shared”. In essence, any environmental good is, at some point, *common* to different individuals, companies, regions and even states. If this assumption is false, we may, however state that, at least, the action upon the environment of a certain individual or group has implications upon others. For example, a fisherman’s activity has consequences upon the stock in the area he operates. The fisherman’s objective is to catch as many fish as he can, while this overexploitation affects others by depleting fish resources and also leads to biodiversity disequilibria (it may produce species extinction or affect the reproduction of fish); a situation that may, in practice, be overcome by putting in place cooperation in the form of agreements for sustainable fishery. These situations are frequently encountered in practice in border areas.

Also, a large number of similar cases are registered for afforestation and forest degradation. To name just one main hazard produced to forests, the most common problem is the exceptionally high level of losses due to increase in volume of uncontrolled logging performed much earlier than the recommended age of exploitability. For example, in the Toplita-Deda perimeter, the total estimated loss of biomass due to early cuts increased in volume for the stands sampled in official statistics and totals 60.2% for spruce species, 45.5% for fir and 20.6% for the beech tree, far from negligible values. (Environmental Protection Agency Mures, 2010)

When extended to a global level, the environmental problem becomes more acute. Its root cause lies in the lack of cooperation, thus we may argue that there is a need for common clear rules. This, in turn, requires institutions, which can ensure compliance to the agreed standards or targets.

A second important prerequisite for cooperation lies in the problem of *externalities*. A main challenge for environmental policies is to find ways to “internalize” externalities. In a world with competing jurisdictions and multilevel governing authorities, environmental hazards do not belong to one state or region only. For example, pollution produces harms that are easily externalized to neighbours.

“Transboundary” spill overs of pollution from one country to another, which result in the so-called “super externalities” (Dua and Esty, 1997) are especially difficult to manage. Given the fact that there is no single jurisdiction to optimally regulate and monitor such harms, a qualitative and effective response is hard to imagine without international cooperation. Even in the case of harms within one jurisdiction there may be reasons (either political or social – such as divergences of power or authority) why governments may not regulate emissions properly.

Even more likely, when harms span multiple jurisdictions, from different regions or the entire world, the negative impact is so high that it is hard for national organisms to reach consensus and share costs and benefits to justify intervention. The root causes for this consequence are the institutional fragmentation and the current structure; as well as the different norms and standards (which may be quite similar, but given each region’s specific, they differ and also problems need customised interventions, thus different methods and instruments need to be applied).

The third and last prerequisite that we will analyse is represented by the environmental problems being *common* to several nations. This is applied to most of the issues; even if they are local in scope and do not go across national boundaries, environmental problems are found across the globe, thus the interest of policy makers is worldwide. (Dauvergne, 2005)

These problems should and can be dealt with by national authorities and, at a first glance, there is no stringent need for international cooperation.

However, the fact that many regions and countries face the same problems constitutes the basic logic for cooperation. Comparative analyses help highlight main causes, issues and can help disseminate policies, technologies and share best practices. Differing on the extent to which a problem requires substantive scientific and technical fundament, international cooperation in this case can help gain and share knowledge and also helps to cut costs and improve overall efficiency. Thus we may argue that the most valuable contribution in this case is the gain of intellectual capital, information and technology, facts which bring added value to economic integration.

As we have seen from the literature review and the three characteristics underlined above, it is indisputable that the real world of interlocked economic and ecological systems will not change; but the institutions and policies can and should improve. What is the solution then?

First, we need to analyse the situation of the present institutional setting. A comparative analysis of the levels of involvement depending on the functions of institutions is presented below.

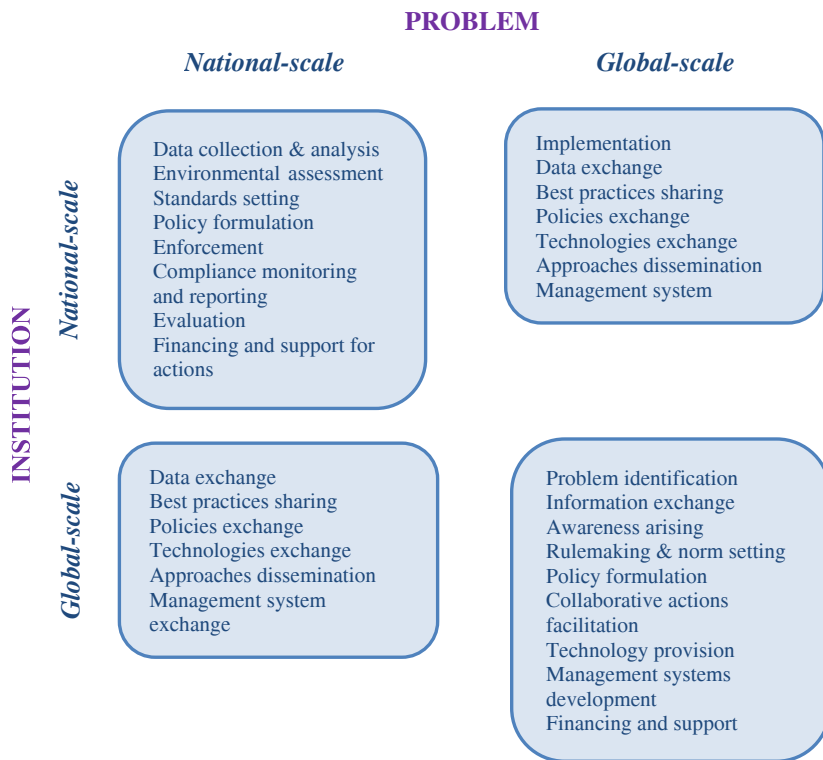


Fig. 1. *The functions of national and global level institutions for national- and global-scale problems*

Source: processed after Daniel C. Esty and Maria H. Ivanova, “Revitalizing Global Environmental Governance: A Function-Driven Approach”, in *Global Governance: Options & Opportunities*, edited by D. C. Esty and M. H. Ivanova (New Haven, CT: Yale School of Forestry & Environmental Studies, 2002), p. 38-50.

Also, there are several methods the EU employed, of which we wish to mention just two. The first mechanism for governance developed by the EU as an alternative to coercive regulation is the open method of coordination. (Heritier, 2001) This relies on target development and published scoreboards of national performance, measured by policy objectives that have been agreed upon, as well as voluntary agreements.

Apart from the open method of coordination, the EU’s influence upon the environmental policy can be explored by the subsidiarity principle, which can be seen as a mean of implementation. The principle states that matters need to be handled or addressed by the smallest or lowest (in case of an hierarchical order) competent authority on any given field (Birnie and Boyle, 2002)

## Conclusions

As we have seen from the literature review and practical aspects mentioned in previous sections, we may summarize that the implications of globalization for the surrounding environment is twofold: on the one hand, it creates new opportunities for cooperation, but, on the other hand, it also gives rise to new issues and tensions.

There are three main aspects that need attention when discussing about the interdependencies between globalisation and sustainable development: the fact that environmental goods are common, the effect of environmental externalities and the shared environmental problems.

Given these interdependences and based on the analysis of institutional functions and principles in the EU, we reached the conclusion that we need an approach that acknowledges the diversity and dynamism of environmental problems and recognizes the need for specialized responses. (Esty and Ivanova, 2002)

The essence for international cooperation in the area of environment holds as a bottom line the institutional component (this is where policies and actions plans are born). A multi-layered institutional structure is required to address the issues demanding immediate attention at various geographic scales. (Karlsson, 2000; Ostrom, 1990; Vogler, 2000)

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Section II

**ECONOMIC AND FINANCIAL ANALYSIS  
IN DIFFERENT TYPES OF ORGANIZATIONAL  
STRUCTURES**



# ANALYSIS OF GENDER GAPS IN PROFESSION, CAREER AND PAY

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## **Abstract**

*Gender issues and concerns about its incorporation into all Community and national policies enjoy attention, both on the agenda of decision makers from the European Union and the Member States. Moreover, equality between women and men is one of the fundamental principles contained in the Charter of fundamental rights and at the same time, is also one of the founding principles of the EU, because it is based on the principle of “equal pay for equal work” stipulated in the Economics Community Treaty from Rome.*

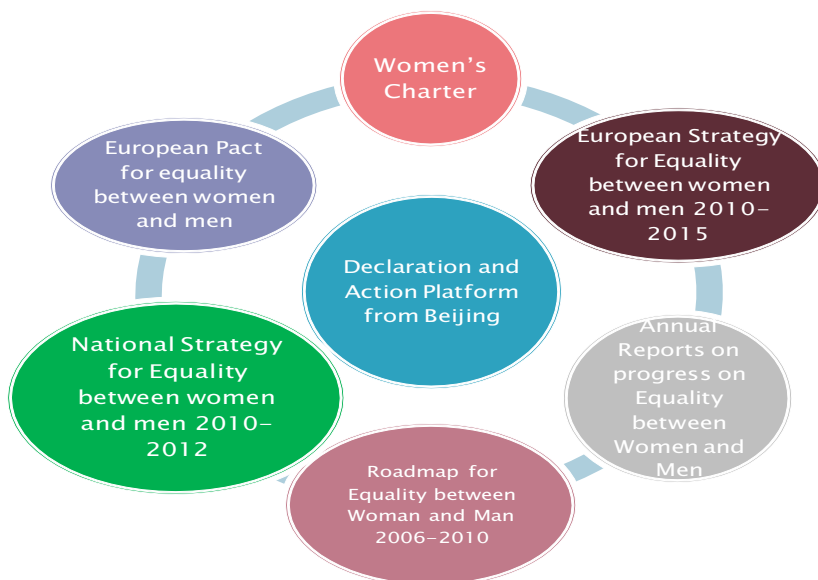
*The results presented in this article are based on questionnaire-based survey, conducted in ProFeminAntrep project financed on ESF, at national level, which included a sample of 3,200 respondents.*

**Key-words:** *gender equality, gender gaps, occupation, career, incomes*

**JEL Classification:** A<sub>13</sub>

## **Introduction**

Equality between women and men is one of the founding principles of the European Union because it is based on the principle of “equal pay for equal work”, stipulated in the Economic Community Treaty from Rome (1957). In time, with enlargement EU to 27 countries, the men and women’s rights to equal treatment and discrimination have evolved with the development of legal and institutional framework. Gender equality law forms a central pillar of equal opportunities policy in Europe, covering the right to equal treatment for men and women in the field of labor, payments and social security and for the access to goods and services. All EU Member States are obliged to respect the law on gender equality and to incorporate into national legislation which covering all areas of the social, political, economic and cultural life. Gender mainstreaming was taken at EU level with the adoption by the European Commission of the strategy for mainstreaming gender in 1996.



Source: authors.

Fig. 1. The main reference documents on the issue of gender differences

### Literature review

Although statistics show progress in many areas of gender equality, especially in regard to the involvement of women in economic activity, it seems that gender inequalities still exist in Romania and EU level, having regard, in particular, the gap between women and men in terms of employment rates (table 1), remuneration (table 2), active participation of women in decision-making and public representation structures (Table 3). The persistence of these gaps, despite the implementation of EU gender policy in recent years highlights the need for the future development of effective and coherent policies to determine the achievement of equality between women and men in all areas, such as social, political, cultural, labor, balanced participation in decision making, incorporating gender mainstreaming in all policies and national programs, combating gender violence, etc. Improving gender equality is still an important objective in many countries, paying attention to both scientific environmental studies at the macroeconomic level, analyzing the effects of family policies on gender attitudes and behaviors (Kotsadam, Finseraas, 2011), social factors that turn into factors risk (McLaughlin, Xuan, Subramanian, Koenen, 2011) and the corporate level (Casey, Skibnes, Pringle, 2011).

Table 1

**Employment Rate (women and men aged 15-64) in EU Member State,  
2005 and 2010**

- % -

	Women		Men		Gap	
	2005	2010	2005	2010	2005	2010
Sweden	75,5	75,7	80,7	81,7	5,2	6,0
Denmark	73,7	73,1	82,3	79,0	8,6	5,9
Finland	70,8	71,5	75,1	74,5	4,3	3,0
Netherlands	67,6	70,8	82,4	82,8	14,8	12,0
Germany	64,2	69,6	75,6	80,1	11,4	10,5
Austria	64,9	69,6	78,5	80,2	13,6	10,6
Cyprus	63,8	68,5	85,5	82,5	21,7	14,0
United Kingdom	68,5	67,9	82,0	79,3	13,5	11,4
Slovenia	66,2	66,5	75,8	74,0	9,6	7,5
Estonia	69,0	65,7	75,4	67,7	6,4	2,0
Portugal	66,0	65,6	78,7	75,4	12,7	9,8
Lithuania	66,6	65,1	74,9	63,6	8,3	-1,5
France	63,7	64,9	75,3	73,8	11,6	8,9
Latvia	65,7	64,9	75,4	65,1	9,7	0,2
<b>UE27</b>	<b>60,2</b>	<b>62,1</b>	<b>76,0</b>	<b>75,1</b>	<b>15,8</b>	<b>13,0</b>
Luxembourg	58,4	62,0	79,4	79,2	21,0	17,2
Bulgaria	57,1	61,7	66,8	69,1	9,7	7,4
Belgium	58,6	61,6	74,3	73,5	15,7	11,9
Czech Republic	61,3	60,9	80,1	79,6	18,8	18,7
Ireland	62,4	60,4	82,8	69,4	20,4	9,0
Poland	51,7	57,7	65,1	71,6	13,4	13,9
Slovakia	56,7	57,4	72,5	71,9	15,8	14,5
Romania	56,9	55,9	70,4	70,8	13,5	14,9
Spain	54,4	55,8	79,9	69,1	25,5	13,3
Hungary	55,6	55,0	69,2	66,0	13,6	11,0
Greece	49,6	51,7	79,8	76,2	30,2	24,5
Italy	48,4	49,5	74,8	72,8	26,4	23,3
Malta	35,1	41,4	80,6	77,7	45,5	36,3

Source: Eurostat, Labour Force Survey (LFS).

While the EU employment rate of women increased by almost 2 percentage points, in Romania there was a decrease by 1 percentage point in the period under review. This also shows that the employment rate gap between the two types decreased by 2.8 percentage points in the EU, while in Romania increased by 1.4 percentage points.

