

**Year XLII, No. 42, 2014, Volume 2**

# **Annals of the University of Craiova**

**Seria:**  
**Economic Sciences Series**



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# **CONTRIBUTIONS OF SOCIAL INFORMATION SYSTEM TO VALUE ADDED GROWTH AND ORGANIZATIONAL PERFORMANCE**

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**Abstract:** Strategic alignment of human resources function is ensured by design and use of an adequate social information system, which has the ability to control personnel costs, optimize the legal aspects, increase customer loyalty and manage talents, taking into account the constraints of mobility and dematerialization .

These new elements are highlighted by choosing a qualitative methodology, based on analysis of the latest studies and research dealing with the human resources information system/social media. It highlights the ways in which these systems can provide this function a privileged status for creating added value.

The paper, which has the explorative character and opens new research perspectives for a larger project, presents two models for analysis and quantification of newly created value, that the introduction and proper management of social information system promotes in the enterprise, but also operational elements on quantification of its influence on organizational performance.

**JEL classification: M14, M50, M54**

**Keywords: human resources, information system, added value, organizational performance**

## **1. INTRODUCTION**

Because it is a simple instrument, human resource information system / social information reconfigures the landscape of human resources in the enterprise. Through qualitative management functionality it shatter power games in the daily organization of work. New games of the actors appear and the cohesion of social information system must adjust, resulting in a potential change of enterprise culture. The indispensable adaptation of the organization must be anticipated.

The development of their human resources function and exploiting the opportunities that this process can turn into competitive advantages for the enterprise are not possible outside of the design of an information system. From a human resources information system oriented primarily inward, it's reached an social information system that has sufficient components that aim new and important fields

for enterprise and its environment: sustainable development, social responsibility, environmental preservation etc.

## **2. FROM THE HUMAN RESOURCE INFORMATION SYSTEM (HRIS) TO SOCIAL INFORMATION SYSTEM SOCIAL (SISS)**

In the literature, HRIS can be defined from different perspectives, depending on the angle that is privileged. Can be seen two current of thinking, one that considers HRIS after ability to handle information, regardless of the means, another who understands by its technological capabilities in a broad sense, especially depending on the role it plays in the more global process.

The use of computer instruments, electronics and telecommunications enable automation and dematerialization of operations as defined by the enterprise's procedures. They are now widely used instead of traditional media such as paper forms and phone. This transformation is the origin of the concept of information system.

Kovach and Cathcart (2003), define HRIS as "a procedure for collection, storage, restoration and data validation regarding human resources, personnel activities and organizational units needed by an enterprise." For them, HRIS does not imply that it is more complex or computerized. Tannenbaum (1990) defines HRIS as "a system that allows the acquisition, storage, manipulation, analysis, retrieval and dissemination of reLEVAnt information on the human resources of an organization." He believes it is a system that includes people, forms, policies and procedures, data" (Tixier and Deltour, 2004). HRIS has as objectives the supply of services in the form of information, reports, to internal and external customers, system users and support transactions and maintain hierarchical control (Haines and Petit, 1997; Monod and Petit, 1999)." (Barth 2001).

Others have a more technological view of HRIS. Reix (2000) defines HRIS as an "organized ensemble of material resources, programs, personnel, data, procedure for obtaining, processing, storage and communication of information in the form of data, text, images and sounds inorganizations." (Merck, 2003) considers it "a set of programs more or less interconnected which enable the provision in a coherent manner of various administrative act and management operations applied to human." " HRIS is a program that, on the one hand, computerize a number of tasks of different human resources missions function and, on the other hand, their information circuit...The logic of implementation of a HRIS induce (supposedly) that tasks that will be automated will be a suite of flows of information with added value value." (Silva, 2008).

HRIS is associated with more global processes such as e-HRM (Nahon, Taskin, 2009) or e- HRD (Mullenders, 2009).

*HRIS and e-HRM.* Individualization of work translates the demand of employees for better take into account their individual aspirations. In this context HRIS aims, inter alia, to provide a personalized service to employees, to provide acces to personal information anytime and anywhere. Under this new requirement, enterprises, today, tend to organize interaction between their employees, to open a discussion space where everyone can express themselves and act on exixtente processes (such as the blog "General Motors University Europe"). The decision to develop a HRIS, from e-HRM and an intranet is not only a technical decision. It requires the organization to

review its information and communication processes. Beyond the choice of e-HRM practices, may appear sufficient problems (challenges) of management .

*HRIS and e- HRD*. Mullenders (2009 ) starts from the following relation:

$$e\text{-HRD} = \text{HRIS} + e\text{-HRM} + e\text{-Management} + e\text{-HR}$$

and determines that the direction HRM in electronic information management system means + management + implementation of policy and process related to HR function. E- HRD corresponds to HR function that is based on an information system that links key activities (pay, recruitment, training ... ).

Regarding the evolution of HRIS, the views of specialists are much closer. It may be noticed that all authors perceive different periods of evolution of HRIS by the crop time. Consequently, it can hold a single presentation, that of Just (2010), completed by the position of Silva (2008), which examines the evolution of HRIS through the development of TIC and NTIC. Just (2010) considers possible the presentation of the history of HRIS through two evolutions. The first is the evolution of the HRM, the second is the computerization of HR function. To these two evolutions, Silva (2008) adds the developments of TIC and NTIC.

Just decomposes the evolution of HRM in seven periods, from 1870-1900 to the present, emphasizing the enrichment that each of these periods brought its accomplishment.

Presenting the evolution of HRIS closely with the development of human resources function of informatization Just highlights the many so-called "ages". "Stone Age " is began with the payroll program. Then in the 1970-1980 users understand better the informatic and begin to issue commands. During this period appear the first customizable application and appears the payroll package.

"Bronze Age" coincides with the emergence and development of human resources enriched programs. "Iron Age" has is its main specific the appearance of a real human resources information system. Since 2000, in the enterprise appear two types of architectures: single program or combination of several specialized programs, with interfaces between them. These architectures allow more or less different, to manage the entire human resources process. From now on it began the age of "e-HR", where new actors have and HRIS receive accreditation. "Golden Age" is the next stage of HRIS, who has many uncertainties. Although everything seems to have been explored in the HRIS domain, technological advances appear and will continue to swamp the function. The new requirements are now related to communication between different modules through an interface increasingly complex.

The answer will likely come from service-oriented architecture, SOA (Service Oriented Architecture) , which consists of cut the functionality of an application or system in service "profession/occupation" reusable in other applications or systems. New horizons for HRIS is their capabilities to be open to a multitude of actors. While HRIS was, at its inception, accessible to authorized users, the "open" HRIS is about to become a system accessible to all.

HRIS cannot be assessed outside the technological context. Indeed, at first glance, it makes sense that the technological size or informatic of the enterprise to influence the implementation of HRIS. This hypothesis was confirmed by Bournois, Rojot and Scaringella (2002) , through a study of enterprises listed on the CAC 40,



which found that often coexist simultaneity between HRIS project and the Internet revolution in the company. Traditional economic groups (such as Accor, France Telecom or PPR ) took advantage of the opening of the new means of communication and trade to expand human resources management and, obviously, HRIS.

New issues of sustainable development and corporate social responsibility, as well as the strategic dimension of human resource functions, expanded the complexity and the external aspect of human resource information system. The name of social information system (SIS), which evokes more the external vocation of HRIS, is used for the first time by Martory (2004) that defines information as one of the subsystems of an organization, namely the necessary to human resources function and control for the proper execution of their tasks. Declining the purposes of this system, the author considers it the same time:

- an internal communication instrument in the enterprise, meaning one of the instruments of cohesion, dialogue and action on the social climate;
- a support of the communication with the environment through its annual publications (social balance);
- a support of management processes and thus, control and decision making: social information is the raw material of individual decision (promotion, remuneration, assignment etc.) or collectively (entries, exits, mobility, career) ;
- an instrument for the deployment and strategic coordination (through integrated scorecard etc.).

### **3. SOCIAL STRATEGY AND ADDED VALUE**

The concept of added value, as defined by the literature is equivocal. In the narrow sense, it means the difference between the final value of a product and the value of intermediate consumption used to manufacture it. However, this value is not limited to what it can be measured in monetary terms. It is also, what some experts call, the "use value", others "use value" and to further complicate things these terms cover very different realities, according to the writer who uses it. Another factor that works in the same sense, is the emergence of the concept of "social added value", which seems more open and therefore more uncertain.

For clarification needs and without over simplifying things, Quentin (2000) analyzes the added value from two different angles, economically and socially. As the current economic instruments only measure which can be appreciated in accounting terms, they tend to reduce economic value added inputs, i.e implemented means. If it's accepted this reduction and consider social added value in terms of outputs, by the final value as a whole is nothing more than the simple sum of its parts, the same can be said about this new concept. So social added value is anything other than the simple sum of the economic added values which compose it.

Once overcome this difficulty, it can easily foresee a final for the crisis of added value by reconciling its economic side (which is in crisis) and social side (which seems to offer the greatest opportunities) To further complicate things, can be addressed in more detail the concept of economic value added.

Thus, in accounting, also a specialized discipline by excellence quantification, the added value of an enterprise is the sum of expenditure in order to achieve a finished product, for sale, starting from raw materials, subassemblies and services purchased.

For years we assist to development of the concepts of productivity and quality, which give to accounting added value a more restrictive sense, corresponding to the amount of expenditure incurred to change the actual market value of the product or piece. It is about real marketable value added, which does not includes operations such as handling, storage or controls, which represent unmarketable added value. Taylorism and the scientific organization of labor have focused efforts on marketable values added, while costs of unmarketable values added have risen and often became more important than the actual transformation.

Discussions on social added value continued, focusing on the issue of limits becoming more visible in assessing financial performance and tracing how the human resource costs, in general social or societal efforts contribute to the creation of value by the organisation. For reasons of simplification and understanding, Albouy (1999) provides a good example of two hypothetical companies, EVA Company and SAV Company, listed on international markets, whose financial results are essential creating value (Table 1). The names of the two companies were chosen to be suggestive in terms of their social and societal policy and how it affects the creation of added value.

**Table no.1. Financial results of two hypothetical companies and creating added value**

|  | EVA<br>Company | SAV<br>Company |
|--|----------------|----------------|
| Turnover excluding VAT   | 2.300.000      | 2.300.000      |
| -of which recyclable products  |                | 1.500.000      |
| Operating expenses, of which :   | 2.000.000      | 2.000.000      |
| -training of key knowledge;  |                | 200.000        |
| - performance wages of children worldwideand other forms of mobilization;                        | 40.000         | 150.000        |
| - wages  |                |                |
| Pre-tax profit   | 300.000        | 300.000        |
| Afer tax earnings  | 180.000        | 180.000        |
| Capital investment during previous period<br>(fixed assests of depreciation and working capital) | 1.000.000      | 1.000.000      |
| Weighted average cost of capital   | 10%            | 10%            |
| Economic value added (EVA)   | 700.000        | 700.000        |

The two companies, who obtain comparable results in economic terms for their shareholders, registered large differences when addressing the social aspects of these results. EVA company has a controversial ethicalbehavior, because it uses children in its subsidiaries in Africa and Asia, which represents a significant long term risk. SAV company adopts a favorable attitude of consumption, by realizing decisive societal investments and by providing recyclable products. Thus, it has anticipated the changes by investing in the training of key skills and positioned in a favorable logic of performance development by setting dynamics of remuneration of its personnel.

In conclusion, the same economic value creation hides potential economic, social and societal risks very different and, finally, different variants of value management.

Social value added approach offers several tracks of answer and few ways to solve these operational problems. It opens the perspective of an analysis of value

creation, which introduces collective intelligence developed within enterprises and authorizes a rebalancing of the distribution of the value created in favor of neglected stakeholders or forgotten by the traditional financial analysis, i.e employees, customers and external partners.

A first idea that would arise in the minds of those who analyze these cases would be to determine a single indicator, SAV (social added value) that would be paired with EVA (economic value added) criteria taking specific evaluation criteria.

Although seductive itself, the idea met with attempts of quantification, which showed that the variety of social measurement makes less meaningful unique value. This is the reason why the proposal was forwarded to the SAV measurement based on multiple indicators.

Thus, it became possible to list a certain number of indicators allowing for appropriate tracking the creation of social added value in enterprises.

These indicators relate to the development of individual competence, harnessing collective intelligence synergy, integration of external knowledge and mobilization capabilities of the employees of the organization (Table no 2) .

**Table no. 2 . Key indicators of creating SAV**

| No. | Domain of action                         | Indicators   |
|-----|--|--|
| 1   | Competence and individual intelligence   | <i>Knowledge development- Invest in training:</i><br>- % of personnel has increased the knoweldge of his post<br>- % of personnel had acces to more knowledge<br>- % of personnel was redistributed<br><i>Remuneration of performances and knowledge</i><br>Remuneration degree of value creators (bonuses, stock-option etc.)   |
| 2   | Integration of external intelligence (s) | <i>Recruitment:</i> index of recruitment, renewal of age pyramid<br><i>The ability to enrich external knoeledge:</i> external growth, tracking networks, alliances etc.  |
| 3   | Quality of team management               | Acquisition of objective elements  |
| 4   | Collective intelligence and organisation | Investing in the improvement of human resources processes, organization that teaches, the operation of the human resources intranet etc.<br><i>The organizational flexibility and human resources</i><br>- % of personnel in the past 2 years<br>- effective human resourcesa/total efective<br><i>Motivation, social climate, ethics :</i><br>- global remuneration/on the market<br>- job security<br>- conditions of work<br>- respecting and listening to collaborators employees<br>- the existence of an ethical book<br>-the percentage of shareholders of the enterprise |
| 5   | Indicators of disfunctionalities         | The indicator of external mobility through resignations<br>The indicator of conflicts: no. of hours of conflicts/working time<br>The indicator of absenteeism: wasted time/working time  |

The partial indicators of value creation and desire a value-based strategic piloting requires a multidimensional framework of measuring social added value.

The proposal of a matrix analysis of the SAV comply with the processing of all actors, to define performance and the requirements of the relevant measurements. The matrix of measuring social added value (Martory, 2009) suggests, to this end, three types of inputs (Table no. 3) :

- lines mention levels of analysis and measurement of specific forms that can take social added value: respect of ethical, streams, human capital accumulation and, regarding the environment, integrating societal added value;
- on lines appear also targeted groups of stakeholders: employees, shareholders, external partners;
- on columns appear SAV assessment levels, gradually, from the mere finding of the means used to measure performance in terms of efficiency and risk.

**Table no. 3. Matrix measuring social added value**

| LEVELS OF MEASUREMENT AND ACTORS  |                                   | MODES OF ASSESSMENT   |   |                                     |   |
|---|-----------------------------------|---|---|-------------------------------------|---|
| Level of analysis and measurement   | THE RECIPIENTS OF THE INFORMATION | THE IMPLEMENTED MEANS   | RESULTS (efficacy)  | PERFORMANCES (efficiency)           | RISC                                      |
| SAV on ST and MT <1 year<br>(account results)<br>ST- short term<br>MT-medium term | Employees                         | Remuneration<br>knowledge<br>Communication<br>Employment modes<br>Management                      | Remuneration system<br>Training                                 | Individualized social balance sheet | External mobilization<br>Social conflicts |
|   | Shareholders                      |   | Degree of mobilization<br>External mobilization                 | Productivity                        | Conflicts                                 |
| SAV on LT>1 year<br>LT-long term  | Employees                         | Action on structure:<br>-employees;<br>-remunerations;<br>-knowledge;<br>Organisation and process | CLIMATE<br>Development of HR                                    | Perenity<br>Variations of income    |   |
|   | Shareholders                      |   | Distinctive knowledge<br>Collective intelligence<br>Flexibility | Immaterial accumulation             | Loss of innovative power                  |
| RESPECT OF THE ETHICAL  | Employees                         | The ethical book  | Respect of criteria   | Images and perenity                 | Risks/rules                               |
|   | Shareholders                      | Coroprate guvernance  |   |                                     | Degradation of image                      |
| SOCIETAL ADDED VALUE (SAV)  | Employees                         | ETHICAL AND ENVIRONMENTAL CONTROL   |   |                                     | CONSUMPTION CONFLICTS                     |
|   | Shareholders                      |   |   |                                     |   |
|   | Partens of the environment        |   |   |                                     |   |
|   |                                   | APPROACH OF AUDIT TYPE<br>(monetary) policies, standards, benchmarking                            |   | Piloting SAV                        |   |

The multi-dimensional aspect is expressed also on the type of measures used in the matrix. From this point of view, the financial measure through prices, costs and economic efficiency will be privileged, because of its operating qualities. It places the observer in a universe of consistency permitting comparisons between companies or

between subunits. It supports all arithmetic processing and authorizes a unique presentation of balance sheets, accounts results, financial efficiency etc. Therefore, it will be used, whenever possible, to express particular, social or societal efforts such as training costs, efforts in the fight against pollution, investments in favor of consumers etc.

This measurement through numbers is not always possible, because it can alter the results. Thus, an ethics compliance can be assessed objectively only by partial indicators, such as the difference in working conditions between developed and undeveloped countries, respect for minorities, product safety etc. To simplify the assessment to a single number it would be absurd.

Hence it can be concluded that the range of expression of social or socio-economic performance requires a variety of methods of assessment, leading to the existence of two types of objective measurements.

The first type is the quantifiable using an objective assessment by groups of indicators, but not homogeneous. Thus, policies to increase team work skills will be translated into practice by data on quality recruitment, by periodic accumulation indicators skills, through balance situation of key skills, through training expenses etc.

The second type of evaluation does not use numbers and lies at the level of the comment, which may be accompanied by some quantitative data. As illustrative examples may be offered an appreciation of injury caused in an area of serious pollution or the positive impact of wage and social measures taken by management on the enterprise environment.

#### **4 . THE CONTRIBUTION OF SOCIAL INFORMATION SYSTEM TO DEVELOPPING ADDED VALUE**

Different options are available to measure the efficiency and effectiveness of HRIS for HRM. This measurement can be done after the implementation of HRIS, to verify if it's in according with the demand of users and responds to their problems, either as continuous auditing, to ensure compatibility of HRIS in realtion with the needs of users.

Haines and Petit (1997) proposed a model to measure the success of HRIS with two criteria, namely the satisfaction HRIS user and system usage. Kostova (1999) proposed a method based on the degree of implementation (the level of acceptance of HRIS by users), compared to standard rules and practices and adoption levels defined through an instrument designed for this purpose (A.NVo, 2008 ). The "active" level is specific to a high implementation and recognized practices. The "absent" level reveals a high confidence in practice, but a weak implementation. The "ceremonial" level enjoys a high implementation but a weak internalization. The "minimum" level is characterized by a weak implementation and a weak internalization. This model is recommended for an transversal HRIS from a multinational enterprise or a group. Just (2010) proposes another method, return on investment or ROI, classical in other areas, but not in this case. This is a purely financial approach, often used to validate a project by comparing the cost of the project (project expenditure, investment, production costs ) with income and future productivity gains.

Despite the emergence of these models, in the case of HRIS, it seems particularly difficult to assess productivity gains, some quality aspects (improvement of confidence and motivation, the image of HR function, increased opportunities for communication, employee retention), quantitative aspects (reduced time management)

In his studies of social audit, Meignant (2009) provides a very structured approach based on two main elements:

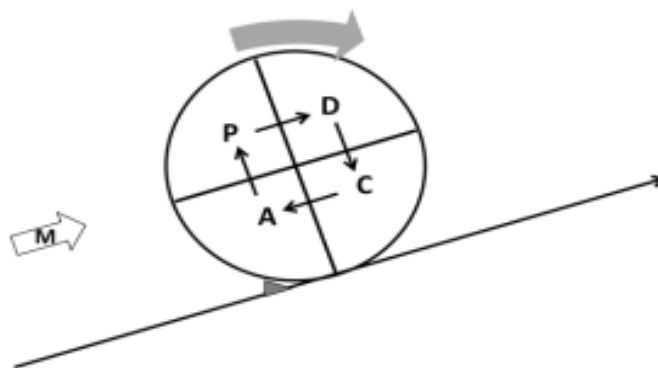
- the original model of human resource management of Ulrich, but without adequate standards regarding social audit;
- the approach used in quality management, known as the "Deming wheel", or continuous improvement loop or "PDCA".

Ulrich 's model establishes four fields, each with a corresponding to the four roles of HRM:

- the provision of services of the HR function; it follows that the function controls how the report quality / cost of services proposed;
- strategic contribution of HRM; controlled if it has the means of human resources, quality and quantity needed to achieve its strategic and operational objectives;
- management of change; observes if HRM facilitates the appropriate development in the culture and organisation of work and the dynamism of the internal and external networks of actors who support the change;
- motivation and involvement of personnel; aims to identify how HRM helps to encourage motivation and involvement of personnel and improvement of working conditions and safety.

This method covers all the objectives of HRM in these four areas. In order to provide a satisfactory scale to the analysis of HRM audit, each area includes a number of criteria, divided into sub-criteria, which means a total of 16 criteria and 46 sub-criteria.

The other basic element is centered on the observation of the existence in the organization of the initiative of improvement in the form of rings, which can be represented by the diagram in Figure 1.



**Figure 1. Deming loop for assessing the contribution of social information system in human resource management (HRM)**

The slope represents the process of improvement. The wheel is composed of four equal parts, each representing a stage of improvement:

Plan: setting goals and means

Do: implement

Check : evaluation and resources

Action : extracting lessons from this assessment needed for the next round .

The arrow M is the management force. The scotch under the wheel represents the formalization of learning and experience capitalization.

Meignant assigns several limitations associated to this model. The first relates to the fact that it represents a relatively precise framework, but should refer to other sources to highlight the details of a particular domain. The model does not address aspects of employment law, which is essential in the assessment. Another default is related to the desire for universality, for which the model does not take into account national peculiarities that can put in question its results. A final weakness is related to the level of training of the users who must be able to understand and decipher what is behind the human and social plan.

To enable HR professionals to participate in the creation of value for an enterprise and to be a true "business partner", is not enough to install the latest technology and functionalities offered by the market. It is first necessary to define HR policies and practices and to see how these IT solutions can meet the best of these expectations.

HRM problems are numerous. In addition to visible challenges, such as process optimization, data access, responsabilization of the actors, refocusing the HR professionals towards action with real added value, HRIS must allow function to be more effective and convincing as "business partner" and provide HRM the right place in the enterprise's share.

Assessment of social added value is made at four successive levels of evaluation, from simple to complex, with the main points:

- the means used to operationalize social policy;
- the results obtained;
- assessment of performance;
- social or societal risks specific to the chosen strategic variant.

At the first level of evaluation, *the means used*, outside of results indicators can also measure the efforts engaged in social domain (within the enterprise) and societal (outside it). Considering the content of the indicators used at this level, it can be concluded that this measurement is mainly financial.

*The results obtained* is the level at which any effort translates different results. Therefore, appreciation is operating in terms of effectiveness, i.e the degree of achievement of objectives. It is estimated, for example, the way in which the efforts to increasing skills effectively turned the key posts situations or how they have improved flexibility of production processes.

*Performance assessment.* At this level, the observer expresses the results obtained by means that fall into a logic of efficiency. It is a logical place to labor productivity or in the efficiency of investment, such as training activity. Expense and social investment are found in the general economic analysis of efficiency and adopt traditional financial logic classical financial comparisons.

*The level of risk.* Social or societal risk is generally defined as the mathematical expectation of loss, i.e a decrease of the potential value of a specific probabilities of occurrence. Here are included the due penalties to non-compliance or various types of conflicts with employees and/or consumers.

If we return to the enterprises above and try to filter out through the measurement matrix of added value, we get a more fair expression of values created by them , and we can already make some observations :

- the use of child labor by EVA Company turns a negative choice regarding ethical behavior and can be easily calculated a financial risk of market losses;
- development of non-recyclable products is quantified in environmental accounting in terms of potential cost and bearing specific risks;
- the practice of performance wages by SAV Company is likely to create a dynamic results on short and medium term, which is measurable in productivity overs;
- hiring of investment in training by the same company is a long-term valuation element that can occur in the evaluation of potential teams included in training programs.

Value creation is a problem that raises today a growing interest in many areas of management sciences: strategic management, finance, accounting, management control, marketing, organisation, human resources management. Under a practical aspect, the issue of value creation has become a concern of managers of large enterprises because it allows the development of activities and uses.

The concept of organizational value, defined as the quality of the operation and management of the enterprise (Capelletti and Khuatra, 2004), can be put into correspondence with other conceptual approaches, especially those issued by swedish authors who have tried to determine the value of the hidden root causes by studying intangible capital. In this context it appeared the model appeared Sveiby model (1986) which integrates the measuring indicators of each parts of intangible capital and the Edvinsson and Malone models (1997) who proposed the famous instrument " Skandia Navigator".

## **5. CONCLUSIONS**

The emergence of the concept of "social information system" is not a simple replacement of the older concept of "human resource information system". New issues of sustainable development and the social responsibility of the enterprise, as well as the strategic dimension of human resource functions, expanded the complexity and external aspect of human resource information system. The name of social information system responds better the responsibilities that the enterprise has for stakeholders and this is the main reason why there are differences between the two concepts.

The measurement of the contribution of both systems to achieve added value in the organization is a difficult task, which requires the use and analysis of the concept of social added value as an intermediate and necessary way, at least at the current state of theory and practice, for such a task. Social added value can not be expressed in a similar manner to economic value added, but the level and structure directly influences its economic results.



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# **THE EVOLUTION OF ADDED VALUE CREATED BY THE MAIN ROMANIAN COMPANIES FROM OIL AND RETAIL TRADE INDUSTRIES**

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**Abstract:** In a period of time in which companies still experience the effects of the financial crisis and are hardly recovering their position held prior to it, it is important for an investor (and for the company itself) to determine to which extent these are capable, along with a satisfactory profitability, to also bring added value to their shareholders. In this respect, I see as opportune the fulfilment of a study in which there are analysed, both in comparison and in dynamics, the main indicators which point out the added value created by the main romanian companies from the oil and retail trade industries, listed on Bucharest Stock Exchange. Thus, the study aims to determine, by analysing indicators like Economic Value Added, Market Value Added, Cash-Flow Return on Investment, Cash Value Added or Total Shareholder Return, which of the targeted companies have increased their value in the recent period of time.

**JEL classification: G01,G32**

**Key words: added value; financial crisis; indicators; financial analysis; dividend policy**

## **1. INTRODUCTION**

The classic performance measurement indicators, although extremely valuable, present the downside that they do not take into consideration the cost of the invested capital, especially the cost of equity, thus, using strictly these indicators in the economical and financial analysis can lead to erroneous conclusions because it is possible to come across companies that are performant, but which do not create value, on the contrary, they consume the existing one.

Both in specialized literature and practice the techniques for quantifying the newly created value of a company are relatively recent. Thus, Colasse B. defines the growth of an entity's value as "the capability of a company to raise its size", also mentioning several more measurement criteria: turnover, production, added value, fixed or total assets.

Essential contributions to this theme were added by the American financial consulting cabinets (Stern Stewart, Boston Consulting Group, CSFB Holt LLC, Applied Finance Group) by promoting new indicators for measuring financial performance. In Romania, most authors have started using the new indicators promoted by the consulting cabinets, in order to measure the added value created by the company.

Thus, Petrescu S. considers that added value is „the main element in determining some indicators of creating value of major significance in the activity of any entity listed or not on the capital market”.

In this context, appears the opportunity to realize a study on the evolution of added value created by the main romanian companies from oil and retail trade industry listed on Bucharest Stock Exchange in the recent period of time (2010-30.06.2012). There have been selected six of the most important companies from the above mentioned areas of activity, in order to deliver relevant conclusions relating to which extent investing in these industries brings added value to (potential) shareholders.

## **2. OBJECTIVES**

After the study is complete, its potential readers will be able to observe aspects like:

1. Which enterprises brought economic value added to their shareholders.
2. Which industry registered a higher cash flow return on investment and when.
3. How many companies have a positive total shareholders return and why.

## **3. METHODOLOGY**

The added value indicators represent ways of expressing the increase of value created by the company for its shareholders, both from an economic and from the capital market's point of view. Confronting the opinions of international specialised literature and practice with those of local literature, there have been selected in order to be determined the main indicators that express added value, presented along with their main components:

Economic Value Added = Net Operating Profit After Taxes - Cost of invested capital;

Market value Added = Trade capitalization - Invested capital;

Cash Flow Return on Investment =  $\frac{\text{Gross Cash Flow} - \text{Economic Depreciation}}{\text{Gross Investment}} \times 100$ ;

Cash Value Added =  $\text{Gross Cash Flow} - \text{Economic Depreciation} - \text{Cost of invested capital}$ ;

Total Shareholder Return =  $\frac{[\text{Dividend per Share} + (\text{Market Share Price at the end of the period} - \text{Market Share Price at the beginning of the period})]}{\text{Market Share Price at the beginning of the period}} \times 100$ ;

Cost of invested capital =  $\text{Weight Average Cost of Capital}(\text{invested capital cost rate}) \times \text{Invested capital}$ ;

Weight Average Cost of Capital =  $\frac{\text{Equity cost rate} \times \text{Equity} + \text{Borrowed capital cost rate} \times \text{Borrowed capital}}{\text{Invested capital} + \text{Borrowed capital}} \times (1 - \text{profit tax rate})$ ;

Equity cost rate =  $\text{Low(No)risk rate of return} + \text{Risk bonus}$ ;

Risk bonus =  $\text{Low(No)risk rate of return} \times \text{Risk rate}$ ;

Return on Equity =  $\frac{\text{Net profit}}{\text{Equity}} \times 100$ ;

Gross Cash Flow =  $\text{Net Profit} + \text{Interest Expenses} + \text{Economic Depreciation}$ ;

Sustainable Cash Flow =  $\text{Gross Cash Flow} - \text{Economic Depreciation}$ ;

#### 4. ANALYSES

The companies belonging to the two areas of activity are presented in Table no.1.

**Table no. 1**

| No. | Area of activity | Company                 |
|-----|------------------|-------------------------|
| 1.  | Retail trade     | Mercur                  |
| 2.  |                  | Napotex                 |
| 3.  |                  | Unirea Shopping Center  |
| 4.  | Oil industry     | OMV Petrom              |
| 5.  |                  | Rompetrol Well Services |
| 6.  |                  | Oil Terminal            |

Before analyzing the added value indicators, certain things must be mentioned regarding to determining the elements that lay at the foundation of these indicators calculation.

Thus, in order to determine two of the five added value indicators, Economic Value Added – EVA and Cash Value Added – CVA, the cost of the invested capital must be determined and so, the rate of the invested capital cost via the weighted average cost of capital. Within this, determining the equity cost rate encounters some difficulties and is not lacking subjectivism. Although some authors recommend approximating this rate with the return on equity, for ease of use, within this study I have determined the equity cost rate based on the low risk rate of return and the risk bonus because I consider that if a company is not able to generate net profit and thus has a low financial profitability, this does not mean that the invested capitals also present such a low cost.

With this purpose, I have selected five emissions of state bonds with the interest in RON, issued in the timeframe of closure of the financial exercises taken into consideration and with a residual maturity of approximately 5 years, the details being presented in Table no.2.

**Table no. 2**

| Issue characteristics                           | Year             |                  |                  |                  |
|---|------------------|------------------|------------------|------------------|
|   | 2010             | 2011             | 2012             | 2013             |
| ISIN  | RO1015DB<br>N010 | RO1116DB<br>N024 | RO1217DB<br>N046 | RO1318DB<br>N034 |
| Type  | SB interest      | SB interest      | SB interest      | SB interest      |
| Date of emission/<br>re-opening                 | 24.01.2011       | 23.01.2012       | 21.01.2013       | 29.07.2013       |
| Due date  | 30.04.2015       | 30.04.2016       | 26.07.2017       | 28.11.2018       |
| Residual<br>Maturity(months)                    | 51               | 51               | 54               | 64               |
| Currency  | RON              | RON              | RON              | RON              |
| Average interest<br>for adjudication<br>(% p.y) | 7,16             | 7,00             | 5,4              | 4,72             |

As far as the risk rates used, these are presented in Table no.3.

**Table no. 3**

| Company                 | Risk rate/Risk |                   | Risk rate/Risk |                   | Risk rate/Risk |                   | Risk rate/Risk |                   |
|-------------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|
|                         | 2010           |                   | 2011           |                   | 2012           |                   | 2013           |                   |
| Mercur                  | 1              | slightly elevated | 1              | slightly elevated | 1              | slightly elevated | 1              | slightly elevated |
| Napotex                 | 1              | slightly elevated | 1              | slightly elevated | 1              | slightly elevated | 1              | slightly elevated |
| Unirea Shopping Center  | 1              | slightly elevated | 1              | slightly elevated | 1              | slightly elevated | 1              | slightly elevated |
| OMV Petrom              | 0,5            | medium            | 0,5            | medium            | 0,5            | medium            | 0,5            | medium            |
| Rompetrol Well Services | 0,5            | medium            | 0,5            | medium            | 0,5            | medium            | 0,5            | medium            |
| Oil Terminal            | 0,5            | medium            | 1              | slightly elevated | 1              | slightly elevated | 1              | slightly elevated |

Considering that based on the existing risk degree, the risk rate can take values between 0.25, for a small risk and 2 for a very high risk, I have chosen a risk rate equal to 1 for a slightly elevated risk for Mercur, Napotex and Unirea Shopping because of their average evolution and as such, investing in these businesses brings a certain degree of risk. Also, considering generic evolution indicators, this time favorable, I have chosen a risk rate of 0.5, corresponding to a medium risk for OMV Petrom and Rompetrol Well Services. Last but not least, the reason for allocating Oil Terminal a medium risk in 2010 and slightly elevated in the following period is based on the considerable downsizing of the results indicators, especially the operational profit correlated with the growth of financial debts starting with the year 2011 and peaking with the loss recorded in 2013.

As far as the borrowed capital cost rate is concerned, it has been determined as an arithmetic average among the monthly interest rates used by credit institutions for new credits, in RON, offered to non-financial companies, with a value under or over the equivalent of 1 million euro in RON, the selection between the 2 categories, being done based on the amounts in the balance sheets of the companies owed to credit institutions. These are presented in Table no. 4.

**Table no. 4**

| Credit value           | Average rate of interest (%) |      |      |      |
|------------------------|------------------------------|------|------|------|
|                        | 2010                         | 2011 | 2012 | 2013 |
| <1 mil euro equivalent | 12,47                        | -    | -    | -    |
| >1 mil euro equivalent | 10,14                        | 8,67 | 8,75 | 8,68 |

Another important information that has to be mentioned is the fact that for the data of 30.06.2013, the elements of the nature of income, expenses and the results used for determining the majority of indicators that express value creation were corrected in order to be afferent to the last four consecutive trimesters and, thus, avoiding distortions due to scale, between the elements from the balance sheet and those from the profit and loss account. The period 30.06.2013 was selected based on availability of information, up to the date this study was completed (February 2014), the yearly financial statements for 2013 not being available.

Thus, the values registered in the period 2010-30.06-2013 by the Economic Value Added – EVA, Market Value Added – MVA, Cash Flow Return on Investment – CFROI, Cash Value Added – CVA and Total Shareholders Return – TSR are presented in the Tables no.5 to no.9.

**Table no. 5**

| Area of activity | Company                 | EVA (RON)   |               |               |               |
|------------------|-------------------------|-------------|---------------|---------------|---------------|
|                  |                         | 2010        | 2011          | 2012          | 2013          |
| Retail trade     | Mercur                  | -1.035.779  | -1.018.228    | -1.461.668    | -1.703.220    |
|                  | Napotex                 | -1.273.427  | -1.177.812    | -739.518      | -513.387      |
|                  | Unirea Shopping Center  | -57.659.804 | -58.904.911   | -40.774.311   | -34.964.096   |
| Oil industry     | OMV Petrom              | 626.004.961 | 2.059.064.371 | 2.397.719.280 | 2.761.976.025 |
|                  | Rompetrol Well Services | -990.118    | -376.429      | 7.819.689     | 17.382.763    |
|                  | Oil Terminal            | -17.280.820 | -47.209.542   | -41.612.224   | -39.919.994   |

Analyzing the evolution of Economic Value Added, it can be observed that all three companies from the retail trade area have registered negative values of this indicator on the whole monitored period, a sign that their net operational profit was not sufficient to cover the cost of capital invested by creditors and shareholders. Thus, Mercur S.A has registered an EVA relatively constant in 2010 and 2011, but in 2012 this has dropped by 43.55%, so that in 2013 to reach the minimum of this period of - 1.703.220, mainly due to the considerable drop, of about 50%, of the operational profit. At the same time, it can be noticed that Napotex, although it also has registered negative values of EVA, they have risen considerably from one year to the next, fluctuating from -1.273.427 to -513.387 on 30 June 2013, mainly due to an increase in operational profit along with a decrease in invested capital cost. The third company in the retail trade business, Unirea Shopping Center, follows a trend similar to that of Napotex, its EVA, although constantly negative, rising by 30,78% in 2012 and an additional 14,25% in 2013. A notable aspect in this case is that in 2012 the company has succeeded in a major increase in their operational profit along with a decrease in their invested capital cost, while in 2013 it was achieved only a small decrease in the employed capital, under the conditions of a relatively constant operational profit.

Analyzing the EVA evolution of the oil industry companies, favorable evolutions are found in OMV Petrom and satisfactory evolutions in Rompetrol, who have succeeded in an increase in their net operational profit along with maintaining a relatively constant or even diminishing their invested capital cost, a sign that the companies have created value for their shareholders, so their investment is an efficient one. On the other side of the spectrum, we find Oil Terminal, who has registered negative economic added values during the whole analyzed period of time, mainly because of a considerable increase of invested capital, both equity as well as borrowed and implicitly, of its cost, an increase that has not lead to an increase in the operational profit, but rather to its decrease, culminating with the loss registered in 2013. It is obvious that this is equivalent to a destruction of capital invested by the shareholders by achieving a rate of profitability per share lower than the average rate of profitability on the capital market.

**Table no. 6**

| Area of activity | Company                 | MVA (RON)      |                |              |                |
|------------------|-------------------------|----------------|----------------|--------------|----------------|
|                  |                         | 2010           | 2011           | 2012         | 2013           |
| Retail trade     | Mercur                  | 5.971.808      | 1.995.640      | 798.681      | -458.446       |
|                  | Napotex                 | -5.581.660     | -7.749.369     | -7.464.632   | -7.110.321     |
|                  | Unirea Shopping Center  | -242.510.571   | -257.409.290   | -300.820.131 | -321.723.705   |
| Oil industry     | OMV Petrom              | -1.034.706.172 | -5.049.049.740 | -155.501.816 | -2.028.227.796 |
|                  | Rompetrol Well Services | -29.941.614    | -50.177.602    | -50.934.521  | -40.530.961    |
|                  | Oil Terminal            | -64.510.562    | -245.758.947   | -307.175.910 | -321.145.985   |

As far as Market Value Added is concerned, we can not speak about a favorable evolution in case of the companies from the retail trade sector unless through comparison. Thus, the only company that registers positive values is Mercur, however, these fall by about 60% each year, culminating with the year 2013, when the market gives the company a price deficit, MVA being of about -460.000 RON. In case of Napotex the price deficit assigned by the market grows considerable in 2011 compared to 2010 when MVA drops by 38,84%, in 2012 and 2013 following sensible increases, of around 4% per year. It is seen that these MVA fluctuations are triggered almost completely by the market price of the share, the value of the invested capital remaining relatively unchanged from one year to the other. Unirea Shopping Center registers the most unfavorable evolution in this sector from the MVA point of view, with important drops during the four years, caused, like in the case of Napotex, by the decrease in the stock exchange value of its shares, culminating with a value of -321.723.705 registered in 2013.

Regarding MVA, we encounter negative values in all three companies from the oil sector in the analyzed period of time, a sign that at least for two of these, Petrom and Rompetrol, the real economic performance measured via EVA is not directly proportional with their stock exchange performance. Thus, it can be concluded that the premise according to which the increase in the created economic value will trigger increase in the generated market value is not valid in this case. On the other hand, the most unfavorable evolution is encountered at Oil Terminal, for whom the market attributes a price deficit larger each year, compared to the capital invested in the company, the market price of its shares diminishing by 38.91% during the 4 years of analysis.

**Table no.7**

| Area of activity | Company                 | CFROI (%) |       |       |       |
|------------------|-------------------------|-----------|-------|-------|-------|
|                  |                         | 2010      | 2011  | 2012  | 2013  |
| Retail trade     | Mercur                  | 12,14     | 11,82 | 9,68  | 7,24  |
|                  | Napotex                 | 2,52      | 3,16  | 4,04  | 4,69  |
|                  | Unirea Shopping Center  | 2,01      | 1,59  | 1,92  | 2,18  |
| Oil industry     | OMV Petrom              | 9,63      | 17,60 | 15,80 | 17,90 |
|                  | Rompetrol Well Services | 12,44     | 12,32 | 15,62 | 21,27 |
|                  | Oil Terminal            | 1,14      | 0,22  | 0,26  | -0,90 |

As far as Cash Flow Return On Investment, it must be mentioned that in determining its levels, in this study, the gross investment value to which the gross cash flow is reported, is assimilated to the invested capital and not to the total assets as some authors recommend, because in this case short-term non-financial debts, which are not related to investments, are not taken into consideration. Analyzing CFROI, it is observed that companies in the retail trade area did not have a favorable evolution, even if some of them registered an ascending trend of this indicator (Napotex) or a relatively constant one (Unirea Shopping Center) because none of the companies were able to register in the analyzed period of time a CFROI greater than the invested capital cost rate, and in this way, create results that are superior to capital cost and, therefore, value for its shareholders. From this point of view, even if Mercur registers a decline of its indicator, constantly falling from 12,14% in 2010 to 7,24% in 2013, it is the company that registers the lowest deficit between the annual values of CFROI and the invested capital cost rate, of about 2% annually. In the case of Napotex and Unirea, CFROI values oscillate between 1,6% and 4,7% yearly, considering a variation of the Weighted Average Cost of Capital of between 9,2% and 14,3%, the deficit being obvious.