Table 2

**Gender pay gap in unadjusted form in EU-27 in 2007 and 2009**

<b>Country</b>	<b>2007</b>	<b>2009</b>
Slovenia	8,3	3,2
Italy	5,1	5,5
Malta	5,2	6,9
Romania	12,7	8,1
Belgium	9,1	9,0
Poland	7,5	9,8
Portugal	8,3	10,0
Luxembourg	12,5	12,5
Latvia	15,4	14,9
Bulgaria	12,4	15,3
Lithuania	20,0	15,3
Ireland	17,1	15,7
Sweden	17,9	16,0
France	16,9	16,5
Spain	17,1	16,7
Denmark	17,7	16,8
UE-27	17,6	17,1
Hungary	16,3	17,1
Netherlands	23,6	19,2
Finland	20,0	20,4
United Kingdom	21,1	20,4
Cyprus	23,1	21,0
Slovakia	23,6	21,9
Greece	21,5	22,0
Germany	23,0	23,2
Austria	25,5	25,4
Czech Republic	23,6	25,9
Estonia	30,9	30,9

\* Difference between average gross hourly earnings of men and women, as a percentage of average gross hourly earnings of men

*Source:* Eurostat

There is a decrease in pay gap between women and men in the analyzed period, although at the EU level it remains at a relatively high level of 17.1 p.p. Romania, in 2009, was in the 4<sup>th</sup> place in the hierarchy of EU countries according to this indicator, after Slovenia, Italy, Malta and at the opposite pole lies Greece (21.5 pp), Germany (23.2), Austria (25.4), Czech Republic (25.9) and Estonia (30.9).



**Sex distribution of members of single/lower houses  
of national parliaments in EU Member State 2010**

Country	2005		2009	
	Wo	Men	Wo	Men
<b>UE-27</b>	<b>23</b>	<b>71</b>	<b>24</b>	<b>76</b>
Belgium	35	65	38	62
Bulgaria	21	79	22	78
Czech Republic	16	84	18	82
Denmark	40	60	37	63
Germany	31	69	32	68
Estonia	18	82	21	79
Ireland	13	87	13	87
Greece	13	87	16	84
Spain	36	64	36	64
France	15	85	19	81
Italy	12	88	21	79
Cyprus	16	84	16	84
Latvia	21	79	22	78
Lithuania	23	77	19	81
Luxembourg	21	79	20	80
Hungary	9	91	11	89
Malta	9	91	9	91
Netherlands	39	61	42	58
Austria	33	67	28	72
Poland	21	79	20	80
Portugal	25	75	30	70
<b>Romania</b>	<b>11</b>	<b>89</b>	<b>11</b>	<b>89</b>
Slovenia	13	87	16	84
Slovakia	17	83	18	82
Finland	38	62	40	60
Sweden	49	51	47	53
United Kingdom	20	80	20	80

*Source:* European Commission, Employment, Social Affairs and Equal Opportunities DG, Database on women and men in decision making.

### **Research investigation based on gender differences**

**Research objectives:** This research has pursued a rigorous investigation to capture gender differences in objective terms regarding profession, career and income in the specific Romanian context, considering, especially the subjective perception of these gaps investigated.

**Sample size:** 3,200 respondents aged between 15-64 years, from all counties according with the sampling method. The sample is not representative.

**Survey Period:** March-May 2011

## Survey results

Below we present some representative results obtained from questionnaire-based survey.

In terms of population distribution on levels of training, can be seen from Chart 4 that the proportion of women with secondary education in the sample achieved is equal to that of men. The number of women who have a university or postuniversity training is higher than men, the difference being about 5 percentage points. Superior education of women should constitute a labor market advantage. Also, a higher proportion of men among graduates of vocational schools or colleges and foremen can be observed, indicating that the men leave early the school and they start the economic activity. Although the level of education of women is higher than men, it seems that the professional development of women is lower, requiring implementation of specific measures to accelerate it.

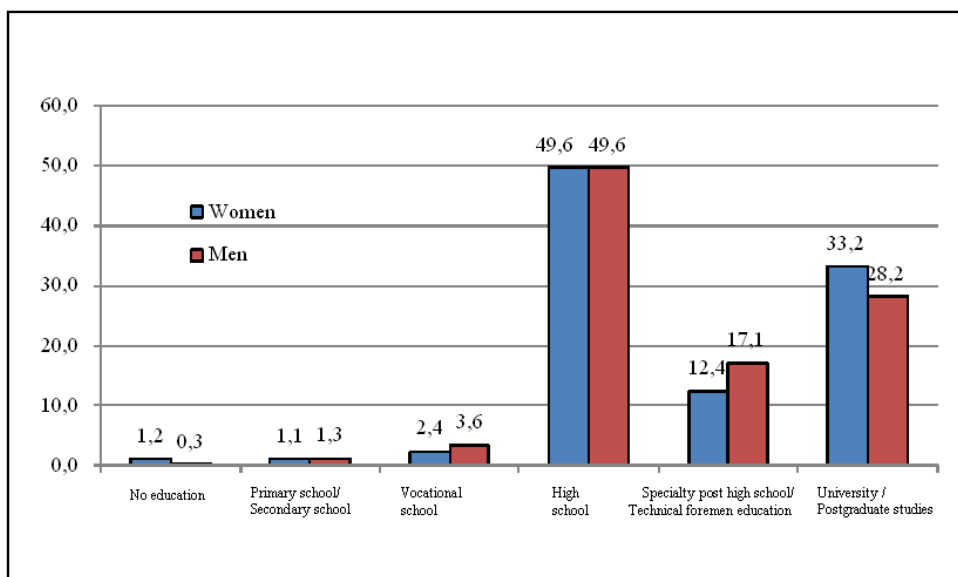


Fig. 2. Distribution of male and female population by education level

The selected sample shows an obvious segregation of the labor market (see Table 2), women tending to be overrepresented in certain skills /professions learned in school, such as accountant, economist, teacher/kindergarten teacher, professor, operator, MD and underrepresented in others, such as engineer, technician, electrician (electromechanic, electronics graduate), mechanic, locksmith, foreman. Female jobs are generally less valued than jobs typically “male” leading to wage disparities by gender.

Table 4

**First 14 occupations/occupations in whole selected sample**

QUALIFICATION / OCCUPATION	% Women	% Men
technician	24	76
economist	68	32
engineer	43	57
teacher/ kindergarten teacher	56	44
accountant	84	16
electrician,	23	77
professor	54	46
operator	66	34
mechanic	13	87
locksmith	11	89
clerk	33	67
lawyer	51	49
foreman	22	78
doctor	74	26

The male and female population distribution in the selected sample according to the group of occupations (Chart 10), illustrates the labor market segregation, women having the majority share in groups like: professionals, service workers and shop and market sales workers, clerks, while men in groups like: technicians and associate professionals, skilled and unskilled workers, armed forces and skilled agricultural and fishery workers. The slightly higher share of women in the group of legislators, senior officials and managers may be influenced by the high rate of women in management positions at lower hierarchical levels. Although women in the sample have the largest share in professionals, legislators, senior officials and managers, however the following chart that illustrates the gender distribution according to the income level shows the largest share of women in low income categories, which indicates that female labor is poorly valued.

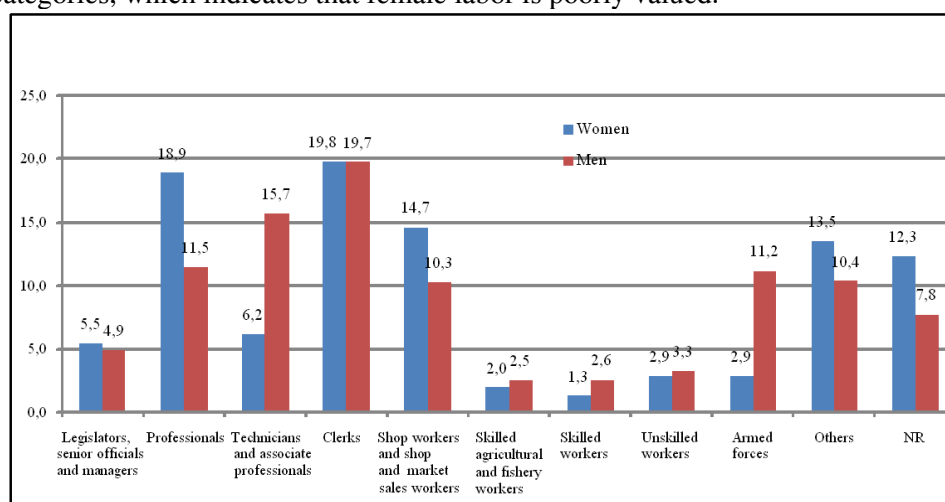


Fig. 3. Male and female population distribution according to the group of occupations (%)

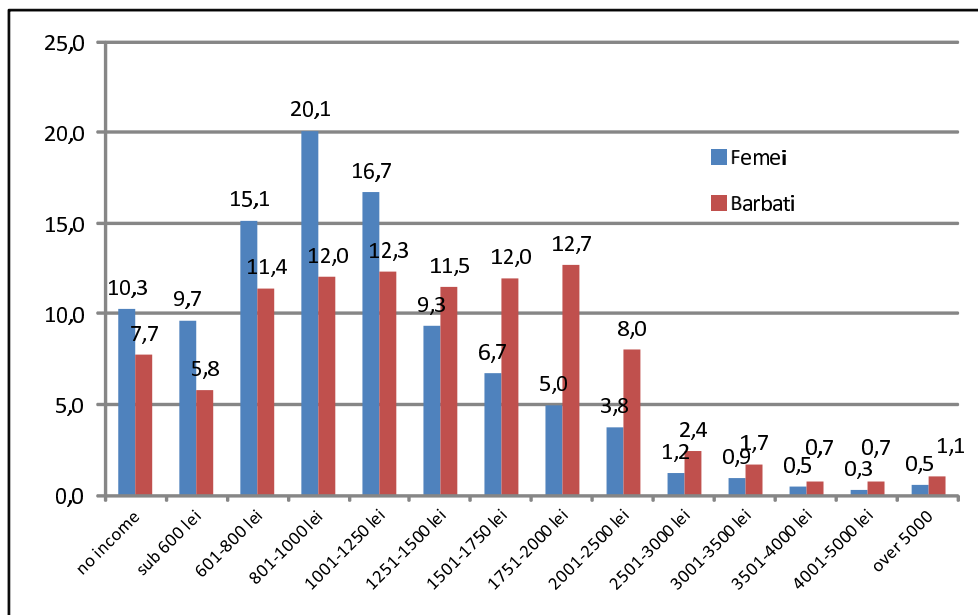


Fig. 4. *Distribution of male and female population based on average monthly net income (%)*

The wage disparities in the selected sample are graphically illustrated by the chart, the largest share of women being distributed in low income categories, under 1250 lei, and the largest share of men in higher income categories (chart 11). The pay gap between men and women may reflect objective differences according to the individual characteristics (age, education level and gained expertise), labour (profession, type of contract or working conditions) or the company level (field of activity or size). Also, the pay gap may be interpreted, partially, by slightly higher rate of women from young age categories in the selected sample, with little experience and slightly higher rate of men in the age group over 55 years. However, there may be discriminatory practices that may affect workers due to gender differences, sometimes, because of the disproportionate burden of the family responsibilities and the difficulty of achieving a balance between work and private life leading to poor career development and little prospect of promotion. Given the high share of women in the selected sample with higher education and intellectual and scientific occupations, we conclude that there is a lower valuation of women's work.

The largest women's rate in low income categories in the selected sample is significantly represented in each age category, which shows that the fundamental principle "equal pay for equal work" has not yet been fully implemented in Romania and that the causes are many and complex. The causes reveals, not only the gender discrimination, but also the inequalities related to education, horizontal and vertical segregation in the labor market, difficulties in reconciling professional, family and private life, unequal distribution of family responsibilities, lack of transparency of remuneration and the impact of gender roles over influencing the educational and professional career course.

Table 5

### The distribution of women across occupational groups according to income level

	sub 600 lei	601-800 lei	801-1000 lei	1001-1250 lei	1251-1500 lei	1501-1750 lei	1751-2000 lei	2001-2500 lei	2501-3000 lei	3001-3500 lei	3501-4000 lei	4001-5000 lei	over 5000 lei	no income
Legislators, senior officials and managers	6,2	12,3	12,3	23,5	11,1	7,4	7,4	7,4	1,2	1,2	4,9	0,0	2,5	2,5
Professionals	1,8	9,8	24,6	19,3	14,7	10,9	8,1	3,2	2,5	2,1	0,4	1,4	0,4	1,1
Technicians and associate professionals	5,6	8,9	16,7	27,8	10,0	7,8	6,7	5,6	0,0	1,1	0,0	0,0	0,0	10,0
Clerks	7,9	12,7	24,7	22,3	11,0	6,2	5,1	7,5	0,0	0,0	0,0	0,0	0,3	2,4
Service workers and shop and market sales workers	10,6	26,6	22,9	15,6	7,3	3,7	4,6	1,4	2,8	0,0	0,0	0,0	0,5	4,1
Skilled agricultural and fishery workers	6,9	13,8	13,8	13,8	6,9	10,3	3,4	0,0	0,0	6,9	3,4	0,0	3,4	17,2
Skilled workers	10,5	21,1	26,3	15,8	15,8	5,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	5,3
Unskilled workers	46,5	23,3	2,3	4,7	0,0	0,0	0,0	0,0	0,0	2,3	0,0	0,0	0,0	20,9
Armed forces	4,7	11,6	4,7	14,0	7,0	30,2	9,3	4,7	2,3	0,0	0,0	0,0	0,0	11,6
Others	11,7	16,8	19,4	9,7	5,6	4,1	2,0	2,6	1,0	1,0	0,5	0,0	0,0	25,5
NR	19,7	12,1	14,6	8,3	7,6	3,2	3,2	2,5	0,6	0,6	0,0	0,0	1,3	26,1

Table 6

### The distribution of men across occupational groups according to income level

	sub 600 lei	601-800 lei	801-1000 lei	1001-1250 lei	1251-1500 lei	1501-1750 lei	1751-2000 lei	2001-2500 lei	2501-3000 lei	3001-3500 lei	3501-4000 lei	4001-5000 lei	over 5000 lei	no income
Legislators, senior officials and managers	2,9	13,2	8,8	11,8	13,2	8,8	23,5	7,4	2,9	2,9	1,5	0,0	1,5	1,5
Professionals	1,3	8,1	6,3	11,3	11,3	17,5	15,0	9,4	7,5	2,5	0,6	2,5	2,5	4,4
Technicians and associate professionals	4,2	12,5	10,2	17,1	12,5	10,2	13,0	6,9	2,3	1,9	0,5	1,4	0,0	7,4
Clerks	4,3	11,1	15,7	11,8	11,4	13,9	13,6	15,4	1,1	0,7	0,0	0,4	0,0	0,7
Service workers and shop and market sales workers	4,8	15,9	19,3	19,3	12,4	11,0	5,5	4,1	0,7	0,7	0,0	0,0	1,4	4,8
Skilled agricultural and fishery workers	8,8	23,5	20,6	8,8	8,8	0,0	5,9	2,9	2,9	2,9	0,0	0,0	2,9	11,8
Skilled workers	11,1	13,9	19,4	11,1	13,9	11,1	2,8	2,8	2,8	0,0	0,0	0,0	0,0	11,1
Unskilled workers	20,5	11,4	13,6	9,1	2,3	2,3	6,8	0,0	0,0	0,0	2,3	0,0	2,3	29,5
Armed forces	2,6	3,2	6,5	7,7	18,1	23,2	18,7	8,4	2,6	1,9	3,9	0,6	0,0	2,6
Others	8,8	10,2	6,6	9,5	8,8	6,6	15,3	5,1	1,5	4,4	0,0	0,7	3,6	19,0
NR	11,1	12,1	19,2	8,1	7,1	4,0	7,1	6,1	3,0	1,0	0,0	0,0	0,0	21,2

Table no. 7

### Calculation of gender pay gap for two occupations – “intellectual and scientific” and “clerks”

#### Calcularea decalajului de venit pe genuri în cazul a două ocupații

	sub 600 lei	601-800 lei	801-1000 lei	1001-1250 lei	1251-1500 lei	1501-1750 lei	1751-2000 lei	2001-2500 lei	2501-3000 lei	3001-3500 lei	3501-4000 lei	4001-5000 lei	over 5000 lei	no income
Professionals - Women	1,8	9,8	24,6	19,3	14,7	10,9	8,1	3,2	2,5	2,1	0,4	1,4	0,4	1,1
Professionals - Men	1,3	8,1	6,3	11,3	11,3	17,5	15,0	9,4	7,5	2,5	0,6	2,5	2,5	4,4
Gap	0,5	1,7	18,3	8,0	3,5	-6,6	-6,9	-6,2	-5,0	-0,4	-0,3	-1,1	-2,1	-3,3
Clerks - Women	7,9	12,7	24,7	22,3	11,0	6,2	5,1	7,5	0,0	0,0	0,0	0,0	0,3	2,4
Clerks - Men	4,3	11,1	15,7	11,8	11,4	13,9	13,6	15,4	1,1	0,7	0,0	0,4	0,0	0,7
Gap	3,6	1,6	8,9	10,5	-0,5	-7,8	-8,4	-7,8	-1,1	-0,7	0,0	-0,4	0,3	1,7

The gender pay gap in the selected sample is also apparent according to occupation categories, revealing a high percentage of women in low wage groups for each category of occupation, with very few exceptions.

In Table 7 were calculated the gender pay gaps for two categories of occupations that are highly represented by women in the selected sample. It is noticeable that, also in these cases, women hold the majority share in low-wage groups, getting to the fact that in the category of occupations in which women are best represented, men hold the better paid job positions.

The reasons why women face greater difficulties in recruitment are presented in the fig. 5. 59.2% of men and 58.9% of women consider that, in Romania, the recruitment criteria favours men. Women believe, in a higher rate than men (41.7% versus 35.2%), that managers have a discriminatory attitude towards women.

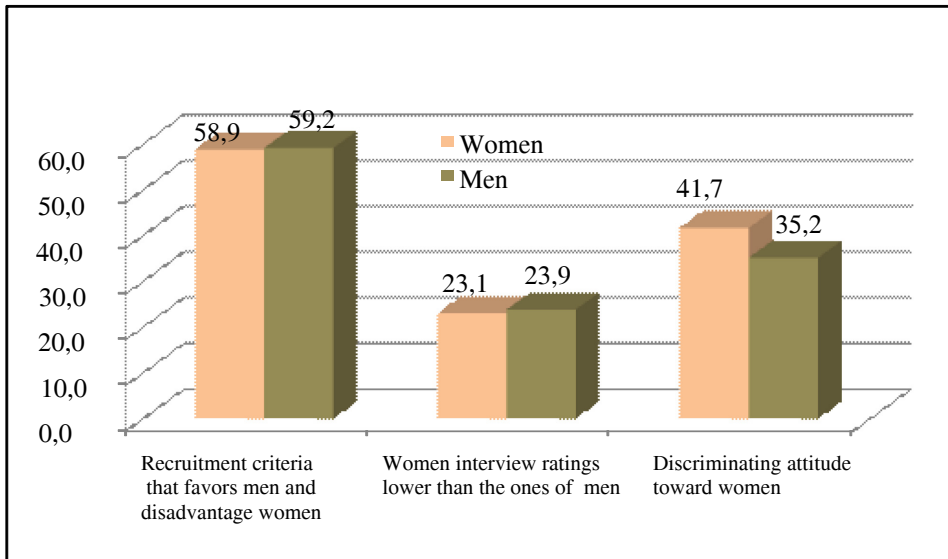


Fig. 5. *The main difficulties encountered by women in employment (%)*

On promoting women, in the selected sample, the majority of women (57.2%) consider that women are not promoted to management positions, while the majority of men (59%) consider that women are, promoted to management positions.

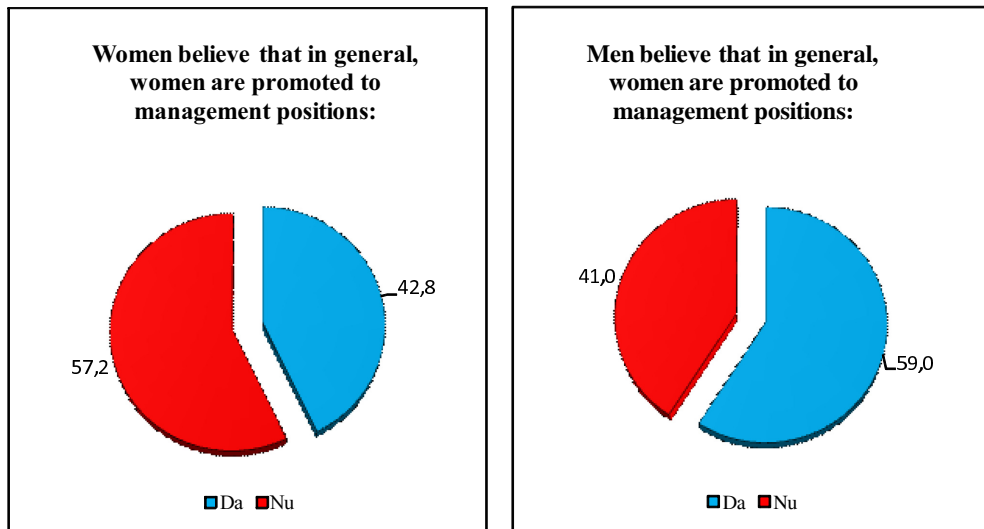


Fig. 6. *What about women promotion in management positions*

50.6% of women and 48.8% of men consider that family responsibilities are the main obstacles faced by women in career advancement (see fig. 7). The skepticism of male managers is another reason claimed by 36.9% of women and

33.3% of men. At the same time, more men than women think that the women's abilities, that are considered inferior that the ones of men, are an obstacle in the way of promotion for women.

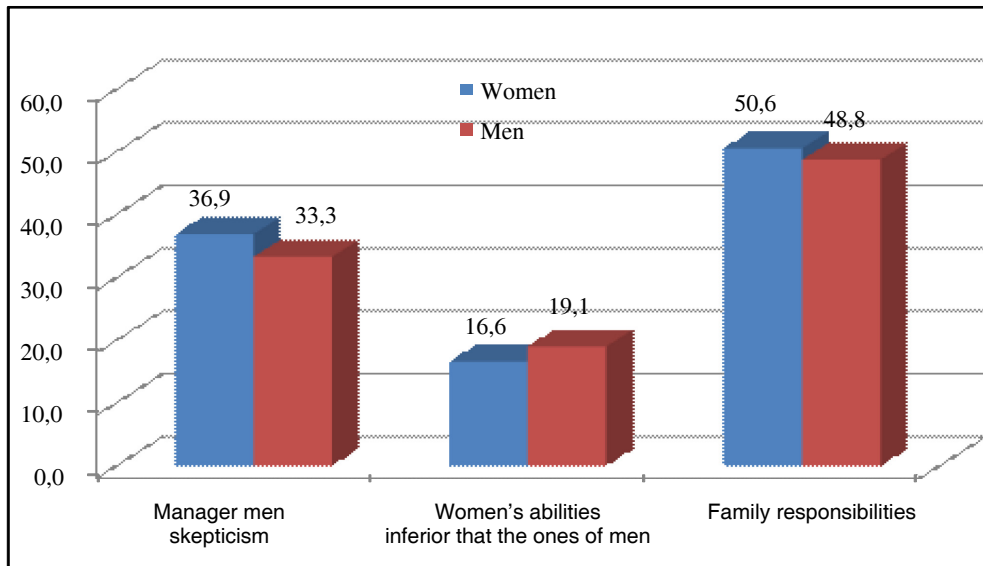


Fig. 7. *The main obstacles faced by women in career advancement*

## Conclusions

The economic crisis affected to a greater extent the vulnerable groups, including women, revealing gender disparities in various fields such as:

- on the labour market, women continue to be overrepresented in areas with lower pay, there are even some feminized sectors of activity (i.e.: health, education, public administration);

- women are underrepresented in decision-making jobs and their major share is present in low-wage sectors;

- a cause of perpetuation of a low employment rate of females is the motherhood, women continue to work more unpaid hours than men (family responsibilities are shared equally);

- women face greater difficulties in reconciling the work and the family life;

- individual decisions are still influenced by gender roles that are essential to the education, the career, the working conditions, the family and the fertility;

- the individual decisions have an important impact on the economy and society so, there is therefore, in everyone's interest to give equally, to both women and men, a genuine possibility of choice in any stage of their lives;

- the existence of significant wage disparities between women and men due to complex causes;

- for achieving the goals of Europe Strategy 2020 and reaching the target of 75% employment rate (70% for Romania) for the population aged 20-64 years, it is necessary that women's potential and talent to be used more and more effectively;
- women use more than men part-time jobs and parental leave;
- women have more career discontinuation and fewer hours of work, having a negative impact on career development or promotion prospects;
- there is a major difference between the level of education of women and their professional development;
- the risk of reaching the poverty threshold is higher for women, particularly the elderly;
- the perpetuation of the belief that states that women cannot provide the same quality work than men reduces their opportunities on the labour market;
- unbalanced participation in economic activities to ensure financial independence of women.

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# EIGENVECTOR SPACE MODEL TO CAPTURE FEATURES OF DOCUMENTS

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## **Abstract**

*Eigenvectors are a special set of vectors associated with a linear system of equations. Because of the special property of eigenvector, it has been used a lot for computer vision area. When the eigenvector is applied to information retrieval field, it is possible to obtain properties of documents data corpus. To capture properties of given documents, this paper conducted simple experiments to prove the eigenvector is also possible to use in document analysis. For the experiment, we use short abstract document of Wikipedia provided by DBpedia as a document corpus. To build an original square matrix, the most popular method named tf-idf measurement will be used. After calculating the eigenvectors of original matrix, each vector will be plotted into 3D graph to find what the eigenvector means in document processing.*

**Key-words:** *eigenvector, Vector Space Model, Natural Language Processing, document analyzing, Information Retrieval, text mining*

**JEL Classification:** C<sub>83</sub>

## **1. Introduction**

To computer understand meaning of documents written by human, many researchers have been given great efforts to make computer think like human using lots of different methods. For example, Support Vector Machine (SVM) is the most common method to identify a feature of objects in computer vision, biomedical, and natural language processing field [1]. This method is based on the fact that every object can be considered as a vector after applying feature detection. This vector can be classified or clustered using similarity method to determine what vector meaning is. This is powerful method for long period. However, it has an unavoidable drawback that the dimension of the vector is too huge. This is the main reason why computing time takes a lot using SVM method. Therefore, it is not suitable for real time system. To overcome limitation of SVM method, LSA had been proposed [2]. LSA uses the singular value decomposition (SVD) to

capture latent semantic associations which do not appeared in SVM. LSA became famous for its ability to effectively handle and capture hidden meaning of vector after splitting original vector to 3 types of vectors. This method has been popular in information retrieval field due to the fact that it is possible to extract semantic meaning of documents. However, it still has a limitation that computation and storage of LSI matrix is costly. Consider that LSA matrix (term-by-document) represents the web document. If the size of the document is big, the size of the matrix will be huge, too. In order to reduce the computation time and storage supply, this paper suggests a method to capture the feature of documents using eigenvector method. The eigenvectors of a square matrix are the non-zero vectors which, being multiplied by the matrix, remain proportional to the original vector. The eigenvectors are also called proper vectors, or characteristic vector. In other word, the eigenvector represents a property of the original vector. For this reason, this paper consists of the method to capture properties of documents based on eigenvector matrix (term-by-document) from original matrix, which includes *tf* (term frequency)-*idf* (inverse document frequency) values using Wikipedia<sup>1</sup> short abstract document corpus. Wikipedia is one of the most famous collaborative encyclopedia webpages. It consists of over 3.5 million documents in English and constantly managed by experts. This is the reason why this paper uses Wikipedia documents as a fundamental data set. To simplify the experiment, we focused on “computer” domain, which is a document set that includes “computer” term. There are many noises in natural documents, such as “and”, “the”, “an”, “to” and special characters. These words have no meaning but are required for syntactic grammar rules. After filtering these noise terms, *tf-idf* matrix will be constructed in term-by-document form. According to the linear algebra theory, the eigenvector and eigenvalue matrix of original matrix will be calculated. This is the core point of this paper that the property of original matrix will be emerged in eigenvector matrix. After building eigenvector matrix, each of the vectors will be plotted into 3-D dimension space to compare feature of documents. We believe that the eigenvector space model can provide valuable features to determine which words are helpful to understand documents.

This paper is organized as follows: Section 2 describes the related works of this paper. It covers the face recognition technique using eigenvector, the eigenvector method for web information retrieval, and the method to extracting context information using eigenvector. In section 3 and 4, the proposed method of this paper will be described with examples. The evaluation and result will be presented in section 5. Finally, we conclude this paper in section 6.