When looking at the CFROI registered by the companies in the oil industry, a much more favorable evolution can be observed for two of them. Thus, Petrom succeeds on raising the rate from 9,63% in 2010 to 17,9% in 2013, starting with 2011 also registering an increase of 7-10% over the invested capital cost rate, an extremely favorably appreciated aspect. In the case of Rompetrol the situation is similar, starting with a CFROI of about 12% in 2010 and 2011 and reaching its peak value, of 21,27% in 2013, mentioning that only in 2012 and 2013 was possible an addition of 7% and 14% over the invested capital cost rate. Oil Terminal presents an evolution that is extremely unsatisfying starting from a CFROI of 1,14% in 2010 and registering -0,9% in 2013, on account of the net accounting loss from this year. It is obvious that the CFROI values are far inferior to the invested capital cost rate in all the four years of analysis.

**Table no. 8**

| Area of activity | Company                 | CVA (RON)    |               |               |               |
|------------------|-------------------------|--------------|---------------|---------------|---------------|
|                  |                         | 2010         | 2011          | 2012          | 2013          |
| Retail trade     | Mercur                  | -591.707     | -627.019      | -322.808      | -583.103      |
|                  | Napotex                 | -1.295.684   | -1.196.366    | -758.849      | -527.553      |
|                  | Unirea Shopping Center  | -58.488.912  | -59.459.963   | -43.056.227   | -35.537.385   |
| Oil industry     | OMV Petrom              | -135.418.480 | 1.611.119.967 | 1.948.469.415 | 2.795.551.228 |
|                  | Rompetrol Well Services | 1.986.576    | 2.336.659     | 10.617.596    | 21.147.037    |
|                  | Oil Terminal            | -18.549.035  | -47.976.974   | -42.248.501   | -41.169.013   |

Analyzing the Cash Value Added registered by companies in the retail trade industry, we can say that none of them is successful in generating extra cash to the invested capital cost, the values of the indicator being negative on the entire analyzed period of time. Still, in spite of the negative values, it can be observed a gradually increase in the indicator in the case of Napotex and Unirea Shopping, a sign that the difference between the invested capital cost rate and the Cash Flow Return On



Investment has decreased each year. As for Mercur S.A, in spite of the combined evolution of the CVA both ascending and descending in the four years timeframe, it is the company with the corrected gross cash flow most close to the invested capital cost.

On the other hand, CVA registered by the oil industry companies has encountered both favorable and unfavorable evolutions. In Petrom's case the start value is negative, -135 mil RON in 2010, but reaching a positive value of 2.795 mil RON in 2013,so, a growth of 2.164%. A similar evolution can also be found in Rompetrol's case, this company only registering positive values of the indicator, though, and achieving a growth of 964,5% in 2013 as compared to 2010. The third company from the oil industry distances itself from the other two through the negative evolution of the CVA. This could have been anticipated from observing the low levels of the CFROI, being obvious that Oil Terminal generates a gross cash flow far inferior to the cost of capital invested in its activity.

**Table no. 9**

| Area of activity | Company                 | TSR (%) |        |        |
|------------------|-------------------------|---------|--------|--------|
|                  |                         | 2011    | 2012   | 2013   |
| Retail trade     | Mercur                  | 0,71    | 5,00   | -11,80 |
|                  | Napotex                 | -34,51  | 24,29  | 6,25   |
|                  | Unirea Shopping Center  | -1,43   | -22,02 | -11,37 |
| Oil industry     | OMV Petrom              | -4,18   | 61,38  | -4,32  |
|                  | Rompetrol Well Services | -0,96   | 25,77  | 20,19  |
|                  | Oil Terminal            | -17,03  | -7,92  | -18,13 |

As far as Total Shareholder Return is concerned, this could not be calculated for the year 2010 because information regarding the market price of shares was not available for the beginning of the year 2010. At the same time, the value calculated for 30.06.2013 does not include the dividends distributed in this financial exercise, still, estimations can be made depending on each case.

Thus, in the case of Mercur S.A, we can observe a low profitability in 2011, of 0,71% and a favorable one in 2012, of 5%, in both years the dividend given to shareholders compensating for the market depreciation of the share. I do not consider that this will also be possible in 2013, since giving a dividend of even 2,4 RON/share still will not be sufficient to compensate for the loss of 2,95 RON/share, leading to a negative TSR.

For Napotex S.A the TSR registers a severely negative value in 2011, of -34,51%, caused by the depreciation of its shares by 4,62 RON/share. In 2012 the TSR becomes 24,29% due to the appreciation of the equity securities by 1 RON/share, the same ascending tendency, but with only 0.5 RON/share, being encountered at 30<sup>th</sup> of June 2013 leading to a positive TSR in this period also.

In the case of Unirea Shopping Center, the evolution is profoundly unfavorable because, even though the company decided not to distribute dividends at all in the 2010 – 2013 period, the capitalization of profit does not influence the view of the capital market, its shares being depreciated by 1,3, with 19,75 and 7,95 RON/share in 2011,2012 and 2013, leading to negative values of TSR, peaking with the minimum of -22,02% in 2012.

For Petrom S.A, the dividend given in 2011 was not sufficient to compensate the market depreciation of shares, resulting in a negative TSR, of -4,18%. This aspect

changes in 2012, when the appreciation of the equity securities of 0,15 RON/share and the provided dividend of 0,028 RON/share has led to a total shareholder return of 61,38%. For the year 2013, although the calculated TSR is -4,32%, considering the history of the dividends given, it is noticed that even if distributing a minimum dividend of 0,02 RON/share, it would compensate the depreciation of 0,019 RON/share and, therefore, lead to a positive TSR.

In Rompretrol S.A, we can observe a similar situation as in Petrom in 2011 and 2012, when the depreciation and later appreciation of the share value on the market determined major fluctuations of the TSR, this registering -0,96% in 2011 and 25.77% in 2012. In 2013 the two companies differentiate because Rompetrol benefits from a considerable appreciation of its equity securities on the market, registering a TSR of 20,19% in absence of dividend, so, if we consider granting it, TSR would be even higher than the calculated one.

For Oil Terminal, the constant unfavorable evolution is maintained also in respect to TSR, the extremely reduced granted dividends being unable to compensate for the depreciation of its shares, and leading to TSR values of -17,03, -7,92 and -18,13% in 2011, 2012 and 2013.

## **5. CONCLUSIONS**

The analysis of the indicators that reflect the newly created value from an economic point of view, as well as from a stock market point of view, regarding the six companies from the oil and retail trade industries has allowed expressing some interesting conclusions.

Thus, a primary aspect that was brought to light is that the stock market does not always reflect the economical performances of a company, proving the subjectivism of investors. Such an example is Mercur S.A, who, even though between 2010 – 2012 has registered negative economical added values, the market did not react proportionally and, even though its shares did depreciate, it still registered a positive market value added, being the only company that succeeded this. At the opposite side of the spectrum lies OMV Petrom (for the whole analyzed period of time) and Rompetrol Well Services (between 2012 - 2013), who although created economic value at relatively high levels, registered negative market added values. Thus, it is ascertained that the premise according to which the increase in the created economic value will trigger increase in the generated market value and vice versa is not universally true. At the same time the unfavorable evolution of Oil Terminal must be mentioned, whose constantly negative economic added values are caused by the considerable increase in the invested capital, both equity and borrowed, and therefore, in its cost, increase that did not lead to a raise in operational profit, but, on the contrary, even lead to its decrease, peaking with the loss registered in 2013, being the only company that did not succeed in obtaining profit in all four years of analysis.

As far as Cash Flow Return On Investment and Cash Value Added, the companies present a complementary evolution. Hence, the only companies with a CFROI superior to the cost rate of the invested capital and a positive CVA are Rompetrol, on the entire period, and Petrom, starting with 2011, when the corrected gross cash flow surpasses considerably the invested capital cost. This situation is

different for the companies in the retail trade industry, as none of them succeeded in obtaining results higher than the capital cost, but Mercur stands out in the branch as the company that registers the lowest deficit between the yearly values of CFROI and those of invested capital cost rate, of about 2% annually.

Analyzing the second indicator which reflects the added value created by the company at stock exchange level, Total Shareholder Return, we notice the most favorable evolution in Rompetrol Well Services, whose indicator, although almost null in 2011, surpasses 20% in 2012 and 2013, mainly due to the appreciation of the stock exchange value of the companies shares, as well as to the dividend granted, situation considered as ideal. At the opposite side of the spectrum lies Unirea Shopping Center, whose evolution is a profoundly unfavorable one, because, although the company has decided not to grant dividends at all during the 2010 – 2013 period, the capitalization of profit does not influence the view of the capital market, its shares being depreciated by 1,3, by 19,75 and by 7,95 RON/share in 2011, 2012 and 2013, leading to negative values of TSR, peaking with the minimum of -22,02% in 2012.

Linking and matching together all the data and conclusions up to this point, it is my opinion that the only companies capable of creating added value, even if the stock exchange market often does not reflect this, are OMV Petrom and Rompetrol Well Services, and, therefore, a long term investment in their shares could generate substantial earnings. Second I would place Napotex, who, although registers negative absolute levels and low relative ones for the added value indicators, the ascendant trend of this company is obvious, the values improving considerably from year to year. Therefore, a long term investment in its shares could generate substantial earnings but the risk level involved would be a medium to high one. On the contrary, the companies in which an investment wouldn't be justified and could end in losses would be Oil Terminal, Unirea Shopping Center and Mercur, since they create no economic value but, on the contrary, they even consume the existing one, even if the stock market does not react proportionally to the change in the financial situation of the company, as is the case of Mercur S.A.

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# **RESULTS (ERRORS) ASSESSMENT IN FINANCIAL AUDIT**

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**Abstract:** : The quality of audit represents an important desideratum that the auditor considers when developing his activities. Therefore, a good interpretation of the results obtained after applying the procedures established in the planning stage, represents an essential step in stating an adequate audit opinion that will precisely represent the reality and will allow the entity to fully understand the problems and to take proper actions for normalizing the activity. In what follows, we will present the main procedures that are specific for the audit execution that will set the path towards obtaining highly accurate results.

**JEL classification:** H83, H87

**Key words:** financial audit, material error, assessing errors, samples

## **1. INTRODUCTION**

An audit mission, in its execution stage, asks for a very complex work from the auditor, that needs to fully comply with the audit programme established and in which verifications will be made for each element selected for testing. Afterwards, the auditor will have to test the controls and to undertake the substantive testing, based on which he will state an audit conclusion concerning the audit controls (if they were enough or not) and tests (if they were able or not to identify material errors that will influence the audit opinion). Based on this conclusion, the auditor will have to decide if the audit is appropriate, sufficient and trustworthy. Also, he will have to decide if the stated activity supports or not stating an audit opinion or if they are problems that need to be reported back to the entity's administration.

In this context, since the audit cannot, normally, verify all recordings from a category of operations, he will have to evaluate errors identified throughout the ongoing of the audit process. This activity has the purpose to calculate the impact of errors on the audit opinion, and to establish the auxiliary activity that the audit needs to actually execute. In fact, this operation reduces the risk that the auditor to be placed in a situation with not enough audit evidences, that would allow him to finish the audit mission, or that the auditor, in the process of funding an opinion, to use unreal information, as an effect of an incorrect examination and analysis operations of the audit proofs.

## 2. ANALYSES

Evaluating the non-detection risk can also be considered as an auto evaluation of the auditor, while considering that certain critical points of the analyzed activities were not noticed in the audit conclusions funding stage, based on which the opinion is stated. As a result, the non-detection risk depends especially on the self-critical attitude of auditor in analyzing and orienting his own attitude towards the manner in which the audit mission will be approached.

During the audit process, the auditor may find errors or weaknesses in the control system, situation in which he must investigate on how and why these occurred. Considering that errors discovered during the tests, especially while testing key-elements or high value elements, often imply weaknesses, the audit must relook at the risk assessment and to use the discovered errors for bringing to date the estimated errors. Thus, if the base materiality increases or decreases by more than 10% of that determined by the auditor in planning phase, then it will adjust it accordingly at a material level. Considering these modifications, a new size of samples will be calculated for the substantive tests.

In evaluating the results of audit procedures, auditors frequently use professional judgment. Therefore, evaluation should be well documented and conducted by the entire team of auditors. In this way is ensured that the findings and consequences were analyzed circumferentially before the financial statements to be certified.

Auditor general assessment should include all sources of audit insurance, which together provide an overall opinion on the financial statements.

Should be noted that such an assessment involves evaluating results of each analytical procedure used for all tests (procedures) and substantive direct control tests were performed during the execution of the audit engagement.

**Evaluation of analytical procedures** is made given their characteristics and stages. As the analytical procedures are an useful instrument that allows the auditor to state that certain values are reasonable, applying them seems suitable for operations in which values are easy to estimate (ex: salaries, local taxes).

Analytical procedures involve three steps, during which the auditor, based on forecast calculations and subsequent comparisons, evaluates the results, concluding on them.

The first stage of an analytical procedure involves **estimating** (calculating forecast) the volume of transactions category that is subject to audit. This estimation is performed by the auditor solely on the independent data accounts, knowing this time the values enshrined in financial situations. The volume of processed data, their typology, depends primarily on the trust that the auditor has in the data.

After the final calculation of the forecast, the second stage begins, in which the auditor determines the *acceptable difference* between weather expected of him and the values recorded in the audited financial statements considering the relationship between the total amount of operations and basis of materiality. Thus, the acceptable difference will be the result of the product between the level of materiality and the square root of the ratio between the operation category value and the basis of materiality.

For example:

We assume that for an entity A, an auditor calculates the level of materiality at 225.000 euro. The materiality basis is represented by the total revenues of 25.000.000

euro (materiality coefficient= 0,5%). The auditor is undertaking a mission that implies operation categories specific for the sale of finished products worth 15.000.000 euro.

The auditor will determine the acceptable difference like this: 15.000.000 divided by 25.000.000 equals 0,6 from which we extract the square root and we obtain 0,7746. This result will be multiplied with the materiality level, respectively 225.000 euro thus resulting an acceptable difference of 174.285 euro.

There are times when the value of a category of transactions may be greater than the materiality basis chosen by the auditor. In this case the auditor shall determine the acceptable difference as equal to the level of materiality.

If the amounts in the account exceed the difference acceptable, the auditor should request the management entity an explanation regarding this situation, interviewing two or more persons independent of the entity's management, while ensuring the reasonableness of their explanations. We emphasize that overcoming acceptable difference does not mean that the accounts contain errors. Being unable to thrust in this case, the analytical procedure, the auditor should perform substantive direct testing to determine whether or not the values in the accounts contain material errors.

**Evaluation of the results of direct substantive procedures** envisages two situations, namely if they were applied to all operations or only on a sample of them.

In the first case, the evaluation is to analyze the results of direct substantive procedures that were applied to all transactions (complete testing). In fact, fully tested populations are composed of significant transactions or have significant value.

Specific to this type of evaluation is that withheld errors do not extrapolate since their impact is limited, as they only are specific for transactions in which they were identified. Thus, the auditor knows the entire area of the error since all the elements have been tested.

If the audited transactions were selected based on sampling, the errors found in the sample can be estimated for the entire population, through the operation known as *errors extrapolation*. It must be emphasized here that the way in which the auditor extrapolates the errors depends on the sample selection method, respectively on the fact if the sampling was made based on monetary units (MUS) or if the sample was extracted through simple random sampling (RANDOM).

Samplings made based on the MUS method is used in audit missions that involve resting numerous series of operations, homogenous and generally, of small value, for which the evaluated error risk is small (ex: auditing payment rolls).

If the auditor will use the MUS sampling only when the risk that the audited financial situation to contain material errors is small. As a result, the auditor will previously conduct analytical procedures.

Sampling through MUS is based on certain monetary units individually considered, and operations are selected according to their size. The auditor will determine the extent to which each item sampled is wrong, then extrapolate the error over the entire range of sampling within the category of those transactions and not only in relation to the size of the operation.

For example, consider a sample obtained through the method MUS was determined for the operating expenses of a government agency. We set the sampling interval to the value of 200,000 euros. The test is a bill for an external service provider. Checking that document reveals an error generated by the use of incorrect currency,

leading to registration in the records of an undervalued stock with 180 euros or 3200 euros instead of 3380 euros.

By extrapolation, the aforementioned error is 11.250 euro. Setting this value entails first determining the error rate which skews the sample selected, reporting the initial error to the registered value (180/3200). Then the error rate thus obtained (0.05625) is multiplied by the sampling interval, considering that the item tested is representative and any mistake (error) detected is supposed to reappear at the same frequency throughout the range.

To assess the test results of samples selected through the simple method RANDOM the auditor sets the error as a percentage of the total value of transactions tested before extrapolation.

Referring to the previous example, we assume that the auditor tests, this time using simple random sampling, 25 selected items related to operations (sample) totaling 175,000 euros. The error detected is 360 euros and covers misstatement of an amount, ie 3,730 euros instead of 3370 euros (understatement). The total population in the year audited was 3.5 million euros. We calculate the error rate and determine that it is 0.205% (360/175.000). Making extrapolation by multiplying the total population error rate, we get an error in the extrapolated value of 7.175 euro (3,500,000 x 0.205%).

After extrapolation, for each class of operation, the auditor should compare the undervaluation and overstatements to their compensation. This operation is necessary because there may be material understatement and overstatement individually and yet the overall financial statements to be materially correct (not to exceed the materiality).

We emphasize, however, that if the auditor determines very high rates of error, he may reconsider the assessment of the risk level determined at the planning stage of the audit year to increase the risk factor which inevitably lead to further tests.

Another aspect of assessing errors aims at their limitation when the auditor finds errors with financial impact arising in so-called *special circumstances*. For example, the errors were detected within the purchasing activity of the audited entity and refer to transactions relating to a particular supplier. In this case, if the auditor is satisfied that that type of error occurs only with that particular supplier, he will not extrapolate the error to the entire population from which the sample was selected but only to the subpopulation consisting of operations carried out with that supplier.

An important aspect of the process of evaluating the results of audit is the evaluation of the *regularity errors*. In this context, the auditor must evaluate the irregularities found during an audit in order to determine their impact on the audit opinion.

It was noted that regularity errors can have a different impact compared to the impact of monetary errors (errors with financial impact). Therefore knowing that audited entities are able to correct cash errors, but it is less likely to correct regularity errors, the auditor should evaluate irregularities to determine if they have a material impact on the financial statements. Also he must consider whether irregularities are material in nature, as this influences the type of audit opinion.

For example, consider that a government payment agency earned an income in the amount of 300,000 euros from teaching courses. Although this work did not involve a loss of public funds, but the contrary, however, considering that the institution's financial regulations do not permit such classes, it follows that the total income registers an irregularity and the income is material. Given that the agency in

question cannot take immediate action in order to change the character of such income because it requires the approval of the Legislature, the opinion expressed by the auditor on the financial statements will be reserved.

Specific for the regularity errors is that they do not extrapolate because they represent a level of financial irregularities that required a similar level of error in the flow category of operations audited. They rather represent unauthorized operation rather because they are not made in accordance with the laws and regulations.

As you can see, concluding on the results goes towards the auditor establishing the material character of the retained errors, both for operation category and for the entire financial situations.

If, after audit tests, the auditor assesses the errors and finds out that they are reduced when compared with the materiality and do not pass its level even when adding a permitted level of undetected error of 50% from the materiality, it obtained the wanted level of insurance, the financial situations do not have material errors, and the opinion stated is a non-qualified one.

### **3. CONCLUSIONS**

However, determining material errors in the financial statements requires the auditor promotion of measures that may lead (or not) to avoid expressing an opinion or even denial of opinion. This is a serious option and is therefore important for the auditor to identify, since the early stages of the audit, the possibility of existence of material errors in order to work towards one of the following measures:

A. To request the audited management additional activities for categories of problem operations, as it is his responsibility to provide additional insurance on the non-existence of material error in the financial statements.

B. To realize even more activities, resulting in additional audit procedures to determine whether there is sufficient evidence to lead to the conclusion that no material errors in the financial statements. In this regard, the auditor will increase the sample dimension also taking into account the sampling method used to determine the initial sample. Thus, in order not to alter the statistical validity of the sample initially establish, when establishing an additional sample must use the same method of sampling (MUS / RANDOM).

C. Limiting the scope of the audit opinion is another scenario applied by the auditor when the above measures do not provide this level of assurance required on the error. This measure is applied where additional work would have no effect on the auditor's opinion on overcoming the materiality, nay should strengthen our belief that the level is exceeded.

In conclusion, evaluation of audit results, preliminary stage of formulating the audit opinion and the audit report, subscribes to the overall objective of the audit, which is to provide assurance that the financial statements examined are complete and prepared accurately and the economic operations-were conducted in accordance with the relevant laws and regulations in force.

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# THE IMPACT OF RESTRUCTURING UPON THE ECONOMIC SYSTEM

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**Abstract:** Achieving economic objectives means meeting requirements of efficiency, profitability and profit. Restructuring phenomenon becomes part of the strategic thinking regarding the process of refurbishment and modernization through continuous adaptation to the economic structural changes. This phenomenon that is increasing in many countries, due to the mechanisms of transition to the market economy and especially the recession one, makes it necessary a broader approach in looking for ways to anticipate and manage, so that economic and social impacts to be mitigated by the creation of harmonious and sustainable national structures.

**JEL classification:** F2

**Key words:** restructuring, economic structures, strategies, labor productivity, economic progress

The economic, political and social changes during the transition towards a market economy led to a reorganization of economic activities, through layoffs and reduction of activities, which often generated negative effects upon the population living standard. In the analysis of social life it requires a systemic approach that reflects phenomena of professional or occupational mobility, or of marginalization or social inequality.

The system structure consists of a multitude of items correlated with each other through a relational system that envisages the achieving of overall objective of the organizational process.<sup>1</sup> It is more and more stated that the economic structures are primarily involved in the global crisis, and hence the solving of the major problems facing humanity is conditioned by overcoming the structures crisis. Pressure that economic structures face raises many questions. What are the factors and mechanisms of structural changes? What kind of essential correlations characterize the economic structures? What are the main events leading to the decline in economic structures? This set of questions requires the development of complex and rigorous theories. The phenomenon of growth and especially of economic development appears inextricably linked to a complex of structural changes that occur not only in the cross-cutting relationships, but also in different economic sectors.

The economic development is a form of change and the change involves innovation, which contributes to the economic progress and the evolution of human society. As noted the economist Adam Smith, the right of private property and free market economy are factors that provide the best results at the individual and social level. The economic development strategy should be based on increasing the efficiency of resource allocation, stimulating innovation and competitiveness.

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<sup>1</sup> Iancu A. (coord.), Structura economiei și sistemul industrial, Editura Politică, București, 1986, p. 20.

In order to make from the analysis of the economy, an operational tool, I would expect a dual approach of the restructuring, giving it a "broadly acceptance" on one hand and, on the other hand, "an acceptance in a restricted sense".

Broadly, the restructuring would be all developments in the economic system – from the company's structure to the structure of the national economy, from the structure of production, of consumption and of distribution to financial, budgeting, institutional structures etc. The assembly of developments in the economic system in the phase of radical transformation in all spheres of political, social life, restructuring aiming not only economic reform, and also change of behaviors, attitudes and habits, developments that involve inherent economic integration in the progress of society in general. In the economic literature has become established the using of term systematic reform that includes revamping and modernizing economy branches and redirecting economic activities, and the development of new economic governance institutions, considering the reorganization of economic agents, restructuring of the decisions system as the financial, banking system and so on.<sup>2</sup>

On the other hand, if we admit that the economic structure can be treated as a exogenous phenomena assembly with respect to all "pure economic mechanisms", then the restructuring regards the actions at the micro and macro economic level. It would be the "narrow sense" of the term restructuring resulting from the overall significance attributed structure which characterizes the relations in time and space. The scope of the restructuring would circumscribe particular actions and interactions that occur in the operation of the national economic system, and organized action space operators.

The process of adjusting economic structures must take into account the requirements and trends worldwide, mostly due to the fact that in all countries great efforts are made to structural changes in the field of technologies, production, organizational system, the qualification frameworks and information system.

Experience of advanced countries has shown many times that it can be emerged from the crisis and can not remove the effects of the economic crisis without major technological changes, without improvements to the unit production, without upgrading products and marketing systems, and generally, without economic structures adapted to new requirements of the markets for raw materials and sale markets. If it is considered the gap between Romania and other developed countries regarding the level of development and of the technology, it is obvious that the task of line change and modernization structures is larger and more difficult for our country, but fully achievable.

There is, nonetheless, a prerequisite: to accompany the material and human effort in development strategies provided a greater and more sustained focus on line promotion of new economic mechanism, to accompany and support policy of adapting economic structures, based on the economic efficiency criteria to be evaluated according to the real possibilities of the national economy and global economic developments. To the same aim, there is a need to adapt adequately the structures of organizational, legal and those of people's behavior. They should fully meet the needs of printing an increased mobility and economic structures of our country to align to structures of the oldest countries of the European Union.

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<sup>2</sup> Institutul Național de Cercetări Economice (National Institute of Economical Researches) Costin C. Kirițescu, Tezaur, Academia Română, București, 1991, p.38.

Operation and at the same time transforming the economy involves a great interdependence between structure and behavior. Thus exceeding the conception of the physical structure of the economy, restructuring could be addressed through the intervention of operators. Economical activities are not done spontaneously, but under the action and control of operators that directs and guides through the decisions needed to meet certain requirements of efficiency, cost, profit, etc. Operation and transformation of economic structures reveals that interdependence between structures and behaviors. When structures are real, they can be considered behaviors - especially the behavior of interrelations. When structures are objectives to be achieved, they require operators acting on the behaviors and not indentifying with them.

During the transition to a market economy it is necessary, in the opinion of most of the specialists, restructuring economic mechanisms in the same way as with the legislative and administrative restructuring. Any delay in the economic and financial restructuring determines immense harm from at least two reasons: on the one hand, international competition is tightening, and on the other hand, the generated adverse selection will cause further structural distortion.

The structure of national economies experienced an evolutionary process characterized by a lot of features and, therefore, there is no ideal structure, a general model to adopt. This structure was formed over time in relation to certain specific conditions, under the influence of certain factors that may be endogenous and exogenous.

Into the category of endogenous specific factors there are concrete conditions of each country which provide the basis of a harmonious development. Exogenous factors should not have an excessive influence, in order not to cause deformed structures, inconsistent with the national interest. Given that, in a specific international context, there are respecting the sovereign right of each state to establish its own economic priorities through the development of international cooperation, their role and they can help improving the appearance of creating favorable conditions for harmonious national economic structures.

The global economy evolution and the accompanying structural change involves three series of events that causes as many structural transformations in the states economies: the first refers to the number of events to move the location of economic activities from one area to another; the second is the rise and fall of economic sectors; the third is the ever closer integration of national economies and the impact of external forces on welfare.<sup>3</sup>

For our country economy, stands at present, the problem of a structural change and large expanses: faster development of agriculture to increase production of agricultural raw materials for industry, improving the structure of industries that, especially developing industries with low energy consumption, high value products and so on; the introduction of new technologies and new products of superior performance that reduce consumption of energy and poor raw materials, that contribute to raising productivity and have a high degree of safety. Changing certain structures entail necessarily change in different proportions to other structures and is therefore very important to analyze concrete and related structures of all components, change and transform them for consideration of their entire complex decision documents on economic structures. Also, in connection with structural improvements, the question

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<sup>3</sup> Gilpin R., *Economia politică a relațiilor economice*, Editura DU Style, București, 1999, p.142.

arises as to harmonize them with the trends and demands of the global economy, particularly assimilation line technical progress at a pace appropriate requests to the external market and towards ensuring sources supply fuel and raw materials and manufactured goods market opportunities. Besides the requirement to ensure the technical level and quality of products offered for export, it also raises the issue of permanent actions and stabilizing trade relations and cooperation on line production, supply and sales by making direct investments in companies on national territory and in other countries, in terms of ensuring mutual benefits and economic and political interdependence of the country.

Adapting production structures to the new technological and organizational requirements must be actively supported on the economic structures and legislative bodies' mechanism. Goals may remain mere attempts to adapt production technologies, professional structures etc., if all other structures remain unchanged.

Modeling the structure of the economy must be based on the structure and volume of resources, their degree of availability. The training and development of branches start, primarily from concrete realities and possibilities offered by their natural resources, changes in components of the factors of production resources in international trade easily affordable prices. Any new productive force, insofar as it is not a mere quantitative expansion of productive forces already known, can cause structural changes or new development of division of labor.

The structure of the national economy in its transition process is constantly subject to factors change, so realistic and sustainable solutions cannot be developed without profound changes both conceptual and categorical ones in structures of economic thought. Because of the fact that between the notion of structure and economic development are closely connections, the latter being defined and explained just by altering structural characteristics, it arises the need for a theory to solve practical problems hurry, really realistic and necessary restructuring of economic development. It is about a revolution in economic theory and practice structures, including the structures of the global economy.

Manifesting in a specific manner from one country to another, the structural changes that lead to changing macroeconomic level specialization have generally a common denominator, namely the pronounced intensity of the trial in the assembly industry and some of its component industries, with notable influence on other areas of economic activity.

Therefore, structural changes are, by their very nature, fundamental to the whole question. If macrostructure represented a certain angle by the ratio of the sectors of the national economy provides a quantitative picture of their participation in the achievement of economic growth, mesostructured is one that has the ability to stimulate growth.<sup>4</sup>

In the meaning given to restructuring "in a restricted sense" as a set of actions at all levels of the economy, the economic structures as objectives involve actions and reactions of economic agents through a complex network can help in issuing bonds, perpetual or slower transformation or rapid economic structures. Examining the economic structures of each one and the correlations between them, we can deduce the

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<sup>4</sup> Iancu A, and staff (1986) „Structura economiei în sistemul industrial”( Economic structure in industrial system) Editura politică, București: Rusu C. and staff (1990).

type and size of economic activities, insisting that operational component of the restructuring process, the set of actions addressed at micro and macro level. Emphasizing this approach is necessary because under conditions of acute need for essential changes to modernize our economy, restructuring can not be addressed only as a conscious process. Privileging the functional assays, and may have a number of appropriate reasons. Economic history and facts of the market economy countries show that the economy works and grows as a result of both the mechanisms objectives and mechanisms developed that economic actions and behaviors generated by decisions at the micro and macro level.

Regarding the overall restructuring actions at micro and macro level, I believe in setting economic policies and measures would be beneficial to privilege changing economic structures, financial and institutional, on the one hand, the creation of markets and other part, for the development of new instruments for economic policy.

As a summary of the issues presented, restructuring means new proportions in the real economy and monetary reform systematic microeconomic environment and creating new tools for solving problems of macroeconomic national vocation, of global issues beyond the horizon and microunităților possibilities, but also to influence their behavior favorarea structural changes.<sup>5</sup>

Restructuring should not be understood solely as a requirement of the current period, but as a necessity to the overall development of the economy. It involves not only correcting the distorted structure of a supercentralizare irrational, but adaptation of the structure to changing economic environment. If the structure is a state restructuring is a process and therefore requires a dynamic vision addressed, taking into account factors, time and cost. Bear in mind that if nothing is done in time for the formation of the corresponding structures of desirable trends, social costs can be very high. It is also necessary to take into account that these structures can be formed by a dirigiste system, but they are formed by all processes currently taking place in society.

If in developing economic growth countries it is achieved mainly through increased consumption of fixed capital investment funds, raw materials and energy, which has the effect of reducing the specific consumption of labor in countries developed that have high scientific and technological potential, the focus is in particular on reducing energy- and material - intensity, intensity. Structural changes present the special importance from the point of view of the drive resources, of their consumption. While the secondary sector development involves significant increases in raw material and energy consumption, the need for investment and skilled labor, the development of the tertiary sector and particularly of the Quaternary one relax more energy consumption and raw materials and calls a larger volume of scientific and technological creation, which positively infleunteaza raising resource efficiency.

Currently, in Western countries, due to the increase of technical equipment and to make efficient use of energy resources in agriculture and services, under the impact of industrial development, there is a tendency of rapprochement between economic sectors in the level of labor productivity. The evolution of the relationship between industry and agriculture, to one of the non-agricultural sectors and agriculture generally has implications not only on the efficiency of various resources, but also, more widely,

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<sup>5</sup> Institutul Național de Cercetări Economice (The National Institute of Economic Researches) Costin C. Kirițescu, Tezaur VI, Academia Română, București, 1991, p.42

the basic components of quality of life, income size the level and structure of individual consumption, food and non-food grade insurance needs of health services, education and cultural and cost of services, quality of environment and pollution levels etc. This manner of approach, the change ratio between agriculture and other sectors is studied through the impact on quality of life components reveals another dimension of the agricultural sector that its importance is much greater than that which refuses direct contribution analysis the achievement of social production and economic growth.

In Romania industries and economic sectors have been ranked artificially, which had repercussions in various areas of economic life: targeting investments and technical equipment, depreciation, wages, labor preparation, delivery prices, how lending supply of raw materials and energy in the country and foreign market, the distribution of financial results etc. At the beginning of transition to market economy in the economic system there is a set of blocked connections that generate a state of economic stagnation or even regression. Regarded as a subsystem of such a kind of national economy, agriculture and rural areas generally neglected, shows, compared with developed countries, some features of underdevelopment: low per capita production, low levels of mutation, the level of comfort and civilization, trade, labor underutilization of capacity, etc. Therefore, the unsatisfactory development of agriculture is a component of inadequate economic and social development.

In countries where the economy is based mainly on agriculture, agricultural underdevelopment may account for the general subdezvolatării. In our country, however, it can be considered that the defect development industry is the main cause of failures on the economic and social development plan. Under these conditions, the overall restructuring of the industry has been a very complex process and long-term rapid transformation of agriculture should be considered a priority for economic development.

The main source of bottlenecks in economy is the vicious circle which has as its starting point the low level of productivity. There are many arguments that this vicious circle can be broken more easily than in the case of agriculture industry: the liberalization of prices and the change of ownership forms.

In agriculture can be produced a jump in incomes, which will generate an increased possibility of saving, the relatively lower specific investment and recovery period, increased opportunities to raise capital, both domestic and foreign, due to a risk lower for investments in agriculture and its related industries than in extractive and heavy industry, the existence of relatively rich agricultural resources untapped properly, there is a significant number workforce which does not require spending too much skill, specific energy consumption and scarce raw materials relatively small, easy penetration in foreign markets for agricultural products, etc.

In order to ensure the success of this process, with multiple implications, including social, rapid awareness is necessary not only of economic companies, but also of the entire population, the necessity and inevitability of restructuring. Regarding the modalities of economic restructuring, we consider the way investment appropriation and non-investment path. The first way targets the sectors that are cost effective and efficient. Of course, allocation and utilization of investment will not be made administratively in the past, but in a new, beleaguered market economy requirements, attributing due weight to both technical aspects and especially the economic one, which becomes decisive in new conditions. The second way is considering a partial or total shutdown of sectors, the dismantling of permanent or

temporary capacity or objectives. The first way can be implemented through the market without the need for a mechanism or a specialized institution focusing investments to profitable sectors attracted large and rapid gains. Non-investment path requires competent and careful analysis and some time to implement, due to spillover effects, directly and immediately unnoticeable, especially in stages where operators have not been able to replace government policy. Typically, restructuring action is associated with a component of it, namely, the refurbishment. It is assumed that due to the lack of real opportunities to implement new technologies, at least in a first stage of restructuring, upgrading will have a special role. Our industry, without being very modern, has a number of important capabilities that the relatively small investment could ensure production system in good conditions.

Restructuring effects as mentioned in the European Commission Report in December 2013, requires the implementation of measures to encourage employees, social partners and regional and national agencies to follow best practice in anticipating change and restructuring. The cover issues such as long-term strategic monitoring of market developments, continuous mapping of jobs and skills needs, and measures to help individual employees by retraining and assistance to facilitate easy finding new places employment.<sup>6</sup>

It should be considered that the restructuring through the contraction of some branches, businesses, capacity will contribute to rising unemployment. Economic restructuring has made much of the urban population shift to focus on rural areas where agriculture but here are the major investment required. In turn, refurbishment, as part of the restructuring had the same effect and in these conditions, it is assumed that the medium term will be creating new jobs and, therefore, will be to pay more attention tertiary sector.

Any change in an organization can have a major impact on labor relations, that's why there are necessary anticipatory and management measures in order to improve the negative effects such as: collective redundancies, temporary unemployment or reducing of certain activities. However the process of modernization and adaptation is necessary for any business to remain competitive on a market where competition is becoming increasingly bitter.

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<sup>6</sup> Cadrul de calitate pentru anticiparea schimbărilor și restructurarea companiei (Quality framework for anticipating changes and company restructuring), <http://www.eurofound.europa.eu/eiro/2014/01/articles>

# **MATHEMATICS UNDERSTANDING OF ECONOMY BY THE GENERAL PUBLIC IN THE ECONOMIC DEPARTMENTS**

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**Abstract:** Some implications for the public understanding of economics are considered here. The paper is completed by considering two case studies of the use of mathematics in economics, both of which focus on the economic effects of education. The first case study considers growth theory, which analyses the effect of education on rates of economic growth, i.e. at the macro level. The second focuses on the micro level, considering the effect of education on individual earnings. These case studies will be used to illustrate the effect of mathematics on the content and public understanding of economics, respectively.

JEL classification: COO,C13,C15

**Key words:** mathematisation of economics, education, earnings ,public, effects

## **1. INTRODUCTION**

Mathematics is thus increasingly important in terms of the expression and communication of ideas in economics. This in itself is a matter of interest, particularly with respect to the public understanding of economics. Further, to the extent that public understanding of mathematics is limited, so too will be the public understanding of economics. This applies at a variety of levels, from school pupils making subject choices to policy makers' understanding of policy advice.

Economics has been undergoing technical change, employing more mathematics and more sophisticated statistical techniques, which have improved the productivity of the discipline; the change in content is thus one of undoubted improvement. But concerns have been raised that mathematisation has proceeded at the cost of attention to matters which cannot be expressed mathematically, i.e. the alternative modes of communication can actually allow analysis in areas closed to mathematics.



## 2. OBJECTIVES

The issue is thus the fundamental one of what we understand by the discipline of economics and what it can achieve. This issue too feeds back into the issue of the public understanding of economics *as a discipline*.

But we turn now to consider this issue in a rather different light, namely how mathematisation impacts on the public understanding of economics, considering first policy makers, then students and then the general public..

## 3. METHODOLOGY

The mathematical basis for much of economic policy advice was most evident in the heyday of the large econometric macro models. The UK government was advised on economic policy by the ‘Seven Wise Men’, most of whom were associated with one or another macro-econometric model. The predictive power of each model was a matter for public discussion. Monetary policy is now the responsibility of the independent Bank of England’s Monetary Policy Committee, the minutes of whose monthly deliberations are published. The Bank staff input on the basis of mathematical models, as discussed in the *Bank of England Quarterly Bulletin*, is clearly significant. Now the Bank has published a volume which explains the nature and use made of mathematical models (Bank of England, 1999) [2].

Perhaps the most significant element of the policy-maker’s understanding of economics, as it is affected by the extensive use of mathematics, is the understanding this conveys about the nature of economics and its capacity for generating predictions. For all the *caveats* (*ceteris paribus* effectively means the economic structure remaining as it was during the estimation period, and no exogenous shocks occurring), an impression is given by mathematical models that they are scientific and constitute the economists’ best basis for prediction. The use of models in the policy-making context thus serves a rhetorical purpose in accord with the aim of putting economics on a par with the physical sciences (McCloskey, 1986) [6].

The large multi-equation models of the 1980s did not predict well; even though they were not complex in the formal sense of allowing a significant degree of interaction between agents, they were complex in terms of scale. Whitley (1997) explains the rationale behind a greater emphasis in the Bank of England on a range of partial models. Bank policy is now based on an inflation forecast which incorporates predictions on the basis of a range of models. The forecast now takes the form of a fan-chart which effectively ranges the forecasts each within the narrow fan of its own stochastic range, the outcome being a large fan; the width of the fan reflects the level of ‘uncertainty’ attached to the forecast range; note that this uncertainty is quantified.

An agency like the Bank collects a wide range of intelligence, much of which must remain within the category of ‘vague’: the sense of the markets, the propensity to innovate, the mood of public sector unions, etc. Yet these matters are of central importance to any inflation forecast. The latest Bank document explains that survey data are fed into the decision-making of the Monetary Policy Committee, alongside formal projections, as a check for the consistency of those projections. Thus, while the ‘official rhetoric’ form of the inflation forecast suggests quantifiability, the ‘unofficial

rhetoric' of actual policy-making incorporates unquantifiable elements of judgement, as the subject-matter dictates

#### 4. ANALYSES

It is no wonder that the public have a conflicting impression of economics as, on the one hand, scientific and, on the other hand, indecisive. There is a range of hackneyed jokes to this effect. Because the official rhetoric implies a degree of precision which is unattainable in practice, economics disappoints. Economists feel themselves misunderstood. The *caveats* are there; the economy is too complex a system to reasonably expect accurate forecasts; there are bound to be differences of opinion. Yet the public expects economists to agree on scientific results in the same way as physicists. I would suggest that it is no accident that this increase in public misunderstanding of economics has coincided with the increased mathematisation of the discipline.

It is with reference to the public understanding of economics that Krugman (1998) [4] in fact makes his case for mathematical formalism. He argues that formalising arguments, eg within an accounting framework, yields useful results which do not seem to be intuitively clear to the media. Indeed he argues that economics can *only* progress with the aid of mathematics. But, as a separate issue, he argues that economists should put more emphasis on translating the result of mathematical theories into lay terms in order to communicate more effectively with the public.