## 2. Related works

The eigenvector space model has been applied for face recognition field. A collection of face images can be approximately reconstructed by storing a small collection of weights for each face [3]. Eigenfaces are sets of eigenvector used in

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<sup>1</sup> <http://www.wikipedia.org>.

the computer vision problem of human face recognition. It is considered the first successful example of facial recognition technology. These eigenvectors are derived from the covariance matrix of the probability distribution of the high-dimensional vector space. Therefore, the eigenfaces provide a means of applying data compression to faces for identification purposes [3]. Also, the eigenvectors can be thought of as a set of features which together characterize the variation between face images. Because of this reason, it is possible to capture properties of documents using eigenvector. Also, this eigenvector have been applied in Information Retrieval field. Every document in World Wide Web is connected with links. These links are the important evidences to determine which documents are more related with query. PageRank is a link analysis algorithm used by the Google internet search engine. It assigns a numerical weighting to each element of a hyperlinked set of documents with the purpose of measuring its relative importance within the document set. Hundreds of thousands of links are mixed and connected without any type of routines. To capture the tendencies of links in Webpages, the eigenvector opened new research door for numerical analysts [4]. [4] focused on Web information retrieval methods such as HITS, PageRank, and SALSA using the eigenvector. The computation of PageRank is a costly, time-consuming effort that involved finding the stationary vector of a PageRank matrix. Therefore, the eigenvector can be a solution to solve time-consuming problem. The dimension of original vector will be decreased and the properties of vector will be captured because of the power of eigenvector. Also, the eigenvector can be used to extract context of document to tagging what document it is. Lee proposed method to determine keywords of a document using the eigenvector [5]. The word that has the highest eigenvalue will be selected as a keyword in Korean newspaper data corpus. As we can simply understand, the eigenvector has a great possibility to obtain property of document data sets. The eigenvector is popular in computer vision area but not in information retrieval field. Documents are also mapped into matrix the same as the matrix of a photo. In order to capture properties of documents, this paper provides, a simple method to apply eigenvector.

### 3. Wikipedia Document Set

Wikipedia is one of the most famous collaborative encyclopedia webpages. Wikipedia includes more than 3.5 million documents and is constantly expanded and adjusted by experts. Each document contained in Wikipedia consists of various forms such as title, abstract, contents information, information box, figures, category information, and core explanation. The abstract part in the Wikipedia document gives brief explanation for the title. Even though the size of abstract document is short, it contains core fact of the document. So it is proper example of fundamental data to conduct Natural Language Processing. The total size of short abstract provided by DBpedia<sup>2</sup> is approximately 1.3GB with 3,261,096 documents. To simplify the experiment, we focused on the computer domain, which contains

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<sup>2</sup> <http://dbpedia.org>.

“computer” term in the document. The total number of the specified document set is 25,834 which is 0.008% of the original short abstract document data set. The 429 stopwords provided by Onix<sup>3</sup> are applied to remove unnecessary terms, which have no specific meaning. Finally, we obtained 750,591 terms after preparing test data set. Table 1 gives examples of short abstract in computer domain.

Table 1

**Examples of short abstract of Wikipedia document**

<b>Short abstract of Wikipedia document</b>
<p>microsoft basic was the foundation product of the microsoft company. it first appeared in 1975 ...</p> <p>technophobia is the fear or dislike of advanced technology or complex devices, especially computers. ...</p> <p>in computer programming, the core language is the definition of a programming language plus ...</p> <p>clist (command list) (pronounced "c-list") is a procedural programming language for mvstso ...</p> <p>basic is a general purpose interpreted, computer programming language originally developed by ...</p>
<b>After removing stopwords</b>
<p>microsoft basic foundation product microsoft company appeared altair basic basic indeed ...</p> <p>technophobia fear dislike advanced technology complex devices especially computers term ...</p> <p>computer programming core language definition programming language plus standard ...</p> <p>clist command list pronounced clist procedural programming language mvstso systems basic ...</p> <p>computer programming languages typeparameter frequentlyused generic label templates ...</p>

**4. Eigenvector and Eigenvalue for Documents**

Eigenvectors are a special set of vectors associated with a linear system of equations that are sometimes also known as characteristic vectors, proper vectors, or latent vectors. Each eigenvector is paired with a corresponding called eigenvalue. Mathematically, two different kinds of eigenvectors need to be distinguished: left eigenvectors and right eigenvectors. However, for many problems in physics and engineering, it is sufficient to consider only right eigenvectors. The mathematical expression of this eigenvector is as follows:

$$Av = \lambda v$$

where A is a square matrix, a non-zero vector v is an eigenvector of A if there is a scalar λ(lambda). To obtain the eigenvector of the document, documents have to be converted into matrix with term weight. The *tf-idf* (term frequency-inverse

<sup>3</sup> <http://www.lextek.com/onix/>.

document frequency) weight is a weight normally used in information retrieval and text mining. This weight is a statistical measure used to evaluate how important a word is to a document in a corpus. The *term count* in the given document is simply the number of times a given term appears in that document. The *term frequency* is defined as follows:

$$tf_{i,j} = \frac{n_{i,j}}{\sum_k n_{k,j}}$$

where  $n_{i,j}$  is the number of occurrences of the considered term  $t_i$  in document  $d_j$ , and sum the number of occurrences of all terms in document  $d_j$ . The *inverse document frequency* is a measure of the general importance of the term that was obtained by dividing the total number of documents by the number of documents containing the term:

$$idf_i = \log \frac{|D|}{|\{d: t_i \in d\}| + 1}$$

where  $|D|$  is the total number of documents in the corpus and  $|\{d: t_i \in d\}|$  is the number of documents where the term  $t_i$  appears. To avoid a division-by-zero, a 1 is added to the denominator. In order to obtain eigenvector of matrix A, the matrix A has to be square. To satisfy this condition, matrix A will be constructed with 10% of terms, which have the highest *df* value. Table 2 shows the example of *tf-idf* matrix.

Table 2

The example of *tf-idf* matrix

	computer	game	software	system	computers	science	university	developed	systems	games
1	0	0	0.049	0	0	0	0	0.0551	0	0
2	0	0	0	0	0.0605	0	0	0	0	0
3	0.0008	0	0	0	0	0	0	0	0	0
4	0.0007	0	0	0	0	0	0	0	0.06	0
5	0.0009	0	0	0	0	0	0	0.0699	0	0
6	0.0007	0	0	0	0	0	0	0	0	0
7	0.001	0	0	0	0	0	0	0	0	0
8	0.0008	0.0493	0	0	0	0	0	0	0	0.0789
9	0.0008	0	0.1643	0.0448	0	0	0	0	0	0
10	0.0034	0	0	0	0	0	0	0	0	0

After building *tf-idf* matrix, it is possible to obtain eigenvectors and eigenvalues corresponding to given matrix A. Table 3 and 4 gives the examples of eigenvectors and eigenvalues of *tf-idf* matrix.

Table 3

**The example of eigenvalue matrix**

	computer	game	software	system	computers	science	university	developed	systems	games
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	-0.0519	0	0	0	0	0	0	0
4	0	0	0	-0.0303	0	0	0	0	0	0
5	0	0	0	0	-0.0303	0	0	0	0	0
6	0	0	0	0	0	-0.0065	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0.0058	0	0
9	0	0	0	0	0	0	0	0	0.0612	0
10	0	0	0	0	0	0	0	0	0	0.0519

Table 4

**The example of eigenvector matrix**

	computer	game	software	system	computers	science	university	developed	systems	games
1	0	0	0	-0.2233	-0.2233	0.6692	0	0.6143	-0.4274	0
2	0	0	0	0.5441	0.5441	0.5518	-0.5467	-0.5901	-0.5356	0
3	0	0	0	0.0059	0.0059	-0.0854	0	0.0875	-0.0058	0
4	0	0	0.7565	-0.0059	-0.0059	0.3067	0	-0.3369	-0.0922	-0.7565
5	0	0	0	-0.2721	-0.2721	-0.0594	0	-0.0569	-0.5418	0
6	1	0	0	0.0054	0.0054	-0.0783	-0.6122	0.0802	-0.0053	0
7	0	1	0	0.0072	0.0072	-0.1043	-0.4579	0.1070	-0.0071	0
8	0	0	0	-0.2315	-0.2315	-0.0032	0	-0.0128	-0.4688	0
9	0	0	-0.6540	0.0025	0.0025	-0.0416	0	-0.0403	-0.0888	-0.6540
10	0	0	0	0.0243	0.0243	-0.3521	0.3417	0.3610	-0.0239	0

When the eigenvector and eigenvalue are calculated by program, an imaginary number can be generated due to the mathematical procedure. The imaginary number will be removed and only the actual number will be considered because the imaginary number cannot be plotted into 3D point. The terms which have the highest absolute value of eigenvector will be selected as a context word. As table 4 shows the simple example of eigenvector, the context words of document 1 are “science”, “developed”, and “systems” even though “science” and “systems” do not occur in document 1. If the dimension of *tf-idf* matrix is increased, the system will predict diverse context words even though those words do not occurred in the document.

## 5. Experimental evaluation

According to the previous section, the eigenvectors and eigenvalues of *tf-idf* matrix were calculated. Based on the suggested method, the proposed system will select what context words it is when the absolute value of eigenvector is in the highest range. This is the fundamental research to apply the eigenvector space

model to information retrieval field to capture properties of given documents. In order to capture the properties of documents, *tf-idf* matrix, eigenvector matrix and eigenvalue matrix will be plotted into 3D graph using Matlab program. The following figure 1 indicates graphs of each matrix.

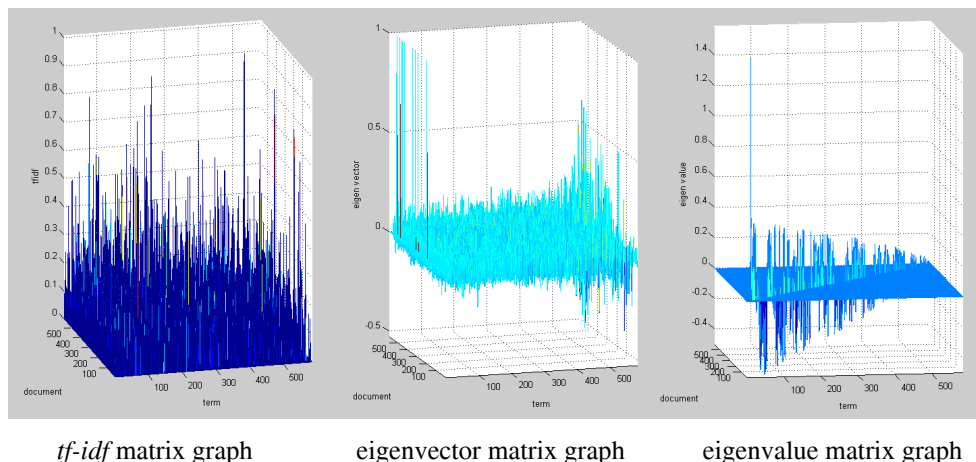


Fig. 1. Graphs of *tf-idf*, eigenvector and eigenvalue matrix

The first graph of fig. 1 indicates the *tf-idf* values of documents when *df* is bigger than 200. Because of the limitation of memory resource size, it is not able to construct the entire *tf-idf* matrix of filtered Wikipedia short abstract documents. To simplify the experiment, every term that has *df* value is less than 200 in given documents will not be considered as a candidate term. Only 583 terms are remained after applying threshold value as 200. It is easy to see that the *tf-idf* graph was is too much complicated to capture the properties of given documents even though the graph based on only 583 kinds of terms. However, the second graph of fig. 1 is different. The graph of eigenvector matrix involves particular patterns that are similar with signal data of voice. The graph goes up suddenly around the 500th term which means that those terms are closely related with “computer” query. We believe that it is possible to obtain properties of given documents through analyzing this inverted eigenvector frequency. Also, the context words for documents will be determined based on the suggested method.

## 6. Conclusions and future works

This paper contained a method to capture properties of Wikipedia short abstract documents through finding eigenvector of matrix with *tf-idf* values. The eigenvector have been applied in computer vision area not much in information retrieval field. To apply the eigenvector model to information retrieval, this paper conducted simple experiments to prove that the eigenvector is also possible to use in document analysis. The candidate terms for context words are selected from documents if their *df* values are higher than 200 due to the limitation of memory

size. After comparing each of *tf-idf* matrix graph, eigenvector matrix graph, and eigenvalue matrix graph, it has been proved that the eigenvector has more evidences to capture properties of given documents. Also, it is possible to obtain context words which are the representative terms of document using this method. Therefore, this great potential to analyze huge documents for semantic information processing or text mining using the eigenvector. However, the eigenvector will be changed if data of the original matrix has is changed. This means that the eigenvector depends on the weight measuring method. This paper is only using most popular method named *tf-idf* measurement, yet. There are many different term weighting methods for document processing. In order to guarantee its potential and usability in near future these weighting methods using the eigenvector have to be compared.

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# ANALYSIS OF SMEs IN HUNGARY COMPARED WITH ROMANIA USING THE INFORMATION AND COMMUNICATIONS TECHNOLOGY IN THIS SECTOR

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## **Abstract**

*Small and medium enterprises contribute greatly to achieving the fundamental objectives of any national economy. They play an important role in the economy for reasons such as: foster innovation and flexibility; they can be integrated relatively easily into a regional industrial network, which contributes to the economic development in the region, reducing unemployment and raising the living standards because it provides jobs, stimulate competition, helps the functioning of large companies that provide different services or producing different parts.*

*In this article I made a comparison of small and medium enterprise sector in Hungary and Romania.*

**Key-words:** *role of SMEs in the economy, set up a company in Hungary and Romania, internet in the enterprises, difficulties of SMEs in Hungary*

**JEL Classification:** A<sub>1</sub>, E<sub>59</sub>, O<sub>30</sub>

## **Introduction**

The study that I conducted wishes to highlight the real situation of the enterprises in Romania and Hungary as well as the penetration of the information technology in SMEs.

Peter Drucker said: “The small business represents the main catalyst of the economic growth” so that the importance of this work derives from the important role of the SMEs in the life of the society.

For this purpose, I defined the business, I have shown which is the procedure for establishing a business in Hungary compared to Romania and I presented some aspects concerning the use of information and communications technology in the SME sector.

This article is based on the most recent studies in the area, aiming topic, supplemented by my own research, through consulting the documents published on the websites of the national and international institutions, in the Report of SMEs’ Activities, 2010 and on the Doing Business Report, 2011.

## **Literature review**

In the literature, the importance of SMEs sector has been referred to by economists such as: Peter J. Buckley (1989), Schmiemann (2009) and authors like Fisher, Craig and Bentley (2007), Levy and Powell (2005), Stockdale and Standing (2006) showed the importance of the web business strategy for the small business owners.

In the UK and U.S.A. the government policy consistently recognizes the importance of access of SMEs to innovation and information and communication technologies (ICT) to help them develop (Wright, Ul-Haq and Oktemgil 2006).

## **Theoretical background**

The definition that reflects the fundamental features of an enterprise is defined by Robert Hisrich (2006) as follows: “The enterprise is the process of creating something new, valuable. In this process the entrepreneur assures the time and the effort required, assuming the financial, psychological and social risks. And of course, because at the end of this process one gains the recognition that would provide material and personal satisfaction”.

Ovidiu Nicolescu and Alexandru Isaac-Maniu in the *White Paper of SMEs in Romania* (2003) highlight the role and the importance of SMEs in the economy, considering that they derive from the next facts:

- generate most of the products and services without which the country’s population would not survive today;
- is the main creator of the economic substance of the value added in any country, without which the contemporary society cannot exist;
- provide jobs for most of the population;
- its performance makes the condition and performance of each country’s economy and the standard of living of its population.

Statistics of almost all countries show that SMEs absolutely dominated the economy, representing over 99% of all firms and having the substantial share in obtaining the GDP and providing jobs.

The new Internet technologies contribute directly to the expansion of the electronic commerce, of the new business models; the information is the major source in the “new economy”. The electronic commerce and the new technologies, in general, can generate significant cost savings and can facilitate the access to the domestic and foreign markets.

One of the major advantages of the electronic commerce process is the fact that it can be run anytime and anywhere, stepping over the boundaries of the location of the user data and the moment when conducting the business. (Pocatilu, Boja, 2009)

### *1. Overview of the SMEs’ sector in Hungary and Romania*

During the week we are constantly in contact with the smaller businesses (e.g. bakeries) or the larger ones (e.g. utilities companies) because they purchase the various products, services or we offer them services or we are their employees.

For society, the enterprises are crucial. The target group of my study in Hungary are the microenterprises.

The importance and the significance of this theme is illustrated by the fact that out of 533,240 enterprises in Hungary, in 2009, a total of 503,171 is represented by the microenterprises, those producing an added value of 9 billion euro of the total added value of 49 billion. Also, the microenterprises contribute to employment at a rate of 35.4% compared with the European Union, where the average of employment in the microenterprises is 29.7%.

In Romania, in 2009, of a total of 440,063 small and medium enterprises, 389,389 are microenterprises. Microenterprises have contributed to employment at a rate of 21.2% compared with the European Union, where the average was 29.7%. Microenterprises also produced an added value of 12.1% compared with the European Union, where the percentage was 21%.

The private household sector in Hungary is based on SMEs.

The vast majority of SMEs have appeared during the regime change. Most have become entrepreneurs “of need” after they have lost their jobs, which means that previously lacked experience in business and management, which later became the source of the problem for SMEs.

Likewise, during the change of the regime, more microenterprises had less than 10 employees. In Hungary, the vast majority of companies are composed of this kind of enterprise and the SMEs may have significant effect on the country’s competitive ability and development of the economy.

Microenterprises and SMEs constitute 99.9% of all functioning enterprises. These enterprises under the data of the Central Statistical Office (Központi Statisztikai Hivatal – KSH) in November 2010 provided employment for an average of 773,900 employees in the private sector, compared with the same period of 2009, when the average number of employees was 747,900.

The average net monthly earnings of the employees in the private sector were 133,191 HUF. Although the unemployment rate reached a value of 10% during January-December 2009, and a value of 11.3% in November 2010, SMEs have an important role in employment and development of the economy.

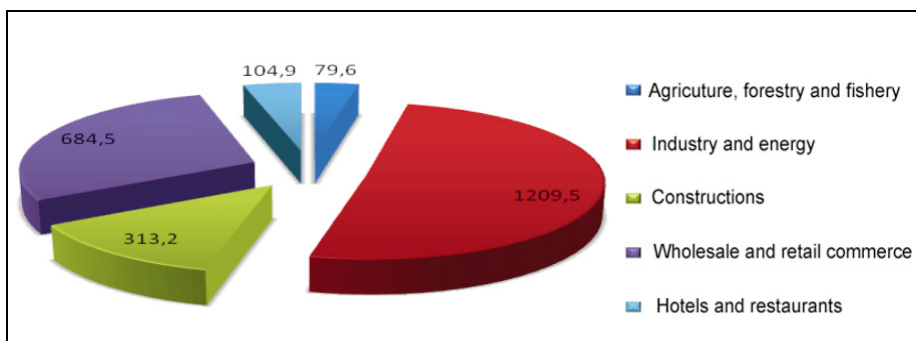
In December 2010, in Romania, the average net monthly salary was 1,496 lei in the private sector which was reduced with 72 lei in March, 2011, at a value of 1,424 lei.

Regarding the employment situation, according to the Report of the SMEs’ activity, in 2010, there was a loss of 333,273 jobs.

Reductions in the staff numbers were recorded both on the total SME sector and in each size category. The strongest negative dynamic was in the category of the medium-sized enterprise (-13.5%), followed by small (-12.1%) and micro (-8.2%) enterprises.

Reducing the number of employees was higher in the medium-sized enterprises, through more severe restructuring measures introduced in order to face the financial and economic crisis. In the case of small and microenterprises, the number of the employees is much smaller, so the staff adjustments could not be made without affecting the basic functions of any company, respectively, of its functioning.

I illustrated the employment structure on the sector of activities, in the chart below:



Source: Monthly Statistical Bulletin no. 11/2010, www. innse.ro

Fig. 1. Distribution of the number of employees in the SMEs, according to the sector of activity, in Romania – 2010 (thousands people)

## 2. Procedures for setting up the business in Hungary compared to Romania

According to the data derived from 2011 Doing Business Report, I presented below the procedure for establishing a company both in Romania and Hungary, the time and the cost involved to launch a commercial or industrial firm with up to 50 employees:

*In Hungary, in order to set up a firm four stages must be followed:*

1. The first step is contacting a lawyer to represent the firm and prepare the legal documents. The fee paid to the lawyer depends on the services offered and company size. This step varies between 1-2 days and can cost from 100,000 to 260,000 HUF, depending on the complexity of the procedures.

2. In the second step, one has to pay at least 50% of the subscription in advance (at least 250,000 HUF) into a designated account at the time of subscription. Half of the cash contribution must be paid when the company is established and the rest is paid in accordance to the provisions of the memorandum, but not later than one year after establishment. This stage lasts one day and the cost is zero (free).

3. At this stage, one applies for registration at the Court of Registration (simplified electronic registration). After the court receives the request for registration, the company may issue a certificate for commence operation. Companies can be established in two ways:

a) Simplified electronic filling, the stamp tax is 15,000 HUF and no publication fee. Time – one working day.

b) Standard electronic filling, the tax stamp and the fee is 100,000 HUF and the publication fee is 25,000 HUF. Duration – 15 days.

Along with filling the application form, an on-line registration is filled at the State Authority Tax (for VAT and income tax) and the Statistical Office.

The cost for this procedure is 20,000 HUF and lasts one day.

*To set up a firm in Romania, according to 2011 Doing Business Report, one must follow six stages:*

1. Obtain the certificate from the National Trade Register Office by filling out a form to check out name availability and reserve the name. The cost is 56 RON and duration for this procedure, one day.

2. Depositing the funds in the bank and obtain a document confirming the existence of a deposit with sufficient funds. For this stage, the banking commission varies from 0 to 0.5% of the capital and takes one day.

3. Obtaining a tax clearance certificate for enterprise associations and its legal representatives of municipal departments of the public finances. The cost for the fiscal record is 20 RON and lasts one day.

4. Recording “one-stop shop” (Single Office) by the National Trade Register Office, the Bucharest Court, obtain registration to the court, notification and registration for the publication of the statistical and social insurance.

The cost is 120 lei (registration fee) + 30 RON for each mandatory element of basic information about the company, such as capital, company, associates, administrators, company’s main activity object + 100 RON for each 2,000 characters as a tax for publication in the Official Gazette + 30 RON for registration in the National Trade Register Office (“Registration Certificate”) + commission for the liquidation fund (20% of the fee charged by the National Trade Register Office) + 10 RON (Fiscal Identification Code – CIF ) + monitor fund tax (5% of the fee charged by the National Trade Register Office) + 10 RON (fee required for the National Trade Register Office to submit documents for publication in the Official Gazette). Time for carrying out this procedure is 3 days.

5. Registration for the VAT is free and lasts 3 days.

6. Recording the contract of the employees at the Territorial Labour Inspectorate (TLI) is also free and lasts one day.

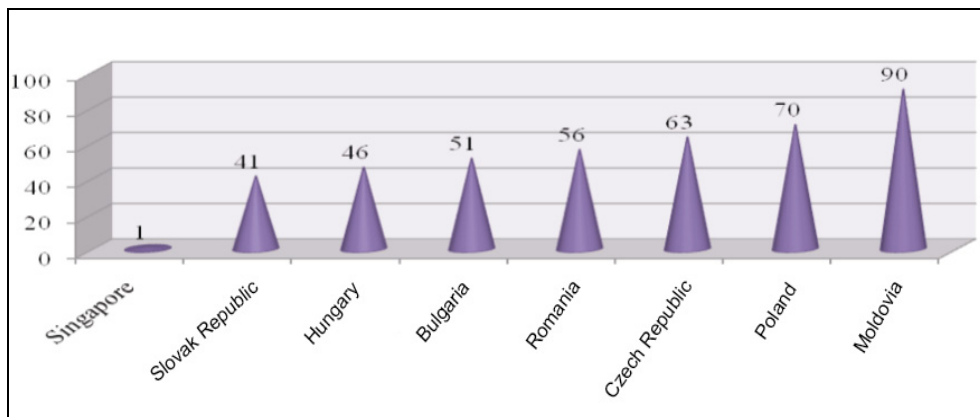
Doing Business Report shows that Hungary ranks on the 46<sup>th</sup> position out of 183 economies and Romania ranks on the 56<sup>th</sup>.

In point of easiness of setting up a company, Hungary is ranked on the 35<sup>th</sup> place while Romania is on the 44<sup>th</sup>, the highest ranked country based on this criterion being Singapore.

From the comparison made between the two countries we can conclude the following: to establish a business requires four stages in Hungary and six in Romania. The time that is required, expressed in days, for Hungary is 4 days and 10 days for Romania. The cost for setting up the business in Hungary is 8.2 (% of income per inhabitant) and 2.6 (% of income per inhabitant) in Romania. The minimum paid-up capital is 0.9 (% of income per inhabitant) for Romania and 10.2 (% of income per inhabitant) in Hungary.

Singapore, which is ranked on the first position based on this criterion, has a total of three procedures for setting up a business and lasts 3 days. The cost is 0.7 (% of income per inhabitant) and the minimum paid-up capital is not necessary (0.0% of income per inhabitant).

Below, I presented graphically the location of Hungary and Romania compared to the economies of other countries:



Source: Doing Business Report 2011, [www.doingbusiness.org](http://www.doingbusiness.org).

Fig. 2. Comparing Hungary and Romania to other countries on the criterion “ease of starting a business”

### 3. Using information and communication technology (ICT) in the SME sector

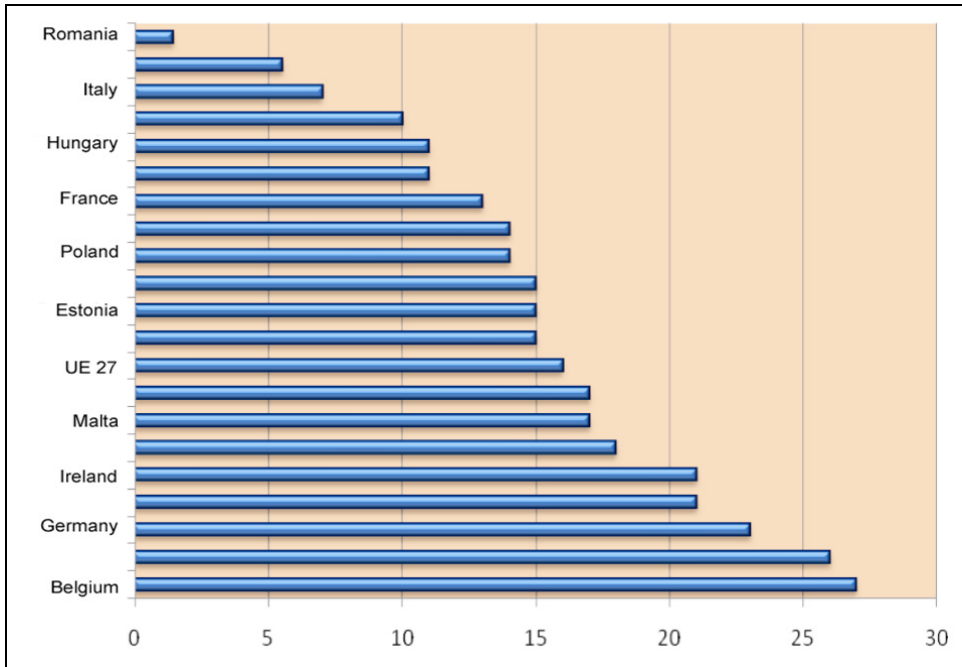
Using information and communications technology (ICT) – which includes software services, hardware for computers and telecommunications equipment, and technical services – represents a major facilitator factor in the innovation process. After joining EU, Romania has developed, within the meaning of approaching the use of ICT in other Member States, and in the recent years the differences in the development of information society have been reduced by developing an ICT industry, a broadband infrastructure and applications of the related services. The penetration of the information and communication technology is still very low due to a low demand and a limited availability of the infrastructure in terms of the access and the price for using it.

In comparison with the EU Member States, the costs for information technology sector in Romania occupies one of the lowest ranking positions in the EU, as it can be noticed in figure 3.

In Hungary, the expenses for the information and communication technology had a value of 11 million in 2009, compared to Romania, where they totalled 1.4 million euro. By comparison to other EU countries, our country was ranked last.

Romania also is on last place in the 27 EU Member States as regards the access to the broadband networks, a specific requirement of advanced Internet services. In terms of the infrastructure, only 73% of the Romanian enterprises have Internet access, compared to Hungary where the proportion is 89%. Is an urgent necessity to update the Internet infrastructure in Romania.

However, there are large differences depending on the enterprise: almost all large enterprises have Internet access (96% in 2009), while only 63% of small and microenterprises, which form most of the SME sector, have no access.

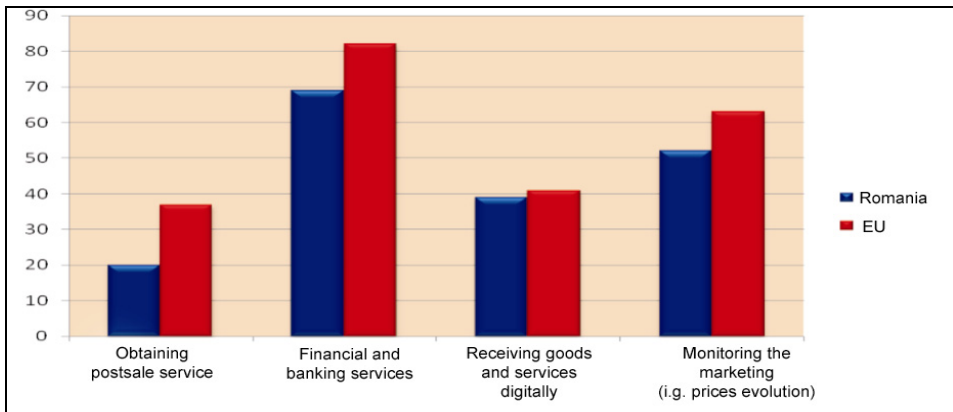


Source: Annual Report on SME sector in Romania 2010, [www.esimplu.ro/resurse-de-afaceri/documente](http://www.esimplu.ro/resurse-de-afaceri/documente).