In the UK the matter of attitudes among economics students has only been addressed relatively recently. The latest issue of the *Newsletter* of the Royal Economic Society contains an account of a survey of A-level students which indicates that students with mathematical ability are more inclined to choose to take economics at university in preference to Arts subjects, but not Science subjects. But otherwise there has been little study of this area. In the UK, unlike the US, course content and methodology are monitored, but not transparently. Thus, for example, the university monitors postgraduate provision, and has the ability to influence programmes through the allocation of its student awards. At the undergraduate level, the new quality assurance system will effectively be influencing how economics is taught. But so far there has been only limited public debate.

We turn now to consider two related areas of economics for illustration of the arguments developed so far.

These studies have suggested that the state of technology is empirically important (i.e. labour and capital did not fully explain growth rates), putting a focus on technological change, something which had been treated as exogenous to the closed, formal system representing the economy. In other words, the requirements for mathematical tractability had required that something which is difficult to represent deterministically, and indeed to measure, was excluded from the analysis.

More recently, attention has shifted from trying to endogenise technical change in general (i.e. independent of capital and labour inputs) to endogenising the other contributors to productivity, notably labour productivity. This is the post-neoclassical endogenous growth theory to which Gordon Brown has expressed allegiance (see Aghion and Howitt, 1998) [1]. Its policy significance is that, while technological

change in the long-run is available to all economies (so that all economies' growth rates would be expected to converge as technological change is globalised), labour productivity is something which is amenable to policy manipulation, allowing different growth rates across economies. Thus the empirical assessment of the relative merits of the two approaches rests on the empirical judgement as to whether international growth rates are converging or not. The fact that there is not a consensus on this judgement illustrates the intrinsic difficulties of empirical testing in economics.

According to the endogenous growth approach, labour productivity may increase because of learning-by-doing (i.e. as a by-product of employment), or it can increase through education outside employment. A series of mathematical models has been developed, which can be grouped around the idea that education provides a one-off increase in labour productivity, raising the rate of economic growth, or the idea that it also increases the capacity to absorb technological change into the production process. The aim is to determine the optimal level of education expenditure in terms of which would yield the highest rates of economic growth.

The models inevitably require a series of assumptions to be made. Thus, for example, the Lucas (1988) [5] model portrays education as an investment decision by the individual on a par with capital investment; time spent in education means time not in employment (just as capital expenditure precludes consumption expenditure). Education yields the same increase in productivity across the board, and at all levels of education. The decision is based on a rate of time preference and a co-efficient of risk aversion, but, since these are unidentifiable in aggregate, empirical application simply focuses on the coefficient of the labour variable in the reduced form equation. Other models have attempted to increase the degree of realism relative to the Lucas model, allowing for example for decreasing returns to education, interplay with the coefficient of technological progress and inequality between education levels of workers. Inevitably this has increased the complexity of the mathematical model. But measurement difficulties mean that these finer points cannot be assessed empirically. Aghion and Howitt (1998) [1] point out that:

*“formal theory is ahead of conceptual clarity. . . . The real question is one of meaning, not measurement. Only when theory produces clear conceptual categories will it be possible to measure them accurately.”*

The presumptions then are formalist. Once the meaning of terms is agreed, it is fixed; theory can then be tested against the facts which can be measured as long as the definition is clear. There is no room for analysis outside the formal mathematical model.

Even if meaning were clear, however, measurement issues would not be insubstantial. There is a more general issue of the capacity of econometric techniques to discriminate between theories. The endogenous growth theories are put forward as an alternative to neo-classical theories on the basis of the pure theory model which precedes the econometrics. But since the econometrics consists basically of correlation analysis applied to a reduced form of the theory which involves a similar range of variables to neo-classical theory it is not at all clear what can be distinguished. The *doyen* of the neo-classical approach, Robert Solow (1994) [7] argues that his treatment of technical change as exogenous does not mean that it cannot be analysed (his model is partial rather than general) and that such analysis must take account of the unquantifiable uncertainty associated with the innovation process. He sees the

extraction of workable hypotheses from case studies as a more promising avenue than the endogenous-growth theory foundation on the intertemporally-optimising representative agent. The endogenous growth theories are constructed in aggregate terms, referring to the aggregate ‘representative’ individual (as having a particular degree of risk-aversion, for example). But they draw on micro-foundations based on the axioms of rational (optimising) individual behaviour. We turn now to consider a literature which focuses on this behaviour (without being concerned with its implications for economic growth).

#### **4.1 Critical**

The micro-economic basis of endogenous growth theory refers to the individual decision about the degree of education to undertake (see Willis, 1986) [8]. This choice is based on an assessment of earnings foregone during education relative to the increase in earnings which would result from education, i.e. a form of present-value calculation. The benchmark is long-run competitive equilibrium, where supply and demand for workers at each schooling level are equated and no worker wishes to alter her schooling level. For each worker in equilibrium, the present value of education represents a return equal to the alternative return on foregone earnings, the interest rate.

While the theory is developed mathematically in the standard terms of individual optimisation, the empirical literature is explicitly couched in different terms, but carrying forward many of the assumptions of the theoretical literature. Thus, for example, in building up his exposition of the literature, Willis (1986) posits an earnings function, whereby earnings are shown as a function of years of education and years of employment over a lifetime. Rather than deriving from theory, the functional form is arrived at as the best statistical fit. The residual term has mean zero, so that, on average, earnings are fully explained by the education and employment periods. As well as all the assumptions underpinning the use of these two variables, it is assumed that the data sample are taken from a population in long-run equilibrium. Willis explains the elaboration of theory as efforts are made successively to relax these assumptions, and the interplay between theoretical formulation and statistical estimation. This interplay is primarily one of confirmation, since the statistical limitations on dealing with micro-level diversity are significant. The conclusion is that empirical work supports the human capital approach to education choices (the same approach which underpins endogenous growth theory).

But two significant *provisos* need to be specified about what this tells us about human capital theory. One is the specific point about rational choice theory which is that it does not readily adapt to disequilibrium expression; Second, the empirical analysis is essentially based on correlation, and thus tells us nothing about causation.

#### **5. CONCLUSIONS**

We have discussed how the use of mathematics has increased significantly in economics, and the issues this has raised. There are issues at the level of communication of ideas, among economists, and between economists and policy-makers, the general. For public and students communication is of great importance. But communication is based on a shared view of the nature and scope of the discipline.

There is therefore a more fundamental issue about whether and in what way mathematisation has changed the nature and scope of economics.

Mathematical tools have allowed many advances in economic theory. But at the same time, the difficulty in combining pure theory with applied economics has allowed the two strands to proceed according to different agendas. Even so, there are elements in common (presumption of equilibrium, fixity of meaning of terms and of the objects of measurement, etc) which provide the basis for mathematical treatment, but which nevertheless are controversial. Much of this issue boils down to the question of how far a study of complex social systems is amenable to the (mathematical) methods of analysis adopted by the physical sciences.

Critical thinking is an active and purposeful thinking process that is required to perform contemporary accounting and auditing tasks. Several task characteristics (e.g., task novelty) were identified as those that require critical thinking. It was also noted that several action- oriented attributes such as meaning imposition are necessary to understand the tasks and to perform them effectively.

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# CAUSES AND CONSEQUENCES OF CLIMATE CHANGE

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**Abstract:** Climate change, arising from the greenhouse effect of heat-trapping gases, is a global problem. All nations are involved in both its causes and consequences. Currently developed nations are the largest emitters of greenhouse gases, but emissions by developing nations will grow considerably in coming decades. The most recent scientific evidence indicates that effects during the twenty-first century may range from a global temperature increase of 1.1°C (2°F) up to 6.4°C. In addition to simply warming the planet, other predicted effects include extreme weather phenomena such as floods, droughts, tornadoes, increased shoreline erosion seas and oceans.

**JEL classification:** Q01, Q54, Q58

**Key words:** climate change; greenhouse gases; economic effect

## 1. INTRODUCTION

“Global warming” is the term used to describe a gradual increase in the average temperature of the Earth’s atmosphere and its oceans, a change that is believed to be permanently changing the Earth’s climate. Even though it is an ongoing debate, it is proved by the scientists that the planet is warming.

Global warming is affecting the nature’s balance and has a huge impact on life like continued heat waves, and sudden occurrence of storms and floods.

What happens, in fact, with this phenomenon of global warming? The Sun’s rays pass through the atmosphere and reach the Earth’s surface. Some of these rays are absorbed at ground level acting like heating. The other part is reflected by infrared rays which are directed vertically. If the case when the atmosphere is loaded with high amounts of polluting gases, including CO<sub>2</sub>, the energy reflected is retained in the atmosphere and not through the upper layers of stratosphere. Thus is explained the abnormal warming of the atmosphere in the same manner that the air is warming from a greenhouse beneath the walls of glass. Global warming of the Earth over the past century, more pronounced after 1983, became an increasingly serious concern for the entire population of the globe. The first official analysis more consistent to the situation caused by the greenhouse effect was submitted to the United Nations Conference on Climate Change held in Montreal (Canada) in 1987, with the participation of all heads of State. A year later, at the conference in Toronto (Canada) was requested of CO<sub>2</sub> gases by 2005, as a first step to reduce "greenhouse effect" installed in the global atmosphere.

After many other interventions remained unanswered at the heads of states intervened the Kyoto Protocol(Japan) in 1997, which constituted the first concrete attempt of industrialized countries to reduce all emissions of air polluting in triggering effect gases (CO<sub>2</sub>, methane, petroxid oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride). European Union countries have pledged to reduce pollutant emissions by an average of 8% by 2012. Experts have argued that, by the year 2050, these emission reductions to achieve 50 % since 1990. To be effective, this action would have been compulsory in the States who have refused to ratify. Although this Protocol was signed by representatives of 141 countries (including Romania, in 2001), yet there were some industrialized countries (U.S., Australia) and some African countries, whose governments have refused to unconsciously ratify without any scientific motivation.

## **2. THE MASSIVE INDUSTRIALIZATION**

By burning fossil fuels (oil, natural gas) in factories , the gas emissions, especially carbon dioxide, retaining in the atmosphere large amounts of solar radiation. It has been calculated each year liberate on Earth, the amount of 21.52 billion tons of CO<sub>2</sub> of which 64 % in just 10 states intensive fuels. From a statistical report the volume of CO<sub>2</sub> released to the population that emerges from these 10 states categorically United States, followed by Canada, Japan, Germany, Russia, UK, Italy, France, China and India. The situation is completely disproportionate to the U.S. , covering only 4.6 % of the global population, but emits into the atmosphere about 25 % of the total CO<sub>2</sub> flux evolved annually from the earth's surface. In the opposite situation is China, which represents 21.2% of the world population and evolves into the atmosphere only 12.7% of global CO<sub>2</sub>. Solid fuel consumption dictated by owners of large industrial companies, made after 1950 to be an increasing in the concentration of CO<sub>2</sub> in the atmosphere by 30%. During the same period increased by 150 % methane content in the atmosphere, resulting from the exploitation, transportation and consumption of natural gas from mining resources, but also from landfills, degradation and burning of waste, as well as livestock.

Although it is known that methane sources are limited, assuming that in the next 30-40 years will total liquid, there was no country to adopt a system of saving , thinking of the needs of future generations.

## **3. THE DEMOGRAPHIC CRISIS**

The demographic crisis represents another issue is the rapid growth of the global population. The 20th and 21st century have seen an alarming demographic explosion unprecedented in human history. The official statistics show that since year I of the birth of Jesus Christ until now, the world population has multiplied by 28 times. There were significant increases slightly until 1500, recording double the number of inhabitants in a millennium and a half , a normal growth between 1500-1900 (3.7 times in four centuries) and an exponential population explosion in the last century (3.7 times in one century). World population clock installed in Chicago reported on the day of Sunday, July 18, 1999 , the existence on Earth of 6 billion inhabitants. The news was

received with enthusiasm, but at the same time, concern, since the last two decades show that the population has increased each year, with many mouths to feed 220,000 from the same food resources. Every second a day there are 5 newborns and 2 people die, which leads to some simple calculations. It may be noted that this rate of population growth, the Earth will have to feed 50 billion people over 120 years (if they will not take effective family planning). Serious problems are also linked to global population distribution per country. Of the 6 billion inhabitants, 50 % live in only five countries (China, India, USA, Indonesia and Brazil).

#### **4.DEFORESTATION**

A third cause is deforestation, considered actions of great seriousness of some greedy businessmen, who for the rapid enrichment can affect the lives of thousands or millions of people with devastating effects. Reckless felling of forests started in the '50s and '60s surfaces million hectares in the Sahel (Central Africa), when some foreign businessmen offer attractive area on the hard wood from tropical forests. In the attempt to have currency, the natives sold their last natural shade for all family members, causing an irreversible catastrophe. In the past 3-4 decades, the action continued deforestation in subtropical and temperate areas, especially in poorer countries. Among these was included even Romania where, after 1990, were cleared over 200,000 hectares, mainly in Vrancea Mountains (Milcov, Zabala and Susita Valleys) Rodna Mountains, Trotușului Valley, Tazlau Valley, Nehoiului Valley, Harghita, Covasna etc. The negative effect of deforestation is linked to the fact that forests have a key role in absorbing CO<sub>2</sub> from the atmosphere through photosynthesis, intervening directly in the reduction of toxic gases and thus to avoid the greenhouse effect.

Water and soil pollution was another cause of the greenhouse effect and a major source of toxic gases. In the last two decades there were many cases of diving in the waters of the seas and oceans of the high-capacity tankers have spilled water on the surface of tens of thousands of tons of oil.

Industrial waste and livestock have also a negative impact on the purity of the atmosphere. An example of this country is the city, the most polluted city in Romania, especially in the hot summer months when values doubled harm the emissions of carbon monoxide, lead and other toxic pollutants (lakes, detergents, phenols), emanating from Dudești industrial areas, Faur, Vitan, Progresul, Militari, Obor, Popești Leordeni.

#### **5.THE CONSEQUENCES OF THE GREENHOUSE EFFECT**

*The progressive increase in global temperature.* The expansion of the greenhouse effect and the continuation of uncontrolled human activities have removed climate system from its natural evolution. The process of heating is not uniform. Thermal increases are more intense in polar and subpolar areas, emphasizing the melting glaciers. This has a disastrous effect on the way of life of the Eskimo. At the same time, occurs a numerical reduction of some species of polar animals (polar bears, seals, walruses) and some species of tundra plants. It is considered that if the average



warming the planet with 20°C, the temperature in the Arctic will increase by 60°C. Uneven heating of land and ocean waters caused some disturbance in movement of hot and cold air currents, with paradoxical effects on weather developments during the year.

Were radically shortened transition seasons (spring, autumn), so that today we only perceive two seasons (summer and winter).

*The melting glaciers.* Global warming has triggered a rapid melting of the Arctic ice caps and glaciers floating adrift in the ocean waters. Data from NASA satellites reveals melting of the polar glaciers in Greenland and Alaska is double then normal. Recently, many of the glaciers have disappeared in southern Alaska Peninsula. Through this area there is one of the great tectonic fault lines. By melting glaciers at the surface, Earth's crust rises and allows triggering devastating earthquakes. The impressive volume of cold water resulting from melting glaciers will descend the Northern southward and will meet Golfstrim waters, the warm current that starts in the Gulf of Mexico, crossing the Atlantic Ocean at the speed of 97 km per day, and is moving towards the west coasts of Europe (Ireland, England, Denmark, Norway, Sweden). By diverting south from warm current is possible to cool the climate in Western Europe. At the South Pole, the last time melted the glaciers Larsen A and Larsen B, which sank in just 35 days, making the whole ocean rise by 2 cm. Behind this giant glacier melting glaciers is exposed Ross's Shelf that after disintegration could cause the sea level to rise by 6 meters, moving underwater islands and countries on maritime coasts.

If the trend of global warming will continue at the same rate, it is estimated that by the year 2020, ocean levels will rise by 6-7 meters so many port cities (Amsterdam, Hamburg, London, Miami, Bangkok, etc.) have to be moved to other locations. In Romania as possible narrowing of the coastal beaches to extinction. It is worth mentioning that began and melting glaciers in the Himalayas, causing flooding of proportion in India, Nepal and China through the great rivers Ganges, Indus, Brahmaputra, Mekong, Yangtze and the Yellow River.

*Precipitation in excess and disastrous floods.* Increased global thermal evaporation leads to a large amount of water in the oceans and seas. Water vapor in clouds that are carried by air currents from the sea onto land where cause severe floods and tornadoes that were not known in prior periods. We cannot forget that in 2005 floods from hurricane Katrina destroyed dozens of lives destroyed thousands of homes. As major flooding in Romania corresponded heavily deforested areas may be considered as totally unacceptable that excessive enrichment of greedy barons, to reach that half the country is under water and tens and hundreds of people die taking anger management.

*Tornadoes in Romania.* In recent years came upon a series of tornadoes Romanian territory unknown in the past only through the media. Arrived here, the tornadoes began to "join" the corridor between Buftea Movilita, Slobozia and the Black Sea, with future extensions to massive deforestation of forest areas. These tornadoes have become common in Europe with an average of 700 per year, conducted in the form of hurricane corridors. Recently, Kyrill tornado with speeds of 160-170 km / hour devastated central and northern Europe killing 38 people in Germany, UK, Netherlands etc.

*Drought , desertification and desertification.* These three phenomena of nature is a big problem for mankind since the past decades, the gradual warming of the atmosphere caused a serious imbalance globally. Temperature increase correlated with a sharp decrease in rainfall and the occurrence of excessive drought. Permanent phenomenon led to desertification and subsequent desertification of large areas On a global scale , land and desertification aridisation subject occupies a quarter of the Earth 's land surface, affecting the lives of about one billion people in over 110 countries around the world, affected by this phenomenon. Serious damage was produced mostly in Africa ( Sahel countries, East Africa, North and South ) , South-West Asia , Iran , Afghanistan , Pakistan , China , India , Australia and some countries in America and Europe. Everywhere, drought conditions have profound effects on world and national agricultural production, especially grain production (wheat , corn, rice). In Romania soil water deficit became outstanding from year to year since 1984, with the systematic reduction effects of agricultural production, especially by destruction of large parts of the irrigated area .

## **6. ROMANIA PESSIMISTIC FORECASTS FOR THE YEARS TO COME**

Romanian environmental specialists show the possibility that in less than 25 years, Romania will radically change its appearance , being hit every year by droughts, floods and tornadoes. It is confirmed the warning that by year 2030 the Sahara desert will exceed the area currently occupied by 9 million km<sup>2</sup> (about 38 times higher than the surface) and submit systematically north. Reaching the shores of the Mediterranean Sea, the desert will cross to Sicily, and southern Italy (Calabria), Herzegovina, Bosnia and Romania will take possession putting Southern Territories (Oltenia, Baragan, Dobrogea and part of southern Moldova). It's not far the period where the approximately 3 million hectares of arid , drought exposed , will turn into a " Romanian Sahara ". These areas will dry up rivers with low flow will degrade soils by wind blown sands , rainfall will have a total system of control and by massive deforestation adverse actions will become more frequent landslides and entire villages housing.

## **7.possible remedies**

To prevent the devastating effects that loom over 25-30 years due to global warming is recommended:

- Reduction of CO<sub>2</sub> , methane and other gas emissions through measures taken at the political leaders of the countries of the world, especially in industrialized countries;
- Reduced energy consumption based on fossil fuels and adopt forms of conventional energy (sun, wind, water, biomass , heat underground );
- Replanting forests destroyed, protecting and creating national parks, protected by severe laws;
- Reduce paper consumption and recycling cellulose to prevent excessive logging resulting wood;

- Restoring facilities to irrigate crops as major steps in the feeding of the population;
- Regulation of water by damming works and desilting of sewer networks that take rain and accidental spills.

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# **NEW TRENDS IN CORPORATE GOVERNANCE OF PUBLIC SECTOR**

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**Abstract:** In Romania, rebuilding the system of corporate governance has been a major component of the reform, although its awareness developed gradually and relatively late, driven on one hand by the accumulation of evidence of inefficiency of the system of corporate governance of state-owned enterprises, and on the other hand by the increased activism of shareholders.

Corporate management is a multi-tiered approach on the relationships between interest groups (employees, managers, shareholders, business partners, regulatory bodies, the general public and the media). Thus corporate governance includes relationships which are established between the Board of Directors and internal or external stakeholders.

Corporate governance has its origins in the corporation bankruptcy laws and mechanisms from each country and in the mechanisms of judicial sanction, which set the basic rules of the internal relationships between various participants in a corporation.

The concept of governance (corporate) has been used in national institutions, commercial organizations, but also in the administration of the colonies and occupied territories. Subsequently, the concept of corporate governance has been developed in the private sector and was picked up and applied in most areas of activity. In recent years it has expanded rapidly, especially in the public sector.

The term corporate leadership appeared in common parlance in the 1970 in the United States of America in the midst of the Watergate scandal when it was discovered the American companies involvement in politics through contributions to various political parties.

The importance of this study is based on a correct approach that can lead to a managerial and organizational system with immediate, positive impact. Therefore it can offer the chance of bringing together the interests of all parties in order to lead a company to an uptrend.

Good corporate governance adds value to listed entities and contributes to reducing the cost of capital, thus assuring an effective financing of the tenderers.

**JEL classification: M41, M42**

**Key words: Corporate Governance, public institutions, national economy, public domain, interested parties financial or non-financial.**

## 1. INTRODUCTION

Corporate governance is the set of rules that govern the Administration and control system within the Government (State), the interrelationships of public guardianship authority and bodies of public undertaking, between the Board of Directors/supervisors, directors, directorship/stockholders and other interested parties (employees, investors, people entering into contractual relations with the company-"stakeholders").

The rules that ensure balance legitimate interests pursued in the establishment and operation of a State:

- public interest (in most cases, strategic interest): energy, aviation, railway, mining, etc.
- developing government policy in industries crucial to the national economy;
- payment of interest of the shareholder-State: payment of dividends, taxes, taxes.
- the interests of minority shareholders: payment of dividends, increasing the value of the securities portfolio held for involvement in the decision-making process.

Governance is a very extensive concept that includes a solid and effective supervision of the way in which something is done, led, managed, or controlled in order to protect the interests of the said areas, organizations or institutions. The term has been used in national institutions, such as banks, but also in the administration of the colonies and territories.

The concept of governance (corporate) has been used in national institutions, commercial organizations, but also in the administration of the colonies and occupied territories. Subsequently, the concept of corporate governance has been developed in the private sector and was picked up and applied in most areas of activity. In recent years it has expanded rapidly, especially in public sector.

In recent years the concept of "corporate governance" is found in the organizations operating in the public sector, in the same extent as in the commercial.

In practice, implementing and developing the concept of corporate governance in particular influenced the nature and evolution of the internal audit.

## 2. IMPLEMENTATION OF THE PRINCIPLES OF CORPORATE GOVERNANCE

At present, all organizations and most countries are concerned with the implementation of the principles of corporate governance.

Governance is a very extensive concept that includes a solid and effective supervision of the way in which something is done, led, managed, or controlled in order to protect the interests of the said areas, field, organizations or institutions.

Basically, corporate governance is an attempt to implement systems for risk analysis, verification, assessment, control that contributes to establishing an effective management for their functioning. Therefore, the concept of corporate governance should be addressed together with the entire organization of risk management (ERM) and with the evolution of the system of financial management and internal control (MFC).

The concept of corporate governance is supported by internal audit, which has an important role to play in assisting the reorganization system of internal control and advising management. For these reasons, internal audit has evolved in recent decades, in the implementation of corporate governance in organizations.

Internal audit has become increasingly important over the years, thus expanding both the scope and activity and coverage of endorsed activities. Governance gained interest all over the world in the last two decades, thus increasing the importance of internal audit.

Consequently, considering only these few reasons, it is interesting to understand what corporate leadership means as most of the countries want to adopt regulations in this regard.

Corporate governance has emerged as a response to a series of spectacular failures in the private sector, in a relatively short time, which rocked, in terms of investors' confidence in the way big corporations and public institutions were led.

Lack of investor confidence in the management of the organizations would decreased corporate activity and would affect both private sector and public sector, and especially the way they are led. If such a measure would not have been made, the commitment to investors would be diminished, and the corporate life would be affected.

In the United Kingdom, Sir Adrian Cadbury was concerned and made research into the causes of common failures of corporations in the private system, elaborating, after the crisis of the 1980s, CADBURY REPORT in 1992.

The report showed that corporate bankruptcies have emerged as a result of major problems of organization and functioning of the internal control system, issues which are in the competence of top management.

General management not only failed to avert disaster, but, in some cases, even was the source of these failures.

Subsequently other reports appeared which confirmed concerns Lord Sir Adrian Cadbury and contributed to the construction of practical rules and codes in all areas.

Corporate governance principles and codes have been developed and used by the OECD and the World Bank, which have been involved in this process.

In 1999, the OECD Principles concerning the administration of corporations have been developed, which, today, are the only set of principles widely accepted worldwide, and recognized as one of the 12 pillars of international financial stability.

OECD principles have served as a reference point to the achievement of national codes of corporate governance. They focus primarily on the public traded companies, but also on issues relating to companies with large shareholders, but not listed on the stock exchange. Lately, corporate governance principles are also implemented for some aspects of the administration of small private companies and state enterprises.

World Bank, when defining corporate governance, considers that its purpose is to maintain a balance between economic and social objectives, between the common and individual, which contributes to the efficient use of resources by encouraging and empowering those who manage them. Keywords in the definition of corporate governance are "balance" and "empowerment".

The World Bank is in line with the conclusions of the CADBURY Report, considering that the aim of the corporate governance is to bring closer the interests of individuals, corporations and society.

Corporate governance principles have been stated very generally, leaving the States the ability to apply them and to grant a lesser or greater importance on some issues.

### **3. CORPORATE GOVERNANCE PRINCIPLES**

Corporate Governance Principles do not follow a universal model of corporate governance, but the long-term trend is to draw up global standards of corporate governance.

The CADBURY Report was sustained by the conclusions of other subsequent reports, which confirmed the initial findings and the fact that top management has not learned from the mistakes of the past and has not acted accordingly.

Principles and practices that built governance can be applied equally in the public sector or non-profit organizations. In fact, many would argue that this concept can bring more value in the public sector, where the taxpayer's interests are at stake and where the general public, who has the right to expect that public institutions to be well led, in the provision of services from public funds. Similarly, the European Union expects that the projects are managed to the highest professional standards.

The concept of corporate management refers to the transparency of transactions and monitoring of the internal control system in order to ensure its capability to assess possible risks to the safety management of organizations.

To avoid inadequate governance, top management must have special concern for the development of strategies, policies and organization of the internal control system with which to master and to evaluate the risks of the organization.

Regarding the definition of the concept of corporate governance, in the literature, there is no universally accepted definition, that's why we present the most important concepts that bring numerous terminological clarifications:

Governance is the system by which companies are managed and controlled;

An effective governance will ensure both the establishment of objectives and long-term strategic plans, but also the existence of management and leadership structures appropriate to achieve these objectives, ensuring the functionality of the structure in order to maintain the integrity, reputation and liability of the Organization which is of interest to the public opinion;

Governance is a combination of processes and structures implemented by the Board of Directors in order to inform, direct, lead and monitor the activities of the Organization, in order to achieve predetermined objectives;

Corporate management is a set of laws, rules, regulations and codes of conduct adopted voluntarily, which allows a company to attract the necessary human and material resources of the business and also offer them the opportunity to develop an efficient activity that generates long-term added value for shareholders, interest groups and for society as a whole;

**Corporate management is:**

-a set of relationships between the company's management, Board of Directors, its shareholders and other interest groups in society;

-the structure setting out the objectives and the means for achieving those objectives and monitoring performance;

-the system of incentives granted to the Board of Directors and management for the big goals that are in the interest of the company and of the shareholders and to facilitate monitoring, thus encouraging businesses to use resources in a more efficient way.

Corporate governance is a set of practices of the Board of Directors and executive management, carried out with the aim of providing strategic directions of action, achieving the objectives proposed, risk management and responsible use of financial resources.

Analyzing the definitions of corporate governance ensue as the most comprehensive of them is that the OECD, as it produces more precisely a company's relationships with both the internal environment, represented by the shareholders, employees and the environment posed by suppliers, lenders, community, but also the interaction between the two environments and leadership structures, i.e. the Board of Directors, company management.

Schematically, the factors that influence a company's activity, relations between them and the interests of every category in the concept of corporate governance structure is presented in Figure 1.2 - the interaction of internal and external environment of the company and the factors of interest.

In the U.S. and United Kingdom, due to the concentration of attention on the interests of shareholders, we can say that the driving model is a model of corporate shareholders.

In practice, companies tend to employ the best norms/standards of corporate leadership, voluntarily, to be competitive and to attract investors.

In Europe, the policies and legislation have in mind not only the interest of the shareholders, but also of other interest groups: employees, creditors, local community and civic organizations.

#### **4. CONCLUSIONS**

The structure of corporate governance (it should be noted that the term in English «corporate governance» was already in most countries, adopted and effectively applied by companies constitutes an instrument through which shareholders watch and control objective to protect and enhance the value of your investment over time.

As a result, corporate leadership influences both, the activity of companies, as well as the national economy of the countries involved.

Under the globalization of capital markets, competition for attracting funds should be growing as adoption of standards and procedures of corporate governance internationally-recognized. This aspect is especially important for economies in transition and those in training, which usually have recovered a handicap of credibility in the eyes of investors.



Analysis of the principles of corporate governance allows us realize that they represent an attempt to make top managers to fulfill their own obligations as fair and qualified as possible, so as to protect the objectives of stakeholders within organizations.

Stakeholders, internal or external, will definitely have different expectations and requirements sometimes in conflict with those of the organization. Also, the various stakeholders can put a certain pressure on the Organization in order to satisfy their own needs and desires.

The concept of corporate governance defines, besides the way an organization is run and controlled in order to achieve the predetermined targets, the system whereby it interrelates with the stakeholders and how it protects their interests.

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# AN UNCERTAIN FUTURE OR THE END OF THE ROAD FOR BRICS?

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**Abstract:** The international financial and monetary crisis has blocked the financial flows of emerging economies (and not only), resulting in a significant restraint of their economic activity. Moreover, the positions of these states have changed; thus, if during the latest 10-12 years, economists considered that emerging countries such as Brazil, Russia, India, China and then South Africa (2011) were the future driving force of the world economy, nowadays more and more people speak of Mexico, Indonesia, Nigeria, Turkey, Colombia, Vietnam, Egypt, Peru and the Philippines. “MINT”, “CIVETS” or “CIPP” are the acronyms assigned to such countries in the analyses of economists and specialists. The hereby paper is an evaluation of the current position of BRICS countries within emerging economies.

**JEL classification:** F02, F15, G14

**Key words:** emerging economy, economic order, integration, efficiency, economic convergence, BRICS, MINT, CIVETS, CIPP.

## 1. INTRODUCTION

Considering the risks predicted by the representatives of the various international financial and money institutions regarding financial markets, investors no longer consider safe the markets of emerging countries such as Argentina, Brazil, India or China. Thus, if Jim O’Neill, in his 2001 *“Building Better Global Economic BRICs”*, invented the acronym BRIC and outlined the power of emerging countries such as Brazil, Russia, India, China and thereafter, in 2011, South Africa, resulting in BRICS, attention is currently focused on other groups of emerging economies, such as “CIVETS” (an acronym first used by Robert Ward at the end of 2009 for the following emerging countries: Colombia, Indonesia, Vietnam, Egypt, Turkey and South Africa), “MIKT/MIST” (an acronym coined by Jim O’Neill in 2011 for Mexico, Indonesia, South Korea and Turkey), “MINT” (first used by the American financial service and brokerage company Fidelity and adopted by Jim O’Neill, to include Mexico, Indonesia, Nigeria and Turkey) or “CIPP” (Colombia, Indonesia, Peru and the Philippines – analysed by the economists at the Coface Country Risk Conference of France, January 2014).

The decrease of financial flows within BRICS was caused by the exhaustion of the available capital of developed countries; at the same time, the reduction in expenses and consumption within such countries also resulted in decreased exports from emerging states. During 2012-2013, BRICS had the lowest economic growth of the latest years, the main indicators showing a negative trend.

## 2. OBJECTIVES

Given the negative transformations of world economy and the risks anticipated by specialists regarding financial investments on emerging markets, an overview of the status of emerging economies in the world economy, particularly of BRICS, is our major focus.

The hereby paper aims at answering the following questions:

1. Are BRICS still a fearsome foil on the international market?
2. If BRICS countries no longer are the future driving force of the world economy, who can replace them?
3. Which are the similarities between BRICS and the potential new emerging “powers”?
4. Which criteria are used for assessing the “power” of such new emerging states?

## 3. METHODOLOGY

With a view to achieving the proposed goals, the methodological approach aimed at presenting the various opinions and interpretations of specialists in the country and abroad, as well as drawing pertinent conclusions pursuant to the analysis of statistical data.

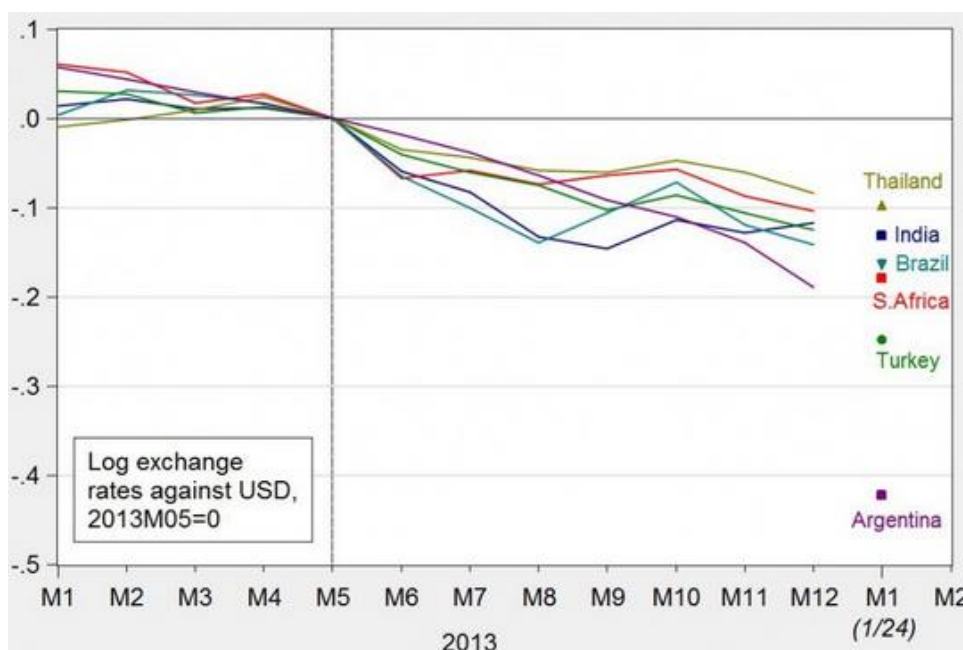
A content analysis was envisaged, in order to outline economic phenomena, understand underlying causes, describe current situations and even extrapolate results to situations similar to the current status. The advantages of this quality-based research are the following: - fundamentally facilitating a better comprehension of the issues at stake; - favouring a perspectivised approach of the research; - outlining other valuable aspects, interdependent with the analysed topic, thereby increasing the complexity of the issues.

## 4. ANALYSES

As it was mentioned in the first part of our paper, investors no longer think that the financial market of BRICS countries are secure. The experts at the Coface Conference of January 2014 argue that BRICS will show a decrease in their economic growth across the year, compared to the average of the last decade, slightly exceeding 2%, mostly due to a cyclic decrease and inflation, but also for considerations related to low domestic production, compared to the total consumption, infrastructure or even political reasons.

This year's elections of South Africa, Brazil, India and Turkey will result in an increased vulnerability of exchange rates, with a significant depreciation of emerging currencies, even of the Turkish lira. According “*World Economic Outlook (WEO) Update - Is the Tide Rising?*” (p.3), “when there are constraints on exchange rate adjustment —because of balance sheet mismatches and other financial fragilities, or large pass-through to inflation because of monetary policy frameworks that lack transparency or consistency in their implementation— policymakers might need to consider a combination of tightening macroeconomic policies and stronger regulatory and supervisory policy efforts.”

In the following, we shall present the evolution of the main currencies of emerging countries from January 2013 to January 2014, compared to American dollar:



Source: St. Louis Fed FRED, Pacific Exchange Services, and Financial Times apud CHINN, MENZIE DAVID, *Interpreting Recent Emerging Market Currency Movements*, 26 January 2014 (available online at <http://econbrowser.com/>)

**Figure no. 1: Log exchange rates against USD for India, South Africa, Turkey, Brazil , Thailand and Argentina**

The first group of countries seeing as a latent candidate of the “new wave” of emerging powers was CIVETS. As previously stated, this acronym was coined by Robert Ward (Editorial Director at the Economist Intelligence Unit – EIU) at the end of 2009 in order to designate Colombia, Indonesia, Vietnam, Egypt, Turkey and South Africa. However, the term became notorious in 2010, with the speech of Michael Geoghegan (Chief Executive of HSBC Holdings plc) within the Hong Kong Chamber of Commerce, where it was shown that the global economy is undergoing a new phase. This time, Geoghegan compared the six emerging countries to a “civet” and argued that they were favourable to investments and business, as they had a dynamic and diverse economy, as well as a young and ever-growing population. Hence, these countries are deemed to be the “new BRICS”, given the conditions they provide, as Asia and Latin America are more and more visible in the international map economy.

According to the data provided by the Economist Intelligence Unit, CIVETS emerging countries will have an economic growth of almost five percent per year in the two following decades, compared to 1.8 percent for G7 countries (Canada, France, Germany, Italy, Japan, the United Kingdom and the United States of America).

The following table includes the main economic data of CIVETS countries:

**Tabel no.1: GDP, exports and population of CIVETS**

| Member       | 2013 est. GDP (PPP)Billion \$USD | 2013 est. GDP per capita (PPP) \$USD | 2013 est. Exports Billion \$USD | Population 2013 est. |
|--------------|----------------------------------|--------------------------------------|---------------------------------|----------------------|
| Colombia     | 526.5                            | 11,100                               | 58.7                            | 45,745,783           |
| Indonesia    | 1,285.0                          | 5,200                                | 178.9                           | 251,160,124          |
| Vietnam      | 358.9                            | 4,000                                | 128.9                           | 92,477,857           |
| Egypt        | 551.4                            | 6,600                                | 24.81                           | 85,294,388           |
| Turkey       | 1,167.0                          | 15,300                               | 167.6                           | 80,694,485           |
| South Africa | 595.7                            | 11,500                               | 91.05                           | 48,601,098           |

*Source: Data processed by the author based on information provided by the Central Intelligence Agency, The World Factbook (www.cia.gov), accessed on 13.02.2014*

Coface specialists argue that investments may currently be oriented to four emerging countries, i.e. Colombia, Indonesia, Peru and the Philippines (CIPP). In order to analyse the risk of a country, the company uses a classification structured by seven levels, ranging from A1 (low risk) to A2, A3, A4, B, C and D (high risk). In the following, we shall present the country risk of the four emerging countries supported by Coface and the evaluation of their business environment:

**Tabel no.2: Country risk and business climate assessment of CIPP**

|                             | Colombia | Indonesia | Peru | Philippines |
|-----------------------------|----------|-----------|------|-------------|
| Country risk assessment     | A4       | A4        | A4   | A4          |
| Business climate assessment | A4       | C         | B    | B           |

*Source: www.coface.com*

The strengths of *Colombia* include institutional stability, significant touristic potential, remarkable and ever-growing population, the banking system, whereas its weaknesses refer to structural unemployment, social inequity, scarce qualified workforce, corruption, etc. A dynamic growth of Colombia is predicted for 2014, of 4.5 points, with investments of almost 25% of the gross domestic product. The strengths of *Indonesia* include a solid banking system, touristic potential, high competitiveness considering cheap workforce, whereas its weaknesses refer to high unemployment, social inequity, significant corruption and low investment. The relatively closed economy of this country was useful in the context of the international financial crisis, so that the state was not very affected by external problems. The economic growth for this year is predicted to be consistent, especially due to easy access to bank loans and the significant consumption of population. *Peru* also is considered a state with significant economic and touristic potential, with low public debt, as well as a functional and transparent banking system. Risks mainly refer to the significant presence of cocaine manufacturers, regional gaps, faulty infrastructure, etc. The analyses by Coface show that, generally, the economic growth of Peru is due to the significant consumption (more than 60% of the gross domestic product) and investment (30%). *The Philippines* have a flourishing economy due to exports of

electronic appliances, as well as remittances by expats, allowing households to have a consumption of about 70% of the gross domestic product. Weaknesses are related to low investments in infrastructure and regional gaps, affecting the country's business performance.

The acronyms MIKT/MIST (2011) and MINT (2013-2014) were recently proposed by Jim O'Neill. A common feature of MINT countries refers to numerous population and young workforce, which represent significant advantages when a country intends to prosper in a quick manner. Of course, their geographical position cannot be neglected: Mexico is adjacent to the USA and Canada, Turkey is close to Euro-area states and Indonesia lies next to China. Nigeria may succeed due to its impressive natural resources. All these countries are included in the Next Eleven (N-11) group analysed by O'Neil and Goldman Sachs and are deemed to have the required potential for becoming the biggest economies of the world. MIKT represent  $\frac{3}{4}$  of the gross domestic product of the N-11 group. There has to be said that some economists think that Turkey is a developed or recently industrialised country, not an emerging country. As the business data for Indonesia and Turkey were presented above, we shall detail in the following the aspects regarding Mexico, South Korea and Nigeria:

**Tabel no.3: GDP, exports and population of Mexico, South Korea and Nigeria**

| Country     | 2013 est.<br>GDP(PPP)<br>Billion \$USD | 2013 est. GDP<br>per capita (PPP)<br>\$USD | 2012 Exports<br>Billion \$USD | Population<br>2013 est. |
|-------------|--|--|-------------------------------|-------------------------|
| Mexico      | 1,845                                  | 15,607                                     | 370.9                         | 118,337,000             |
| Nigeria     | 478.5                                  | 2,827                                      | 95.68                         | 174,507,539             |
| South Korea | 1,666                                  | 33,155                                     | 552.6                         | 50,004,441              |

*Source: Data processed by the author based on information provided by the Central Intelligence Agency, The World Factbook ([www.cia.gov](http://www.cia.gov)), accessed on 13.02.2014*

Mexico is striving for achieving proper infrastructure, with the middle class playing a more and more important part in the country's economy. Nigeria is foreseen to become one of the topmost twenty economies in the world in the following six years, as it is already the third African country in terms of GDP (PPP). As for South Korea, there are some voices saying that it is a "new BRICS" in itself, considering its recent economic growth. At the same time, numbers support these ideas, for instance, South Korea has surpassed Canada, Spain and almost Italy in terms of GDP. It is foreseen to surpass the United States, along with G7 economies, in the following three-four decades. The Turkish economy was the third in the world in terms of growth in 2012, exceeding China. Its growth was mostly due to constructions and related industries.