Fig. 3. Expenditure allocated to information and technology (million euro) in 2009

The main Internet activities of the Romanian SMEs are for banking and financial concerns (69%), followed by monitoring the market (52%), activity for which the share of SMEs is higher than the European average.

The usage of the banking and financial services is lower, which implies that there is no market sufficiently developed for such services yet.



Source: Eurostat Database, Information Society Section, [http://epp.eurostat.ec.europa.eu/portal/page/portal/information\\_society](http://epp.eurostat.ec.europa.eu/portal/page/portal/information_society).

Fig. 4. Types of activities used on the Internet by SMEs in Romania

In Hungary was launched a project called “My Company is on the net” by which the Hungarian government intends to help small and medium enterprises to become more competitive and achieve higher incomes, following the introduction of Internet in the small companies, particularly those that sell goods and services.

### **Conclusions**

The SMEs play an important role in any economy, being the engine for its development. As a consequence of the economic and financial crisis, the SMEs were reduced in number; those most affected were medium-sized enterprises.

Regarding the creation of the company, analyzing the procedures described in 2011 Doing Business Report, it can be said that in Hungary there are four stages in this respect, and six stages in Romania. Thus, in point of view of easiness of setting up a company, Hungary is ranked the 35<sup>th</sup> internationally and Romania – the 44<sup>th</sup>.

The penetration of the information and communication technology is still very low due to a low demand and a limited availability of the infrastructure in terms of the access and the price for its usinage.

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Section III

**IMPROVEMENT OF MANAGEMENT  
AND MARKETING OF THE ECONOMIC UNITS –  
CONSTANCY OF OBTAINING  
SUPERIOR QUALITY IN THIER**



# INTERNAL CONTROL, CORRUPTION AND MONEY LAUNDERING<sup>1</sup>

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## Abstract

*The global financial crises created a different context for the economic growth and globalization. In the last few years, five risks have been designated as “risks to watch”, as survey respondents assessed them with high levels of variance and low levels of confidence while experts<sup>2</sup> consider they may have severe, unexpected or underappreciated consequences: cyber-security, demographic challenges, resource security, retrenchment from globalization, weapons of mass destruction. Strongly connected to these risks others are important to analyze: corruption, illegal trade and money laundering. There is a strong relation between corruption and money laundering. During the economic crunch the level of corruption and fraud had scientifically increased.*

*Internal control could be a good instrument to reduce corruption and to stop the illegal trade and money laundering. Internal control is a dynamic integral process that is continuously adapting to the changes an organization is facing.*

**Key words:** *Internal control, corruption, money laundering*

**JEL Classification:** H<sub>83</sub>, M<sub>41</sub>, M<sub>42</sub>

## 1. Introduction

This paper seeks to present an analyze of the current literature by examining the negative welfare effects of corruption, the interaction between political connections and the effect of corruption, and the causes and consequences of corruption. In the present paper, I present the relation between internal control, corruption and anti-corruption procedures. Corruption represents a barrier of the economic development and stability all over the word. As outlined in the Forum’s Financial Development Report 2010, strengthening financial systems in emerging economies by developing capital markets and improving access to retail financial

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<sup>2</sup> www.weforum.org – The Global Risks Report 2010-2011.

services could increase both domestic confidence and investment opportunities, both of which could stimulate consumption and help to offset global imbalances as well as reduce the risk of asset bubbles.

Olsen<sup>3</sup> presented corruption as a negative phenomenon with a corrosive impact on both overseas market opportunities and the broader business climate. Corruption deters foreign investment, stifles economic growth and sustainable development, distorts prices, and undermines legal and judicial systems. More specifically, corruption is a problem in international business transactions, economic development projects, and government procurement activities. The effectiveness of a government's anti-corruption measures may affect the incentives for corporations to seek political benefits.

## 2. Literature review

The paper has based its conclusions on the following papers and researches: COSO, Committee of Sponsoring Organizations of the Treadway Commission (2009) "Internal Control – Integrated Framework" presented how ongoing and/or separate evaluations enable management to determine whether the other components of internal control continue to function over time, and internal control deficiency are identified and communicated in a timely manner to those parties responsible for taking corrective action and to management and the board as appropriate. "Over the past decade, organizations have invested heavily in improving the quality of their internal control systems. They have made the investment for a number of reasons, notably: (1) good internal control is good business – it helps organizations ensure that operating, financial and compliance objectives are met, and (2) many organizations are required to report on the quality of internal control over financial reporting, compelling them to develop specific support for their certifications and assertions."<sup>4</sup>

Bishop and Kidosky present in their book "Corporate Resiliency" how to manage the risk of fraud and corruption. "Fraud itself cannot be eradicated, but fraud and corruption risks can be managed like other business risks. Fraud and corruption risk management strategies can help companies avoid some frauds and help them reduce the impact of frauds that occur. Resilient corporations focus more on strategies, not tactics, for managing fraud and corruption risks intelligently. In today's more brittle economy, fraud and corruption can more easily set off a chain of events resulting in significant loss for the companies affected."<sup>5</sup>

Olsen, P. (2010) discussed the new proposed regulations about anti-corruption. In his book "The Anti-Corruption Handbook", he presented managing

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<sup>3</sup> Olsen, W. P. (2010), "The Anti-Corruption Handbook. How to Protect Your Business in the Global Market Place", John Wiley & Sons, Inc., Hoboken, New Jersey, p. 26.

<sup>4</sup> The Committee of Sponsoring Organizations of the Treadway Commission (COSO) – Internal Control – Integrated Framework, p. 2.

<sup>5</sup> Bishop, T. Kidosky, F. – "Corporate Resiliency, Managing the Growing Risk of Fraud and Corruption", John Wiley & Sons, Inc, New Jersey, 2009, p. 3.

corruption risk, efforts to combat global corruption, laws governing corruption, internal control and accounting provisions. “Since the Foreign Corrupt Practices Act (FCPA) was enacted in 1977, U.S. law has prohibited offers, promises, or payments to foreign officials, political parties, political officials, and candidates to secure business. A company running afoul of the FCPA, or recently enacted anti-corruption laws of other countries, may subject itself to criminal charges and substantial fines. Companies in these situations may also face loss of financing and insurance from national or international institutions and debarment from public contracting. Companies committing FCPA violations may also sustain damage to their reputations and their ability to compete for international business. The financial losses incurred due to the loss in reputation can be far more costly than the fine and penalties leveled against companies for FCPA violations.”

Treisman, D. (2000) is explaining why fighting corruption in many countries has proved so difficult and the distant past appears as important as – or more important than – current policy. He thinks that democratization has to be radical and long-lived and trade liberalization has to be extensive to decrease corruption much. “The one slightly more hopeful finding is that, even though corruption hinders growth, countries can at times grow their way out of corruption.”<sup>6</sup>

Svenson, J. (2003) found that firms typically have to pay bribes when dealing with public officials whose actions directly affect the firms' business operations. Such dealings cannot be easily avoided when, for example, exporting, importing, or requiring public infrastructure services. Svenson made the connection between bribes and corruption by the quantitative data on corruption with detailed financial information from the surveyed firms to test his bargaining hypothesis and find that firms' "ability to pay", proxied with their current and expected future profitability<sup>7</sup>.

### 3. Internal Control

According to the Committee of Sponsoring Organizations of the Treadway Commission (COSO), internal control is designed to assist organizations in achieving their objectives.

“Over the past decade, organizations have invested heavily in improving the quality of their internal control systems. They have made the investment for a number of reasons, notably: (1) good internal control is good business – it helps organizations ensure that operating, financial and compliance objectives are met, and (2) many organizations are required to report on the quality of internal control over financial reporting, compelling them to develop specific support for their certifications and assertions.”<sup>8</sup> Related to corruption in particular, the COSO

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<sup>6</sup> Treisman, D(2000), “The Causes of Corruption: a cross-national study”, *Journal of Public Economic* 76(2000) p. 402.

<sup>7</sup> Svenson, J(2003), “Who Must Pay Bribes And How Much? Evidence From A Cross Section of Firms”, *The Quarterly Journal of Economics*, MIT Press, vol. 118(1), p. 209.

<sup>8</sup> COSO, *Internal Control, Integrated Framework, Guidance on Monitoring Internal Control Systems*, 2009, p. 5.

standard has become one of the principle benchmarks for American companies to evaluate their compliance with the U.S. Foreign Corrupt Practices Act (FCPA).

Internal control is a dynamic integral process that is continuously adapting to the changes an organization is facing<sup>9</sup>. The International Organization of Supreme Audit Institutions (INTOSAI) claims that no matter how well designed and operated, internal control cannot provide management absolute assurance regarding the achievement of the general objectives.

Sullivan & Cromwell LLP maintain that the SEC's interpretive guidance, which addresses the management assessment aspects of the internal control process, emphasizes a top-down, risk-based approach to evaluating the design and operating effectiveness of internal control over financial reporting. Sullivan & Cromwell LLP stress that management should evaluate the design of controls to determine whether the controls adequately address identified financial reporting risks.

As Sullivan & Cromwell LLP put it, support for management's assessment may come from a variety of activities, including day-to-day management of the business, direct testing and activities that are performed to meet the monitoring objectives of the control framework. PCAOB state that the effective internal control over financial reporting provides reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes. PCAOB argues that the auditor should assess the competence and objectivity of the persons whose work the auditor plans to use to determine the extent to which the auditor may use their work.

INTOSAI holds that as information technology has advanced, organizations have become increasingly dependent on computerized information systems to carry out their operations and to process, maintain, and report essential information. INTOSAI claims that providing needed information on internal control deficiencies to the right party is critical; information generated in the course of operations is usually reported through normal channels.

COSO observes that no system of internal control can guarantee that all control weaknesses that may result in material errors will be prevented and detected. Hong Kong Institute of CPA writes that establishing a sound system of internal control and reviewing its effectiveness is about implementing mechanisms that will help a company to achieve its corporate objectives and fulfill the expectations of its shareholders and stakeholders. Hong Kong Institute of CPA contends that control is not synonymous with managing and does not constitute everything involved in the management of a company. PricewaterhouseCoopers affirms that the Internal Control System (ICS) is one of the key management instruments at an organization's disposal. PricewaterhouseCoopers maintains that the investment an entity needs to make in setting up and operating its Internal Control System depends on the objectives and the desired scope of the ICS.

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<sup>9</sup> INTOSAI, Guidelines for Internal Control Standards for the Public Sector, p. 6.

#### 4. Corruption and money laundering

Corruption is a growing phenomenon and many specialists discussed its evolution. Bishop and Kidosky<sup>10</sup> present in his book “Corporate Resiliency” how to manage the risk of fraud and corruption. Thus, “ongoing legal and regulatory requirements, board pressure, and increased media coverage have created a new sense of urgency and have raised legitimate questions about whether companies are prepared to deal effectively with the complexities of fraud in a global economy. For example, despite the fact that the Foreign Corrupt Practices Act (FCPA) has been around for years, it has only recently become an issue for many companies. Prosecutions of FCPA violations have increased rapidly over the past several years, due to increased focus by U.S. and other authorities on anti-corruption. Several years ago, bribery violations would not have been on the horizon as major risk concerns. Today, for companies dealing with officials in other countries, they can be paramount, thanks to recent international fines and penalties as high as \$ 1.6 billion for a single company.” They think that the unnerving speed at which new fraud risks appear and grow seems to argue for a new kind of corporate agility based on risk management processes supported by advanced analytical technologies. These newer technologies enable companies to develop forward – looking capabilities for anticipating and responding quickly to new risks as they emerge.

As DiRienzo<sup>11</sup> et al. developed an interesting relation between corruption and taxes. They think that corruption raises the cost to host countries in the form of reduced tax revenues. This is why corruption has a negative impact on a country’s ability to become a significant player in the global economy. A normal consequence is a more open and transparent economy experiences a lower level of corruption. As a result, openness in public and private institutional operations should reduce the prevalence of corrupt practices. The conclusion is that access to information lowers corruption levels.

Olsen<sup>12</sup> had prepared an anti-corruption handbook. He thinks that money laundering represents one of the most important problems of the global economy. “In an effort to crack down on money laundering transactions, since 9/11 the federal government has enacted new reporting regulations for the banking and financial industry and is planning to extend such regulations to cover money brokers and other businesses and organizations involved in the transfer of large sums of money. The “Suspicious Activity Report” requires financial institutions and other businesses that transfer large amounts of cash to report patterns of suspicious activity by customers.”

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<sup>10</sup> Bishop, T. Kidosky, F., “Corporate Resiliency, Managing the Growing Risk of Fraud and Corruption”, John Wiley & Sons, Inc, New Jersey, 2009.

<sup>11</sup> DiRienzo, C. et al. (2007), “Corruption and the Role of Information,” *Journal of International Business Studies* 38: 320–332.

<sup>12</sup> Olsen, W. P. (2010), “The Anti-Corruption Handbook. How to Protect Your Business in the Global Market Place”, John Wiley & Sons, Inc., Hoboken, New Jersey, p. 24.

Olsen discussed the new proposed regulations also call for the development of “Customer Identification Programs,” which call for financial institutions to establish procedures and adopt steps to reduce the risk of money laundering under the Bank Secrecy Act, Patriot Act, and other anti-money laundering laws. He admitted that if implemented correctly, these preventive measures should help financial institutions prevent and detect illegal activity being perpetrated against their organization. It will also assist them in complying with government regulations.

Chaikin and Sharman<sup>13</sup> presented some anti-corruption techniques and the relation between corruption and money laundering. Anticorruption techniques can potentially assist in the fight against money laundering. Reporting entities routinely fail to lodge information about corruption-related transactions. Chaikin and Sharman say that corruption and money laundering will often occur together, mutually reinforcing each other, and they will affect the economic development.

Corruption and money laundering had a big impact on governments, on society, population and a special impact on business. Since 2006 the World Economic Forum’s Global Risks report has provided a unique and timely analysis of the risks that are shaping the global environment. Corruption is one the risks discussed on the World Economic Forum 2011. Illicit trade, organized crime and corruption are chronic risks that are perceived as highly likely to occur and of medium impact<sup>14</sup>.

## 5. Conclusion

The negative effects of corruption, illicit trade and money laundering are easy to characterize but extremely difficult to quantify. Governments are making efforts to reduce corruption and the effects of money laundering. According to the World Economic Forum 2011, the financial crisis has reduced global economic resilience, while increasing geopolitical tension and heightened social concerns suggest that both governments and societies are less able than ever to cope with global challenges. Internal control could be an efficient instrument to reduce the corruption, illicit trade and money laundering. Companies’ management should implement the internal control and the good internal control it means good business.

The COSO Board recognizes that management’s assessment of internal control often has been a time-consuming task that involves a significant amount of annual management and/or internal audit testing. Thus, effective monitoring can help streamline the assessment process, but many organizations do not fully understand this important component of internal control.

Olsen<sup>15</sup> thinks that an effective anti-corruption program must have the foundation of a strong code of conduct that communicates the organization’s position

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<sup>13</sup> Chaikin, D. and Sharman, J.C. (2009), *Corruption and Money Laundering: A Symbiotic Relationship*. New York: Palgrave Macmillan, p. 45.

<sup>14</sup> [www.weforum.org](http://www.weforum.org) – The Global Risks Report 2010-2011.

<sup>15</sup> Olsen, W. P. (2010), “The Anti-Corruption Handbook. How to Protect Your Business in the Global Market Place”, John Wiley & Sons, Inc., Hoboken, New Jersey, p. 25.



on conflicts of interest, bribery, kickbacks, confidentiality of proprietary information, and compliance with all applicable laws and regulations. To be effective, the program must have the support and oversight of top management. The communication of the organization's policies and procedures is also critical in this type of program. More than that, employees need to be constantly apprised of industry trends and new regulations through ongoing training programs.

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## REMARKS ON THE MARKETING OF EDUCATIONAL NOWADAYS

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### **Abstract**

*This article examines the marketing of educational products and services based on theoretical premises of marketing as defined in the specialized literature; were also identified the main characteristics of the marketing process of the teacher-manager: knowledge, identification and initial evaluation of the students' expectations and needs of training and information. In our daily work, marketing becomes an essential element of the teacher's strategic management, influencing our decisions in the field of course design, organization, coordination and evaluation (of the academic courses).*

**Key words:** *educational environment, marketing concepts, educational marketing*

**JEL Classification:** I<sub>21</sub>

A social system is characterized by a permanent exchange between its members and the environment in order to maintain the balance between of production and consumption.

While in the early history of mankind the individual consumed what he produced, nowadays there is a strict specialization of producers, that is a division of labour, which triggered the birth of private property and trade.

The trade activity has continually refined. It has become an important link in the production-consumption chain. Production has to adapt to the requirements generated by needs and once the product is manufactured it has to enter the trade circuit in the most favourable way.

### **1. Defining marketing**

The 21<sup>st</sup> century has imposed different relations between production and consumption.

The incapacity to adapt to the new type of economic relations can only lead to bankruptcy. In this context marketing has become essential for stimulating demand and supporting customers.

Marketing is a set of principles that contribute to selling of production and to satisfying customers' needs. Its main purposes are to support and assist the economic activities that direct the flows of goods and services from manufacturer to consumer, to assure the orientation of production according to the demand, to customers' needs and the achievement of profit.

Marketing also deals with the adaptation of production to the market environment so that profit should be obtained. The marketing specialist is conscious of the management's requirements, stimulates demand and intimidates competition. A high quality marketing policy is supposed to achieve goals such as: offering the right products and services to customers, assuring a wide range of products and services of the same type, assuring the right prices, at the right moment, for a quantity of products that is enough.

The specialized literature defines marketing as the art of creating the environment that should generate the customers' buying decision. Scientific techniques and methods of investigating the market and adapting production and sales to customers' needs are also part of efficient marketing strategies.

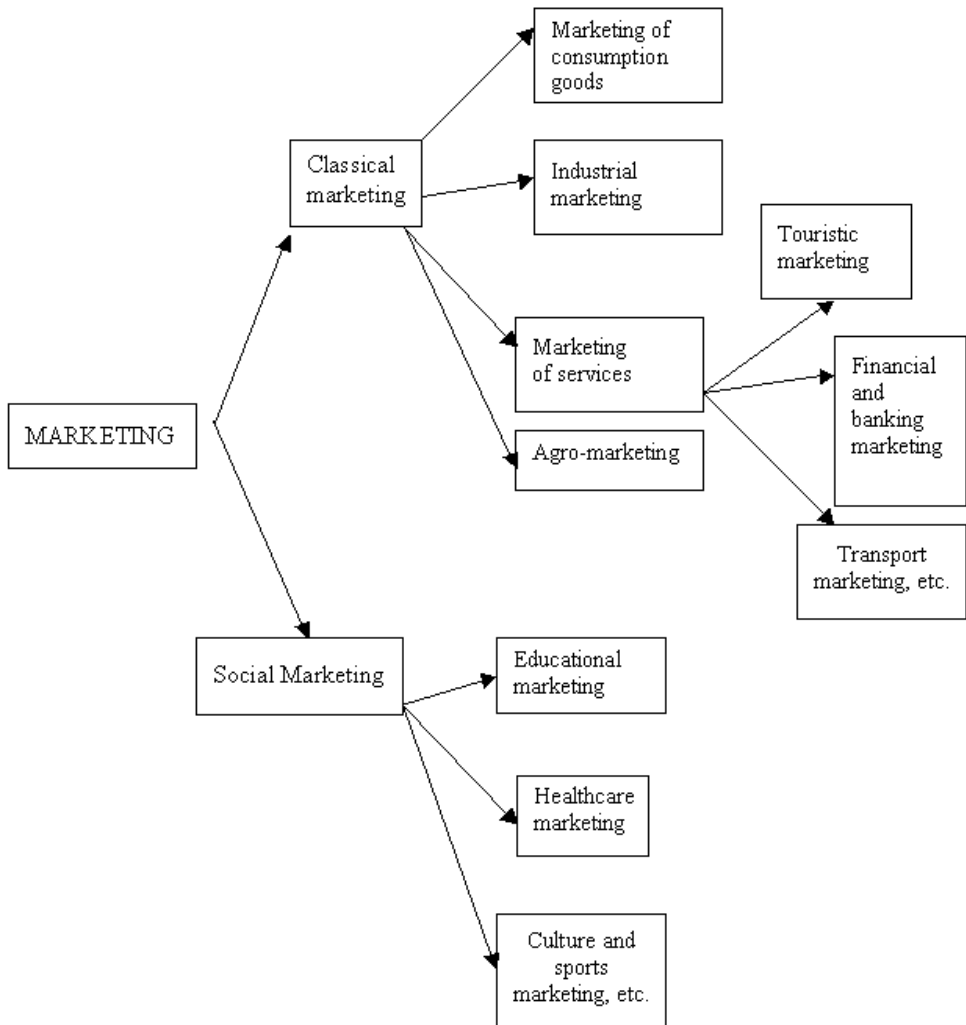
The marketing concepts and methods were first applied in the sphere of tangible goods and later in the field of services. Industrial, commercial, touristic, financial, cultural, educational, political marketing are among the most important types of marketing that have started to be used more and more creatively.

The above-mentioned classification is the result of differentiations based on the specific conditions of the different economic-social activity domains. At a concrete level, we speak about differentiation of objectives, investigations techniques and methods, market behaviour.

According to the nature of different economic activities the following categories of marketing have differentiated:

- the marketing of consumption goods is the oldest type of marketing, having nowadays the widest use and confronting with the most difficult problems. The consumption goods market is a very complex one and is becoming more and more diverse, under the influence of many factors – a situation that may generate difficulties in the process of studying and understanding its components and evolution, imposing therefore a high mobility of marketing.

- the marketing of goods for productive use (productive resources or investment goods), meant especially for industrial consumption; it is also called industrial marketing.



Source: Zaharia Razvan, *Marketing social politic*, Editura Uranus, București, 2001, p. 49.

## 2. Educational marketing

Pedagogical research has tried to find out students' and parents' expectations regarding education, school, educational institutions, based on which certain operational and strategic decisions may be made. The practical outcome of this is a market oriented planning, a means of developing, improving education, teachers' activity both in a pedagogical and managerial direction.

Educational marketing could be defined as a set of methods and techniques used by a supplier of educational programmes, educational organization or educational system in order to determine the receptivity (i.e. needs and motivations) of potential clients for a certain educational product or service and the promotion of an educational product or service on a certain market. (S. Iosifescu, 2000, p. 30).

The above definition should be completed with the elements referring to the process of providing educational services, distribution and pricing strategy, that are also specific to marketing activity.

Marketing becomes thus an essential element of the teacher's strategic management, influencing his/her decisions in the field of course design, organization, coordination and evaluation.

Psychologically, it represents a means of involving the students in the very process of achieving, learning what they have expressed as their expectations, proposals.

### **3. Educational marketing nowadays**

Nowadays, educational marketing becomes a task of both the central leading staff (Ministry, inspectorates) and the local one (school) – as an aspect of decentralization, a need to balance the relationship between the supply and demand in education, on the background of a very rich alternative educational offer (optional curriculum, private education, on the job qualification, distance learning projects, national and international programmes).

What can teachers do in these conditions? They shall study the domain of educational marketing, collect information regarding students' and parents' expectations, participate in training programmes and apply marketing principles when doing class management. For teachers the market is represented by their activity in the classroom, by the subject they teach; their "buyers" are the students while the "offer" is represented by the projects and educational programmes; the services are their actions, strategies, and resources while the demand is represented by the students' expectations and interests. The teacher actively using educational marketing in his/her activity can apply one of the general marketing strategies – niche marketing, that is he/she offers certain projects and programmes only for the subject he/she teaches, for a determined period of time, for a market segment – the students he/she teaches.

By adapting the principles and strategies of general marketing to the field of education (S. Iosifescu, 2000: 30-37, R.M. Niculescu, 2000: 94-140) we can describe the characteristics of the marketing process of the teacher-manager: knowledge, identification and initial evaluation of the students' expectations and needs of training and information (at the beginning of a curricular cycle, academic year, semester, chapter, lesson). This can be done progressively by training needs analyses, by analyzing the requirements and content of the general and specific curriculum of the subject he/ she teaches (educational planning, textbooks, auxiliary materials) and defining the possibilities of adapting them to the concrete conditions and situation of his / her group of students.

Increasing the competence level in teaching services has to be based on a knowledge of both customer needs and the way they are willing to receive the information contents (Gârdan, Geangu, Andriesei, Gică 2009:167).

As methods and techniques, the teacher may use the analysis of previous results, study of the students' behaviour during different educational activities,

group discussions, questionnaires to be filled in by students and parents, peer consultations, comparative analysis of other schools, analysis of the community from an educational and socio-economic, cultural development perspective.

#### **4. Main elements of the market of educational services**

The teacher may then elaborate an improvement project, adapting the curriculum for a short or medium term. This will constitute the offer made to the students, promoted based on its new and interesting elements, before stating the teaching – learning process.

The market of educational services consists of several main elements:

– *The educational services proper* that is the teaching-learning and evaluation didactic activities, in the form of courses, seminars, lessons, projects, tests, examinations. At the level of these components the suppliers of educational services are the teachers, who contribute directly to the shaping of their clients' behaviour and personality by using educational programmes.

– *The auxiliary educational services* are identified as the set of general administration activities supporting a smooth development of the educational process (financial and economic activities, managerial activities, secretarial activities).

– *The educational human capital* consists in the totality of knowledge, abilities and competences acquired by the direct client of educational services. This type of capital values the production capacity of the economy and may have long term effects; that is why the decision to invest in human capital is not an easy one; it is usually a collective decision.

#### **Conclusion**

Investigation of the demand for learning needs assessment scale structure and its spatial representation and phased over time, the notification of trend.

Investigation of potential consumers of education requires knowledge of their images on them about values and education services, report on education – culture – civilization. Educated man has a special capacity to obtain social recognition of its value; he puts his knowledge and personal qualities in the service of a better adaptation to social life.

The educational human capital is the result of a long and complex process during which students internalize knowledge, build up their own internal system of values. The client of the educational process that is the student is equally a subject and an object in the process. It both receives and formulates ideas, knowledge, and truths. Both the teacher and the student are active elements in the educational process, educational marketing supporting and enhancing their roles. Promoting the educational needs of marketing managers implies a foundation that consists in dedication, perseverance, consistency, honesty, and respect for students.

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## REFORM IN THE DENTAL SERVICES AREA IN ROMANIA – OBJECTIVE NECESSITY OR SECOND OPTION

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### Abstract

*The article herein deals with a topic of current interest, not only because the latest economic and social phenomena within the context of globalized crisis in the world, but also from the perspective of the evolution and specific processes in the medical area in Romania.*

*The writer accomplishes a journey into the various medical systems in national economies, by analyzing the features of each type of system and the opportunity for a ‘capitalist’ vision related to the healthcare services in general.*

*The dental medical services share a series of characteristics that help them be better defined from the point of view of provider-customer relation. Thus, it becomes evident that, for Romania, the process initiated in 2006 meaning liberalization of practicing the dental doctor profession represents a natural way of developing the market specific to such services.*

*From this perspective, this issue targets the mentalities level only – to impose quality standards on the market and to witness the offer-demand balance, both deriving from the specific nature itself of the dental services.*

*The involvement of the authorities at Health Department into developing a health insurance policy in the dental field and the support of the private initiative in the underserved areas are the main targets of the ‘reform’.*

**Key words:** *healthcare services, reform, dental medical services, global crisis*

**JEL Classification:** I<sub>15</sub>, I<sub>18</sub>

### Literature review

The scientific literature regarding healthcare services has had a tremendous development in the last twenty years, from the medical point of view but also from a socio-economic perspective.

The latest developments in the economic theory and practice could not interfere with the problems regarding healthcare services consumer habits, qualitative evolution of the relationships between supply and demand on the market, etc.

The qualitative aspects related with the game of demand and supply on the healthcare services market are concerning the degree of consumers’ satisfaction, quality of life and their expectations. As far as the dental medical services, this axiom is more real than ever.