## 5. CONCLUSIONS

On balance, we consider that BRICS countries are currently undergoing a deceleration of financial and economic activity (which may only be caused by a cyclical decrease), resulting in the investors' focus on another emerging and growing

markets. However, it is our opinion that the international role of BRICS does not stop here, as they represent 20% of the world's gross domestic product, and the summit of South Africa witnessed the decision to create their own development bank, with a view to financially supporting infrastructure project.

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# THE IMPORTANCE OF THE HUMAN FACTOR IN THE GROWTH AND ECONOMIC DEVELOPMENT

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**Abstract.** The links between the development of human potential and its various structures on one hand, and economic growth and development, on the other hand, represent a concern of exceptional importance for contemporary economic theory. Concerning the demo-economic relations, the population occupies a double position: it represents a main production factor contributing to economic growth, but also a virtual receiver of the output of economic activities. On one hand, economic growth affects the sectors and socio-professional groups, geographical and occupational mobility of the workforce, the content, quality, duration and labor difficulties. On the other hand, the working population can exert a favorable influence on economic growth, thanks to increases of labor productivity, either lower or higher, through the quality of workers activities and public openings for professional and territorial mobility.

**JEL classification:** O15, O10

**Key words:** growth, development, human capital, labor force, population, resources, labor, education

## 1. Introduction

Economic development and population evolution are two components of social development, which do not operate simultaneously, but interdependent, between them, existing system interrelationships. Effects resulting from the impact of economic and human potential is assessed, most often, through the production of goods and services per capita. Production volume ( $Q$ ) is conditioned mainly by the physical capital stock and its yield ( $K$ ), volume and quality of labor input ( $L$ ) and technical progress, became the basic factor of production growth, which is included in all components of economic processes. Given the increase in investment in humans (for growth, education, skills, health, information, human culture, etc.), labor factor has ceased to be homogeneous; it was divided into **regular work** ( $L_o$ ) and **trained labor** (educated, cultural) or **human capital** ( $K_n$ ). So traditional binomial real capital - labor has become a trinomial: regular work ( $L_o$ ) - material capital ( $K$ ) - human capital ( $K_n$ ). The three production factors, distinct but interdependent in their operation, meet permanent mobility based on competitive market situation of each of them.

Economic growth depending on the impact of human capital can act as an **economic growth with stagnant human capital**, when labor contribution ratio of



normal (L0) and human capital (Ku) remains unchanged, **economic growth with human capital regression**, when regular labor contribution to achieving production is higher compared to that of human capital **and economic growth with progressive human capital**, when reaching a high contribution of human capital to produce goods in relation to regular work.

In turn, the result or production obtained through the contribution of human capital (QKu) manifests itself as a global size in relation to investment in human capital components: current individual consumption expenditure (food), clothing, housing) (Ci); expenses for protecting healthcare and medical assistance (Cs); cultural costs (Cc); sport and recreation expenses (Cs0) and the costs incurred for labor mobility (changing jobs (Cm). Therefor:

$$QK_u = f(Ci, Cs, Cc, Cs_0, Cm)$$

$$qk_u = \frac{Qk_u}{P_0} = \frac{1}{P_0}(Ci, Cs, Cc, Cs_0, Cm)$$

where:  $qk_u$  represents production per employed person obtained through the contribution of human capital and  $P_0$  – people employment.

Economic growth and population are in relations of reciprocity. On one hand, economic growth affects the sectors and socio -professional groups, geographical and occupational mobility of the workforce, the content, quality, duration and labor difficulties. On the other hand, the working population can exert a favorable influence on economic growth, thanks to lower or higher increases of labor productivity, through the quality of workers and public openings for professional and territorial mobility. People are moving across the territory – from a village, town, region or country to another - either to return sooner or later to the place they left from, or to settle permanently elsewhere. These actions, as a whole, characterize the geographic mobility<sup>7</sup>. During a longer or shorter period, a part of the active population adapts its workforce to changes in economic activity (agricultural exodus, modernization of activities, etc.), or demand, changing the activity sector, employment status or profession, the enterprise or institution. Finally, people can more easily walk up or down the social hierarchy, voluntarily or involuntarily.

## 2. Economic growth theories focused on the impact of the human factor

Economic growth theory aims to shape the interactions between production factors (inputs in the economic system) and increase of production (outputs of the economic system and macroeconomic outcomes). The general equation that shows the production function is:

$$Y = A.K^\alpha.L^\beta$$

Where:  $y$  - national income

$A$  - a constant reflecting the initial technological level;

$K$  - the size of physical capital used;

$L$  - the amount of labor force used;

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<sup>7</sup> Krugman P.R., *Geography and Trade*, Cambridge, MIT Press, 1991, p.73-79.

$\alpha, \beta$  - coefficients of income elasticity (outcomes) in relation to capital and labor, respectively;  $\alpha + \beta = 1$ .

Population growth shapes the trends of reduction of physical capital per capita income. In order to rise the income per capita, we must find sufficient investment in physical and human capital, to equip national production and to increase its efficiency. Investments, in their turn, depend on the volume of internal and external (foreign) economies, public and private, which can be converted into additional production factors and increase national production volume. Also, the investments productivity is different from one country to another and from one production factor to another.

Keynesian economists revealed the possibility of determining economic growth through policies of stimulation of aggregate demand ("demand-side economics") either internal ("home-mode expansion"), or external ("export led expansion"), either one or the other simultaneously, on its three components: final consumption, investments and net exports<sup>8</sup>. Moreover, post-Keynesians economists had in mind the increase of production capacity and the method of balance it with aggregate demand.

According to the growth pattern of R. Harrod and E. Domar, investments have a dual status: on one hand, they represent a component of the aggregate demand (of total spendings), which causes an increase of national income equal to the product of the investments volume and investment multiplier, on the other hand, they represent an addition to the existing capital stock, so an increase in production capacity. Economic growth will be given by the marginal propensity to save, which depends on the rate of investment (if we consider satisfactory the equilibrium condition of Keynes, the equality of savings to the investments), and its existing technology and costs, which gives us the (marginal) coefficient of capital.

Unlike the previous model, where the coefficient of capital was fixed, given by the production technology, the *neoclassical theory* introduces flexibility on production techniques, therefore, on the capital coefficient. R. Solow<sup>9</sup> sustains the increase of national income as a function of increasing production factors (labor  $L$  and capital  $K$ ) or their total productivity ("Total factor productivity")

$$Y = Ae^{\lambda t} K^\alpha L^{1-\alpha}, \text{ where}$$

$A$  - a constant reflecting the initial technology;

$e^{\lambda t}$  - exogenous rate of technical progress.

Given the possibility of substitution of production factors, the capital coefficient becomes reported to the capital-labor ratio. In the absence of technical progress, the average/marginal productivity capital (reverse of capital coefficient) will be in its turn reported to the capital-labor ratio.

$$Y/K = Ae^{\lambda t} (K/L)^{\alpha-1}$$

Neoclassical growth theory considers that there is a convergence trend of per capita income levels in countries which register the same rate of technical progress and population growth, and economic policies are unable to determine (predict) these two variables.

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<sup>8</sup> Michael Burda, Charles Wiplosz, *Macroeconomics. An European Text*, Oxford University Press, 1993, p.88-90.

<sup>9</sup> Robert Solow, *Growth Theory. An Exposition*, Oxford University Press, 1987

*New growth theories* have proposed precisely explaining persistent and growing divergence in growth rates of per capita income across countries and substantiation of some economic policies through which they intend to influence the growth rate of the economy. Remaining differences between the growth rates are due to endogenous kind of technical progress. Three explanations have been given to this phenomenon.

First, there may be *a higher share of capital income in national income factor* in relation to the other income factors, which would mean that the social benefit of capital investment exceeds the private benefit. In order to justify this difference, Paul Romer<sup>10</sup> assumed that private investment in capital generate dynamic externalities type "learning from practice " (*" learning by doing "*) which increases the public stock of knowledge (*"knowledge"*), so a higher rate of technical progress and higher productivity of all future investments. The idea belongs to Arrow<sup>11</sup>, who considers technical progress as a function of the cumulative investment of physical capital. The technical progress is the result of a " learning " process in each company, a secondary product (*"by- product"*) of physical capital investment. Growth equation becomes:

$$Y = A(K)F(K,L)$$

Robert Lucas (1988)<sup>12</sup> considered human capital as being the generator of externalities. In his model, the marginal productivity of capital increases with the ratio of human / physical capital and, in the presence of externalities, with existing human capital stock. Production function becomes:

$$Y = A(H)F(K,H)$$

Following the same line, Paul Romer (1986)<sup>13</sup> proposed a model in which knowledge (*knowledge*) represent a distinct factor of production. Knowledge production causes an enhancement of the public stock of knowledge and using external economies due to the specificity of these economic goods, counteracts the decreasing yield in their subsequent production and enables further innovation and therefore growth.

The second application supported by G.Mankiw and others (1992)<sup>14</sup> assumes that the mere existence of human capital is *an input into production that can justify a slower convergence*. Production function becomes:

$$Y = AK^\alpha H^\beta L^{1-\alpha-\beta}$$

where: H - human capital.

Usually, the weight attached to the work force in national countries represents both paid income for unskilled labor, and paid income for skilled labor, human capital share is estimated to be between 50 and 70% of the total workforce. Adding weight represented by the the human capital to the stock of physical capital, we find a value for  $\beta$  close to that of Romer , not assuming the existence of external economies to justify a higher share of capital contribution to total income growth. Labor weight in national income (human capital plus unskilled labor) is the usual and can justify

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<sup>10</sup> Romer Paul, *Crazi Explantations for the Productivity Solowdoun*, Cambridge, MIT Press, 1987

<sup>11</sup> Arrow Kenneth, *The Economic Implantations of Learing by Doing*, Review of Economic Studies, 1962

<sup>12</sup> Robert Lucas, *On the Mechanics of Economic Development*, *Journal of Monetary Economics*, July 1988, p.3-42

<sup>13</sup> Paul Romer, *Increasing Returs and Long-Run Growth*, *Journal of Political Economy*, 1986

<sup>14</sup> Mankiw G., Romer P., Weil D., *A Contribution to the Empirics of Economic Growth*, *Quarterly Journal of Economic*, vol.107, 1992

significant differences between countries in labor productivity through reduced differences investments ( physical and human capital) . Mankiw and others (1992) consider that the type  $Y = A(t)K^{1/3}H^{1/3}L^{1/3}$  best satisfies empirical estimations.

***The third explanation of slow convergence is giving up the equal access to technology hypothesis for all countries*** . Existence of differences between countries in the level of technology does not exclude the existence of convergence trend, countries followers meet higher rates of technical progress as they recover gaps (catch- up grow). A. Gerschebkrin (1962)<sup>15</sup> was the first who advanced the idea that countries lagging behind enjoy yet the advantage of taking over advanced technologies. Barro and Sala Martin (1992)<sup>16</sup> propose a model in which the technology level is different, the initial distribution of these differences being due to historical conditions. Technological difference causes a variation both of the capital-labor ratio and the marginal productivity of capital. Dissemination of advanced technology makes the follower countries (followres) to meet higher rates of technical progress. Speed of convergence will be determined primarily by the rates of diffusion of technology, and not by the representatives of capital and labor. The rate of diffusion of technology to these countries differ due to their different ability to adapt to new technologies. This depends on a number of elements of the internal environment (social capability)<sup>17</sup> as well as technologically compatibility ( the technological congruence ) with the leader<sup>18</sup> .

The concept of social capability (social capability) does not have a precise definition. M.Abramowith (1986)<sup>19</sup> lists the elements of social capability at educational level, how to organize companies, opening up to foreign competition, free market entry, resistance of certain interest groups, labor market performance, the degree of competitiveness on domestic goods markets. N.Stern (1991)<sup>20</sup> has added a number of other factors as: managerial competence, quality of infrastructure, including social infrastructure such as honesty, kindness bureaucracy, rigorous definition of property rights.

### 3. Conclusions

Economic growth today comes on the general backround of globalization . The new models of economic growth give a major role to international trade in determining the economic performance of different countries. Under the new conditions , open economies will grow faster than the autarkic ones, as international economic flows include not only goods but also ideas, research and development, supply of technical progress, the inputs and outputs of human capital. The free flow of ideas will benefit

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<sup>15</sup> Alexander Gerschebkrin, *Economic Backwardness in Historical perspective*, Cambridge MA, Belknap Press 1962, dup[ Jan Fagerberg, techology and International Differences in Growth Rates, Journal of Economic Literature, No.3, September 1994, p.1147-1176

<sup>16</sup> Robert Baroo Ji Xavier Sala I Martin, *Convergence*, Journal of Political Economy, vol.100, No.2, April 1992, p.223-251, dup[ Romer, 1994, p.8-9

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<sup>20</sup> Nicholas Stern, *The Determinants of Growth*, The Economic Journal, vol.101, 1991, p.122-123, dup[ Hansson Ji Heurekson, 1994, p.762

research in each country , which will increase the stock of ideas. Increasing the available set of ideas will increase the marginal productivity of human capital and therefore use more growth .

***Liberalized exchange of ideas take place between countries that are unevenly developed and record different rates of innovation , where international trade acts as a reallocation of resources under comparative advantage .*** The new theories makes the long-term economic growth a good specialization. A sustained growth can be achieved only in those sectors likely of innovation that use as production factors technology and / or human capital or sectors with potential of ”practical learning” .

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# **FINANCIAL RISK MANAGEMENT – INFLUENCE FACTORS AND NEW TRENDS**

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**Abstract:** Financial or corporate risk management is a part of the firm risk management with which deal with the financial risks, such as market risk, liquidity risk and credit risk. In the context of international financial crisis, a variety of factors are influencing the development of corporate risk management: the increased volatility and deregulation of financial markets; developments in information and communications technology; the complexity of financial products and so on. The objective of risk management for most corporates is to reduce the influence of external financial variables on the company's earnings volatility, in the short term. This article describes the developments in financial risk management, presents the influence factors and underlines the recent trends in this field.

**JEL classification:** G01, G32

**Key words:** corporate risk, management, crisis, factors, trends

## **1. INTRODUCTION**

Risk management can be defined as identification, assesment, analysis of internal and external risks that prevent the company from achieving its business goals and financial objectives. Therefore, the risk management means also coordination and economical use of resources in order to minimize, monitor, and control the probability or impact of unfortunate events o none hand, or to maximize the realization of opportunities, on the other hand.

Financial or corporate risks can directly or indirectly influence the value of a company. In the last years, combination of effects of financial crisis, a greater deregulation, international competition, interest rates and foreign exchange rate volatility, together with commodity price discontinuities heightened corporate concerns, which have resulted in the increased importance of financial risk management.

The firms recognizes that the effective management of business risk is critical to the success of the company. Business risk is strategic in nature and embraces all forms of risk.

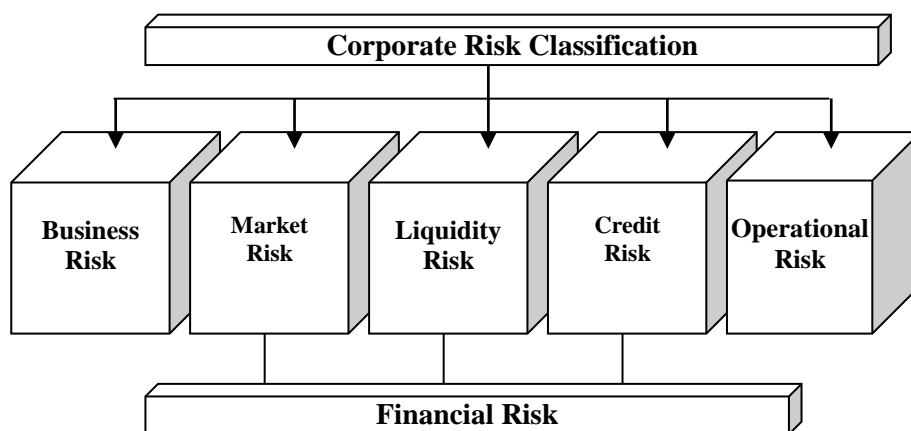
Management should identify and evaluate the risk to achievement of business objectives. This would include the regular assessment of both the significance and the probability of occurrence the risks arising.

A variety of factors are driving corporate risk management developments, such as the increased volatility and deregulation of financial markets, developments in information and communications technology, increased use of derivatives, the complexity of financial products, imperfection of financial markets (information asymmetries, agency costs, transaction costs and taxes) and the financial crisis. These factors have increased the number as well as the complexity of risks a company should face.

An integrated, proactive and quantitative approach to risk management is the latest trend in the financial markets. Increasingly, companies make use of systems to quantify the market risks their companies face and use this information for decision-making at a strategic level.

## 2. OBJECTIVES

Financial risk management is only one part of enterprise risk management with a focus on financial risks, such as market risk, liquidity risk and credit risk. Figure 1 below presents a classification of corporate risks:



**Figure 1: Corporate Risk Classification**

*Business risks* result from the core competencies of the corporate and involve to make strategic business decisions. The role of the manager is to support this process by analyzing the investment proposal or the execution of financial transactions. Business risks are important to manage as investors need to estimate the unlevered beta and to estimate the credit rating to determine the required rate of return on debt.

*Financial risks* is generally not the core competence of a corporate but managing it is of vital importance, and this is the responsibility of the financial manager and corporate treasurer. Financial risks can be seen as a collateral effect due to the fact that the company is taking on business risks. They can be subdivided into market risk, liquidity risk and credit risk:

*Market risk* is created by the values of financial variables, such as earnings and cash flow. The value of a firm changes, due to changes in market variables including foreign exchange rates, interest rates, commodity and equity prices.

*Liquidity risk* is an important financial risk for a corporate, which is split into funding and price risk. Funding risk is the risk that a company is unable to fund itself due to its financial or market position. Price risk is the risk that interest rates increase or that the companies credit spread increases.

*Credit risk* occurs when a counterparty is unable to honors its (full) contractual obligations. It is managed by using proper limit control for external counterparties and via negotiation of contracts and documentation, such as the ISDA agreements.

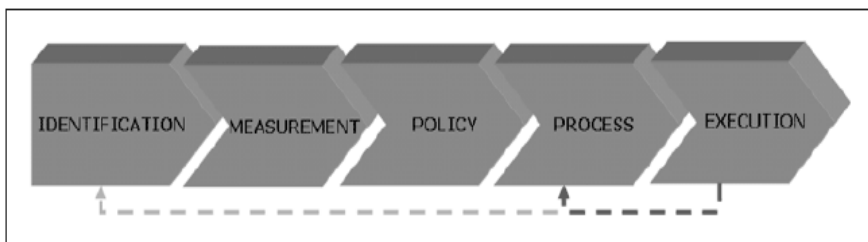
*Operational risks* are often procedure and internal control related issues. The corporate treasurer can act as an internal consultant for the business and also has a responsibility to minimize operational risks for its own organization and processes.

Organizations that rigorously interpret the results of the risk assessment process set a foundation for establishing an effective enterprise risk management program and are better positioned to capitalize on opportunities that can arise. In the long run, this capability will support steer a business toward measurable, lasting success in today's ever-changing business environment

### 3. METHODOLOGY

Corporates need a more advanced risk management approach in order to benefit by a competitive advantage from strategic risk management. They should manage risks proactively via an integrated approach with a focus on measurable financial risks.

The framework is a systematic, integrated approach with a focus on managing financial risks to enhance shareholder value. The corporate risk management framework could have a five-step approach (figure 2):



**Figure 2: Corporate Risk Management Framework**

a) *Identification*. The first step of the framework is the identification of risks. Key risks are identified by using impact analysis and estimating the impact of each exposure on the variability in earnings or cash flow.

b) *Measurement*. The second step uses cash flow-at-risk and earnings-at-risk techniques to quantify the key exposures. Simply adding up exposures or using scenario analysis or sensitivity analysis will not meet the requirements of a truly integrated corporate risk management approach.

c) *Policy*. The third step is the definition of a risk policy and strategy. Executive management needs to define the objective and risk appetite of the company in line with corporate strategy and operations.



*d) Process.* The fourth step is about implementing risk management within the organization using the risk policy as a guideline. The right enablers need to be used to guarantee that risks are owned at different levels within the organization by the people who are able to influence it.

*e) Execution.* The last step in the framework is execution and tactics, which relates to the tactical decisions that need to be made within the boundaries set by the risk policy, such as the optimal combination of hedging instruments. It also deals with the execution of operational procedures and control.

Managing risks is a recurring process and needs to be reviewed by the managers periodically. Some techniques, such as cash flow-at-risk and earnings-at-risk, are necessary to look at the combined effect of risks on the formulated business objectives. To achieve this, the corporates need to embed risk management across the organization because this will allow them to optimize their risk and reward balance by reducing earnings and cash flow volatility, which ultimately increases shareholder value.

#### **4. INFLUENCE FACTORS AND TRENDS FOR CORPORATE RISK MANAGEMENT**

A variety of factors are driving corporate risk management developments, such as:

- the increased volatility and deregulation of financial markets;
- developments in information and communications technology;
- increased use of derivatives;
- the complexity of financial products.

These factors have increased the number of risks, as well as the complexity of the risks, a company has to face. At the same time, risk awareness has intensified among board members as their responsibility and accountability increased caused by the growing pressure from external regulators. The result is an increased focus on risk management forcing companies to pay more attention and disclose more details of their risk.

Risk management is becoming an area in which a company can differentiate itself from competition and it is therefore a topic of strategic importance. There are a few trends in corporate risk management that will help address these challenges:

- the scope of risk management is becoming broader and extending from market risks to enterprise risks (including operational risks);
- risks are increasingly managed through an integrated approach. A truly integrated approach takes into consideration the risk contribution of each risk type present in the business portfolio with respect to the overall objective of risk management;
- in order to effectively implement a corporate risk management framework requires that risk management to be embedded across the whole organization. This starts with the commitment of executive management when they need to define the objective and risk level of the company, in line with corporate strategy and operations, and elaborate a risk policy. The policy is used internally as a guideline to define the risk management approach to all levels within the organization. It can also be used as a guideline for disclosure and communication of the company's risk to external stakeholders.

At present, risk management keeps the attention of most company's boards, but they are still trying to determine the best way to address the array of exposures they face to risk.

More and more the companies recognize that corporate risk is broadening all aspects of their business including reputation, property, liability risks, intellectual property, supply-chain management, environmental and social risks. As a result, managing the organization's risks involves greater cooperation among its various departments, including finance, legal, human resources, production, distribution and information technology.

Also, since corporate governance has become an issue, boards have taken a serious interest in risk and insurance. In general, there is a policy of the companies that global corporate risks should be assessed on an annual basis and that the Board of Directors is responsible for overseeing the risk management strategic activities of the company.

Some companies are installing a chief risk officer to oversee the management of all the company's risks, while others are setting up risk committees, with senior representatives from most departments reporting on risk to the board.

The risk managers could have a variety of backgrounds, such as: law, auditing or engineering as much as insurance. Therefore, the risk management requires a knowledge that also embraces business continuity, project management, corporate governance and many other disciplines. Risk management is a field that has come together through a number of different professions coming at risk from different aspects.

At present, more European companies adopt a structured and enterprisewide approach to risk management, setting up risk committees. That group seeks to identify, monitor and manage the company's risks. There is a raised awareness of corporate and operational risk.

Recently was introduced a new technique for identifying risks that are hinder progress to corporate goals: Business Confidence Management. Instead of asking managers directly about risk, they are asked about confidence in achieving results (a positive approach). Thus, lack of confidence is translated into risk.

This technique could be a solution to some high profile events which exposed errors of judgment of both executive and non-executive directors, senior management and external professional advisors.

Business Confidence Management analyses the confidence of staff in meeting agreed targets, key performance indicators and management objectives. These tasks can be achieved when there are cross-functional responsibilities for delivering a particular target. The answers may expose unidentified high impact risks while results are anonymous, without attribution to individuals. This generally generates direct responses from interviewees, creating an opportunity to raise concerns. In this circumstances, there are needed confidence bar charts highlight areas of low confidence, which are then translated into risk and brief report comments and therefore, the managers can work together better in order to reduce risk.

Business Confidence Management has been successfully implemented in a number of large organizations. It has highlighted areas of low confidence and promoted more balanced corporate reporting.

## 5. CONCLUSIONS

In the context of globalization, the companies have to face more and more the challenges and risks which could occur. Therefore the risk management is a key tool that all general managers should have to take into consideration as a priority. The Corporate Risk Management is a part of risk management with a focus on financial risks (market risk, liquidity risk and credit risk).

At present, a variety of factors are driving corporate risk management developments, such as: the increased volatility and deregulation of financial markets; developments in information and communications technology; increased use of derivatives; the complexity of financial products, etc.

At the same time, risk awareness has intensified among board members as their responsibility and accountability increased as a result of growing pressure from external regulators. The result is an increased focus on risk management which forces companies to pay more attention of their risk and reward ratio.

All these challenging factors have increased the number of risks, as well as the complexity of the risks, a company has to face. As result, the companies recognize that the effective management of business risk is critical to the success of the company. Therefore a company's approach to risk management should follow the principles:

- Risk management will be embedded in all management systems and business processes and will be an integral part of the company's internal control processes;
- The identification of and management of risk is not limited to just the Board of Directors, but includes all managers and staff of the company;
- A key objective of risk management is the development of a comprehensive risk management framework to ensure that risks are being managed in an efficient, effective, and economic manner. The framework will include risk management standards and risk assessment criteria.
- the Board of Directors will review the effectiveness of risk management systems and internal controls regularly.

In conclusion, the executives in all fields need to acquire a greater understanding of risk management. Risk management is becoming an area in which a company can differentiate itself from competition and it is therefore a topic of strategic importance.

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# EFFECTS OF COMMERCIAL CONTRACT

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**Abstract:** The contract is a legal instrument used to organize economic and social life. International trade agreement has certain features in order to ensure the international exchange of goods and services between the Contracting Parties. In terms of commercial contract, there is a foreign origin element, that gives the parties the right to determine the law to govern the contract. A fundamental aspect of commercial contract, in addition to that of determining the law applicable to judicial report established between the parties, it is also the mechanism of interpretation of the contract in case of a conflict due to obscure or inaccurate contractual clauses. Effects of commercial contract are governed by two principles, namely the principle of the binding force of the contract and the principle of relativity of the contract.

**Key words:** contract , internationality, commerciality, customary, applicable law.

## I. Fundamentals

External contract is a bilateral agreement by which one party, usually the seller of a certain country, undertakes to deliver to the other party, usually the buyer, in another country, his material good, quantified and qualitatively determined, in a certain place at a certain time, under conditions agreed, for a price<sup>21</sup>.<sup>1</sup>

So international contract is a mutually binding contract. In the international agreement appears the foreign origin element, an element that gives the parties the right to determine the law that will govern the contract. It may be the law of the seller's country, the law of the country of the buyer, the law of a third country, completed with rules arising from international conventions, rules and customary use of interpretation of international practice.

Most laws provide that, if the parties do not agree on the law that applies *lex voluntaris*, the contract is applied the law of the country in which it was concluded. Other laws provide that the contract is governed by the law of the land of the seller (*lex venditoris*). In case of international agreement, the entire assembly of normative regulations of the state and not a single act, or a single law shall be applied.

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<sup>21</sup> Contracte comerciale internaționale, Constantin Fota, Luminița Degeratu, Loredana Niță, Editura Reprografia Universității din Craiova 2001, pag. 9

Lex contractus governs all legal operations on training, effects, performance and extinction of contractual obligations, not having as object the ability of the parties, the establishment of real rights, the external form of the legal act<sup>22</sup>.

The capacity of the contracting parties is determined by the *lex patriae* (national law), even the establishment of real rights falls under the law of the place where the goods are situated (*lex rei screen*)

Contracting Parties in the virtue of freedom granted to them, determines the elements of the contract, assuming the mutual obligations and adopting customary uses and international practices by registration contract clauses referred to or by the formulation of type-clauses, embedded in the contract.

The contracting parties must have legal capacity and their consent shall not be vitiated .

No legal capacity for: minors, mentally insane and those placed under judicial interdiction.

Vitiation of consent can be done by: error, namely by presenting false reality when concluding the contract, fraud, consisting in deception of the contracting party using dishonest means, violence, meaning threat of the signer with an evil nature causing fear, eviction, exercise of rights by a Contracting Party who doesn't own these rights.

The contract must be lawful, to exist at the time of conclusion of the contract or to be established in the future, to be determined or determinable.

Also on the grounds of the conclusion of the contract must stand a legal and moral issue. Form of the contract, in most laws, takes the form of writing, but there are laws that also acknowledge the verbal form of the contract.

### **The commerciality and internationality of the contract**

A contract may be commercial or civilian as would constitute a trade act<sup>23</sup>.

The same contract can be civil or commercial, as the applying law for it, in accordance with shall determine the nature, qualifies it as an act of trade or not. A contract may be considered to be commercial in a country and as a civil in another.

The qualification of a contract as commercial or not is of great importance because it involves the application of a special legal regime.

Thus, on the commercial contract, we may distinguish the following special rules:

- Ability to contract. For a person to contract, that person must meet certain administrative activities required by law ( special authorizations, registration at Trade Register, performance of certain forms of advertising, etc. )
- Commercial usage. Only within the commercial contract, the ommited clauses in the contract will be governed by the application of commercial usage.
- Probation of the contract. Probation of the contract can be made by any means not only by unique documents.

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<sup>22</sup> Contracte comerciale internaționale, Constantin Fota, Editura reprografia Universității din Craiova, 1998, pag. 11

<sup>23</sup> Fr. Lemeunier , Principes et pratiques du droit commercial, Paris, 1978, pg. 1

- Effects of contract. In case of the commercial agreement, the debtor is in default without prior notice and in the laws which require such notification, it can be done by any means.

The principle of internationality results from the fact that such contract contains elements that objectively establish the connection with multiple systems of law.

## **II. Conclusion of contracts.**

Regarding the conclusion of contracts, most international trade agreements are concluded based on standard contracts (which often contain general contract conditions) based on forms or models with standard clauses .

The parties may freely determine the content of the contract under limits imposed by imperative regulations, morals and public order. Also according to statutory provisions of private international law, the parties are free to choose the applicable law. This choice must be expressed or demonstrated in contractual terms or by the circumstances of the case. By their choice, the parties can select the law applicable to the whole or only a part of the contract. Parties may agree to subject the contract to a law, other than that which previously governed. Any changes made by the parties regarding the applicable law, which occurred after the conclusion of the contract, shall not prejudice the formal validity of the contract. Failing for a choice, when the applicable law can not be established neither by framing the contract in one of the specified types nor as the law of the country where the party who must perform the characteristic performance of the contract has his habitual residence, the contract should be applied the law of the country which is most closely connected. At the training of the contract, parties should respect the obligation of fairness and information.

The parties of the contract shall be obliged to inform correctly about any act or fact regarding the validity of the contract.

## **III. Effects of international contract/ agreement**

The effects of international trade agreements are reflected in the rights and obligations arising from any such contract for the benefit and respectively, to the parties. Commercial contracts, as well as civil contract is governed by two large main principles: principle of the binding force of the contract and the principle of relativity effects of the contract.

The research on the effects of commercial contract requires addressing the following issues:

- Interpretation of the contract in order to determine the content according to the will of the contracting parties
- Binding force of the contract in relations between the Contracting Parties
- Effects of commercial contract on third parties
- Specific effects of mutually binding contract

### **1. Interpretation of commercial contract**

Interpretation of the contract is a transaction by which the judicial body tries to determine its actual content.

Interpretation of the contract is required if the contract terms are incomplete, unclear or contradictory, or if the terms do not express the real intention of the parties.

Contradictory statements and conflict between parties happen to arise during and in relation to the performance of the contract having its origin in the different interpretation of certain contractual stipulations.

The need to interpretate the contract arises most often because formulations of contractual clauses are obscure or inadequate in relation to the specific of legal relationship between the parties.

Another reason for the necessity of interpreting the contract is the insufficiency of contractual clauses and the difficulty caused by the collision between the legal systems.

## **2. Binding force of contract of international trade.**

Binding force of international trade contract has the following key issues:

- Parties are required to execute each other the face of assumed benefits
- Parties can not cancel the contract unilaterally
- Execution of contractual obligations must be carried out in good faith

In the international commercial law, the obligativity and irrevocability of contracts has a particular importance, given the purpose of concluding such contracts namely to secure as a main legal mechanism, the participation of the persons from one country to the world economic cycle.

Another requirement of the principle of the binding force of the contract is the impossibility to unilaterally change the international commercial contract by one of the parties. Like the revocation of the contract, its changing can only take place by agreement of the parties .

Given principles of international trade are manifested either by restricting or by strengthening the effects. Thus in terms of strengthening the effects of binding force and irrevocability, we mention that the specific of international commercial contract is that they are usually concluded on medium or long term and a manifestation of these principles is that the intervention of a force majeure does not result in immediate termination of effects of the contract and contractual risk occurrence, as it happens in common law, results in temporarily suspending the binding force of the contract thus offering the possibility of continuing legal relationships initiated. Cessation of international commercial contracts as a result of causes *intuitu personae* are much less common than in common law.

But a case of termination of contract as a result of causes *intuitu personae* may, for example, be the death of a natural person or reorganization of legal entity contractor. In terms of limiting principles above stated principles, we mention that the effects are often restricted or limited by parties especially in the medium and long term contracts, in order to include clauses leading to insurance against currency risks. The obligativity under the international commercial among the opportunity to be limited by the will of the parties may be restricted by law or by court or by commercial arbitration.

## **3. The principle of relativity of effects of international trade agreements**

This principle implies that international trade agreements have effect only between the contracting parties but not to third parties. The given principles require to determine the concept, third parties, successors of the parties.



Parties are also natural or legal persons that directly or through representation concluded the contract. It is assimilated to parties and the intermediary acting without representation concludes the contract in his own name but on behalf of the representative. In turn, third parties are people who did not participate neither directly nor indirectly (ie by proxy) at the conclusion of international trade contract and are completely foreign to this contract, the category of third parties also includes the intermediary acting in representation, remaining outside the legal obligational relationship.

The successors of parties are an intermediate group of people, who, although not directly or indirectly participated in preparing the contract, somehow incur its effects because of the fact that they are in certain legal relationships with the parties.

In legal doctrine, discussions were brought on the possibility to have as debtors people who have participated at the conclusion of the contract and also of those in quality of successors of rights; so it is established that it is possible to become a debtor of an obligation in international commercial contracts, but also that nothing precludes create rights in favor of a foreign person through international commercial contract by means of contract stipulation by the institution to another. This institution is an exception to the principle of relativity of effects of the contract and is quite common in insurance contracts of goods and of the international freight. The grant of rights to third parties by an agreement also gives them an opportunity to use a clause in the contract to limit or exclude its liability, such clauses are common in contracts for international freight and are a typical stipulation for another.

We have to mention that third parties may waive the rights that are established in international trade agreement, also parties may modify or revoke the rights granted to a third party until it has accepted them or acted in a manner prescribed by these.

#### **IV. SPECIFIC EFFECTS OF SYNALLAGMATIC INTERNATIONAL TRADE CONTRACTS**

##### **1. Exception of non-performance**

The exemption of non- performance of the contract is the right of a third party of the international trade report to refuse the performance of the contract as long as the other side its not performing the services for which it was employed, such as paying the price.

For the existence of non-performance exception, it is required to be fulfilled certain conditions:

- Mutual benefits should be simultaneous, ie none of them is affected by a term or condition precedent;
- Mutual obligations are interdependent, correlative, so that legal execution of one is dependent on the performance of the other;
- Nonperformance of the contract by the party to whom the contract is alleged, has to be significant;
- The party invoking the exception must be of good faith, that is the non-performance is not caused by the contract itself.

## **2. Termination of international trade contract**

Referring to termination of the contracts of international trade, it has some particularities, namely : first, the termination is less encountered in practice in international commercial contracts, since they end in the medium and long run by successive benefits, secondly the termination occurs by the will of the parties as a final sanction when the contract can not be saved, in the latter case, the will of the parties is expressed by means of contract terms which give the court the ability to terminate the contract in extreme situations.

Thus, we can define the termination as the retroactive abolition of the contract on the grounds that the other part has not met his performance, by his guilt .

Effects of termination :

- The contract is canceled retroactively from the beginning of its conclusion, and operates both for the past and for the future.

The parties are restored to the previous situation;

- The contractor who executed the performance or who declared ready to execute and can prove this situation may claim compensation from the other party for non-performance of the contract.

Termination of the contract constitutes in the penalty materialized in the dissolution of effects only for the future (ex nunc) of the sinallagmatic contract of successive performance, that applies in case of culpable non-performance of the obligation by one of the parties.

Termination, as rescission, can operate either by right or under a compromise pact agreed by the parties.

Unlike rescission, termination excludes the retroactive effect accordingly, executed benefits until termination moment, are not subject to refund.

## **V.CONCLUSIONS**

International trade agreement/contract is an important tool, by which the exchange of commodities, goods and services is performed.

The practical importance of this instrument depends on the required mechanisms providing the enforcement of the contractual and legal regulations and of contract relations between parties. Statutory provisions should establish mechanisms to ensure the proper development of contractual relations in international trade, proxies and measures that ensure timeliness execution of these relationships.

The commercial contract, as we have seen, has notable differences to civil contract, differences meant to regulate and ensure a certain speed in performing contractual obligations and benefits and maintaining international flows of goods and services exchange.

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# **THE RELATION BETWEEN COST, MARKET VALUE AND TRANSACTION PRICE, IN THE CURRENT CONTEXT OF THE RESIDENTIAL REAL ESTATE MARKET**

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**Abstract:** The material approaches the complex relation between cost, value and price in case of real estate properties, analyzed in the context of evaluation mission exercised by a specialist in the field. Therewith, this material illustrates the influence of particularities of the real estate market on the establishment of the market value of residential properties and also the specific elements which the evaluation shall consider within the professional approach in order to formulate an opinion. This shall consider, in addition to the previsions of evaluation standards, the self-regulating mechanism of the market by means of the report between demand and offer, and the inter-relation, in this context, between the three concepts mentioned.

**JEL classification:** D23, D46, O12

**Key words:** cost, value, price, real estate market, demand, offer.

## **1. INTRODUCTION**

“The market represents the assembly of sale-purchase relations which appear between the economic agents who offer and demand goods, according to the demand and offer law”<sup>24</sup>. Theoretically, the market should be in equilibrium, respectively to exist a demand level equal with the offer level, forming in this way the price. But, this stage is difficult to reach, even impossible in the context of active markets, considering the fact that the demand and the offer are influenced by many factors and the model of the perfect market is valid only at theoretical level.

In general, the real estate markets are characterized trough disequilibrium. On short time, the offer remains relatively fixed, and the demand adapts the price to it. If the demand for a certain type of property increases, the offer should be aligned to the level of the demand, thus building new real estates. But, until these are finished, it's possible that the demand change its tendency. In this way, the real estate market can aim to equilibrium only on long term.

In current context, the demand from the market is lower than the offer, the market being one in which the buyer is the main decision maker. He gives a large importance to the price in the selection process of a property to the detriment of another one, and he won't pay more for a property, just its value recognized by the market. In these conditions, the seller shall formulate since the beginning adequate offers in order to obtain a positive feedback. Contrarily, if the property is promoted

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<sup>24</sup> Gh. Pirvu, Ramona Constantina Georgescu “Microeconomics”, Craiova 2009.

with a price offer inadequate for its real market value, the effective transaction price will suffer decreases, assimilated to the time interval needed for repositioning.

## **2. INFLUENCE OF REAL ESTATE MARKET CHARACTERISTICS ON THE ESTABLISHMENT OF THE MARKET VALUE OF A RESIDENTIAL REAL ESTATE PROPERTY**

In current real estate market, the prices are in a continuous change. In an active market, we meet two cases of report between demand and offer. The first, in which the demand is bigger than the offer and the market is of the seller, and the second in which the demand is lower than the offer and the market is of the buyer. The difference between the seller's market and the buyer's market is explained by Claudiu Hațegan, broker/owner of Klauss & Partners Agency, thus: in the first case, the demand for houses is bigger than the offer, reason for which the seller becomes the decision factor in a transaction and he “dictates” the price. In such a situation, the buyers take the decision to rapidly acquire, on emotional background, dictated by the fear that the offers rapidly “fly” from the market. The most aimed factors are the location and the physical characteristics and less the price. What happens in such a market is that the prices artificially increase, without taking into account the “reality” and the equilibrium between the offer and the demand. On the other hand, in a market of the buyer, the demand is lower than the offer, fact which determines him to be the decisive factor in the conclusion of the transaction. Since he has several options, the buyer searches for a long time the adequate offer and its perspective is much more rational. The factor which influences the most the acquisition decision and the choosing of a property in the detriment of other property is the price. In such a situation, in order to sell, the owners shall be aligned to the market tendencies.

During the last years, the real estate market was characterized by major fluctuations, passing through both stages. During the years 2006-2008, because of the increased demand and of rapid alignment of the offer, the prices increased without being controlled, reason for which the period was characterized as a real estate boom. On the background of the economic crisis which followed immediately, the purchase power decreased significantly and the offer remained more overweight to the demand, reaching to the decrease of payments.

Currently, the real estate market is one of the buyer and it seems to be stabilized at national level, after the prolonged crisis. Compared with the first term since 2013, the first months of the year 2014 brought a decrease of prices of only 0,6%. In respect to the top moment registered in the second term from 2008, the prices of the houses were reduced with 41%, thus the current level of the market is similar with that from 2006.

“The demand as expression of the buyer's behavior reflects his preferences and availability for the acquisition of certain goods and services, in quantities determined at a certain price”<sup>25</sup>. On the real estate market, the demand depends on the population from the market area in which the property is (respectively the size and the number of households), their income, the percentage of owners and tenants, the level of savings and the credit conditions, the urbanism plan and the directions in which the town is developed (or, contrariwise, its decay), physical attractive factors, facilities from the area.

“The offer represents the maximum quantity from a good or service which can

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<sup>25</sup> Gh. Pirvu, Ramona Constantina Georgescu “Microeconomics”, Craiova 2009.

be sold on the market in a certain period of time and at certain unit price, accepted by the buyer and considered by the seller as minimum price, which educes him the desire to sell that good”<sup>26</sup>. In turn, the offer can be influenced by the quantity and the quality of the properties which are competitive on the market, by the number of new or in progress constructions (both those competitive and those complementary), by the construction costs, occupation by the owners in respect to the occupation by the tenants, the non-occupation degree and the non-occupation cause, the availability of credits and financing for constructions, the impact of the construction standards, of local regulations regarding the systematization and of other regulations regarding the volume and the costs of constructions.

Each of the participants from the market, in quality of bidders and claimants of goods, oppose one to another, following the own interest. They will react at each influence factor and will try to establish, depending on the price of the market, an adequate price for their properties, depending on the own understanding on the value of the good. As a rule, there are four economic factors which create the value: utility, rarity, desire and purchasing power. All the factors shall be present to a real estate property in order to this be considered competitive on the market and, as a consequence, to have value.

Being general, the value concept cannot be rigorously defined. It is subjective, always influenced by the part who formulates it, from where is explained the value as being an opinion, not a fact. In case of a real estate property, this is an opinion on the most probable price which will be paid on the market, for a change. An objective and competent opinion on such a value can be formulated by an authorized assessor, who will estimate a market value through the specific techniques and procedures of the evaluation.

The market value is defined as “the estimated amount for which an asset can be changed on the evaluation date, between a convinced buyer and a convinced seller, in a fair transaction, after an adequate marketing and where the parts acted each of them informed, prudently and without constraint.”<sup>27</sup>

The definition of the market value applies according with the European framework which provides that, through “convinced buyer” we understand a buyer who is motivated, but not obliged to buy. This buyer is not impatient or decided to buy at any price. Herewith, this buyer is a person who rather purchases according to the reality and to the expectations of current market than with those of an imaginary and hypothetical market, whose existence cannot be demonstrated or anticipated. The hypothetical buyer wouldn't pay a higher price than the price required on the market. The current owner is included among those who form “the market”. On the other hand, “the convinced buyer” is not an impatient seller or a seller ready to sell at any price or one prepared in order to resist to a price which is considered to be irrational on the current market. The convinced seller is motivated to sell the asset, under the market conditions, at the best accessible price from the free market, after an adequate market, regardless the price. The factual circumstances of the current owner aren't part of these considerations because the convinced seller is a hypothetical owner.

The evaluation process which leads to the estimation of a market value is an

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<sup>26</sup> Gh. Pirvu, Ramona Constantina Georgescu “Microeconomics”, Craiova 2009.

<sup>27</sup> International Valuation Standards Council – International Evaluation Standards, Bucharest, 2011.

elaborated process and consists in several stages which approach the formulation of the final opinion. It started with the identification of the property and of all its relevant characteristics. Then, is collected information about the market area, specific information about the property and about other comparable properties. All this information is analyzed and is determined the best use of the property, according to which is proceeded to the effective calculation of the value, through the use of some specific approaches in evaluation.

### **3. THE ESTIMATION OF THE MARKET VALUE OF REAL ESTATE PROPERTIES ACCORDING TO THE INTERNATIONAL EVALUATION STANDARDS**

As it is known, the International Evaluation Standards (IVS, edition 2011) illustrate specific approaches in order to estimate the value of the real estate properties, namely: the approach through the market (or direct comparison), the approach through the cost and the approach through the income. Each of these three approaches treats the property in a different way, fact for which are obtained different values and the authorized assessor chooses the one who represents the best the property.

In order to exemplify the three approaches, we chose a residential property formed of land and construction, located in the area A of Craiova municipality, Craiovița street, no. 50, with the following characteristics: ground floor height regime, land surface 670 sqm, net area of the construction 165 sqm, street front 11 m, construction year 1960, renewed in 2004, finishing quality – average, general good condition.

*Within the approach through the market*, are chosen from the market area properties compared with the analyzed property, as close as possible in respect to the characteristics, to which is known the transaction price (or offer). The market area is selected depending on the limits until which the similar properties can compete with the analyzed property, in the vision of a potential buyer. Because of the fact that it is impossible that two properties are identical, corrections are made on the price of each comparable, depending on the comparison elements used, thus all be brought, from the point of view of characteristics, to the level of the analyzed property. In the end, the corrected value of the comparable property with the smallest number of corrections and the lowest total gross correction is chosen as being the market value of the subject property.

In case of an analyzed property, we selected 5 comparable to which we made corrections in order to be located within the market area, the surface of the land and of the construction, the street front of the land, and the presence or the absence of some facilities considered useful. The market value thus estimated through this approach, through the comparison method on data pairs, was 120.000 €.

We shall pay a big attention within this approach to the prices, transaction or offer prices of the comparable properties selected. A deficiency of the transaction price, which is declared in the sale-purchase agreement, is that this can be erroneously declared, respectively smaller than the real price, in order to reduce the value of the transaction tax. This problem could be corrected through the alignment of grids used by the notaries at the real value of properties from the market, through the performance of an evaluation at each transaction. Even so, it would be needed a relatively long period of time in order to create such a data base, which shall be consistent and relevant and which the notaries and the assessors would access with confidence.

On the other hand, a failure of the offer price is that this can be higher than the real value of the respective property, the difference consisting in the negotiation margin which the seller anticipates and other costs which appear during the promotion of the property. As a consequence, the assessor, through his professional reasoning, shall adjust the prices of the comparable thus reflecting the real current market values.

*The approach through the cost* is based on the principle according to which a careful buyer won't pay for a property more than the purchasing cost of a similar site and construction of a building with equivalent demand and utility. Thus, the current replacement or reconstruction cost of the analyzed property is calculated. From this, we take possible depreciation (physical, functional or external), thus resulting the current value of the building. To this, we add the value of the land, leading to an indication on the market value of the entire property.

A calculation method of the total cost is the devices methods. This starts from the gross effective replacement cost, which includes the expenses directly related to the construction, the infrastructure (foundation and basement), the super-structure (number of floors, attics), roof and coating, interior and exterior finishing and functional installations (electric, sanitary and heating). To these are added the indirect expenses, namely other unpredictable expenses, administrative and profit costs, other indirect expenses and the developer's profit.

In case of the analyzed property, the gross replacement cost of the building was 62.100 €, to which we added a percentage of 5% related to unpredictable expenses, 12% for administrative and profit costs and 10% the developer's profit, resulting a total cost of 80.000 €. From these, we took the total depreciation, in percentage of 60% (physical depreciation related to the effective age of the building, 30 years), leading to a construction value of 32.000 €. Adding the value of the land (determined through the comparison method) of 92.300 €, we arrived to a market value estimated through the cost approach of 124.300 €.

*Within the third approach, the approach through income*, are estimated the revenues generated by the property and the expenses incurred with its exploitation, through difference resulting the net income from exploitation. According to the direct capitalization method, the net exploitation income is multiplied with a capitalization rate (taken from the market), in order to obtain the market value.

In case of the analyzed property, we selected 5 comparable properties for which were formulated rental offers and, after the corrections, resulted the price of 350 €/month obtained from the rent of the property. Then, we calculated the net exploitation income, of 2.680 €, through the difference between the gross effective income, of 4200€ and the total of exploitation expenses, represented by the fixed expenses (duties and taxes - 170 €, mandatory insurances - 20 € and allocations for replacements in the quote of 20% from the annually amortized value - 490 €). The variable expenses weren't included because it is considered that these will be paid by the lessee. Through the division of the net exploitation income with the capitalization rate (obtained from the formula  $VNE/price$ , applied in the case of the 5 comparable properties used to the approach through the market), we obtained an estimation on the market value of the property of 103.100 €.

The conclusions obtained as a result of the evaluation process were the following:

- the estimated value of the land, through the comparison method: 92.300 €



- the estimated value of the property, through the cost approach, devices method: 124.300 €
- the estimated value of the properties, through the market approach, the comparison method on data pairs: 120.000 €
- the estimated value of the properties through the income approach, direct capitalization method: 103.100 €

In case of residential properties, the market approach is the most adequate from the three approaches, because it directly takes into account the realities and the tendencies from the market, reason for which we chose 120.000 € as market value.

#### **4. THE INTERACTION BETWEEN THE EFFECTIVE CONSTRUCTION COST AND THE MARKET VALUE ESTIMATED BY THE EVALUATOR AND THEIR INFLUENCE ON THE TRANSACTION PRICE**

The three concepts are defined by the international evaluation standards as it follows:

1. The cost is the amount of money needed in order to purchase or to produce the asset. When that asset was purchased or produced, its cost becomes a concrete situation. The price is correlated with the cost, because the price paid for an asset becomes its cost for the buyer.
2. The value is not a fact, but an opinion: either on the most probable price which would be paid for an asset, within a change, or on the economic benefits resulted from the holding of an asset.
3. The price is the amount of money asked, offered or paid for an asset. Because of the financial capacities, of motivations or special interests of a certain buyer or seller, the price paid can be different from the value which could be assigned to the asset by other persons.

In this context, we can affirm that only in the conditions of a perfect market, the cost, the value and the price of a property will be equal.

In case of residential real estate properties, the determination of the construction cost is part of the approach through the cost and, as a consequence, competes with the other information in order to estimate the market value. This cost is calculated in the hypothesis in which would be purchased a site similar with the existing one, on which can be build a building with identical characteristics with the one analyzed. Total costs are calculated depending on the current medium levels of the prices recognized on the market, not depending on the effective construction costs of the existing building, because not always the construction costs, either higher or smaller, directly influence the value of the property. For example, the choosing of some materials with a superior quality, compared with the current requirements, or the endowments and the additional finishing which won't be recognized by a possible buyer from the point of view of utility, will be of no use. The cost increased in this way won't be directly proportional reflected in the market value, because of the subjective perception of the buyers, in respect to the physical characteristics.

With this in view, supposing that the construction is finished before the sale, with a cost of 10.000 €, finally will be obtained a value surplus of maximum 5.000€. At the opposite side, a construction physically depreciated (which isn't renewed) can have a market value higher than another similar construction, because of the importance which the buyer gives to other aspects, ignoring the physical aspects. For

example, if the property will need repairs, in the amount of 10.000€, this doesn't mean that a possible buyer will pay a price diminishes with this cost. In his vision, maybe the superior location will balance more in the detriment of the cost of future repairs, and will arrive to pay a final price increased by the characteristic he considers important.

Another example can be the case of real estate properties analyzed, where the total replacement cost of the construction was calculated at the level of 80.000€. Through the decrease of the estimated depreciation, was obtained a value of the construction of 32.000€. The evaluation methodology supposes the determination of the market value through the accumulation of the construction value with the land value. The market value thus obtained was of 124.300€ (32.000€+92.300€). If the construction was new and the physical depreciation wasn't deducted, the market value would have been 172.300€ (80.000€+92.300€). The difference of 48.000 €, between the value obtained through the cost approach and this last value won't be totally paid by the buyer, even if it shows the real renovation costs.

In respect to the price as a general concept, the answers in time to the question – what the price measures – lead to the formulation of several theories on it, namely: the classical theory considered that the price level is determined by the work made in order to obtain the product, the neoclassical theory provides that the price is subjective and it is determined by the marginal utility and rarity of the good and the contemporary theory takes into account “the reality that the two previous perspectives of interpretation of the price aren't opposed. We start from the finding that, if the change is the unit between the demand and the offer, of the utility of the goods and the purchasing power, then the economical value of a good is determined by the work made in order to obtain it and by the utility given to the consumer”<sup>28</sup>.

Continuing with the determination process of the price of the analyzed property, supposing that the market value was reported to the seller by the assessor, he will use it in order to formulate a transaction offer. With this in view, the seller, starting from 120.000€, will add to the price about 10%, percentage represented by the negotiation margin with a possible buyer. Moreover, if the transaction is realized through a real estate agent, the price will be increased also with the commission practiced by him. In this last variant, it's preferable that the seller chose just one real estate agent which represents him, contrarily the property will be listed at different prices, aspect which will lead to the misleading of the buyer and, as a consequence, the offer will lose from its credibility.

During the stay of the property on the market, if he will find that the level of the demand is not high, in order to sell the property, the seller will decided the decrease of the price step by step, until the possible buyers will consider that the report between the price and the utility will be optimum in order to make an investment. We shall mention the fact that the residential real estate properties aren't transacted with a high frequency because they represent long term investments, reason for which the possible buyers are very careful to all the details they consider relevant and adequate in relation to their desires and needs, especially in a market of the buyer, where the preferences are dictated in a large measure by the price.

Thus, the real market value of the property will be different from the transaction price. The price will be higher than the market value because of other costs

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<sup>28</sup> Gh. Pirvu, Ramona Constantina Georgescu “Microeconomics”, Craiova 2009.

which occur during the promotion of the property or because of the apparition of a “special buyer, for which the asset will have a special value, because of the advantages resulted from the property on it, and which won't be available for another buyer on the market”<sup>29</sup>. On the other hand, the price will be lower than the market value if the seller will accept a negotiation in the sense of a diminution over the limits, or if he will formulate, since the beginning, an unrealistic offer because of the over-evaluation, which will lead to diminutions of the price in trenches.

## 5. CONCLUSIONS

The construction cost, the market value and the transaction price are in a permanent interaction, which determines the modification of individual levels, depending on the regulations from the field of constructions, on the level of prices and of financing conditions in this field, on the report between the demand and the offer from the market and on the subjectivity of buyers and sellers.

The effective construction cost of a residential real estate property can be formed by a significant component for the determination of its value, but not directly proportional, because the market doesn't recognize major fluctuations of value depending on the cost components.

The market value can be calculated in a competent and realistic way only by an authorized assessor, who, thorough the specific techniques and procedures of evaluation science, will express his opinion in this respect.

Being objective, the market value is usually different from the price at which the transaction is concluded, because this price is decided between the seller and the buyer, each of them can bring a subjective influence which can change the price.

In order to formulate an offer, the seller shall have realistic expectations, uncorrelated with the effective construction costs of the property, if these are high. An offer price which isn't in line with the market tendencies can attract a diminution of the effective transaction price, because of the prolongation of the period of time in which the property remains unsold.

A potential buyer won't pay for a property a higher price than the maximum market value of a similar property.

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# KYOTO PROTOCOL- THE SOLUTION TO THE CLIMATE CHANGE PROBLEM

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**Abstract:** The United Nations Framework Convention on Climate Change is the subject to a particularly important Protocol: Kyoto Protocol from 1997 entered into force on 15 February 2005. It aims to limit emissions of six greenhouse gases.

In short, the Kyoto Protocol *commits* industrialized countries to stabilize greenhouse gas emissions based on the principles of the Convention. The Convention itself only *encourages* countries to do so. Under the Protocol, the European Community has committed to reduce by 8% in greenhouse gas emissions in the period 2008-2012, compared to 1990 levels.

Protocol contains two annexes grouping developed countries in Annex I and those with economies in transition in Annex nr.II.

In december 2012, the Doha Amendment to the Kyoto Protocol was adopted. This launched a second commitment period, starting on 1 January 2013 until 2020. Russia, Japan and New Zealand are the only countries that will not take binding commitments to reduce emissions. On the other hand, Canada has withdrawn from the Protocol in 2011.

**JEL classification:** Q01, Q54, Q58

**Key words:** greenhouse gases, climate change, protocol, joint implementation mechanism, emissions trading

## 1. INTRODUCTION

The international scientific community believes that humans are responsible for global warming (according to the Intergovernmental Forum Panel on Climate Change ) which is due to the elimination of greenhouse gases. Numerous studies have shown that the temperature is increasing, on average by 0,6°C per hundred years.

Current concentration of greenhouse gases appears to be highest in the last 160,000 years. Based on the chosen simulation model were provided particularly increases of temperatures between 1.4°C- 5.8°C until year 2100. The large margin of variation between the two figures is due to lack of information about physical phenomena and environmental policies that could be adopted. The heating process will not be uniform, being more intense in the case of polar and tropical latitudes and more pronounced on the continents than the oceans. This phenomenon will increase melting the glaciers and drought in areas that already have a high degree of aridity.

## **2. THE NEAR FUTURE**

By 2030 global emissions of carbon dioxide will increase by over 39 % , unless they will be established new rules and will not be signed other protocols to stop the global warming. Without a new agreement the worldwide emissions could reach 40.4 billion metric tons in 2030, compared to 29 billion metric tons in 2006.

Most researchers believe that emissions should be reduced by 80% by 2050 to avoid dangerous heat waves and droughts. It is expected that the largest amount of emissions of greenhouse gases come from developing countries such as China and India, where large amounts of coal are burnt. By 2030, the carbon dioxide emissions from developing countries will reach 25.8 billion metric tons, while the pollution from rich countries will reach 14.6 billion metric tons.

In December 2008, EU member states have adopted a series of ambitious targets as part of a package of concrete measures to fight climate change. These include a commitment to reduce, by 2020, global emissions of greenhouse gas emissions in the EU by 20% compared to 1990 levels and increase the share of renewable energy in energy consumption by 20% in the EU. Each member state has an individual target which reflects the potential or produce renewable energy. EU objective of reducing emissions will increase by 30% if other developed countries agree to do the same through a global agreement .

A common goal of all member states was that by 2010 the EU to achieve 10% use of biofuels in transport, with a clear set of rules that ensure that this is done in a sustainable manner. There are also individual targets for each member by 2020 to reduce emissions from buildings, transport, agriculture and waste by an average of 10% below 2005 levels.

To avoid an environmental catastrophe is required the cooperation of all countries in the world, but especially those that pollute the most ( the U.S. is the largest producer of greenhouse gas per capita and, China surpasses U.S. in the total emissions of greenhouse gas, although not in chapter quantity of greenhouse gas per capita).

## **3. UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE AND THE KYOTO PROTOCOL**

International Treaty provides basic commitment aimed at halting emissions to a level that does not adversely affect global climate is the United Nations Convention on Climate Change (signed at the 1992 UN Summit in Rio de Janeiro). The Convention adopted the principle that all countries have a "common but differentiated responsibility" to stop global warming. The parties agreed that:

I. Developed countries have historically had and now have the largest emissions of greenhouse gases ( GHG );

II. Quantities of GHG emissions per capita in developing countries are still small;

III. Amount of GHG emissions will increase in developing countries to meet the social needs of these countries.

China (currently the largest producer of GHG), India and other developing countries were not included on the list of numerical limitations regarding GHG because

it had a major contribution to global warming in the period preceding their Kyoto Treaty. However, even if the treaty does not require the signatory states to take measures to take, this document requires further guidelines protocols for reducing GHG emissions, most notably the Kyoto Protocol in 1997.

One of the main features of the Convention is to make an inventory for each country GHG emissions and CO<sub>2</sub> removal from the atmosphere. This is essential as it provides the necessary data to world nations negotiating agreements on CO<sub>2</sub> reduction. It also has the task of drawing a grid of equivalence of greenhouse gases other than CO<sub>2</sub> values. This can form a single market for the output common unit is CO<sub>2</sub>. Signatories are divided into three groups:

I. Annex I countries (industrialized countries): Australia, Austria, Belarus, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, United States of America. (40 countries and separately the European Union).

II. Annex II countries (Annex I countries minus developing countries in 1992, developed countries which pay for costs of developing countries): Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States. (23 countries and separately the European Union, Turkey has been removed from this list because he asked to be recognized as a transition).

III. Developing countries. Convention requires that Annex I countries to assign to operators from their borders (companies, organizations etc.) permission of greenhouse gases for certain quantities. Exceeding the allowed amount may be done only through a mechanism that is acceptable to all parties to the Convention. Developing countries are not participating in the effort to reduce GHG emissions than if developed countries help them with financing and technology. Over time, these countries may choose to join Annex I countries.

The Kyoto Protocol is an international agreement on the environment, whose purpose is to reduce the greenhouse effect. Protocol was negotiated in December 1997 by 160 countries. One of the goals of the protocol is that the signatory states to get together to 2014, at a level of 5.2% GHG emissions lower than 1990. Discounts negotiated for each state varies from 8 % for the EU, 7% for the U.S., 6% for Japan and 0 % for Russia. The treaty allows an increase of 8% for Australia and emissions by 10% for Iceland. To enter into force, the Protocol had to be ratified by at least 55 nations (condition already met) and to produce 55 % of global emissions of carbon dioxide.

In October 2004, Russia, responsible for 17.4% of greenhouse gas emissions, ratified the agreement, which led to meeting the quorum required for the entry into force of the Protocol. In November 2004 the participating countries were in number 127 including Canada, China, India, Japan, New Zealand, Russia the 25 members of the EU together with Romania and Bulgaria and Moldova.

Among the countries that have not ratified the protocol is the United States, responsible for more than 40 % of total greenhouse gas emissions. The Protocol was signed by 183 countries in 2009.

The Protocol provides for the creation of "flexible mechanisms" to lower emissions, such as emissions trading, clean development mechanism and joint implementation. The purpose of these arrangements is to ensure that parties to the treaty that reduction can be achieved in a manner that is economically efficient. The main problem that occurs in the absence of these mechanisms is that emission reductions have different costs in different regions. In some regions are more cheap because fossil fuels as oil or coal resources are easily accessible. Also, in these regions the alternative energy may not be an efficient economic option. As such, there is strong reason to accept emission reductions. But yet flexible mechanisms allow achieving an indirect emissions by funding to increase the capacity to absorb carbon dioxide. To use the flexible mechanisms, participating countries must ratify the Protocol they should calculate the maximum amount of emissions (CO<sub>2</sub> or CO<sub>2</sub> equivalent) that can eliminate the need to have a national system for estimating emissions and removals CO<sub>2</sub>.

*The emissions trading* involves the buying and selling large quantities of CO<sub>2</sub> emissions attributed to anyone but unused. As such, CO<sub>2</sub> becomes a natural resource like other resources (oil, gold, coal etc.) and it creates a carbon market where you can buy and sell the right to emit ( tons ) carbon into the atmosphere.

*Joint Implementation Mechanism (JI)* any Annex I country can invest in emission reduction projects taking place in any other country in Annex I. For example, in Russia and Ukraine ther are implementing projects that provide the replacement of coal power plants (in the heat used for electricity production is eliminated then directly into the environment ) with electric and thermal coal plants ( in which heat is used to heat water for residential installations). As such, the countries that finance such projects receive from countries in which the draft is held the project of Emission Reduction Units (1ERUs = reduce emissions by 1 ton of carbon dioxide). These units are part of a fund of CO<sub>2</sub> emissions permits allocated to each country, fund which is calculated based on emissions from 1990. If the units would not be distributed from this fund of emissions, then there might not achieve emission reductions established in the Protocol.

Romania signed (until 2007) 10 such memorandums with the governments of Switzerland, the Netherlands, Austria, Denmark, Norway, Sweden, France, Italy and Finland as well as the Prototype Carbon Fund set up by the World Bank .

So far 21 JI projects are in various stages of implementation. The vast majority of projects approved are within the local: heating systems (using renewables - sawdust, geothermal), closure of landfills. Projects undertaken under this mechanism favors revamping the areas that carry

Regarding the JI projects it can be distinguished two modes: Mode II and I. So far all JI projects approved in Romania were developed as draft mode II.

*Clean Development Mechanism* provides the possibility to purchase cardboard credits through the development of projects in developing countries leading to a reduction in CO<sub>2</sub> emissions. Loans are granted not by the country where the project is but a special organization ( operational organization design) approving the project. For the project to be approved it must demonstrate that it has an "additional" character, it

would not be conducted in the absence of country initiative that seeks to acquire loans. You also need to estimate the emissions that would be achieved in the absence of the project and an estimate of the reductions that will result from the project.

Each country listed in Annex I agreed to limit emissions to the values specified in the protocol. There are countries that currently do not reach those values . The difference can be sold to other countries that exceed quota. For example, on April 18, 2001, the Netherlands has bought four megatonnes of carbon dioxide emissions in Poland, Romania and the Czech Republic.

#### **4. ROMANIA AND KYOTO PROTOCOL**

Romania is the first country from the Annex I which ratified the treaty in March 2001 by the Law no. 3/2001. Our country has pledged to reduce by 8 % reduction in greenhouse gas emissions compared to year 1989.

The purpose of the EU trading scheme emissions of greenhouse gases (EU ETS) is to promote a mechanism for reducing emissions of greenhouse gases by economic agents such emissions -generating activities, so that the fulfillment of EU commitments under the Kyoto Protocol to be less expensive.

Operation of the scheme is based on emission allowances trading greenhouse gas emissions. A certificate of emissions of greenhouse gases is the title that confers an installation right to emit one tonne of carbon dioxide equivalent in a defined period . Eight sectors have been defined ( allocation of) ETS: energy sector, refinery sector , the production and processing of ferrous metals, cement industry, lime industry, glass industry, ceramic industry, pulp and paper sector. Once the number of allowances to each of its eight sectors, they are allocated to installations within the sector.

According to the law 780/2006, Romania allocates emission allowances for greenhouse gas free. The reserve for new entries unused at the end of 2008 - 2012 was valued by auction. The number of allowances were allocated in 2007 was 74,836,235. The number of allowances to be allocated in the second period (2008-2012) was 379 721 760 (the whole period) , with a mean value of 75,944,352 annually.

In the South West Region of the pollutants covered by the Kyoto Protocol, the emissions inventories following: carbon dioxide , methane and nitrous oxide.

In Mehedinti county has been implemented the JI project "Improvement of efficiency Heating System in Drobeta Turnu Severin . "

JI project "Improving the efficiency of district heating systems in Drobeta Turnu Severin" is mainly heat exchangers heating points and secondary network distribution of heat and hot water. Thus it is considered secondary distribution network redesign and replacement of approx. 190 km of pipelines for the distribution of heat and hot water with new pipes pre-insulated. In addition the project includes the replacement of approx. 114 heat exchangers 38 substations. Meters will be installed for heat and hot water out of points both thermal and final consumers.

The project will reduce heat loss both in the secondary distribution network and the substations . This will reduce fuel consumption and thus emissions of greenhouse gases in the CET - ROMAG THERMO. During the project (2006 - 2012) was estimated 371 667 tonnes of CO<sub>2</sub> reduction.



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# THE ROLE OF ETHICS FOR COST ACCOUNTING PROFESSIONALS

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**Abstract:** The purpose of this paper is to improve the understood importance of ethics for cost accounting professionals as a tool for successful cost accounting system. Also, present study is outpointing the implications of ethical conduct over the cost accounting system and, also, a review of ethical standards and principles for cost accounting professionals.

The value contribution of this paper comes from a critical review of the ethics of cost accounting professionals presented by the most important cost accounting professional institutes, showing the role of ethics for a cost accounting system, and the need to treat cost accounting ethics as an important discipline of accounting curricula.

The paper stops at the conceptual level, and represents a starting point for studying cost accounting ethics for Romanian cost accounting professionals and it also outlines an agenda for further research.

**JEL classification:** M41, M21

**Key words:** cost accounting system, ethical standards, cost accounting profession, accounting curricula, key factors

## 1. INTRODUCTION

One recent study shows an increase in the number of articles on accounting ethics field published annually from around 1995 (Bamton, R. and Cowton, C.J., 2013). Another study shows that ethics among professionals diminished with age (Sankaran, S. and Bui, T., 2013). Also, can be said that the trend is on a positive path, because of increasing number of ethical studies and the fact that the younger professionals are more ethical than the old ones.

The importance of accounting ethics was more and more often highlighted (Tweedie, D. et al., 2013; Atlas, J., 2013), but also, the need to improve ethics education on accounting (AAA, 2012; Bernardi and Arnold, 2004).

Also, Kaplan (Atkinson et al., 2012, p: 345) says that employees ethical judgement is often challenged

- 1, by requests to tailor information to favor particular individuals or groups
2. Pleas to falsify reports or test results
3. Solicitations for confidential information

#### 4. Pressures to ignore a questionable or unethical practice

Also, in lack of rules and regulations, the cost accounting profession is driven by the specific methods and techniques, letting an enormity of space for subjectivism. Interpretations of the data and the recommendations that follows are made in accordance with cost accounting principle "different costs for different scope". This principle means to use specific information for specific situation, giving space for more subjectivism. Also, choosing between specific methods and techniques can influence the final outcome, and the subjectivism intervenes again.

Therefore, it is known that both financial accounting and cost accounting systems are mandatory. Anyway, rules of measurement and reporting data are different from financial to managerial accounting system. The financial accounting system, is conducted in accordance with rules and regulations. Regarding cost accounting system, there are not mandatory rules and regulations.

This fact brings in front a very important question regarding the success factors of the cost accounting system, respectively what ensures the factors that are needed for cost accounting system to succeed.

## 2. OBJECTIVES

The purpose of this paper is to improve the understood importance of ethics for cost accounting professionals as a tool for successful cost accounting system. Also, present study is pointing out the implications of ethical conduct over the cost accounting system and, also, a review of ethical standards and principles for cost accounting professionals.

The aim of this study is to answer to a very important question regarding the core of the cost accounting system, respectively what ensures the factors that cost accounting system needed to succeed.

Also, the study objectives are:

4. Present the functions of a cost accounting system
5. Identify the key factors of a successful cost accounting system
6. Identify the role of ethics in a successful cost accounting system.

## 3. METHODOLOGY

The present paper takes the form of literature review and argument. This study is based on literature review for first objective and, it is based on authors' argumentation for third and fourth objective. Data are collected from cost accounting books, academic articles on accounting ethics field and other accounting academic papers.

The information is analyzed in a critical manner in order to present the role of cost accounting ethics for a successful cost accounting system.

## 4. ANALYSES

The consequences over the company performances are different when is caused by non-ethical financial accounting behavior or non-ethical cost accounting behavior. In first case, non-ethical behavior will have negative impact in the form of fines, legal judgments and public scandals affecting company's image.

Effects of non-ethical behavior of cost accounting professionals are bad quality of informations which can lead to inefficiently decisions and, in the end, to low company performances. This low performances can be in terms of quality of the products or services, employee motivation, financial performances or malfunctions of the different company subsystems with effects on the long terms financial performance. Financial non-ethical behavior has negative effects regarding external environment, while cost accounting non-ethical behavior has negative effects regarding internal environment. Also, non-ethical cost accounting behavior lead to mistrust in cost accounting system, transforming this system in a set of activities which are generating only costs, and which are not leading to value creation

The aim of this study is to answer to a very important question regarding the core of the cost accounting system, respectively whath ensures the factors thath cost accounting system needed to succeed.

#### ***4.1. Present the functions of an cost accounting system***

The literature regarding the cost accounting field is offering a list on cost accounting system characteristics and functions (Lianabel, O., 2004, p: 3-5; Zimmerman, J.L., 2011, p:4-5; Atkinson et all., 2012, p: 342). Analyzing the data, we are able to identify the following functions of cost accounting system.

- a) delivering accurate, timely, consistent and flexible informations in order to sustain the managerial decision and control processs
- b) combined with evaluation and rewarding system it becomes part of the motivational system
- c) it becomes a support function for financial accounting.

#### ***4.2. Identify the key factors of a successful cost accounting system***

Starting from th functions of a cost accounting system, it is possible to identify the key factors for a successful cost accounting system as:

- 1) Information quality, in terms of accuracy, time, consistency and flexibility
- 2) The trust which is given by the information supplier (cost accountant).

Information quality it is a factor of success due to the decisional system need of accurate, timely, consistent and flexible informations (Atkinson et all., 2012, p: 342). Also, additional to the quality informations, another key factor has been considered the trust given by the cost accounting professionals. These because, in order tot make decisions based on cost accounting informations, among the quality of informations, managers need to be sure of ethical integrity of the cost accountant professionals (Buys, P. et al., 2012).

#### ***4.3. Identify the role of ethics in a succesful cost accounting system***

Cost accounting ethical standards are provided by most larger cost accounting professionals associations. We have analyzed two of such ethical standards guides.

First one was Chartered Institute of Cost Accountans (CIMA) Code Of Ethics. Also, CIMA`s code of ethics is issuing following ethical fundamental principles:

Integrity, Objectivity, Professional Competence and Due Care, Confidentiality, Professional Behavior.

Second one was Institute of Management Accountants (IMA) Statement of Ethical Professional Standards. Also, IMA's is issuing following ethical standards: Competence, Confidentiality, Integrity, Credibility.



**Figure no. 1 The role of ethics in cost accounting system**

So, for a cost accounting professional both, CIMA's Code of Ethics, and also IMA's Statement of Ethical Professional Standards suggest that it is needed the appropriate level of competence and an ethical behavior which is leading to trust, in order to perform in cost accounting profession. Also, considering ethics is inversely related to individual competitiveness (Sankaran, S. and Bui, T., 2013) strengthens this hypothesis.

Also, considering key factors of a successful cost accounting system can be said that cost accounting ethics is such a key factor for a successful cost accounting system. Therefore, the role of ethics for the cost accounting system is to ensure that the system is working properly and performs its functions at the required level.

In other words, in lack of rules and regulations, the cost accounting profession is driven by the specific methods and techniques, leaving an enormity of space for subjectivism. Interpretations of the data and the recommendations that follow are

made in according with cost accounting principle “different costs for different scope”. This principle means to use specific datas for specific situation, giving space for subjectivism. Also, choosing between specific methods and theniques can influence the final outcome, and the subjectivism intervenes again.

Also, ethical principles and standards should be the factors which ensures the quality of informations and the trust in system needed for a optimal work of the cost accounting system.

Successful cost accounting system is influenced by the professional ethics trough link between competence and ethical behavior, information quality and trust, and cost accounting system (Figure no. 1).

## 5. CONCLUSIONS

For a cost accounting professional both, CIMA`s Code of Ethics, and also IMA`s Statement of Ethical Professional Standards suggest that it is needed the appropriate level of competence and an etical behavior which is leading to trust, in order to perform in cost accounting profession.

Considering key factors of a successful cost accounting system can be said thath cost accounting ethics it is a key factor for a successful cost accounting system. Therefore, the role of ethics for the cost accounting system is to ensure thath the system is working properly and performs his functions at the required level.

Also, ethical principles and standards should be the factors which ensures the quality of informations and the trust in system needed for a optimal work of the cost accounting system.

As a conclusion, was shown thath successful cost accounting system is influenced by the professional ethics trough link between competence and ethical behavior, information quality and trust, and cost accounting system.

In addition to the showed role of cost accounting ethics for cost accounting professionals, and considering thath moral development and moral reasoning are associated with ethical behavior (Abdolmohammadi, M. J., and C. R. Baker, 2007), the need to embed the cost accounting ethics in cost accounting curricula is most important issue to solve.

The paper stops at the conceptual level, and represents a starting point for studying cost accounting ethics for Romanian cost accounting professionals and it also outlines an agenda for further research.

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# **A MODEL OF THE STRATEGIC MANAGEMENT**

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**Abstract:** : The strategic management represents a modern form of company's management based on the prediction of the environmental changes, on the evaluation of the company's internal potential and also on the operating of the modifications that are imposed in order to harmonize it with the environment, to achieve the mission and the established objectives, to assure its lasting survival. A model of the strategic management process is shown in this paper.

**JEL classification:** C35 Q53 Q58

**Key words:** : strategy, strategic management, strategic plan,model,changes

## **1. INTRODUCTION**

Although the expression of strategic management was officially introduced in the theoretical language even since 1973, during “The First International Conference of Strategic Management” organized by I.H. Ansoff at the Vanderbilt University, the acceptances of this concept given by an author or other are in general quite different, the strategic management being considered as the process that aims to facilitate the management of an organization and to use the strategy for orienting the actions; it incorporates the putting into practice of the strategic actions related to structural and cultural factors

## **2. OBJECTIVES**

1.A kind of management that aims to assure in time the best possible equivalence between on one hand the exigency of the environment, internal and



external partners and on the other hand the managers' goals who is interested of the interior as well as the exterior of the enterprise, the political and economical dimension and confers an important role to enterprise's structure and culture;

2.A special mood of the enterprise's management that aims to assure a tight relation between strategy and operations; it means that all the operational decisions, which are just decisions of the operating management, are examined from a strategic view.

3.The process in which the managers establish the long-term orientation of the enterprise, propose specific performance objectives, develop strategies for all these objectives accomplishment- according with the internal and external factors- and try to perform the proposed plans.

4.A set of decisions and actions which aims to the development of one or more effective strategies in order to complete the enterprise's objectives;

5.The process through which the company's management establishes the long term directions and results of the company, assuring an attentive formulation, the appropriate implementation and a continuing evaluation of the strategy.

6.A set of decisions and actions which have as a result the formulation and the implementation of the projected strategies in order to achieve the aims of the company.

7.The process through which the top management of the company determines the long-term evolution and its performances assuring a strict formulation, an appropriate application and a continuing evaluation of the established strategy.

### **3. METHODOLOGY**

In spite of all these, it can be estimated that there is certain consent between the points of view expressed by some authors who focus on the recognition of the fact that the strategic management represents a modern form of company's management based on the prediction of the environmental changes, on the evaluation of the company's internal potential and also on the operating of the modifications that are imposed in order to harmonize it with the environment, to achieve the mission and the established objectives, to assure its lasting survival

### **4. ANALYSES**

Because each component of strategic management entails judging whether to continue with things as they are or to make changes, the task of managing strategy is a dynamic process - all strategic decisions are subject to future modification. Changes in the organization's situation and ups and downs in financial performance are constant drivers of strategic adjustments.

A model of the strategy issuance of strategic management is shown in figure 1 [2].

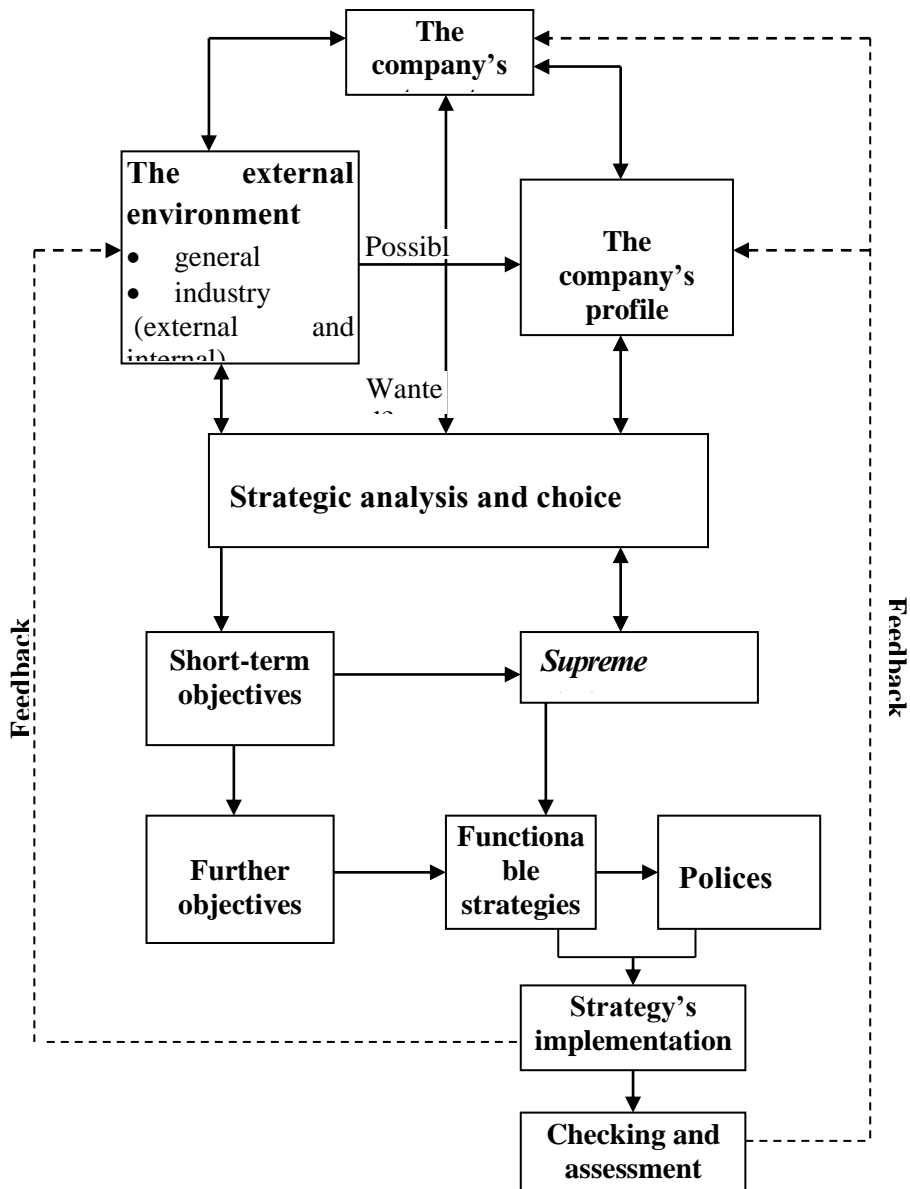


Figure 1. Strategy issuance of strategic management

#### 4.1 Critical

But a simple model of the strategic management process is shown in Figure 2 [3]. The first three components, in combination, give direction to the enterprise, establish the directional map for strategic action, and, in effect, define what we shall call an organization's strategic plan. The fourth component is easily the most complicated and challenging one because it involves not only deciding on but also undertaking the administrative actions needed to convert the strategic plan into results;

indeed, orchestrating the execution of strategy is probably 5 to 10 times more time-consuming than is formulating the strategic plan. The fifth component, evaluating strategic performance and making corrective adjustments, is both the end and the beginning of the strategic management cycle. The march of external and internal events guarantees that the time will come for making revisions in the four previous components. Most of the time, revisions will be of the fine-tuning variety, but occasions for major overhaul in one or more components arise-sometimes because of significant external developments and sometimes because of sharply sliding financial performance.