Generally speaking, consumers evaluate the dental medical services by making a comparison with other similar units and, if those services meet their expectations, the consumers will define the service as attractive. If a situation of dissatisfaction occurs in case of medical services, then the sensitivity of consumer's perception is higher than in other services and the effects are visible at the level of provider's competitiveness. (Bolog S.A., 2008)

Talking about the evolution of the medical sector in Romania with a focus on the dental medical services, a topic of interest is the sustainable development of this sector and from this perspective, the degree of involvement of the state regarding the correlation between social protection strategies, healthcare strategies of the state and the contribution from the private sector. As Romanian authors mention in an article published in 2009, the aspects regarding the consumers' loyalty towards dental medical services, the factors that are influencing the choice of a particular dental office can efficiently point out what the main action lines are for sustainable development at the level of dental medical services market in Romania. (Gârdan D.A. and Geangu I.P., 2009)

In another article, written by same authors, there is a suggestion for the implementation of educational programs at the level of dental offices as part of an efficient strategy aimed to improve not only the quality of medical dental services but also the quality of consumer's life (Gârdan D.A. et all, 2010). The authors show that, in everyday behaviour, the Romanian consumers are not in the habit of quantifying the impact of dietary habits on their dental hygiene.

Within the dental care services, the Romanian consumer behavior tend to evolve step by step under the pressure of socio-economic and technological factors. After a series of qualitative research regarding the marketing implications for the Romanian consumers, researchers have found that consumers tend to accept and use more and more mobile marketing techniques as SMS, MMS, mobile internet advertising, SMS in location, etc as channels that influence their decisional process regarding consumption of healthcare services, along with the dental ones (Gârdan D.A., Geangu I.P., Roșu A.M., 2011)

This thing, plus the level of demands regarding the quality of medical act itself, creates the premises for a conceptual change at the level of consumer behavior and mentality regarding the dental medical services on the Romanian market.

### **The features of the demand and offer in the dental medical services**

The world economy is going now through the worst economic crisis since 1930. While more and more countries are facing high external debts, combined with non-sustainable budget deficits, it comes natural to have a concern for reform in economy and state, in general.

Such reforms could not avoid the medical system – thus, in the context of the present crisis, the efforts to reform the medical system is mainly focused on costs cutting.

People are talking more and more often about how to make the hospitals ‘more lucrative’ (an internet search will give us the extent of this phenomenon in Romania). For this purpose, more economists and political decision-makers recommend that the patient care be ‘industrialized’ and standardized.

This conception implies that the medical system rely on the evidence-based practice and not on the clinical judgment. The clinical care should be, in a nutshell, an issue of compliance with books that provide guidelines (similar with the plans in a factory) and the doctors will be evaluated in terms of how they maximize the profits for their ‘customers’ (Beth Israel Deaconess Medical Center, 2011)<sup>1</sup>.

Such solutions that may seem reasonable to any economist who analyze the activities specific to certain entities involved in a free market economy (capitalist) will create major problems when it comes to their effective implementation at the level of medical system.

This is true, as there is no medical system based on free competition, a system of capitalist type. Generally speaking, they are either ‘fascist’ or socialist or communist.

In a fascist system, the production means are private property, but the government is allowed to control what the entrepreneurs can do or not. Such a health system is in Canada. Doctors monitor the production means, but the government controls the type and content of the medical services as well as the amount to be paid, to the purpose of the ‘social benefit’.

In a socialist system, the state owns a large part of the production means, but a private sector is made room to. These health systems are in Great Britain and Romania. Finally, a communist state owns all the production means and no private sector is allowed – see Cuba, for example.

In the United States, there is a combination of more systems. Here, we have a capitalist system, as people can directly pay for the services and many contracts concluded with the insurance companies are voluntary.

Nevertheless, as such companies are subjected to strict governmental regulations, we may say that we have to deal with a fascist system. Medicare/Medicaid is a socialist system, as supported by the state. Similarly, the government is the one that directly controls and finances most of the medical training.

A question arises: why don’t we have exclusively capitalist systems? The answer is that the medical services are not regular merchandise. In his article (first of this kind) *Uncertainty and the Welfare Economics of Medical Care*<sup>2</sup>, Kenneth Arrow shows some features of the medical services that put them apart from the other merchandise (Arrow Kenneth, 1963).

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<sup>1</sup> Beth Israel Deaconess Medical Center (2011, October 12). New buzzwords ‘reduce medicine to economics’: Physicians lament the devaluation of clinical judgment in today’s health care world. *ScienceDaily*. Retrieved October 29, 2011, from <http://www.sciencedaily.com/release/2011/10/111012185632.htm>.

<sup>2</sup> *The American Economic Review*, Volume 53, Issue 5 (December 1963), pp. 941-973.

A first one would be that the individual demand for medical services is not constant during lifetime (see food and clothing), but irregular and unpredictable.

The medical services, besides the prevention ones, give satisfaction only when a disease is present, which is an abnormal situation. The only area with the same behavior is the legal one, when hiring a lawyer for defending during trials.

Also, the disease in itself is an elevated risk, which may trigger disabilities that may affect the ability to derive income or result in death. For most cases, a quite high income may avoid risks, but not for the diseases (at least, not for all of them).

A second one refers to the behavior expected from the doctor. It is about an altruist one, focused on the consumer welfare, which is not usual for a seller or a regular businessman. The advice given by the doctor for the future treatment in his office or other is not dictated by his own interest. This treatment (as claimed) comes from the objective necessities of the case and is not limited by financial constraints.

Even though this imperative is not absolute, it still has a certain importance in resources distribution. The charitable treatment exists thanks to this tradition of human right to medical care. The distance from the motivation intrinsically linked to profit is pointed out by the predominance of the non-profit organization among the hospital owners. Moreover, an explicit concern in deriving profits may give birth to lack of trust among patients.

A third characteristic of the medical services is the one concerning the uncertainty for the product quality. As for most of merchandise, it is possible that, very often, clients learn from a previous experience, personal or not. For the chronic diseases, this thing is not possible at all. Different people react differently to similar treatment. There is also the possibility that, for a recurrence, the same person react differently to the same treatment (viruses are immune to that treatment). Plus, due to the complexity of medical knowledge, there is an informational asymmetry between the doctor knowledge and the patient's about the disease – where both parties are aware of this asymmetry that affects their relation.

A fourth characteristic of the medical services deals with the offer's requirements. Unlike the situation of a free competition, the access to the medical profession is conditioned by licensing (there is a similar system for many professions). Nevertheless, the medical costs are very high and only a small amount is supported by the students who follow this professional path.

As a consequence, the advantages expected are much more important than the costs.

The fifth characteristic refers to the existence of a price discrimination in relation to the incomes obtained (the access to the medical basic services or emergency services is possible in some countries even in the absence of incomes). There can also be agreements regarding certain fixed prices at the level of the whole industry, without these being submitted to the anti-monopoly legislation.

These characteristics analysed by Kenneth Arrow were considered to be barriers for the adequate functioning of a free competition system (capitalist) in the medical field.

Taking all these into consideration, there is a series of events to be highlighted when we analyse the dental medical services in comparison with the other medical services.

Therefore, there are authors who identify notable differences between the dental affections and treatments and the other affections in the medical field (Sintonen and Linnosmaa, 2000).

If, as seen before, the individual demand for healthcare is unpredictable and intensifies when a person is ill, and the patients do not usually have serious knowledge about their affections, these things are not valid in the case of dental services.

Firstly, the number of the dental affections is relatively low and their occurrence is more predictable than in other cases. Secondly, a person goes through the same dental procedures more than once in a lifetime, therefore is capable of learning from experience about the quality of the services. Thirdly, the dental affections are relatively easy to identify and diagnose and almost all the relevant information can be obtained by radiograms or photographs. Fourthly, there is a more diverse range of alternative treatments available than in the case of other diseases.

Next, there are various prevention possibilities for the emergence of the dental affections and these can lead to important resource economy (which in the case of other medical specialisations is not always possible).

Also, except for the dental accidents and toothaches, the dental treatments are hardly ever classified as emergencies, and ignoring the dental affections rarely has dramatic consequences upon the health of the people. These things give more freedom to the patient in planning the treatments and choosing the medical services supplier, freedom leading to the growth in the price elasticity regarding the individual demand.

Another feature of the market economies is the existence of externalities preventing an efficient distribution of the resources. In the case of the medical services, the transmitted diseases are such an externality. The dental affections are not transmittable and therefore the market mechanism should function better in the case of the dental services.

Nonetheless, the specific features of the dental affections have important consequences on the way the medical insurances function in this field.

The fact that they are not emergencies, that they can be documented accordingly by radiograms or photographs and the existence of many treatments available, with different costs, make it possible to accept or not the recommendations of the dentist treating the patient by the dentist working for the insurance company and therefore, a reduction of the prices can be obtained.

Most of the insurance policies have strict regulations regarding the previous authorisation of any dental treatment. It must be said that the biggest amount of the dental treatments expenses are supported by the patient, and this is valid even for the countries where the healthcare and insurance systems are mostly public.

## **Particularities of the dental medical services in Romania**

The development of the free market after 2006, when the dental medical services became completely liberal (by the possibility to develop the free initiative regarding the dental practices) suggests the fact that there is no need for a “reform” in the sense of an enhanced regulation, as the free market spirit is functioning really well.

The trend of the expenses with the dental services is eloquent, although they are still reduced in comparison with the EU average. An important increase has been registered between 2005- 2010. The demand evolution on the dental services market show not only a quantitative development of the consumption demand, but a qualitative one as well, the consumers being able to modify their consumption behaviour in the sense of adopting more complex services (such as the dental aesthetics). Another dimension of the market development is represented by the differences emerging at the level of the expenses with the dental services for the consumers’ different levels of education. The consumers with a superior education level spend up to 8 times more on dental services than the consumers with inferior degrees of preparation.

This indicates a growth of the consumption demand on the medical services market in Romania, maturation that inevitably leads to a necessity of an adequate adaptation of the services offer. Therefore, within this process, an essential role is the one of the dentists- dental practices and clinic managers that will have to promote an active policy regarding the research of the consumers’ behaviour, the adaptation of the services to its dynamics.

Although the offer and demand regulated the dental services market, leading to the crystallisation of certain tendencies regarding this market – the highlight of certain practices that specialise in “dental tourism”, the establishment of the premises for developing certain private clinic “chains”, there still is the need for a “reform” of the decision makers mentalities regarding the promotion of policies in order to prepare and train the medical personnel, the human resources management within the sanitary field.

The particular initiative must be supported rationally, highlighting the development of the rural infrastructure, in the areas where the number of doctors does not fit the needs of the local community.

In conclusion, the medical dental services in Romania are submitted to major qualitative and quantitative changes that are normal and natural in the context of the evolution specific to a capitalist market system. The specific of the medical act and of the associated needs of these services make possible these development directions.

As we have noticed in the short review of the specialty literature, the change in the consumption mentality of the consumers, of the methods and their self-education features, of the information channels and the decision to purchase are the essence of a possible “reform” at the level of the medical dental services market.

The state’s intervention is recommended only at the level of correlation of the policies regarding the superior medical education with the needs of the market and

when encouraging the private initiative in the underserved areas. Also, the state could interfere in matters regarding the health insurance market in the medical dental field, as the development of the private dental insurances should be encouraged. At the same time, there are better protection mechanisms of the consumers' interests, which can be promoted in the case of inappropriate medical practices, faulty dental treatments, medical errors, etc.

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## **BOOK REVIEWS**



Short evaluation of the work

**THE GLOBALISATION OF THE ECONOMIC ACTIVITY. RELATIONS AND TENDENCIES** by Elena GURGU

*România de Mâine* Foundation Publishing House, recognized for issuing works on the contemporary fundamental aspects, releases **The globalisation of the economic activity. Relations and tendencies**, a book written by Associate Professor Ph.D. Elena Gurgu. As we know, the economic globalisation, correlated to other similar processes, changes the world's configuration, if that hasn't happened yet. People worldwide seem to increasingly realize that they belong to the world itself and not to small communities, that their development does not depend on the development of the communities, but on decision-making processes they never knew existed. In this respect, I mention a relevant case. The thousands of Romanian female textile workers active in lohn manufacturing for many years lost their jobs on account of such unknown forces. In fact, these processes emerge following production globalisation.

Mrs. Gurgu addresses this phenomenon, from its historical and immediate causes, its intensity, to its actual development and its impact upon the entire world. As a starting point, she pertinently outlines the increasing interdependence of the states, following the technological development resulting in: information technology, the development of new materials, increased renewable and non-polluting energy sources, environmental protection, space sciences and biotechnology genetics development.

Another topic approached is the development of transnational societies, leading to increased foreign investments exceeding the export figures.

The knowledge-based society marks the transition to the network-based system, facilitating information dissemination, the corporate sector development and increased profit opportunities.

Chapter II addressees the globalisation process itself. The author openly states that each person approaching this process along time has defined it differently. She defines it as a dynamic process resulting in the increasing interdependence of the states worldwide, following the expansion and consolidation of transnational relations at economic, political and social levels; this means that the issues are more global than national, requiring solutions rather at global than at national level.

I state that I agree with the author's definition, even if it is incomplete. I have in view that the increased interdependence of various states leads to a new element – the integrated global production – the distinguishing mark of globalisation, in my opinion.

The author tries to group the thousands, even hundreds of definitions of globalisation into two categories: the hyper-global approach and the sceptical one.

This chapter also covers the economic globalisation indicators, globalisation on the economic and financial crisis background and, in a distinct paragraph

entitled **Uncomfortable truths on the globalisation process**, the negative effects of this phenomenon.

I must confess that I enjoyed reading this paragraph.

The subjects approached are grouped on headlines, as follows: Globalisation makes us unhappy; Globalisation increases climate changes; Globalisation wastes natural resources; Globalisation – a threat for a decent living standard; Globalisation increases conflicts; Globalisation is based on sham accounting.

Chapter III, entitled **Transnational corporations and direct foreign investments in the globalisation process**, outlines the impact of such investments on both the capital flow and the globalisation. This chapter also describes the increased competition at corporate level, the impact of globalisation on the world, the role of foreign capital in the contemporary world

Chapter IV presents the causes and effects of globalisation on world economy, issues tackled in detail in the previous chapters.

The final chapter covers the Romanian economy at national and international levels, the economic and financial development at national level in 2010, with emphasis on the procedures to be implemented for the adoption of the European currency.

The paper is completed with a synthesis on economic globalisation perspectives in the contemporary world. The author provides sound references for those interested in world economy.

This work is open for those willing to acquire economic science knowledge and to get acquainted with the current economic and financial structures.

Constantin MECU, Professor Ph.D.

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## **ERRATUM**

**for volume 2 (11), issue 1, *Annals of Spiru Haret*, Economic Series**

The following two articles „Fraud, corruption in the private sector and internal control quality”, author Luminița Ionescu and „Crisis impact on the Romanian economy compared to European Union countries”, author Zorzoliu Raluca, should have both contained the statement ‘this work was supported by the project “Post-Doctoral Studies in Economics: training program for elite researchers – SPODE” co-funded from the European Social Fund through the Development of Human Resources Operational Programme 2007-2013, contract no. POSDRU/89/1.5/S/61755’, statement which has been omitted.