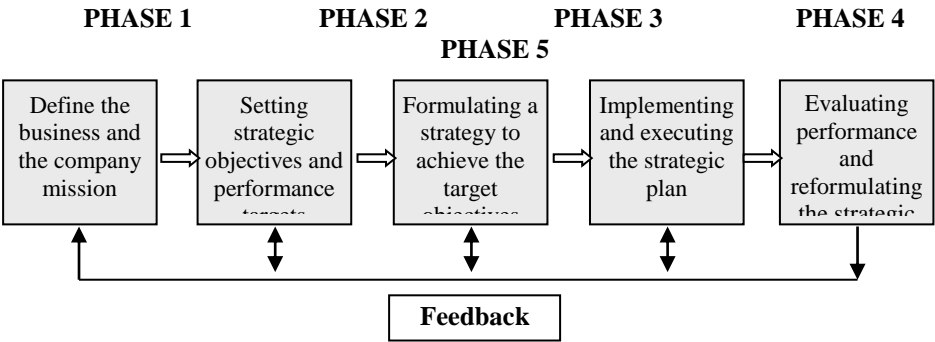


Figure 2. Model of strategic management

**Characteristics of the Process.** While defining the business, establishing strategic objectives, formulating a strategy, implementing and executing the strategic plan, and evaluating performance accurately portray the conceptual elements in managing an enterprise's strategy, the process is not quite so cleanly divided and neatly performed in actual practice. First, managers do not necessarily, or even usually, go through the sequence in rigorous lockstep fashion. Often there is interplay back and forth between the elements; for example, consideration of what strategic actions to take can provoke discussions of whether and how the strategy can be implemented with real effectiveness. Moreover, the boundaries between the components are some- times hard to distinguish in practice: establishing a strategic mission shades into setting objectives for the organization to achieve (both involve direction-setting); objective-setting shades into considering whether and how strategies can be formulated to achieve them; and deciding on a strategy is nearly always entangled in discussions about the direction the organization needs to take and the position it should try to assume. Second, the tasks involved in strategic management are never isolated from everything else that falls within a manager's purview. Strategy has to be formulated and implemented in the midst of a managerial schedule that is fragmented with appointments, meetings, paperwork deadlines, unexpected problems, and momentary crises. It is incorrect to construe the job of managing strategy as the exclusive task of managers, even though it may well be the most important function they perform where organizational success or failure is concerned.

Third, the demands that strategy management puts on the manager's time are irregular. Strategic issues, new opportunities, and bright ideas about strategy or its implementation do not appear according to some ordered timetable; they have to be dealt with whenever they arise. Strategic issues soak up big chunks of management time during some weeks and take a backseat in other weeks.

Finally, formulating and implementing strategy must be regarded as something that is ongoing and that evolves. [1] What qualifies as a surefire high-performance strategy today is sooner or later rendered stale by events unfolding both inside and outside the enterprise. The task of "strategizing" can never therefore be a one-time exercise. While the "whats" of an organization's strategic mission and long-term strategic objectives, once established, usually present fairly stable targets to shoot for, the "hows" of strategy evolve regularly in response to changes in an organization's internal situation and external environment. As a consequence, fine-tuning-type changes in strategic plans, and an occasional major change in strategic thrust, are normal and expected (big strategy changes, however, cannot be made often). The need to keep strategy in tune with an organization's changing situation makes the strategic management process dynamic and means that the prevailing strategy is rarely the result of a single comprehensive analysis. Strategic decisions are made over a period of time, not all at once; moreover, previous decisions are modified and decisions to initiate new strategic moves are forthcoming from time to time. Much of the time strategy evolves in a fairly orderly manner, but sometimes the strategy is crisis-driven, forcing a number of big strategic decisions to be made rapidly.

Similarly, strategy implementation is the product of incremental improvements, internal fine-tuning, the pooling effect of many administrative decisions, and gradual adjustments in the actions and behavior of both managerial subordinates and employees. Implementation is not something that can be made to happen overnight. The transition from the old strategy to executing the new strategy takes time; normally, the larger the degree of strategic change, the more time it takes for the new methods of implementation to take hold.

## **5. CONCLUSIONS**

Managerial jobs with strategy-making/strategy-implementing roles are thus quite numerous and common. The need to understand the ins and outs of strategic management and to be skilled in strategic thinking, strategic analysis, and methods of strategy execution is a basic aspect of managing and is not something that only top managers need to know and to worry about.

Since the scope of a strategy manager's role in the strategy-making/strategy implementing process plainly varies according to the manager's position in the organizational hierarchy, "the organization" under a strategy manager's direction should henceforth be understood to mean whatever kind of organizational unit the strategy manager is in charge of—whether it is an entire company or not-for-profit organization, a business unit within a diversified company, a major geographic division, an important functional area unit within a business, or an operating department or field unit reporting to a specific functional area head. This will permit us to avoid using the awkward phrase "the organization or organizational subunit" to

indicate the alternative scope of the strategy manager's area of responsibility and place in the managerial

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# STATISTICAL STUDY ON UNEMPLOYMENT IN SOUTH-WEST OLTENIA REGION

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**Abstract:** Unemployment is a state of imbalance in the labor market in which there is an excess of demand over the supply of jobs. To ensure sustainable growth, any economic policy must aim low unemployment. In this paper, the authors have proposed to carry out a statistical study on the evolution and structure of unemployment in the South West Oltenia Region.

**JEL classification:** J64, E24, C82

**Keywords:** unemployed person, long-term unemployment, youth unemployment, gender unemployment, area unemployment.

## 1. INTRODUCTION

One of the most important issues facing the world today is unemployment. By its great extent, by its complex structures and especially by its different variations, unemployment has become a macro-social subject of heated theoretical, methodological and political- ideological debate. In the literature we find various tools to analyze unemployment, also official statistics - both national and international - appeal to different methods of recording and measuring it, fact which generates conceptual confusion. As a principle, unemployment reflects the number of people who have an official unemployed status. It is considered to be unemployed the person who is seeking a paid job and currently does not have one. International Labour Office (ILO) defines an unemployed person as the person seeking for a paid job because is lacking it and he/she is available to start work immediately (15 days).

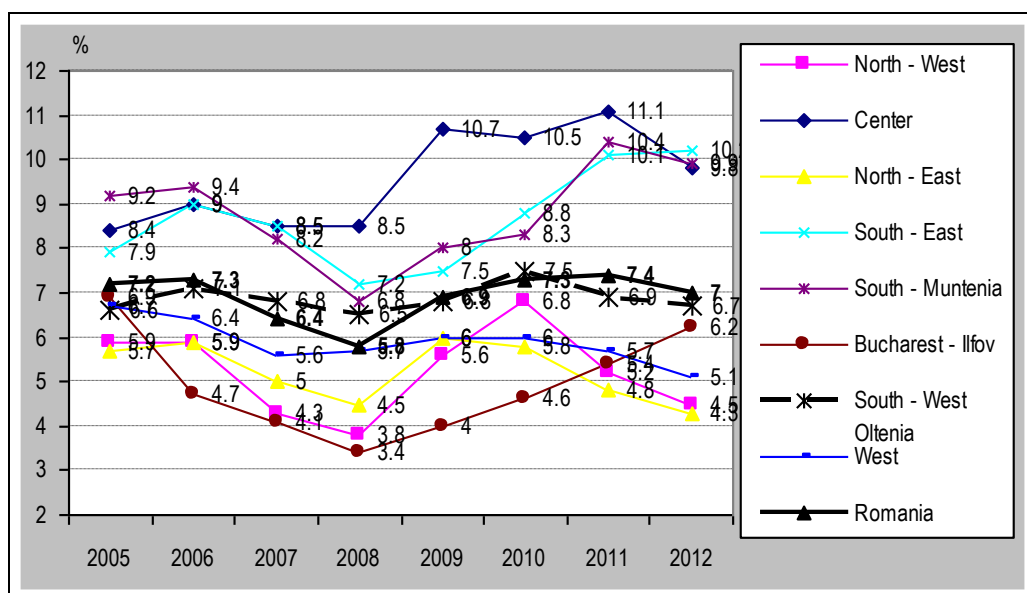
Unemployment is approached and analyzed as an imbalance in the labor market as the place of encounter and confrontation between aggregate demand and supply of labor at a national level. The knowledge of the direct causes of unemployment and the forms generated by these causes has a great importance for the assessment of its perspectives and for conceiving ways to improve employment and the socio-economic status of the unemployed persons.<sup>30</sup>

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<sup>30</sup> For additional items on the unemployment, see also *ECONOMIC FORECAST. Theory. Tests. Applications*, Ciurlău C. (coordinator), Universitaria Publishing House, Craiova, 2008, pp.84-93.

## 2. STATISTICAL INDICATORS OF UNEMPLOYMENT DYNAMICS AND STRUCTURE IN SOUTH-WEST OLTENIA REGION

Unemployment rate at national level in the 2005-2012 period had a rather small variation on an interval of less than two percentage points (from 5.8 to 7.4%): after an increase in 2006, followed by a reduction until 2008 (when it reached the minimum of the period, 5.8%), years 2009-2011 brought a new growth (up to 7.4%), completed with a reduction in 2012 to 7% - figure no. 1. In territorial unemployment rate was very different from one region to another. Forefront at unemployment has proven to be the Centre Region (with a maximum of 11.1%, but a decreasing trend), while low levels have been recorded for the Bucharest-Ilfov Region (but an increasing trend). Oltenia Region has had an evolution that blends with the national average, keeping overall, its tendency.

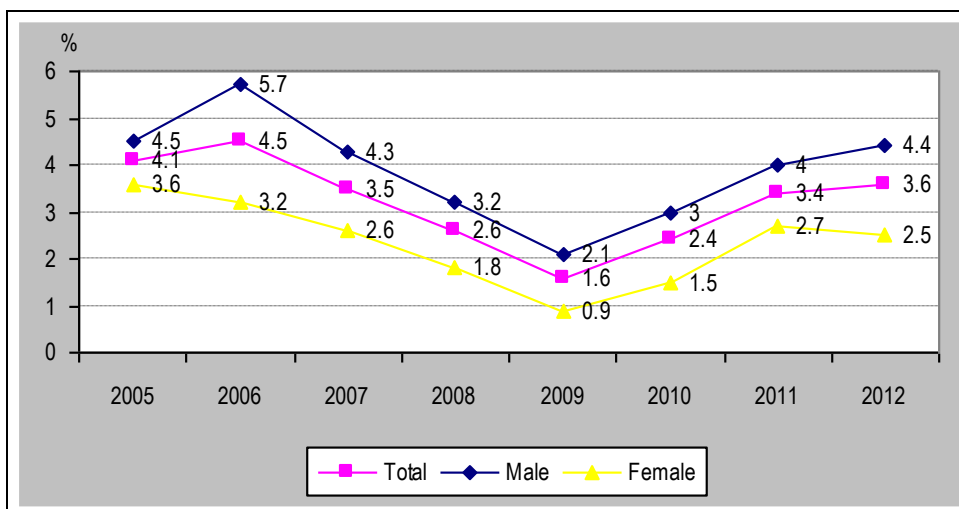


Source: National Institute of Statistics, Romanian Statistical Yearbook, 2011-2013

**Figure no. 1. Dynamics of the unemployment rate in the development regions of Romania between 2005-2012**

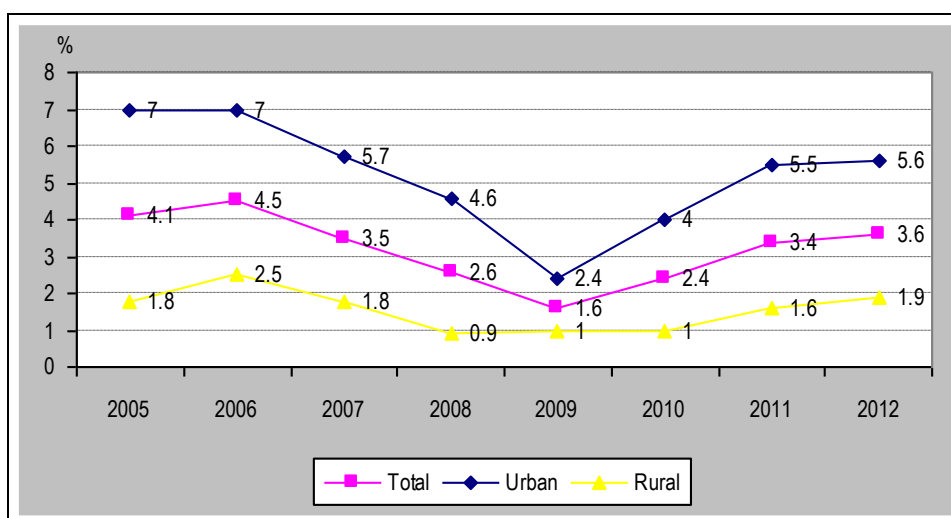
In the 2005-2012 period, ILO long term unemployment rate (12 months and over) in Oltenia was swing: after an increase in 2006, it encountered a reduction by 2009, but years 2010-2012 brought new growth (up 3.6%) - Figure no. 2. The evolution of unemployment rate by gender shows that male unemployment was placed above total unemployment over entire period, while female unemployment was under total unemployment during the eight years. The difference between the two categories of rates range from 0.9 to 2.5% (in 2012 it was 1.9%).

Figure no. 3 depicts ILO long term unemployment rate in Oltenia Region, by area. Compared to the total unemployment rate, the urban rate was superior, while the rural rate was lower than the total one.



Source: National Institute of Statistics, Romanian Statistical Yearbook, 2011-2013

**Figure no. 2. Dynamics of the ILO long term unemployment rate (12 months and over) in Oltenia Region, by gender, between 2005-2012**

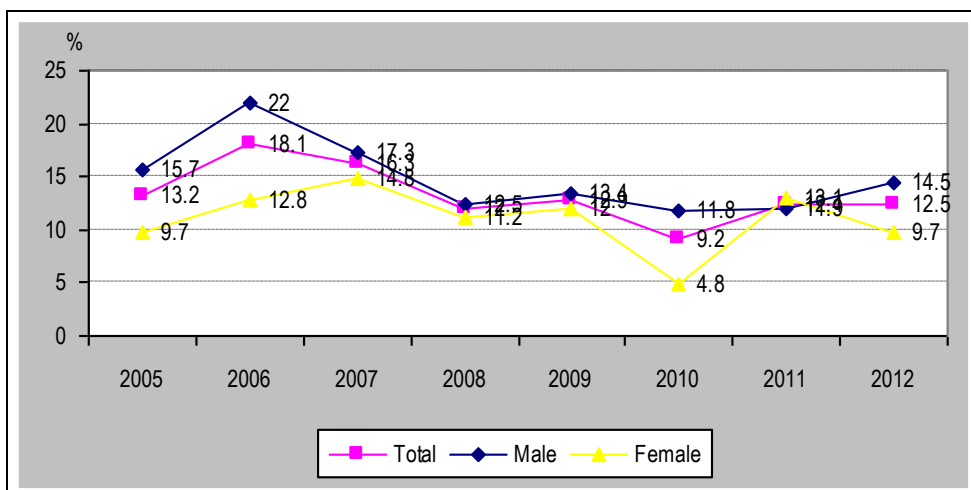


Source: National Institute of Statistics, Romanian Statistical Yearbook, 2011-2013

**Figure no. 3. Dynamics of the ILO long-term unemployment rate in Oltenia Region, by area, between 2005-2012**

Dynamics of the ILO long-term youth unemployment rate (6 months and over) in Oltenia, by gender, between 2005-2012 is plotted in Figure no. 4. Although youth unemployment is much higher than the general, a downward trend is noted in the studied period (although the last two years brought a slight increase). Also for this indicator the male unemployment is higher than the feminine one, except for 2011, when there was reverse relationship between the two indicators.

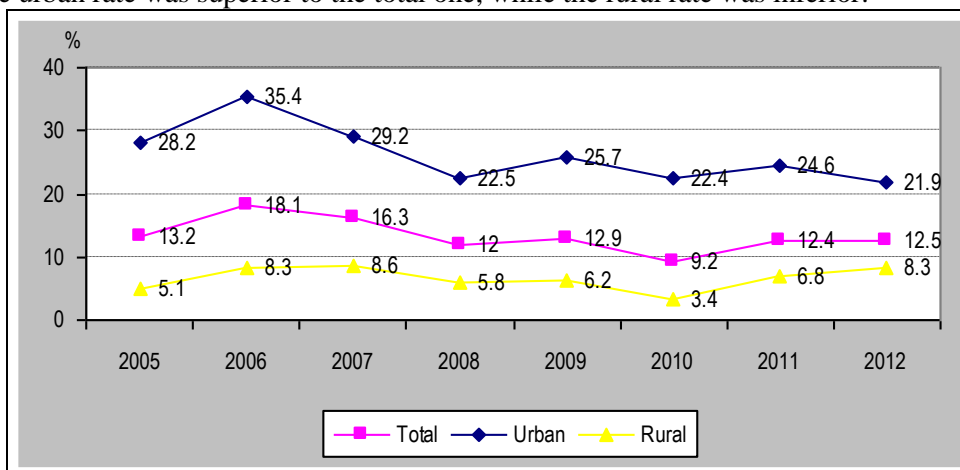




Source: National Institute of Statistics, Romanian Statistical Yearbook, 2011-2013

**Figure no. 4. Dynamics of the ILO long-term youth unemployment rate in Oltenia Region, by gender, between 2005-2012**

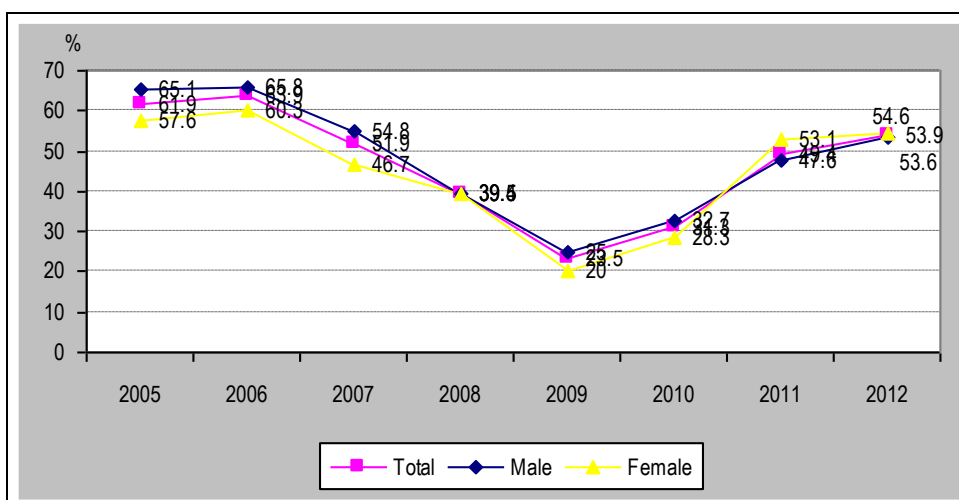
In Figure no. 5 is plotted the evolution of the ILO long-term youth unemployment rate in Oltenia, by area. Compared to the overall unemployment rate, the urban rate was superior to the total one, while the rural rate was inferior.



Source: National Institute of Statistics, Romanian Statistical Yearbook, 2011-2013

**Figure no. 5. Dynamics of the ILO long-term youth unemployment rate in Oltenia Region, by area, between 2005-2012**

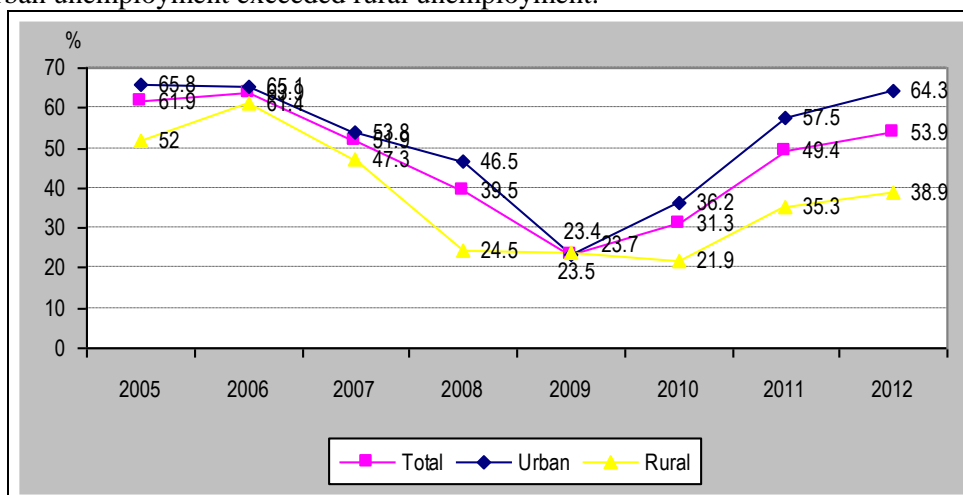
Incidence of ILO long-term unemployment in Oltenia, by gender, between 2005-2012, is shown graphically in Figure no. 6. From 2006 to 2009 the trend was decreasing, but in 2010 the indicator returns to growth (which extended up to 2012). Of course, the incidence of male unemployment exceeds the feminine one, except for the last two years, when the values of the two indicators were reversed.



Source: National Institute of Statistics, Romanian Statistical Yearbook, 2011-2013

**Figure no. 6. Dynamics of the incidence of ILO long-term unemployment in Oltenia Region, by gender, between 2005-2012**

Incidence of ILO long-term unemployment in Oltenia Region, by area, is shown in Figure no. 7. As in the previous case, the trend was decreasing until 2009, and since 2010 we have had a new growth (continued until 2012). The incidence of urban unemployment exceeded rural unemployment.

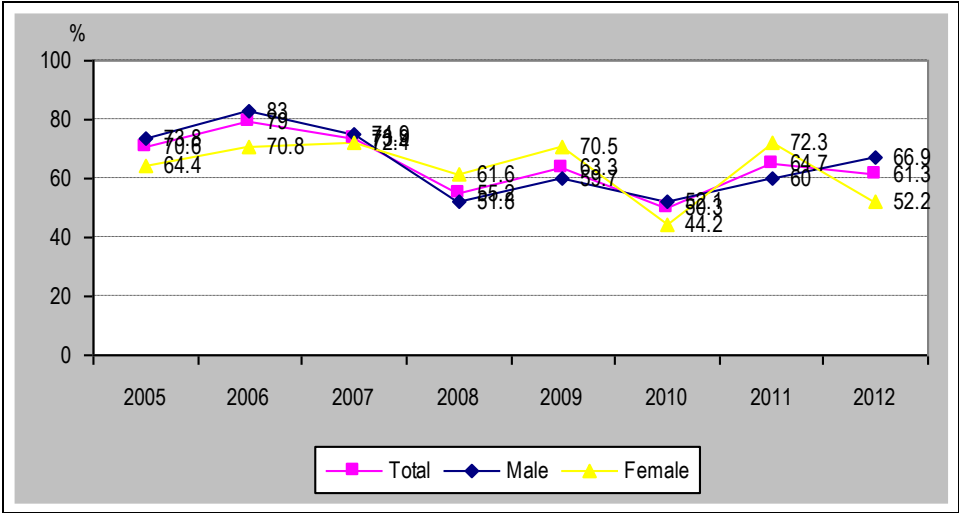


Source: National Institute of Statistics, Romanian Statistical Yearbook, 2011-2013

**Figure no. 7. Dynamics of the incidence of long-term ILO unemployment in Oltenia Region, by area, between 2005-2012**

Figure no. 8 presents the incidence of ILO long term youth unemployment in Oltenia Region, by gender. The trend is slightly decreasing, but by gender the evolution is somewhat strange encountering a great intertwining between levels: in the first three years, the incidence of male unemployment exceeded the levels encountered among the female population, but followed two years with a reverse report between the

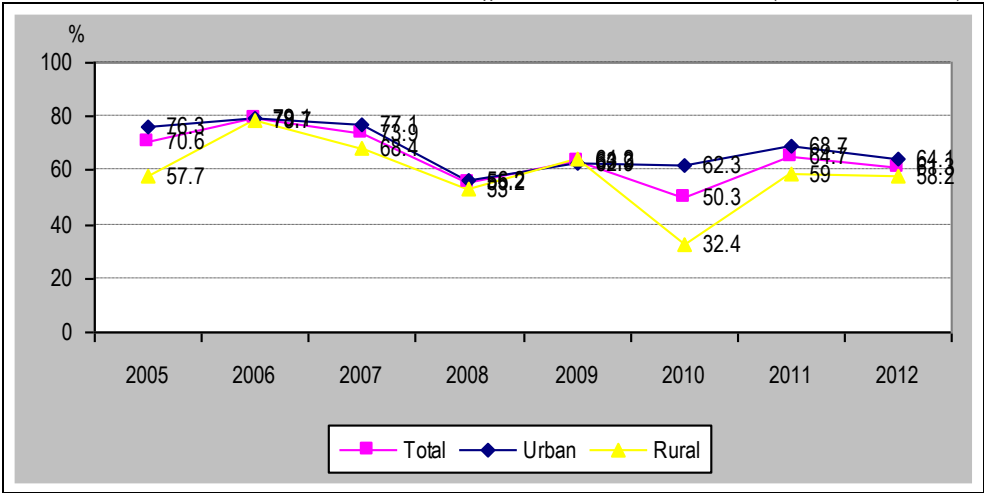
two indicators. The last three years show a permanent reversal of these levels, so that 2012 brought the incidence of the male unemployment over the female unemployment rate.



Source: National Institute of Statistics, Romanian Statistical Yearbook, 2011-2013

**Figure no. 8. Dynamics of the incidence of ILO long term youth unemployment in Oltenia Region, by gender, between 2005-2012**

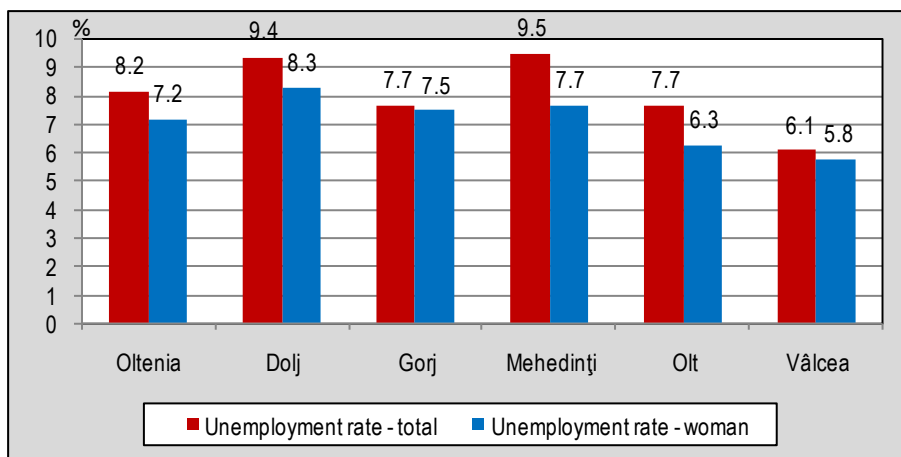
The incidence of ILO long term youth unemployment in Oltenia, by area, between 2005-2012, is shown graphically in Figure no. 9. Levels of unemployment in urban areas exceed the ones in rural areas. Unlike the early years of the studied period, the year 2010 brought a surprising value of the rural youth unemployment: is half the urban level. Since 2011, levels returned to „normal” for both areas (urban and rural).



Source: National Institute of Statistics, Romanian Statistical Yearbook, 2011-2013

**Figure no. 9. Dynamics of the incidence of ILO long term youth unemployment in Oltenia Region, by area, between 2005-2012**

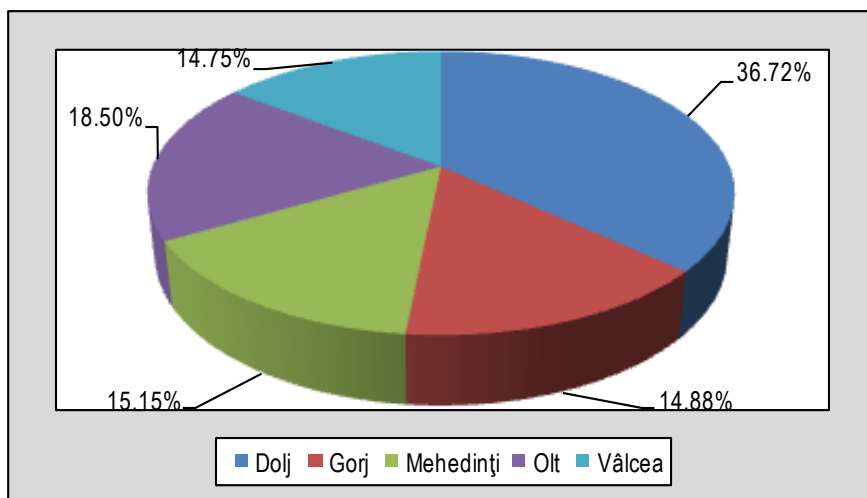
Unemployment rate in the counties of Oltenia in 2012, is shown in Figure no. 10. The maximum level of total unemployment rate is encountered in Mehedinți County (9.5%) and the lowest value is in Valcea (6.1%). The female unemployment rate recorded the maximum value in Dolj County (8.3%) and the minimum value in Valcea (5.8%).



Source: National Institute of Statistics, Romanian Statistical Yearbook, 2011-2013

**Figure no. 10. Unemployment rate in Oltenia Region, by county, in 2012**

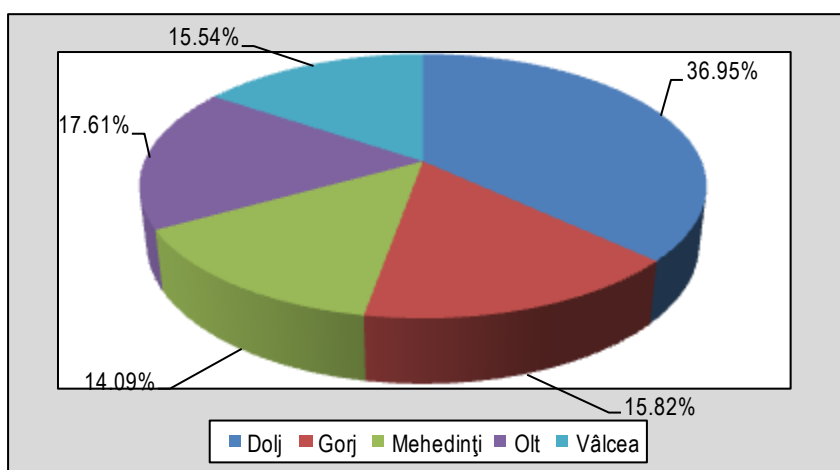
In 2012, from the total of unemployed persons in Oltenia (75.565), the largest share was held by Dolj County (36.72%) and the lowest share by Valcea County (14.75%) - Figure no. 11.



Source: National Institute of Statistics, Romanian Statistical Yearbook, 2011-2013

**Figure no. 11. Structure of registered unemployed in Oltenia Region, by county, in 2012**

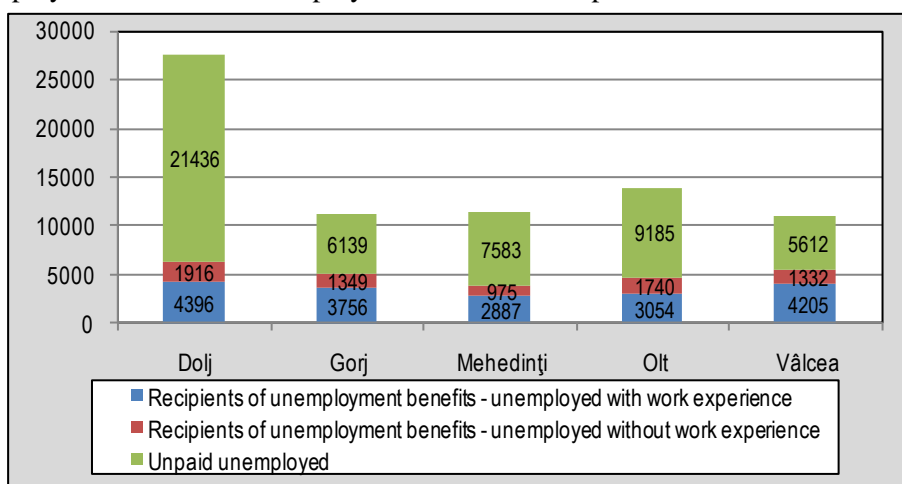
Regarding unemployed women, out of 31.391 in 2012, Dolj County has the largest share of the unemployed women in Oltenia (36.95%) and Mehedinți County has the lowest percentage (14.09%) - Figure no. 12.



Source: National Institute of Statistics, Romanian Statistical Yearbook, 2011-2013

**Figure no. 12. Structure of unemployed women in Oltenia Region, by county, in 2012**

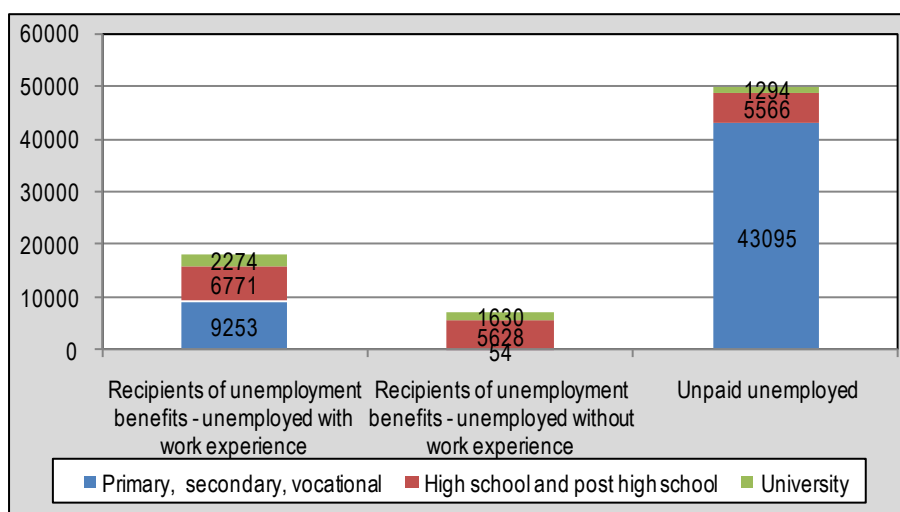
The structure of unemployed persons by types of protection (Recipients of unemployment benefits - unemployed with work experience; Recipients of unemployment benefits - unemployed without work experience; Unpaid unemployed) in Oltenia, by counties, in 2012, is shown in Figure no. 13. Within each county, the largest share was held by unpaid unemployed and the smallest share by Recipients of unemployment benefits - unemployed with no work experience.



Source: National Institute of Statistics, Romanian Statistical Yearbook, 2011-2013

**Figure no. 13. The structure of unemployed persons by types of protection and by county in Oltenia Region, in 2012**

The structure of unemployed persons by types of protection and levels of education, in Oltenia, in 2012, is shown in Figure no. 14. From the graph is resulting very clearly the influence that studies have on finding a job.



Source: National Institute of Statistics, Romanian Statistical Yearbook, 2011-2013

**Figure no. 14. The structure of unemployed persons by types of protection and levels of education, in Oltenia Region, in 2012**

### 3. CONCLUSIONS

ILO unemployment rate at national level between 2005-2012 had a relatively low variation: after an increase in 2006, followed a reduction until 2008, but years 2009-2011 brought a new growth, finished with a decrease in 2012. A territorial analysis show that unemployment rate was very different from one region to another. The leading position in unemployment is was held by the Central region, while low levels were recorded for the Bucharest-Ilfov region. Oltenia Region have had a development that blends with the national average, keeping overall, its tendency.

ILO long term unemployment rate (12 months and over) in Oltenia was oscillating: after an increase in 2006, there was a reduction by 2009, followed by a new growth between 2010-2012. The evolution of unemployment rate by gender shows that male unemployment was placed the entire period, over total unemployment, while female unemployment was, in the eight years, under total unemployment. Compared to the total unemployment rate, the urban unemployment was above the total level, while the rural rate was below.

ILO long-term youth unemployment rate in Oltenia, by gender, show a decreasing trend. For this indicator than male unemployment is also higher than the feminine one, except for 2011, when there was reverse relationship between the two indicators. Compared to the overall unemployment, the urban rate exceeded the total level, while the rural rate was lower than the total level.

Incidence of ILO long-term unemployment in Oltenia, by gender, had a decreasing trend up to 2009, and since 2010 the indicator returned to growth (until 2012). The incidence of male unemployment outrun the feminine unemployment, except for the last two years, when the values of the two indicators were reversed. The

incidence of urban unemployment outrun the rural unemployment. For the incidence of ILO long term youth unemployment the trend was slightly decreasing, but by gender the evolution was unpredictable (in 2012 the incidence of male unemployment was bigger than the female unemployment). Unemployment levels in urban areas exceed the ones in rural areas.

The maximum level of total unemployment was encountered in Mehedinți County (9.5 %), while the minimum value was in Valcea (6.1%). The female unemployment rate recorded a maximum in Dolj County (8.3 %) and a minimum value in Valcea (5.8 %). In 2012, from the total number of unemployed persons in Oltenia (75.565), Dolj County held the largest share (36.72 %) and Valcea County held the lowest one (14.75 %). Regarding the total number of female unemployed, out of 31.391, Dolj County had the largest share (36.95 %) and Mehedinți County had the lowest percentage (14.09 %).

Structuring unemployed persons by types of protection shows that within each county, the largest share is held by unpaid unemployed and the smallest by Recipients of unemployment benefits - unemployed with no work experience. Structuring unemployed persons by types of protection and levels of education, demonstrates the influence that studies have on finding a job.

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# THE DESIGN OF THE ROMANIAN EDUCATION IN THE CONTEXT OF KNOWLEDGE-BASED DEVELOPMENT

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**Abstract:** In the current conditions of the knowledge-based development, particular importance is given to the investment in human capital, especially in the education achieved via the educational system. Thus, the main goal of our article aimed at analyzing the way the Romanian education is designed in the new knowledge society. The specific objectives have considered, in addition to consulting the specialized literature to outline the main theoretical-methodological and conceptual boundaries, a synthesized analysis of the key aspects which require a timely and relevant design on Education in Romania, in the context of the current state of knowledge and economic integration in the European Community.

**JEL classification:** I21, I25, E00, O10

**Key words:** education; knowledge-based economy; design; innovation; knowledge economy index

## 1. INTRODUCTION

The dynamism of the scientific, technological and economic environment at the end of the 21st century represents a permanent and persistent challenge for educational systems all over the world. One way or another, various aspects regarding the functioning of educational systems and their capacity to take over the changing signals coming from society are amply discussed upon in all countries. The quality of Education and the training technologies are discussed. Funding strategies from public and private sources of early education of young generations are analysed, and also of continuous education of those who have recently or long ago passed through the mechanism of initial training. They undermine the school's ability to meet personal expectations and aspirations of professional and social fulfillment, the correspondence between the offer of school training, of educational systems' institutions and the application/demand of professional skills and competencies expressed by those who act on the labour market as employers<sup>31</sup>.

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<sup>31</sup> Korka, M., The Romanian Higher Education Reform, into Transition and Reform, Economic Publishing House, Bucharest, 2001, p.160



The educational policy of the European Union, to which our country has fully adhered, is mainly based on respect for cultural and linguistic diversity of the integrated countries. Natural conditions, related to ensuring the quality of chances to the labour market for the citizens of the member states, impose norms and recommendations accepted by all states.<sup>32</sup> The Romanian educational system must respond, through content and organization, to internal and external opportunities, such as:

- the creation of a transparent educational system and competent with that of the Union;

- globalization, where the competitiveness of different economic areas is based on labour resources that have a wide range of abilities and knowledge permanently updated;

- adjusting to the information age. In order to be recognized as active members of the European society, people have to master the use of computer while educational institutions have to use information technology in developing the general and specialized curriculum;

- increasing the age for completing compulsory education which then allows immediate professionalization;

- the application of the latest educational theories and the implementation of the motivated and interactive curriculum;

- ensuring an effective education by applying creative evaluation techniques;

- rationalization and resizing of the school and institutional network, in line with demographic changes.<sup>33</sup>

To implement these priorities, the strategy in education provides **a set of programs and projects**, among which we mention the following:

- ✓ *drawing up the methodology underlying the design and dimension of education;*

- ✓ *restructuring of institutional network to ensure the quality of education for socio-professional integration in the European market;*

- ✓ *supporting educational alternatives;*

- ✓ *strengthening university autonomy;*

- ✓ *supporting private education.*

The ultimate objective of this strategy is the social, real assumption of a new scale of values which is necessary to consistently achieve options corresponding to a knowledge-based economy where transforming education is in fact vector of socio-economic development. We will succeed only if these values will be reflected in our actions, not just in the occasional speeches of noble days.

## 2. THEORETICAL APPROACHES ON DESIGNING EDUCATION

Alongside the development of competitive economy, partnership structures and unions were established. Structural reforms have taken place in administrative organization, an extensive process of decentralization of responsibilities and decisions

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<sup>32</sup>[http://www.edu2025.ro/UserFiles/File/LivrabileR1/diagnostic\\_panel2.pdf](http://www.edu2025.ro/UserFiles/File/LivrabileR1/diagnostic_panel2.pdf), Diagnostic analysis , „University and Knowledge”, Panel No. 2 Coordinator: Anton, A., Raportor: Miron, D., [Accessed on January, 25th, 2014]

<sup>33</sup> Romanian Government, *The National Development Plan 2007-2013*

related to community life. Establishments and educational institutions are increasingly involved in community life, we have achieved the transfer of decision-making skills, of collection and management of financial resources by the local public authority (for pre-university education). Regardless of the position or conotation which addresses the terminology of the word, the structural analysis and the design of education offer a set of tools and processing techniques for developing and piloting the volume of schooling under various stages of the reform programs, and also for a realistic forecast of the future educational development on the short and medium term.<sup>34</sup>

In other words, school planning, its need and importance make part of the overall strategy of the Government of a country, which through the socio-economic development programs and plans at national, regional and local level recommend qualifying/professional specialization of labour, in line with the absorption of the market economy, which we hope to be a functional one. From the researches made and the specialty materials consulted, it has resulted that all European states, and not only, use school planning, that is determining a certain volume of tuition at regional level or at national level for some states. In all states of the world education is considered a priority and particular attention is paid to it, being a major factor in the socio-economic development of a nation, even if it enters the category of non-productive and very expensive activities. As earlier mentioned, sizing the volume of tuition is ultimately a political decision of the Government because, according to the guidelines and character of the power, school projection may have a controlled or decentralized trend. Substantiating the design and dimension of the tuition volume is based on setting the educational offer and on its adjustment to the social, cultural, economic and administrative environment, and its implementation will be made by taking into account the elements/factors which directly influence it. In our country, the design and dimensioning of education still takes place at national level, while decentralization at the level of school inspectorates and universities is still limited. With regards to the university education, this one offers students a high general, scientific and technical preparation, and training in a particular specialization, preparing them to achieve the competencies required by the chosen field. The general objectives of the University Education mainly refers to the restructuring of higher education level. The European integration process has an important cultural and educational dimension. Increasing the trans-European mobility of the students requires the adoption of structural measures which have to lead to the national educational system compatibility with the systems of other European states. The recognition or equivalence of the study periods undertaken abroad becomes of particular importance in this context.<sup>35</sup> In order to regulate these issues, universities in Romania have introduced the system of transferable credits, and the Ministry of Education has proposed *a series of measures*<sup>36</sup> on the short term, which aim at:

- restricting the number of specializations;
- reviewing the study programs and their internal organization in accordance with the students' opinions, thus enabling a greater flexibility;

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<sup>34</sup> The Romanian Government, *The National Program of Reform*, 2007

<sup>35</sup> \*\*\* Study on "The returns to various types of investment in education and training", completed by London Economics, European Commission, Directorate General for Education and Culture, 2005

<sup>36</sup> Government Program for Education 2013 - 2016

- converting the current education from a predominantly reproductive one into a creative one;
- increasing the quality of university education through the redeployment of scientific research at the basis of university studies;
- developing competencies regarding innovation and critical analysis;
- implementing at a larger scale a system of modules that can be capitalised and then adapted to the Romanian academic education;
- developing the interaction between the university and pre-university education which equally contributes to the formation of pupils and students;
- improving the system of information on the possibilities for employment and on the studies required;
- generalizing the electronic communication within the framework of the education system;
- developing international cooperation in the research and higher education field;
- improving the infrastructure (by taking into account, alongside the established resources, attracting contributions from the gross profit of business agents).

### **3. ROMANIAN EDUCATION IN THE CONTEXT OF KNOWLEDGE-BASED DEVELOPMENT**

Technological progress in telecommunications and digitization ensure the democratization of access to knowledge. On the threshold of the 21st century, the knowledge society tends to gain global proportions. At the same time, being aware of the rapid moral depreciation of knowledge and skills, the contemporary society is preparing to adopt a new behaviour towards education in order to become a lifelong learning society. In more developed countries, there is already a legal framework and they are experimenting various strategies of compatibility of the initial education with the requirements of continuous education.

The conference on global economy, held on the 10th – 12th of March, 1999 in Los Angeles by the Milken Institute, highlighted among the predominant factors of the 21st century the increase of human capital importance in creating wealth and welfare and the change of balance between old industries, intensive in standardized labour and new industries, intensive in science and innovation, a change in favour of the latter. It was also pointed out that the loss or deterioration of human capital in some countries imply recovery funds which are higher than those necessary for the recovery of the economy after the crisis phases. One can understand that even in periods of economic and financial difficulties, the society must not neglect the formation of human capital. The fact that education represents the key factor of present times is underlined by the presence of this topic on the agenda of the G-7 Summit of the most developed countries in the world, which was held in Cologne in June 1999. A Charter on Lifelong learning was even adopted in order to draw the world's attention on the necessary measures to address the main challenge nowadays: training and equipping all people in order to survive and prosper in the future knowledge-based economy. Education and lifelong learning are the passport to success in today's global economy and not only for our countries, but everywhere, all over the world – appreciated Prime Minister Tony Blair at the presentation of results from the Cologne Summit in the House of Commons

(June 21st, 1999). The investment in human capital represents first priority in the contemporary society faced with the rapid pace of the scientific and technological novelties, with the innovations in the sphere of trade and financial relations.<sup>37</sup> The 21st century is known as a period of intense changes in the financial techniques. If training in business and finance were limited to those specializations directly related to trade or finance, then the educational system would be ineffective, unable to solve a social requirement with an obvious tendency to generalization. In a modern society, where market powers play an increasingly important role in all human activities, knowing the business world is of great importance for all its members, and as soon as possible.<sup>38</sup> The mission of educational system becomes an essential part of the strategy of change. Learning must become creative, must develop the ability to solve problems. The initial formative level no longer meets the exigences of a society which finds itself in a constant and rapid transformation. Contemporary reality requires permanent training, respectively lifelong learning.<sup>39</sup> The change is induced by many factors, among which the first one is the ability to innovate and not to imitate, and also the willingness to cooperate, to inter-connect valuable and competitive activities from the sphere of knowledge, from industry and services, from the life of the communities. Through their implication in the innovative processes, the education institutions have to respond to this reality by increasing the emphasis on technological innovation and on the immediate applicability of research.<sup>40</sup>

The knowledge society gives new dimensions to the learning process. This will no longer be quartered exclusively in schools and educational institutions. The centre of gravity when it comes to learning will gradually transfer from schools to organizations and institutions, from pupils and students to employees. Every organization and institution that uses employees will thus become a second school where various forms of training will constitute the current currency. In accordance with the objectives of the Lisbon Strategy, transformations are necessary both in relation to the *knowledge-based society* and to the *modernization of the creative processes of human capital* which aim at *information society, at research and innovation developing and at education*.

Romania has to assume the new foundations of competitiveness by developing a culture of innovation, by encouraging creativity, by promoting partnership and disseminating to the community the results of the processes of the knowledge creation which become the foundations of the new competitiveness. Consequently, in our country *a society of knowledge* is built through education and research, the only one capable to bring prosperity, sustainable development and personal development of every citizen. Promoting the *four pillars of the knowledge-based society – education, research, development and innovation* – does not mean just a priority support of these social activities, it means, first of all, a new scale of values. We must make it so that those who continuously study, work in the research field,

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<sup>37</sup> De la Fuente, A., Ciccone, A., Human Capital in a global and knowledge based economy, [Online], Available on: <http://ideas.repec.org/p/aub/autbar/576.03.html>, [Accessed on January, 30th, 2014]

<sup>38</sup> Iancu, A. și Suci, M. C., Knowledge-based Society and Economy, Challenges and Opportunities for Romania, ASE, Bucharest, 2008

<sup>39</sup> Roșca, Gh. I., *The Knowledge-based Society*, Economic Publishing House, Bucharest, 2006

<sup>40</sup> Suci, M.C., Economy. The new economy and the knowledge-based society, First and second parts, ASE Publishing House, Bucharest, 2004

those who contribute to the development and innovation of institutions or technologies should enjoy the highest social prestige. All measures and actions proposed in this strategy aim not only at a new institutional and legislative arrangement, but especially at a new axiological commitment, a new hierarchy of values. We cannot have a society and economy of knowledge in Romania unless we believe in this country's values.

Some of the international organizations, including OCDE or the World Bank, have put special emphasis on competent management policies dedicated to these resources and specifically on innovative and educational policies. Therefore, the World Bank initiated the programs „*Education for the Knowledge-Based Economy*” and „*Knowledge for the Benefit of Development*”. The World Bank's experts have developed an evaluation methodology entitled *KAM (Knowledge Assessment Method)* where the *Knowledge Economic Index (IEC)* was used. This is an aggregate index that reflects the extent to which a country or a region is prepared to cope with the demands of the knowledge-based society and economy. Based on the KAM methodology, the main components of the knowledge economy are: economic and institutional organization; education; information and communication technologies; national systems of effective innovation. In relation with the IEC values in 2012, Sweden took the first place with an IEC value of 9,43 (where 10 is the maximum possible score to be reached) and Finland and Denmark took the next two positions. Romania was placed on position 44 (with a score of 6.82) among the 146 countries and has seen an improvement of the IEC performance for all four dimensions analyzed in comparison with the year 2000, as one can notice from table no. 1.

**Table no.1 Knowledge economy index in Romania, in 2000 and 2012**

| Country | Knowledge economy index |      | Economic and institutional regulations |      | Innovation |      | Education |      | Information and Communication Technologies |      |
|---------|-------------------------|------|--|------|------------|------|-----------|------|--|------|
|         | 2012                    | 2000 | 2012                                   | 2000 | 2012       | 2000 | 2012      | 2000 | 2012                                       | 2000 |
| România | 6.82                    | 5.66 | 7.39                                   | 5.46 | 6.14       | 5.24 | 7.55      | 6.37 | 6.19                                       | 5.56 |

Source: Adapted World Bank Statistics, 2012

From the analysis of the data presented in table No.1, one can ascertain that education is one of the components that has a substantial contribution to the aggregate index value of the IEC. The KAM methodology of the World Bank confirms that education, in general, and top level education, in particular (university studies, masters, doctorates, post-doctorate studies) become strategic priority investments, thus contributing to the improvement of a country's performance in relation to the various methods of benchmarking.<sup>41</sup> Lifelong education constitutes a real source of the sustainable competitive advantage on the long term. In the specialty literature one

<sup>41</sup> Suci, C. M., Drăgulănescu, V.I., ș.a., The role of universities in the knowledge-based society and economy. Implications for the Higher Economic Romanian Education, Economic Amphitheatre Magazine, Vol. XIII (30), June 2011, p.336-353

estimates that, in the context of the knowledge-based economy and society, enhancing the importance of investment in education occurs on the broader background of increasing the role of: intangible assets and the management of intangible assets; intellectual capital and intellectual capital management; creativity, innovation and creative and innovative management; knowledge and knowledge management.

#### **4. CONCLUSIONS**

An increasingly expressive feature of globalization is the reliance on knowledge, which is materialized into: increasing the role of human capital; centering the performance increments on highly educated and specialized human resources; allocating the benefits of development to those well-prepared and capable ones; the tight connection between knowledge and competitiveness.

Connecting the Romanian teaching institutions to the challenges of the knowledge-based society unquestionably implies a certified performance. It can thus begin by supporting the creation of some national poles of excellence which dispose of competitive advantages and which channel their energies towards international debates connection because without these kinds of links our country cannot take part in the worldwide system of knowledge production. The current stage of the globalization process creates the premises but at the same time accentuates the challenges of the knowledge-based society.

With regards to the design of education, we consider it appropriate to plan the volume of enrollment for the following reasons: we cannot school more pupils/students than the physical capacity of the network of educational establishments; the necessary number of teaching staff, of auxiliary teaching staff and of non-teaching personnel can be established only after determining the amount of schooling for an entire academic year, for all levels of training and for all forms of organization of the educational activity; since the academic year does not coincide with the financial year, settling annual state education budget is still based on the structure of flows of pupils/students and its size; determining the teaching staff by specialization/department is also made according to the flows of pupils and students put to school depending on areas of activity, specialization, jobs and types of schools.

In our opinion, an effective design in education requires information regarding the potential demand for certain specializations. The Ministry of Labour is the most appropriate institution to engage in conducting studies regarding the graduates' chances to get employed and their successes from the economic point of view and the transmission of this type of information to the persons dealing with design within the Ministry of Education, and also to the personnel from education institutions responsible of pupils and students' orientation and responsible of the curriculum development, too. Nevertheless, it is very likely that an economy such that of Romania's, which is rapidly evolving, to suffer frequent and substantial changes in the structure of labour demand. Therefore, the attempts to improve the capacity to forecast the demand and offer of jobs should come second place, after the formation of graduates with the greatest power to adapt.

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# **THE ROLE OF ENTREPRENEURSHIP IN THE DEVELOPMENT OF THE SERVICES SECTOR AND OF THE SOUTH-WEST OLTENIA ECONOMY**

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**Abstract:** Solving social and economic problems in the context of financial and economic crisis attributes to entrepreneurship an important role in the development of new projects that promote social welfare. In the regions of Romania there are still development lags accumulated over time, which are reflected in the quality of the business environment and entrepreneurship level. This work paper analyzes the business sector and describes the economic potential of the South West region.

**JEL classification: F2**

**Key words: entrepreneurship, entrepreneurs, labor productivity, the structure of enterprises, domestic market**

In the context of the many economic life challenges, the implementation of some appropriate measures for the stimulation of the regional entrepreneurship represents a necessity for the economic development of the South-West region of Oltenia.

Although the world states focus on great economies saving, a special attention should be still given to the fact that the role of the small businesses in creating jobs was not taken into account. Small businesses which contribute to a great extent to the achievement of some basic aims of any national economy represent the best source of innovations and in the same time they can become the prospective great businesses. SMEs play an important role in the regional economy for the following reasons:

- structures flexibility gives a higher adaptive capacity to the fluctuations of the economic environment;
- small and medium enterprises can relatively easily integrate in a regional industrial network, fact which contributes to the economic development of that region, to the decrease of unemployment and to the decrease of living level;
- their reduced size allows a more efficient acting inside or outside the localities weakening the monopoly positions of large enterprises;
- SMEs contribute to the improvement of the competitive environment, also providing opportunities for the local resources capitalization;

The vulnerability of SMEs consists in the fact that they dispose of limited resources, which means that the technological level is lower than that of large enterprises. In this issue information plays an important role in adopting some measures of risk factors prevention;

Howard Stevenson, the Entrepreneurship Activities Centre manager from



Harvard memorably formulated an undeniable truth: 'An advantage of large companies is that they make big mistakes, but they survive.'<sup>42</sup>

In the case of SMEs, when these make big mistakes, the most probably they go bankrupt - a fact that bankers thoroughly take into account'.

Business planning in the area of small and medium-sized enterprises represents a process which has as central aim the search of market opportunities, continuing with the attempt of getting competitive benefits through customer attraction and results fructification for the benefit of the entrepreneur. In this respect, there are noticed distinct features between the entrepreneur who searches and creates resources and the administrator manager who tries to use the existent resources as well as possible. Many entrepreneurs start the process of opportunities capitalization without any other resource apart from the confidence that they have identified a real possibility to create a new enterprise. Besides the quantitative argument, SMEs represent an engine of the economic growth which is usually characterized by dynamism, flexibility and innovative strength, being capable to adapt along the way to the changes occurring in the economy. The entrepreneurs must adapt to the market tendencies, to be supporters of changes and promoters of trajectories towards economic and technological progress. This is essentially the entrepreneurship principle.

The climate dominated by the economic and financial crisis represents a challenge for experienced companies but also for new entrepreneurial ideas from the region. Those who managed, in the current economic context, to find the most appropriate innovative solutions now represent references for those who have the initiative to start on the path of entrepreneurship. The crisis period also represented the pass across a learning period for entrepreneurs, managers and companies' staff that have had to adapt to the new conditions. Relatively new companies, that have experienced only periods of growth since the foundation, have been placed in front of some situations of uncertainty and instability.

According to statistics, the SMEs were the most affected by the financial and economic crisis, especially in the context of the lack of poor enforcement of anti-crisis measures. Romanian business sector between 2008-2009 faced a difficult macroeconomic environment, with large unpredictable changes that led to the deterioration of the general business environment, the consequences of the financial and subsequently economic crisis being also reflected on the South West region of Oltenia.

Therefore, the business sector was forced to evolve in an environment characterized by rebellion, uncertainty and very low predictability.

Although Romania's population exceeds that of many European countries, it still has a shortage of enterprises, namely 23 SMEs/1000 inhabitants. General development gaps accumulated over time persist between the regions of our country, fact which is reflected in business environment and entrepreneurial level characterized by the density indicator SMEs per 1,000 inhabitants.

In the South-West Oltenia region, the year which saw the lowest number of new companies registered was 2009, year of economic and financial crisis, followed by a slight recovery of the gap in the period 2010-2011.

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<sup>42</sup> The role of SMEs in ensuring economic growth – Isărescu, BNR Governor  
The note opening symposium presentation "Romania, where?", Bucharest, February 9, 2011

**Table no. 1 - Registrations and deregistrations evolution in the South-West Oltenia region**

|                        | 2005   | 2006   | 2007  | 2008   | 2009  | 2010   | 2011   |
|------------------------|--------|--------|-------|--------|-------|--------|--------|
| <b>Registrations</b>   | 12.075 | 9.645  | 9.801 | 10.673 | 8.921 | 10.190 | 11.932 |
| <b>Deregistrations</b> | 8.505  | 10.827 | 3.711 | 4.179  | 4.963 | 16.053 | 5.241  |

*Source: National Office of Trade Register, 2012*

Considered among the least competitive, South West Oltenia region has a density of 16.4 inhabitants SME-s/1000, recording a rate of only 7.5%, which places it among the regions with the lowest number of SMEs in the country.<sup>43</sup> Regarding the number of deregistered companies, it has seen since 2007 a relative stabilization around the annual value of 4,000 units, after the years 2005 and 2006 when it registered values of 8.505, 10.827 respectively. The exception represented the year 2010, which saw a record value of 16.053, this being mainly due to authorized individuals, individual enterprises and family businesses that have not turned the operating permits under EO 44 / 2008 to the legal term.

It is noticed the fact that companies progress at regional level experienced general positive values, except for the years 2006 and 2010, when the number of deregistered companies exceeded that of newly registered firms.

Entrepreneurship development perspective, and support actions have been highly affected by the heightened of the economic and financial crisis. The compression of domestic demand for goods and the market downturn in the region, the lower revenues and the rising unemployment led to the reorientation of many entrepreneurs, drastic reduction of many businesses, their activities restriction or liquidation.

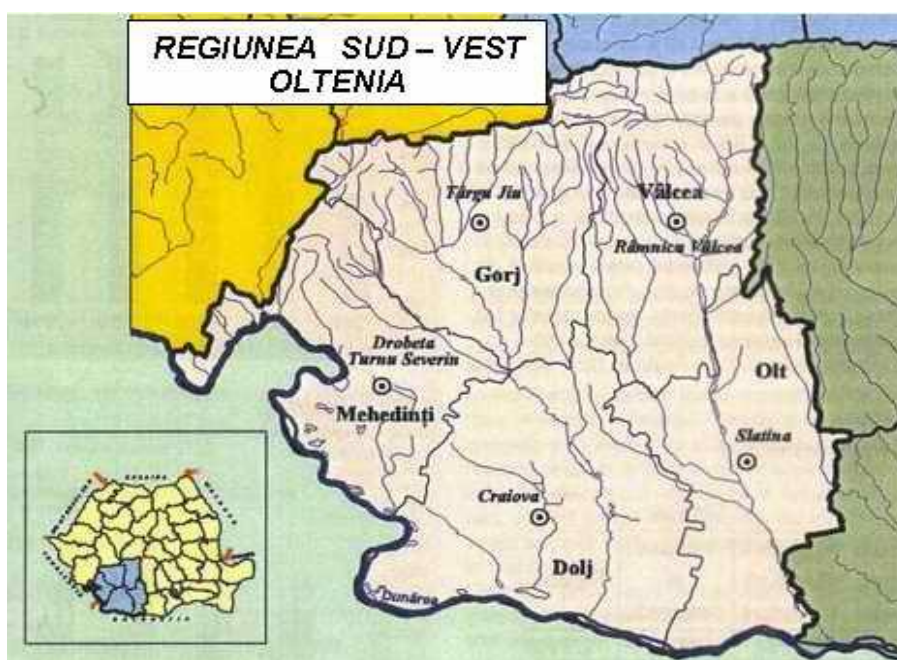
The global economic crisis has manifested itself by reducing the rate of development of entrepreneurship and increasing the number of bankruptcies, affecting the economy of the South West Oltenia. The period 2008-2010 showed that the SMEs sector is one of the most affected by the financial and economic crisis, representing in the same time the sector which can substantially contribute to remedy the economy as a whole.

In Region 4 South West Oltenia there were 177 477 registrations from 31 December 2011, of which 45,800 SMEs, representing about 8% of the national total, of which assets are about 36 000 units. Of this number, approximately 92.0% represent micro enterprises, and 98% achieved a turnover of 200 thousand. In this region the SME sector is stabilising. The volume of fixed assets is approximately 3.1% of the national total; also the SMEs in the South-West have only 3.7% of the total debt.<sup>44</sup>

From administrative point of view, the development region South West Oltenia includes 5 counties (Dolj, Gorj, Mehedinți, Olt, Valcea), as shown in the figure below.

<sup>43</sup> Post-Privatisation Foundation report on the SME sector in Romania, 2013 edition

<sup>44</sup> Research Report, Analysis of current entrepreneurial South-West Oltenia [www.competimm.ro](http://www.competimm.ro)



Source: National Institute of Statistics

**Figure no. 1**

According to the National Institute of Statistics, 1 July 2010, South West Oltenia had a population of 2,246,033 inhabitants, representing 10.5% of the country population.

Dolj County has 20.5% of all enterprises while the opposite is Mehedinți with 10.1%.

The contribution of SMEs to the development of the region is reflected in the economic outcomes, as shown in the following chart.

**Table no. 2**

| County       | Turnover<br>(mil.lei) | Exercise net<br>result<br>(mil.lei) | County share % |              |
|--------------|-----------------------|-------------------------------------|----------------|--------------|
|              |                       |                                     | in CA          | in RNE       |
| Dolj         | 8.160                 | 572                                 | 36.9           | 40.7         |
| Gorj         | 3.130                 | 207                                 | 14.2           | 14.7         |
| Mehedinți    | 2.300                 | 136                                 | 10.4           | 9.7          |
| Olt          | 3.650                 | 206                                 | 16.5           | 14.7         |
| Valcea       | 4.860                 | 284                                 | 21.9           | 20.2         |
| <b>Total</b> | <b>22.100</b>         | <b>1.405</b>                        | <b>100.0</b>   | <b>100.0</b> |

Source: NIS data processing, Database Tempo online

If the role of SMEs is fundamental to ensure the economic flexibility and a rapid adaptation to a business environment that is in the process of transformation, certainly nor large enterprises mission should be omitted. The size of these enterprises and the owned assets confer considerable advantages of market access and financing, but also great strength to invest in technology, research and development.

Large enterprises with over 250 employees can act on regional economic growth. Although their number is reduced compared to SMEs, the share of large enterprises in the power of employment and respectively in the total turnover is significant. In 2009, 38.7 % of the employed people in the South West Oltenia region were working in large enterprises. The statistics also highlight the important social role that these economic units play.

The structure of enterprises in South West Oltenia region can be seen starting from two different datasets. On the one hand, information on Trade Register registrations can be analysed having NTC as data source. On the other hand, another set of data on the total number of active companies may be obtained from the Institute of Statistics. Obviously, the number of active entrepreneurs is much lower than that of the registered units.

In the economy of the South -West region Oltenia, in late 2008 there was a total of 40 236 active local units, up by 6% compared to 2007. In 2011, in the S-W Oltenia region worked 33.706 companies covering most of the economic activities. The region has 16.1 companies/1000 inhabitants compared to the national average of 23/1000 inhabitants. Among the counties of this region ,Dolj has 18.8 companies/1000 inhabitants, 17.3 Vâlcea 17.3, Gorj 15.9, Mehedinți 12.5 and Olt 13.3.

Although there is a greater stability in the region of Oltenia, compared to the national average, it conceals in the same time a lower adaptive capacity of the companies in the region to the new market conditions. In a changing economy, adaptation is more important than a longer life of companies.<sup>45</sup>

Dolj County is the most developed of all the counties of the South West Oltenia Region. The most important activities are carried out in the following sectors: energy industry, engineering industry, electrical industry. chemical industry, mining, food industry, textile industry, building materials industry, manufacture of arms and ammunition, furniture industry, automobile and aircraft construction, agriculture and animal husbandry especially in the Danube and Jiu meadows.

In Gorj county the dominant companies are from: the mining industry: - coal mining in Rovinari Motru Jilț exploitations; oil and natural gas industry; energy industry: Turceni and Rovinari thermo-electric power stations and the hydro-electric stations located on the rivers Jiu, Olteț and Motru - Cerna - Tismana, building materials industry - cement, lime, bricks and ceramic blocks, refractory bricks, precast concrete, wood processing - lumber, furniture, flooring, particle board of wood chemical industry - manufacturing technical rubber manufacture weapons and ammunition, machinery, mining equipment, household glass production , food industry - bakery, beverages, cigarettes, textiles, agriculture and animal husbandry, tourism – the speleological reservation from Cloșani, Jiu pass, the quays of Olteț and Sohodul, the Women's cave and the cave from Polovragi, Rânca and Săcelu mountain resorts.

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<sup>45</sup> South West RDA, study on business development at regional and economic crisis on businesses, economic development analysis Section South-West Oltenia, p.61

Mehedinți county is characterised by a lower intensity of economic activities, the most important being: the energy industry - Iron Gates I and II, chemical industry - the production of heavy water nuclear reactors designed for nuclear reactors, super easy water, liquid nitrogen, demineralised water, drinking water, distilled water and industrial water, food industry, ship building, wood industry, agriculture - Danube Meadow, tourism - Cerna Quays, Natural Park Iron Gates.

In Olt county the most important activities are carried out in the following sectors: energy, metallurgy - manufacture of steel components, processing of aluminium and aluminium alloys, primary aluminium production, chemical industry - rubber processing, manufacturing Carbon cokes, produced from graphite, silicon carbide, machine industry: manufacturing of components for wagons, manufacture of rolling stock - freight wagons, exploitation of coal, food industry - beet sugar processing and raw sugar refining , agriculture and animal husbandry - production, industrialisation and marketing of agricultural buildings , growing zones Samburești Dobroteasa, Morunglav, Vitomirești, Strejești, farming in the Danube meadow and along the river Olt and Olteț.

Vâlcea is represented by: energy industry - using the energy potential of the river Olt and its tributaries , resulting in a production of 1,000 MW , of which 510 MW only from Ciunget Lotru station- the largest hydroelectric station in Romania, chemical industry – this county has one of highest processing capabilities in its area, the mining industry - surface coal mining and exploitation of limestone, oil and natural gas , wood processing , machine building industry , light industry – it is represented the footwear and garment factories and leather imitation, textiles and nonwovens, food industry is represented by factories of canned fruit and vegetables, meat and dairy products, bread and soft and alcoholic drinks, agriculture and animal husbandry especially in Olt meadow, tourism - resorts Călimănești- Caciulata, Govora, Ocnele Mari, Bistrița, Cozia monasteries and and One Wood monastery, mountain areas.

Taking into account the distribution of various types of business opportunities by regions of development, we see the following differences bigger than the overall situation: SMEs in the South East region frequently reported domestic sales growth (71.43%) and new markets penetration (57.14%).

Businesses in the Central region have the highest proportion of SMEs that records the uptake of new products (52.54 %) and grants obtaining (54.24 %), but it is the last one regarding the use of new technologies (15.25 %) and the achievement of business partnership (27.12 %). South West is more poorly represented by companies entering new markets (34.33 %), but it has the best position in relation to companies aiming to increase exports (39.55 %). Southern companies recorded lower share of SMEs which indicated the increase of domestic sales (50.77 %) and exports increase (9.23 %). Making a business partnership is a business opportunity more frequently manifested in Bucharest (40.55 %) and the uptake of new products is rarely noticed to the economic agents in North-West (29.09 %).

**Table no. 3 - Business opportunities frequency according to development regions**

| Crt. No. | Business opportunities for 2009  | SMEs grouped by development regions |            |        |            |        |            |        |          |
|----------|----------------------------------|-------------------------------------|------------|--------|------------|--------|------------|--------|----------|
|          |                                  | North East                          | South East | South  | South West | West   | North West | Center | Bucharet |
| 1        | Domestic sales increase          | 66,8%                               | 71,4%      | 50,77% | 67,54%     | 65,33% | 61,%       | 66,1%  | 62,99%   |
| 2        | Exports increase                 | 11,7%                               | 20,78%     | 9,23%  | 39,55%     | 12,00% | 22,%       | 10,1%  | 13,78%   |
| 3        | New technologies use             | 42,7%                               | 31,1%      | 27,69% | 36,94%     | 28,00% | 29,%       | 15,2%  | 26,77%   |
| 4        | New markets penetration          | 51,8%                               | 57,1%      | 44,62% | 34,33%     | 41,33% | 39,%       | 37,2%  | 38,98%   |
| 5        | New products assimilation        | 41,1%                               | 45,4%      | 52,31% | 33,21%     | 36,00% | 29,%       | 52,5%  | 45,28%   |
| 6        | Business partnership realization | 36,9%                               | 35,0%      | 33,85% | 27,61%     | 34,67% | 27,%       | 27,1%  | 40,55%   |
| 7        | Grant attainment                 | 24,0%                               | 32,4%      | 23,08% | 22,01%     | 13,33% | 24,%       | 54,2%  | 18,11%   |

Source: South West Oltenia RDA, *The study on business environment development at regional level and the economic crisis impact on enterprises*, p.48

The analysis of the contextual developments with negative influence on the activities of SMEs by development regions mainly highlights the following aspects:

1. SMEs in the South West region have the highest percentages of enterprises in which there are indicated the excessive bureaucracy (53.73%), the corruption (44.78%) and the ethnic tensions (17.91%);
2. Southern companies are experiencing a higher frequency the adverse impact of the evolution of the legal framework (78.46%);
3. Enterprises in the North West region recorded the highest proportion of SMEs that indicate the climate / the social tensions (40.91%) and the policy changes (28.18%);
4. Companies in Bucharest are affected to a greater extent by the IMF/WB policy in our country than our country (22.83%);
5. South and South East regions does not record enterprises in which there are highlighted negative influences of the military conflicts in the nearby areas of Romania;
6. In terms of the number of active companies in the distribution by counties, the capital city stands out as an atypical territorial unit in the remaining counties operating between 0.71 % - Giurgiu and 5 % - Cluj from the existing national firms;

7. As intensity Bucharest leads ( 67.9% ), other counties being placed between: 11.1 % Botoşani and – 44.2 ‰ and - Cluj, fact which indicates strong differentiations of the economic development and business environment by counties;
8. By development regions there are also recorded major differences regarding the share of companies : Bucharest - Ilfov region aheads the national average of about 1.87 times, is 3.1 times the South-West region;
9. The share of large enterprises was reduced at national level, compared to the previous year, the Bucharest-Ilfov region recording nevertheless an increase compared to other regions;

The process of entrepreneurship polarisation was reinforced at national level in the regions Bucharest-Ilfov, West, North -West and Centre, to the detriment of less developed regions such as: North-East, South and South -West (64.3% in Bucharest-Ilfov, compared to 19.7% in South).

Romanian entrepreneurship holds the development potential and rapid increase, but for this to happen should young entrepreneurs should have an innovative thinking, to continuously improve and to assume the risk for their actions. Among Romanian regions, overall development gaps accumulated over time persist, which is reflected in the level of business environment and entrepreneurial level.

The evaluation of the indicators for SMEs reveals the existence of sharp disparities between the eight development regions Bucharest-Ilfov region standing out with a higher level of performance comparable to the average values of the European Union. The density of SMEs in Romania represents only 56 % of the European average, being of 23 compared with 41 inhabitants SMEs/1000 inhabitants in the EU27. In relation to the average in Romania there are large disparities in the 8 regions. Bucharest-Ilfov region is at a great distance from other regions, with the highest density of SMEs 50.23 IMM-uri/1000 inhabitants respectively, exceeding the European average. The densities of other regions is at half the value for Bucharest - Ilfov if the Northwest and Central regions or even third in the case of the North East (15.2 IMM-uri/1000 inhabitants).

It is observed the maintenance of the three levels of disparity between the eight regions of development, established in 2006, at the sizing of financial allocations from the European Regional Development Fund for investment in SMEs, these being present in all sectors of the economy, in a share more than 6 % in most regions.

However, some regions are characterised by the predominance of certain sectors, such in the case of Bucharest - Ilfov region, which accounts for 35.6 % of SMEs in services and the North West and Central regions with the best shaped industrial specialisation profile, respectively with shares of productive SMEs of 16.3 % and 15.9 %.

In terms of labour force at regional level, Bucharest-Ilfov region also distinguishes by the highest percentage of employees in SMEs (23%), share which is maintained since 2007 and it perfectly correlates with the maximum values of the other characteristic indicators, the number of firms or SMEs density . In the other regions the percentage of employees in SMEs are between a minimum of 6.7 % for the South West Oltenia region and a maximum of 13.9 % in the North-West region. The superiority of the performance of SMEs in the Bucharest - Ilfov is based on a high level of labor productivity, representing a rate of 160 % of the national average, the value being in

the same time comparable to the average recorded in the EU-27. This reflects the sound financial and economic development of the country capital, concentrating the activities in the field of services and less in the industrial sector where the labor productivity is usually lower.

The promotion of entrepreneurial talent and the development of entrepreneurial skills should be a permanent concern of the authorized institutions of the government authorities, the organisations promoting entrepreneurship and business support providers - by providing efficient financial and technical support, appropriate for the particularities of the Romanian business environment. The responsible authorities have expressed their concern for the support and development of entrepreneurship education in Romania by developing specific policies in order to improve the entrepreneurial skills of business owners and those of young potential entrepreneurs.

Currently, Romania needs to develop a new generation of entrepreneurs having characteristic skills such as responsibility, spontaneity, adaptability, foresight, initiative and managerial spirit, which allows them to identify and implement strategies appropriate for the market penetration and maintenance.

To adapt to the complex economic environment, an SME needs to develop an entrepreneurial management, the creation of innovative business capabilities and infusion of good transnational practices. Entrepreneur's education and former experiences can influence the performances of the enterprise.

In general, the entrepreneur's education, at least in its managerial side, is poorer than the manager's education in large enterprises both within market economies and those in transition. During the transition period, the negative motivations that were the priority in taking decisions to become entrepreneurs, led by the pioneering background in this activity and the lack of experience, to the emergence of a group of entrepreneurs having very low economic and managerial knowledge.

In many of these cases the market has sanctioned the entrepreneurs' mistakes, thus gradually creating, between them the awareness of the quality of the managerial act which must be based on a good knowledge of the market, on the type of business in which they operate as well as on their intrinsic power. Many entrepreneurs consider that the economic sense is enough to ensure success.

This can help business administration in the early stages, but with the increase of business complexity, managerial knowledge is strictly necessary, intervening the need of education in this area.

Creativity, talent in a particular area, spirit of action must be added to the educational elements.

Most Romanian entrepreneurs and business founders do not have previous experience in management or technical professions. Only 1.3% of the entrepreneurs have previous managerial experience, and 8.4 % have experience in technical fields. More than half of them (52.9 %) had been unskilled workers before they started to run their own business. From this point of view it is necessary to develop entrepreneurship programs through which prospective entrepreneurs in Romania can improve their skills in order to favorably implement business.



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# **SME - BASED APPROACH IN THE CONTEXT OF THE KNOWLEDGE-BASED ECONOMY**

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**Abstract:** SMEs will continue to represent, in the following decades, the most active, dynamic and performant part of a country's economy. In this respect we have tried an approach of some aspects of extreme importance for the role of the SMEs in Romania in the present economic context of the knowledge-based economy, and we have started by presenting the main advantages and disadvantages of the SMEs in Romania as compared with large enterprises, and later we have analyzed the institutional framework which shall ensure the development and growth of the SMEs, as well as the main factors which influence competitiveness in the current economy.

**JEL classification:** M13, M21, G00, G18, G32

**Key words:** SME's, knowledge-based economy, competitiveness, institutional framework, factors of influence.

## **1. INTRODUCTION**

The magnitude witnessed by the emergence and development of the micro-enterprises, small and medium enterprises demonstrates that small business represents, for many people, the chance of inclusion in the economic and social competition, the one which creates jobs and values exchange. The ability of small businesses to create jobs comes from the entrepreneurs' power of creation and innovation, on the basis of numerous changes caused by the discoveries in science and technology.

Small and medium enterprise is adaptable to the dynamic changes in the economy and the future is therefore represented by dynamic, adaptable and flexible enterprises. Small businesses in many countries have contributed significantly to their economic development. Peter Drucker would report that small businesses represent *the main catalyst of economic growth*. Socio-economic research in this field in the USA and Germany have pointed out that 60-70% of the jobs demand in the recent years have come from the sector of small and medium enterprises.

The small and medium-sized business within the European economy represent 99% of the whole number of enterprises and account for over 54% of jobs. Romania has a relatively small number of SMEs, about 23 per 1000 inhabitants, the European Union average being of 64, which will result in approximately 800 thousand active SMEs by the end of 2017.

Starting from the idea that our country will register an increase in the number of SMEs in the future as reported to the average met at European level, an increase in the number of jobs created by the SMEs sector with 8-10%, as well as an increase in their contribution to the gross value on average with 10-12% annually<sup>46</sup>, we consider it necessary to conduct studies on SMEs, on policies and development strategies, and on project management as a result of the European integration.

In Romania, SMEs operate successfully in the direction of reducing the role of large monopolistic enterprises, increasing employment of active labour, emphasizing competitiveness and generating, via their profitability and dynamism, a great impact on the economy.

## **2. ASPECTS ON SMEs IN THE CURRENT GLOBAL ECONOMY**

The organizational environment in Romania has acquired and maintained a series of unfavourable influences, being built on a precarious basis of the staff activity which was inherited from the old centralized structure. Against this background, more and more human resources management professionals face many old habits and attitudes. An efficient management is the one that creates a system of values based on communication and trust relationships, on encouraging employees, on making them responsible of the decisions to be made while assuming their consequences.

From the analysis of the literature in the field of SMEs<sup>47</sup>, we have identified a series of advantages of the SME sector in comparison with the advantages of the large enterprises, and at the same time we have not neglected the disadvantages of the two sectors, either. Table No. 1 illustrates our view on these aspects, thus the advantages of the SME sector are related to the current trends of globalization, to the fierce competition and mobility in the economic processes, while the disadvantages or weak points of the SMEs in front of the large enterprises are because of extra-economic reasons.

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<sup>46</sup> [www.cnipmmr.ro](http://www.cnipmmr.ro), Strategy of the National Council of Small and Medium-Sized Enterprises in Romania for 2012-2016, accessed on February, 10th, 2014

<sup>47</sup> Nicolescu, O., *Management of Small and Medium-Sized Enterprises*, Economic Publishing House, Bucharest, 2008; Walters, J., *The Great Power of Small Business*, Curtea Veche Publishing House, Bucharest, 2008

**Table no. 1 Advantages and disadvantages of SMEs as compared to those of large enterprises**

| Advantages  | Disadvantages   |
|---|---|
| SMEs have great flexibility and adaptability under all aspects, actually (finance, production, marketing, personnel), when economic conditions change rapidly, especially when they become adverse; | SMEs have limited access to the local and international capital market, defending a vicious circle, in the sense that small businesses are often excluded because they are small, they cannot become large and they even disappear because they cannot cover the high costs for the implementation of their own projects; |
| SMEs require less financial resources (largely based on equity), SMEs using the available resources more effectively;   | SMEs are strongly affected by the impact of institutional and regulatory constraints, especially when they want to enter a foreign market;  |
| SMEs are more active in the labour market, creating jobs quickly, often in new areas, the costs of creating a job are much lower than those recorded by large enterprises ;                         | SMEs are sensitive to any type of „barriers” (national or international, economic or non-economic), transposed into numerous and high trading costs;  |
| SMEs influence, firstly, the efficiency of domestic markets, they create easier and faster some „niches” for specific products or services;   | SMEs are characterized by low representation of their own interests, including the access to advertising or representation in various bodies, which makes them vulnerable, especially when they are in competition with large enterprises.  |
| SMEs are perceived as an element of economic growth and stability, by asserting the trends of a healthy economic growth in the long term.   |   |

Source: Popescu, D., *SMEs Competitiveness*, Economic Publishing House, Bucharest, 2001; Porter, M., *Competitive Strategy – Manual on the survival and growth of firms in the market economy*, Teora Publishing House, Bucharest, 2004

In Romania, financing faces a series of obstacles. The European Union is financing three priorities with regards to small and medium-sized enterprises:

- *Private sector development of the SMEs* (non-refundable loans to support the creation and development of SMEs, credit lines, training and consultancy services for SMEs);
- *Human resources development* (training-retraining measures for bringing the Romanian SME's to the European technology standards, management improvement, active measures to combat unemployment);
- *Regional infrastructure in support of economic development.*

The latest measures aimed at switching to a multi-annual programming of the financial support granted to the SMEs in Romania by the European Commission and at having a coherent strategy for the SMEs development<sup>48</sup>. But in addition to the benefits brought by the opening of the Single Market and the free movement of goods and services for the Romanian SMEs, one must draw attention to the danger represented by the ignorance of the Community *acquis* under the free competition in this market.

<sup>3</sup> Walters, J., *The Great Power of Small Business*, Curtea Veche Publishing House, Bucharest, 2008, p. 67

Starting from a much lower level of equipment and managerial experience, the entrepreneurs for the Romanian SMEs have to strive harder as compared to the European entrepreneurs. Competition does not spare them, and thus all those who will not cope with the standards stipulated in the single market, will be removed.

### **3. INSTITUTIONAL FRAMEWORK FOR PRIVATE SECTOR DEVELOPMENT OF THE SMEs IN ROMANIA**

In Romania, the formulation of economic policy in the field of private sector development of S.M.E.s is generally within the public authorities, while the implementation of specific programs is accomplished primarily through agencies belonging to the NGO sector, respectively to the business community or to the banking system. This also corresponds to the general experience worldwide. An important role in the private sector development of the small and medium-sized enterprises in Romania is played by the assistance of the international community – which contributes to the improvement of the national efforts made with regards to the economic policy specification and to the implementation of the concrete programs of action.

The concerns regarding the private sector development of the small and medium-sized enterprises come from<sup>49</sup>:

- **Central Public Administration**, through the Council of Coordination, Strategy and Economic Reform and the National Agency for SMEs, consulting the Chambers of Commerce and Industry of the SMEs employers, have significant powers to sustain the development programs of the small and medium-sized enterprises. There are also **provisions** on the local public administration regarding the private sector of the small and medium-sized enterprises.

According to the main economic and social statements, the Government is interested in the development of the SMEs private sector, the main actions of the Government in this area concern the following: specification of the Government policies regarding the development of the SMEs private sector; the improvement and completion of the legal framework relevant to SMEs; the establishment of the Agency for S.M.E.s (A.S.M.E.); the support for organizing and functioning of the development centres for small and medium-sized enterprises.

- **Business organizations** have concerns in the area of SMEs development. In this respect, one can mention the following: Associations of Small and Medium-Sized Enterprises; the Chambers of Commerce and Industry; Development Centres for Small and Medium-Sized Enterprises; Pilot-Business Incubators; Specialized consultancy firms; Financial Institutions (commercial banks, loan guarantee funds).

The services offered in general by the centres for S.M.E.s development include: consultancy on setting up companies, small and medium-sized enterprises management, financial and marketing planning, preparation of business plans or of the documentations to obtain loans, accounting system and tax regulations; programs of local development; providing legislative and economic information; identifying

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<sup>4</sup> Cristea, H. (coord), *Financial Management of Organizations*, Mirton Publishing House, Timișoara, 2004, pp. 312-314

business opportunities; organizing courses and seminars for private entrepreneurs; supporting international partnership in business.

▪ **The International Community** supports the creation and development of S.M.E.s private sector in Romania through the components of the following programs: Multilateral Assistance Grant (eg the PHARE Program of the European Union, the Sectoral Operational Programme for the Development of Human Resources - POSDRU, the United Nations Development Program); Bilateral Foreign Assistance; Repayable Assistance provided by the international financial institutions and organizations (eg: the European Bank for Reconstruction and Development; the European Investment Bank).

#### **4. SMEs IN THE ENTRY TO KNOWLEDGE-BASED ECONOMY**

Many concepts, especially the one from economy, have a certain history and origin because they result from a social and intellectual construction. Therefore, the concept of "new economy" could not be absolved of these findings either. Starting from Karl Marx's phrase "Give me a windmill and I'll give you the Middle Ages", we'll make the following remark on the Industrial Age: "Give me the steam car and I'll give you the Industrial Age", and if we move further on to the contemporary era, we'll add "Give me the computer and I'll give you Globalization". Although this determinism is somehow forced, it summarizes the basic idea, namely, that in all connection moments in history, there is a capital invention which overturns the normal order of things, bends the evolution of a society and puts into operation a long-lasting movement<sup>50</sup>. At the end of the 18th century, the steam car brought about a series of significant changes: the elevation of capitalism, the emergence of the working class, the birth of socialism, the expansion of colonialism. Wishing to substitute the human brain, the computer is about to generate, before our eyes, novel and formidable mutations. Everyone of us can notice that everything changes around us: the economic context, the data on politics, the environment, the social values, the cultural criteria or the individual attitudes.

The latest communication and information technologies make us enter a new era whose main characteristic is the instant data transport, to which electronic links and networks are added. The internet represents the core of the big mutation. The communication highways are today what railways used to be for the Industrial Age: a strong factor to boost and intensify exchanges<sup>51</sup>. Since the Internet represents the latest information and communication technologies most brightly, these technologies have a great impact not only on the rythm of economic growth, but on the content of the economic activities, be them production, consumption, financial or regulatory ones, and thus we witness the enthusiasm of a new economy.

The knowledge-based economy represents a new concept, a new approach of the economy. It is a way of access which has a "*greater chance for a democratic and*

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<sup>5</sup> Archibugi, D., Lundvall, B.A., *The Globalizing Learning Economy*, Ed. Oxford University Press, Oxford, 2001, p. 145

<sup>6</sup> Borghoff, T., *Evolutionary Theory of the Globalisation of Firms*, Management International Review, Wiesbaden, Gabler, 2005, p. 23

<sup>7</sup> Ibelings, H., *Supermodernisme : L'Architecture à l'ère de la globalisation*, Hazan Edition, Paris, 2003 pp. 18-21

*sustained economic growth which will bring, in the near future, prosperity and social justice”*<sup>52</sup>. The concept has evolved as more and more aspects of reality have been discovered, analysed and defined. Noticing the changes occurred by the Industrial revolution, by the production and management revolutions, Peter Druckner considered that what we now understand as knowledge is in fact „*information effective in action, information focused on results. These results are seen outside the person, having a role on society and economy, on promoting the knowledge itself*”<sup>53</sup>. Eversince ancient times, wealth and power have been associated with physical resources, while the necessity to own knowledge has been limited, if not ignored. The wealth and power of the 19th century will not consist of physical resources ownership only, but they will result especially from intangible intellectual resources, from the knowledge capital. The transition from an economy dominated by tangible, physical resources to an economy based on knowledge is very broad and deep, generating essential changes in all components of economic activities, somehow similar to the ones produced by the Industrial Revolution. Currently, we are in the early phases of knowledge revolution. Products and services are, in terms of knowledge, more intense, and due to this fact the delimitation between products and services is becoming more and more difficult, knowledge tends to become the main feature of activities, more than the products and the services resulted. The impact of the knowledge revolution becomes visible in the volatility of the market, in the incertitudes about targeting the economic activities, in the uncertainties of careers and jobs<sup>54</sup>.

Result of human thinking, concepts are subject to a permanent process of evolutive metamorphosis: *data* ⇔ *information* ⇔ *knowledge* ⇔ *wisdom*. The evolution of society is closely related to the evolution of these concepts, and the economy follows the model of the society where it is practised. *Data* are raw material, facts, symbols, figures, details which have no use, do not make any sense without a proper understanding. *Information* refers to the description of concepts based on understanding the relationship between data, on defining some models and links, etc (what, who, when, where?). *Knowledge* represents the awareness and understanding of a set of information and of the way this information can be used at its best, and knowledge is obtained by understanding patterns and it comprises strategies, practices, methodes or approaches (how?). *Wisdom* is based on understanding the principles governing knowledge, judgment on their utility and morality (why?).

Economy is closely related to the type of society where it takes place. Some research carried out in countries with experience on market economy have highlighted that SMEs compete successfully and more often in many fields of activity. Under these circumstances, we believe that in the future ***the role of the SMEs will be emphasized in the Romanian economy, too*** due to the following considerations:

- *There have been created bodies to represent and defend the interests of the SMEs;*
- *There is a tendency that according to the economy's development, a change should occur in the share of economic branches, namely in favour of services;*
- *Specialist publications dedicated to SMEs have appeared;*

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<sup>8</sup> Stiglitz, J.E., *Public Prolicy for a Knowledge Economy*, World Bank Working Paper, London, 1999

<sup>9</sup> Peter Drucker, *Post-capitalist Society*, Image Publishing House, Bucharest, 1999, p. 112

<sup>10</sup> Gadrey, J., *Nouvelle économie, nouveau mythe*, Flammarion, Paris, 2000, p 213

- *Specialists in the management of SMEs are prepared according to the specific of this business through University and post graduate courses.*

The existence of legal regulations concerning the granting of some facilities to the SMEs give them the possibility to benefit from the following **facilities**:

- *Access to the available assets of the SMEs with majority capital owned by State, as well as to the autonomous public corporations which are forced to organize the first tendering procedure for SMEs only;*

- *SMEs benefit from information services, assistance, consultancy, research and technological innovation in the areas of banking and finance, management and marketing;*

- *The Government supports the activity of research and technological innovation of the SMEs, and the Government and the local public authorities ensure full or partial financing via appropriation from the budget for training schemes for managers and employees of SMEs.*

SMEs in their operation are facing a series of problems, among which<sup>55</sup>:

- Lack of financial resources which limits the SMEs opportunities to buy new equipment, to conduct marketing studies, to employ qualified personell and to motivate them.

- Experts consider the insufficiency of financial resources as the common cause to the SMEs bankruptcy.

- The SMEs managers do not have the necessary training to deal with the multiple issues that occur during the process. Under these circumstances, the manager has to adopt a series of decisions which imply knowledge from various areas of specialty, which in fact highlights the inconsistency between the complexity of the issues and the professional training.

- Difficulties in hiring qualified personnel since the managers have solid knowledge regarding the necessary selection techniques as compared to the managers of large enterprises.

At the same time there have been researches on the possibility of predicting the failure of small and medium-sized enterprises. With that end in view, experts<sup>56</sup> ***have built financial patterns to predict failure***, among which we could mention the following:

- ***Simple and variable patterns*** which try to foresee failure by studying the level and trends of a single financial indicator. The following financial indicators can be used: the ratio of cash flow to total debt, the ratio between net income and total assets, the ratio of total debts and total assets, the ratio between working capital and total assets. Error probability of these indicators decreases as the period to which the indicators apply to is further as reported to the time of bankruptcy registration.

- ***Complex and variable patterns*** which combine more indicators and to which more weights are applied in order to obtain a complete profile of the enterprise: the ratio between the working capital and total assets, the ratio between gross revenues and total assets, the ratio between sales and total assets, the ratio between the market value of the shares and the book value of total debt.

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<sup>11</sup> Barrow, C., *Financial Management for Small Business*, Rentrop & Straton Publishing House, București, pp. 110-112

<sup>12</sup> Ganidis, B, “*Nouvelle initiation à la comptabilité générale*”, Publisher L'Harmattan, Paris, 2009, p. 78



#### 4. FACTORS THAT INFLUENCE THE COMPETITIVENESS OF THE ROMANIAN SMEs IN THE CURRENT ECONOMIC CONTEXT

Many of the Romanian SMEs have crossed a heavy period which is a continuation of the two years of impact with the new realities after the accession to the European Union. In the first two years after accession, there has been a compression of the number of SMEs as these ones didn't have the resources and the necessary force to modernize and align to the demands and standards of the European Union. Reality statistics has shown that there have been a considerable number of recorded bankruptcies because of that. However, since 2010 a series of SMEs have been established, their investors coming mainly from the European Union. The survival of the SMEs lies in the both in the market evolution, more compressed for them, and in the way the financial issues get solved.

**Factors that influenced the development** of SMEs<sup>57</sup> can be found under various forms, and they are divided into:

- **Environment factors:**

- *Internal (endogenous)* among which: human potential, informational potential, economic status, complexity, technical equipment and technologies, territorial dispersion of subdivisions, the owner, senior management, size and organizational culture of the SMEs.

- *External*, where the organization operates.

- **Efficacy factors** which refer to the performance influence on the organizational structure, among which we mention the following:

- *Economic efficiency* measured by the economic and financial performance of the SMEs;

- *Social efficiency*, that is social parameters that are becoming more difficult to quantify: quality of work environment, relations between management and unions, types of motivation used.

- *Organizational efficiency*, that is the accomplishment of individual tasks, the degree of activity coverage with proper staff, when it comes to number and structure.

In the current economic situation, the main factors which affect negatively the activity of the SMEs are the evolution of the legislative framework, social climate, as well as the policies of the IMF and of the World Bank. Among the negative factors considered with a minimum impact on the activity of the SMEs, privatization (2,13%) and interethnic tensions (1,19%) have been taken into account.

When it comes to SMEs, **innovation**<sup>58</sup> represents the main engine for growth. Whether it relates to the development of products or new services or to the identification of some efficient ways to create the ones already existent, innovation brings value to an entity. The need for a sustained effort from the entity's management, especially for innovation, results from the obvious complexity of the innovation process. Innovation is

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<sup>13</sup> Grey, C., 1997, *Management as a technical practice: Professionalization or responsabilization?*, Systemic Practice and Action Research, Volume 10, Issue 6, Pag. 703 – 725

<sup>14</sup> Bărsan, S.C., Sima, M.G., *Innovation and technological transfer-aligning tools of SMEs to the market economy demands*, Seminar "Social and economic interferences at the border of innovation" – 1st edition, Bucharest, 2008

the activity that results into a product/good/or new service or into an obviously improved one which is launched onto the market or which is related to the introduction of a new or improved process into the entity. Innovation is based on the results of new technologies, on new combinations of the existing technology or on the use of other knowledge obtained by the SMEs. The terminology of innovative entities includes all entities with completed product or process innovation, as well as with uncompleted or abandoned ones and it refers to the active entities.

## 5. CONCLUSIONS

SMEs represent a vital and dynamic factor of progress in contemporary society, the main generator of economic performance in all countries, major player on job offer, a major contributor to the state budget, a development engine by improving the living standard of the population. The development of small and medium-sized enterprises is a key element targeted by the Romanian economy in the context of accession to the European Union. Since the issue of SMEs development is acute because of the lack of coherent programs for their development, strategic options are therefore required for their survival. A major constraint SMEs are facing in general is that they are at a low technological level, they cope harder with difficult technical issues, they do not have the financial resources for scientific and technical information, for consultancy, for services of training qualified staff.

The key trends resulted from the analysis performed in this work underline the role of the SMEs in the context of the emergence of the knowledge-based economy and the role of assuming the principles of social responsibility for the expansion of new forms of business, organization of business incubators and the impact of competitive clusters on SMEs development. In this respect, it is necessary to take measures to finance the participation of the SMEs to the innovative process in the context of the knowledge-based economy. At the same time, the targeting of goals accomplishment is required, goals leading to: achieving a predictable and favourable business environment for SMEs; expanding middle class in Romania; promoting its role in the social and economic development of Romania; defending and promoting the SMEs interests at local, sectorial, national and international levels, especially in the EU; increasing the investment capacity of the SMEs and relauching the investment process in Romania. Since the SMEs in Romania do not have the financial strength to innovate, a set of policies is required, policies that would help small business and start-ups enter the sectors where the added value is high by continuing the process of removing entrance barriers. Such measures could involve: creating and improving techno-parks and science parks, too; implementing development programs of innovation culture and reducing the subject perception of the associated risk, the need for a permanent and active concern of the authorities to increase the competitiveness of the SMEs sector.

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# **Correlations between the investment process and economic growth**

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**Abstract:** The importance of investments within the economic growth process is a phenomenon pertaining to the scientific proofs. The modern growth theories designate the development process in which knowledge is the main internal factor, while the economic development process is the result of the final production growth, accompanied by the quantity growth and information quality. In the spirit of this theory, the human capital, technologies and information become pertinent elements of the sustainable economic development.

**JEL classification:** E22, O10

**Keywords:** investment, economic growth, GDP, GNP, direct foreign investments

## **1. INTRODUCTION**

In the practical economic culture and the daily language, investments have adjudicated their position as a central element in the economic development of a company, with implications in the economic development of the country, social development, and provision of the social and economic welfare of the individual, as an investor or employee. The investments, irrespective of their typology, can provide and consolidate the material, educational, cultural and health status of a nation or person regarded individually or at family level.

Macroeconomically, irrespective of how positive the indicators proving the economic development of a country would be, if investments, the foundation of the economic activity by means of the attribute of property and free initiative, do not help the individual, both as an investor and as a beneficiary of the products and services, or as an employee of the investing company, the investment has no utility and end.

The importance of investments within the economic growth process is a phenomenon pertaining to the scientific proofs. The fact that the promotion of the economic growth can no longer be continued as a global growth of the economic performance macro indicators (GDP or GNP), by ignoring waste and irrationality in consuming resources, has led to taking into account the economic development processes. Besides the idea that the level of investments regulates the dynamism of economic growth, one also includes the thesis according to which the objectives of achieving the development also implies the social ethics, as well as the anthropic transformations caused to the natural environment. Whenever they discuss the economic growth or development, investments are aprioristically considered the

foundation of this process. The way they are reflected, the way they contribute to attaining certain rates of growth, is however different from one model of growth to another.

## 2. Investments, economic growth and development

The role of investments in the economic development of a country is especially complex, because they influence the property structures, affect the branches and sub-branches of economic structures, contributing to the development of the effective ones to the detriment of the ineffective ones, influence the technological structures, the employment structures, with direct and indirect consequences in the social field, influencing the development rate of the country, that is why the role of investments must be analysed from the perspective of the several connections between branches and sub-branches, between demand and supply, between production and consumption, etc.

Investments occupy a central role between the field of goods and services production and the field of consumption, being a factor stimulating the economic growth and development, simultaneously influencing the demand and supply, generating the increase of the turnover, incomes and profit, favouring the circulation of capitals and accelerating the promotion of the technical progress and providing the business environment. As a support of development, investments lead to the extension of the existing capacities, to creating new capacities, to strengthening the production potential of economy. The beneficial effects of investments for the national economy are not only limited to the economic growth.

Thus, they have built development models which are predominated by what certain specialists call the vicious circle economies-investments-growth-development.<sup>59</sup> These models are used in order to characterize and “justify” the general progress of the countries, which we know under the name of developed countries, countries with a high income per capita, etc. At the same time, on the contrary, most of the countries are confronted with the vicious circle economies-investments-growth-development. This vicious circle is intertwined with other such circles and correlations, such as: the correlation inflation-economic growth; the atypical correlation inflation-unemployment; the vicious circle of the interest rate and tension in the economic field; the negative correlation, the driving effect between the internal and external depreciation of the RON; the vicious circle of privatization, of the great privatization and economic restructuring in its whole; the correlation between a strict fiscality and the investment decline, therefore, of the economic development.<sup>60</sup>

Economically, investments play a double role: firstly, the economic agents triggering investment actions, and implementing several investment projects increase their offer of goods and services by increasing their productive capacity, obtaining additional incomes; secondly, any investment project shall generate additional needs or demands.

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59 Michel Didier “*Economia. Regulile jocului*” Editura Humanitas, 1988, pag. 70

60 Lucian Croitoru, Cornel Târhoacă “*Politica fiscală în România*” în *Tranziția economică din România*, pag. 752

The material basis of the economic and social development of any country is represented by investments, which provide the quantitative and qualitative growth of the fixed capital, the increase of the technical and economic capability of the existing capital, but also the new job creation.

Investments have a decisive role in providing the modernization of the economic activity, as a prerequisite for adapting the technical and economic systems related to the conditions of the transition of the national economy to the market economy, participation of our country in the international economic relations under competition and competitiveness circumstances. They provide a higher degree of employment, jobs with high-performance equipment, improvement of the technological processes, extension and generalization of the leading processes of principles pertaining to the market economy.

Investments give rise to the promotion of the technical progress, growth of production, improvement of the goods quality, increase of the economic effectiveness, contributing to the acceleration of the optimization processes and increase of competitiveness for each activity. The investment policy must be directed in such a way that it would provide the macroeconomic stability and attraction of a large amount of credits from abroad, required for the economic development of the country.

In the context of the market economy, private property and competition between several business operators, investments are the key for providing maximum effectiveness by means of a level as high as possible of the effects per unit of effort.

**The economic growth is based on the economic investment**, by means of which it is intended to increase the productive potential, the accumulation of human and material capital. Depending on certain criteria, such as the contribution of factors, manner of achieving the economic growth, increase rate of the aggregated indicators per inhabitant, compatibility of the economic effects with the social and ecologic ones, the following concepts pertaining to the economic growth types have been outlined: extensive, intensive, negative, balanced, consolidated, etc.

Thus, we must **understand the economic growth process** not as a dynamic process with a permanently positive ascending evolution; it does not exclude occasional oscillations, possible temporary economic regresses. Supporting the scoring of an economic growth by a national economy is based on the positive progressive trend in a certain time frame and space, which have generated the increased size of the macroeconomic results.

At present, in the economic theory, there are two different approaches (two points of view) regarding the connection between investments and economic growth. According to the first point of view, investments are the essential factor of economic growth: the more a country invests, the higher its rates of economic growth are. The economists sharing the second point of view consider that the demand is the key element, because the very demand *leads to the increase of production, which forces the companies to make investments; the higher the incomes, the more the country saves, and consequently it can invest.*

These two approaches are diametrically opposed, both by means of their nature and the role the state has to play in stimulating the capital accumulation process. Thus, the supporters of the first approach state that it is required to stimulate, in different ways, savings and consumption limitation. The representatives of the second opinion, on the contrary, support the point of view according to which the state must, using

different ways, contribute to the increase of demand, especially the consumption demand.

In reality, by consistently applying the proposals of one or another different point of view, the countries obtain great achievements regarding the economic growth rates, as the economic growth theory is a long-term theory, focusing on all the effects of the investments on the increase of the potential national growth.

The theory *regarding the decisive role of the investments in providing the economic growth* is confirmed by the experience of the market economy countries, which, during the post-war period, have taken a sudden leap into the economic development, turning the recession national economies into economies providing a stable growth. Later, in these countries, a balance is obtained, in which the high growth rate of the population's incomes provides the constitution of savings, which are turned into investments, thus creating premises for the continuous economic growth.

*The macroeconomic stability* is considered to be essential for the economic growth. Although most economists argue that stability itself does not generate economic growth, the instability of the macroeconomic indicators can question any potential growth. Companies cannot make decisions to invest in economic environments where there is hyperinflation, while an excessive fiscality can make investment projects, which are profitable by their economic nature, become unprofitable.<sup>61</sup>

*The public institutions* are also essential for the economic growth. Although, in the case of a market economy, prosperity is in general created by the private entities, they are subject to the public regulations, and especially due to their interactions with the public authorities, can be prevented in their activity. For example, a property rights system in which the legal system is effective in protecting and re-establishing the violated rights is essential for the favourable development of the economic activity. Furthermore, the economic science approaches more and more the impact of the institutional organization on the macroeconomic performances of several countries.

The third considered element is *technology*. The growth of an economy can only be performed in a long run under the circumstances of the technological progress. The three elements are not obviously independent: strong institutions are necessary for the macroeconomic stability, which promotes the technological innovation.

### **3. Investment in knowledge and education**

The contribution of education to the economic development is mainly achieved using two ways: the first one, the most famous and promoted one, is creating new knowledge, also known as the *Schumpeterian* growth, which is attributed to the growth of the human capital. More highly educated individuals mean, for the economic system, more scientific and technical information, more inventions, a larger stock of knowledge, which cause the appearance of new technological production processes, so a quantitative economic growth.

The investment in education as a manner of forming the human capital – skills and abilities – is a vital element in providing the economic development, increase of

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61 I. Cetină, N. Mihail, *Competitivitatea firmelor românești față de mediul european de afaceri*, în *Integrarea României în Uniunea Europeană. Provocări și soluții*, Simpozion AGER, București, 2006.

the living standard, and improvement of social inequalities and iniquities. It is an important element in fighting unemployment and social exclusivism.

By means of the second way, education affects the economic development process by spreading and sending information. The school system sends the individual the information by means of which he is able to manage the new information; in its absence, the new technologies would have a much weaker effect. For instance, if individuals came on the labour market without having information regarding the use of computers, the impact of the information technology could be negative, as the individual would not be able to work with either the machines to be found at his work place, or with the other individuals he should communicate with.<sup>62</sup>

Education produces two types of effects in economy: *qualitative effects and quantitatively/qualitative effects*.

The qualitative effects are closer to the social side, providing and increasing the effectiveness of the economic processes. The individual himself becomes more competent, being able to manage the economic act, and prepare/implement complex interdisciplinary decisions in a clearly different manner to surpass by means of operating speed and performance accuracy. The availability of intelligent business operators (high-performance educational product) provides the democracy of the economic processes, the performance of the activity based on a high-quality competition. A properly educated manager shall be able to foresee the best solutions and opportunities in order to obtain the best performance of the spent money.

*The quantitatively/qualitative effects* refer to the number of occurring qualitative transformations (for instance, the number of highly educated individuals). Directing considerable financial resources towards the educational system has led to a quantitative and qualitative growth of the human factor. Competent individuals have appeared, capable to exploit high technologies, and even create themselves hi-tech at a high quality level. Considering the human factor as an active and determinant presence in the economic context has led both to an economic leap, and (historically) to the shortening of the period required for this leap to take place. The essential question is how much money a company should allocate in order to obtain the best results. One cannot answer this question without realizing the amount of the relapse flows of the spent money. For this, they generally use a method similar to the *cost/benefit* analysis. The *cost/benefit* analysis is hindered by the fact that an economic leap owed to the education is not reported unless we deal with a coherent and continuous allocation of educational funds, for a long period of time, as the whole educational process implies a long period of time for implementation at the individual level.

Education often affects the quality of life in ways which are rarely perceived as such. The highly-educated individuals can much better adapt to the varied conditions of the life development, and moreover can adapt these conditions in order to meet the individual preferences. Having a higher income, they manage to invest in themselves; the access to a better quality medical assistance, to certain methods of mental and physical care, to certain services (household and tourism) implies better health. We can thus consider that we deal with the maintenance of the human capital.

Education implies a series of modifications of the individual's behavior as a social element, the way he behaves within and regarding the collectivity is an

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62 Huru Dragos, *Investitiile si dezvoltarea economica*, teza de doctorat, ASE, Bucuresti, 2003



immediate result of his cultural level. *Fridman*<sup>63</sup> thus describes a series of these effects: “A stable and democratic society cannot exist without a minimum level of training and knowledge of most citizens and without their broad acceptance of a mutual set of values... a child’s benefits further to education fall back not only on the child or his parents, but also on other members of the society. The education of my child contributes to your welfare, by promoting a stable and democratic society.” Thus, education causes a series of effects called “neighborhood effects” in the Saxon literature, which means a quiet community life, without social or individual conflicts (decrease of crime rate).

#### 4. Direct foreign investments and economic growth

The bidirectional relation between the direct foreign investments and the economic growth is, on the one hand, due to their impact on the economic environment in each country, and on the other hand, to the positive influences of the permanent and sustainable economic growth on the received foreign capital flows. According to the field specialists, for a given country, the intense economic growth periods are characterized by attracting important flows of direct foreign investments<sup>64</sup>. At the same time, the investments (domestic and foreign) are an essential factor of the economic growth, while the models prepared in this respect reflect the actual functional connection between the accumulation rate and the growth rate of the national income, mediated by the capital coefficient.

The interdependence analysis: *direct foreign investments – economic growth* (in the developed countries and the developing countries) proves that ISD has a positive effect on the economic growth only in the case in which the state persistently promotes their own policy in this respect, and attracts ISD considering the national interest and the priorities of the respective country’s development. Where the state transmits its functions to the transnational companies, where they arbitrarily operate, ISD does not provide a stable high-rate economic growth. Moreover, these countries can lose their very sovereignty.

The activities of the multi-national enterprises are much more complex, and their impact on the national economies of the host countries is much stronger than the statistics show. The indirect effect of their activity is reflected by the orders sent to the national enterprises, creating new jobs, encouraging the horizontal industry, indirect export, etc. Consequently, the direct foreign investments have become more and more important in relation to production, trade, transfer of technologies and capital flows from the world economy, while multi-national companies play a more and more important role in the national economies of the host countries<sup>65</sup>.

Because the economic science has proved that there is a direct connection between the ISD volume and the rates of the economic growth, the IMF and the World Bank have started to recommend to all countries (which they also do at present) to create the favourable conditions for attracting ISD and thus providing the high rates of

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63 Milton Friedman „*Capitalism și libertate*” Ed. Enciclopedică colecția BNR, București 1995, pag.104

64 Lipsey, R., *Inward ISD and economic growth in developing countries*, Transnational, Corporations vol. 9, no. 1, 2000, p.73.

65 UNCTAD, World Investment Reports 2006.

development. The foreign investments, as a support of development, lead to the extension of the existing capacities, to creating new capacities, and strengthening the production potential of economy. Investments in general and all the more the high-performance and high-productivity ones promote the technical progress, lead to the increase of the economic effectiveness, and strengthening of the possibilities for a higher rate of growth as a fundamental element in reducing the discrepancies.

The contribution of the multi-national enterprises to the economic growth and development process is all the more obvious and acknowledged. The analysts have integrated the direct foreign investments into the theories about the economic growth and international development, besides the benefits of the exterior trade flows, and more and more the benefits of the direct foreign investment flows.

In the structural-sectorial sense, the economic growth induced by the foreign investments in Romania is unbalanced. The foreign investments have come where investors have perceived the obtaining of the maximum profit, but those sectors did not often match the priority interests of economy. Most of the foreign investments – certain considerations speak about almost two thirds – are practically directed towards the financial, real estate and retail sectors, as they are currently the maximum profit sectors. Furthermore, it is not by chance that the sectors in question are also the most dynamic, precisely thanks to the foreign implication.

## **5. Technology and information investment**

The economic development depends on the capacity of the nations to understand, interpret, select, adapt, use, transmit, diffuse, produce and market scientific information and technological knowledge according to the development objectives and national culture. The main factors that the impact depends on are: the status and level of education; the request for information from the private sector; the public policy to orientate the state institutional structure towards competence; the quality and state of development of the market's functional mechanisms in order to allow the manifestation of information as a production factor by inclusion in the products and their marketing.

Watson, Crawford and Farley<sup>66</sup> show that the major importance of information as a production factor for the development phenomenon appears in each sector of activity, causing an effect of dynamization and shortening of the time required for reporting an economic leap due to the reduced costs of information multiplication. The information is also the one holding the “*blame*” for the differences of development among several countries considered to be under the development process because this is where the capacity of each nation to manage new information intervenes.

The investment in technology as a production factor imprints a strong growth effect of the economic development rates, identifiable both as national income and as income level per capita. We must mention that the investment in technology-economic development relation is two-way: an important leap of development imprints a growth effect of the technology level in the economic system. If the economy operates around a potentially growing GDP level, the economic agents that do not involve in their activity strategic decisions for increasing the technology investments, shall very

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66 Robert Watson, Michael Crawford, Sara Farley, “*Strategic approaches to science and technology in development*” World Bank-working paper 3026, April 2003; <http://econ.worldbank.org>

quickly be characterized by non-competitiveness and shall consequently be excluded from the market.

The information technology, the most modern component of technologies, already exists under several forms (from the most rudimentary to the most complex ones), in any economic system, having spectacular beneficial effects on people, business, institutions, governments, nations in general. Even if the information technology requires quite high costs, these can rapidly be recovered (both due to the fast commissioning of the investment, and to the fact that the profit rates in activities implying hi-tech are in general quite high), the subsequent maintenance costs in operation are much lower than the initial ones. The importance of technology transfers by means of the export/import of capitals, from the technologically advanced economies, becomes obvious within the economic development process. The technological quality of the domestic industries, would give, before the internationalization phenomenon of the real capitals market, the value of the comparative advantage at national economy level. Bringing in the imported technologies determines the transformation of the internal production systems, but the manner in which the effectiveness modifications occur in several sectors varies substantially.<sup>67</sup>

The quantity and quality of the information available at the level of a national company, as well as the manner in which it circulates and is managed (so in relation to the human capital, depending both on its intellectual competence - the management -, and its emotional competence – communication) influence both directly and indirectly the economic development process.

A direct connection is created among specialization, labour division and economic development within the classical models. The creativity and quantity/quality of the increasing information oblige to a higher specialization in order to acquire and operationalize as much specific information as possible, which leads to a division of labour as serious of possible. The research/development investment (as implementation of research) is the key of long-term development by means of the constant growth of the labour productivity. So practically, the production and consumption of information determines, in the long run, the occurrence of economy operation at the potential level and its increase, consequently the occurrence of an ascending economic trend.

## 6. CONCLUSIONS

Investments occupy a priority field of the economic life, both regarding the significant resources they consume, and the multiple effects they generate: their orientation towards certain fields of activity and towards certain objectives must be performed depending on necessities but also depending on the trends available at world level, and the status of economy.

The decisive role in creating a functional market economy, compatible with the principles, norms, mechanisms, institutions and policies of the European Union, mainly regard the provision of a sustainable economic growth, the creation of a favourable business environment, the promotion of a coherent investment policy, the modernization and sustainable development of the entire social and economic life.

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67 Naresh Kumar; K.S. Krishnan Marg. “*Foreign direct investment and technology capabilities in the developing countries: a review*” International Journal of Public Administration, May-August 2000 p123

By means of the investments, the relation between capital and labour is rearranged. The modification of the capital volume and structure draws the improvement of the production technologies and development of the human factor in the sense of perfecting its qualification. In the long run, the human investment seems to be the safest and most profitable, turning the individual into the most valuable capital, i.e. the "human capital".

If the contribution of the foreign investments is strong and beyond doubt regarding the economic growth, the issues must be toned regarding the content of the economic growth and implicitly the contribution to development. The economic growth regarded from the perspective of the direct foreign investments depends on the attractiveness degree of the economic and social system.

The modern growth theories designate the development process in which knowledge is the main internal factor, while the economic development process is the result of the final production growth, accompanied by the quantity growth and information quality. In the spirit of this theory, the human capital, technologies and information become pertinent elements of the sustainable economic development. The way they are integrated within the functional processes by means of which an increased development rate is attained, is a specific one, and at the same time, relatively new for the economic science. The analytical and lucrative approach of the investment processes by means of which the presumptions of highly educated human capital, advanced technologies and consistent and varied information are created, implies a decisional and control behavior, outlined on new managerial principles.

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# Human capital, sustainable development and human development

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**Abstract:** The concept of sustainable development is founded on the idea that any development process must be focused on human purpose and must allow the expanding of the range of choices that any individual can make in order to satisfy ones many necessities. There fore, starting from the main factors which condition the development - population, resources and environment, agricultural production, industrial production and pollution - the strategic vision of sustainable development aims to find, in each country and worldwide, the most appropriate criteria for optimizing the ratio between the needs, the resources, the goals to achieve, the necessary means, based on their mutual compatibility.

**JEL classification:** Q01, O10, O15

**Keywords:** human capital, sustainable development, social capital, HDI, HD

Placing the human being in the center of the priorities, sustainable development is not a purpose within itself but the means to humanize economic and social progress, to distribute as evenly as possible the effects on both all coexisting generations and on those who succeed in life. The concept of sustainable development is founded on the idea that any development process must be focused on human purpose and must allow the expanding of the range of choices that any individual can make in order to satisfy ones many necessities.<sup>68</sup>

Conceived as a reconciliation way between economy and environment, as support for human progress not only in a few places in the world and for a few years, but on the entire planet and for the long-term future, the sustainable development is based on compatibility and interaction of four systems: economic, human, environmental and technological, from which will result a new civilization, which provides needs of the present without compromising the ability of future generations to meet their own needs.

Starting from the main factors which condition the development - population, resources and environment, agricultural production, industrial production and pollution - the strategic vision of sustainable development aims to find, in each country and worldwide, the most appropriate criteria for optimizing the ratio between the needs, the

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68 M.Băbeanu, E.Marin, Considerations upon concept of human development, in *Management and administration in open market economy*, Craiova University, 1993, p.88-92.

resources, the goals to achieve, the necessary means, based on their mutual compatibility.

In essence, sustainable development is defined by the following major elements:

- Permanent and safe compatibility between the environment created by human and the natural environment;
- Equal chances for generations that coexist and that succeed in time;
- Interpretation of the present through the future, introducing as aim of the sustainable development the ecological security instead of maximizing the profit;
- Introducing compatibility of strategies of national development, as a result of increasingly powerful interdependencies, in geo-economic and environmental dimensions;
- Shifting the center of gravity regarding the general welfare from the quantity and intensity of the economic growth to the quality of it;
- Organic integration of the ecological capital with the man-made anthropogenic capital and the human capital within a global strategy that redefines its economic and social objectives and expands its horizon coverage in time and space;
- Switching to a new strategy of natural-human essence, where the economic and social development objectives are subordinated both to man and rural area healing, human development, human capital development, without endangering the ecological balance.

Sustainable development aims to change the type of economic growth, to ensure pollution control, to create an appropriate and efficient legal and institutional framework, to create a more flexible education system that is able to anticipate and to deepen their knowledge, to create a system of economic instruments in order to prevent, to protect and to ensure scarce resources, to enhance people's lives.

Sustainable development subsumes and correlate the economic development and human development.<sup>69</sup> As *human development*, sustainable development maintained that, firstly, *the development is made for men* and implies men participation in order to obtain economic results and to distribute the income equitably. Income means the individual access to the resources needed to ensure a fair standard of living; it guarantees personal satisfaction of decent needs, normal consumption of goods and services, as well as individual social mobility. A second essential feature of human development is the fact that economic and social development is done by people and, therefore, the *human potential has to be created and strengthened*, based

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69 UN issues annual reports on human development (Raport mondial sur le developement humain). The first report (1990) has argued for focusing on individual development as a process of enlarging the possibilities offered to the individual. The second report (1991) stressed the role of governments in financing human development, by restructuring national budgets, in the way of redistribution the military budgets to the core areas of human affirmation (health, education, culture and so on). The third report (1992) noted the international dimension of human development focusing on restructuring the international markets and the need for massive investment in developing countries, to meet human needs. The 1993 report, based on the experience gained, made more nuanced concept of human development. Reports in the following years were devoted to human development globally by geographical area, groups of countries and countries.

on the investments in human capital, namely in education area, culture, vocational training, life-long learning and human health. Education level and health status reflects the ability of individuals to acquire knowledge, to communicate and participate in the social life of the community, to fulfill social roles.

Equitable distribution of income and investments in human capital creates material and socio-cultural framework for *life expectancy of man*, so that longevity or individual's ability to live a long and healthy life is another fundamental feature of human development.

*Developing through the people and for the people* outlines the fourth dimensions of human development: *participation* or chances which people have to participate in social life, to be its protagonists. The deepest and effective method of people participation is the access to employment and remuneration, which means that a key objective of human development strategies has to be the engender of new jobs, improving the condition of the existing jobs, reviewing the concept of labor and labor duration, extending the concept of capital which, in addition to physical capital, financial capital etc., should contain itself the human and natural capital.

Human development is based on three aggregate components of the concept: natural capital (ecological), anthropic capital and social capital.

Human development is simultaneously national and international. *National and global (worldwide) vision on human development* represents the fifth feature of the concept of human development; it proves that at both national and international level, new models of development have to be created which will be focused upon population's needs in order not to marginalize countries, groups or individuals and to create the framework required for investing in human potential.

The meaning of sustainable development and the information society is the improving of the people living standards, their material and social welfare; the economic and social development are humanizing. The main components of human development are: longevity, degree of education and living standards, materialized in income per capita. The first two reflect factors of "stock", mainly the accumulations reached in health and education, while the income is a "flow" variable characterizing the degree to which the individuals access the resources for a decent life. By detailing the three variables, we get to an impressive number of groups of indicators that characterize human development, which include: indicators of demographic profile, of fertility and natural increase of the population, of people participation in economic activity, of employment, of unemployment, of education and health, indicators of education and communication, indicators of human capital developing and so on, which demonstrates that cumulative growing of human capital is not possible without sustainable human development. The human capital, labor resources and thus the population form the prerequisite and the main motive of sustainable economic development and so the results of such growth model provide human development.

By analyzing trends in human development (HD) in Romania, we are interested to track, in the first place, the national performance starting with the indicators figures on HDI components and the size of the latter. Secondly, we consider comparisons with the average HDI of the highly advanced countries in terms of human development, and also, in certain cases, with the global maximum. We will hereby describe the work methodology used in 2011 in order to analyze afterwards the results of demarche.

Thus, the calculation of *life expectancy at birth index*, 0-1 space standardization was achieved by considering the global maximum value recorded in the period 1980-2011 (83.4 years, Japan, 2011), the minimum was set to 20 years (for a long while the works were done with a maximum target considered of 85 years and a minimum of 25 years, but the real minimum was 47.8 years - Sierra Leone). The adjustments of this type are part of a general intention to reduce the differences between countries.<sup>70+</sup>

For the *average years of school (AYS)* and *expected years of school (EYS)* the global maximum was 13.1 years (Czech Republic, 2005) for the first indicator and the second indicator maximum was limited to 18 years, considering the number of years of school from the first grade class to graduating from College (in 2010 the works were done with the real maximum, meaning 20.6 years, Australia, 2010). The minimum was decided for value of 0 for both indicators, considering that one can live without school. In reality, the global minimum for AYS was not too far from 0, respectively 1.2 years (Mozambique), nor for EYS (4.8 years, Eritrea), which can be a good sign for the future, although the value itself is still extremely low. Among countries with low HD, however, there are records of levels of EYS of 11 years (Liberia, Kenya, Timor).

As for the index for economic standard, the determination of its value requires a more complicated methodology. As was previously done for GDP, it begins by the operation of getting the values of GNP per capita from currencies to a common comparison basis. This is done, not by the exchange rate, but by calculating the so-called Purchasing Power Parity (PPP) based on the prices of products and services in a country relative to the U.S. (constant prices, 2005) and expressed in U.S. dollars (in 2010 the prices of 2008 were used). Obviously, in countries where prices match those in the U.S., the values GNI / capita PPP remains at the nominal level. In countries where prices are lower GNI / real PPP is higher than the nominal value and, as opposite, higher prices reduce the nominal GNI. Note that by updating the calculation of PPP in 2005 (the old computing time was 1990), Romania's situation was better reflected, the GDP per capita reported to PPP increased, because prices in our country have been and are lower than in the country of Reference (USA).

If previously they have also adopted adjustments of the incomes of those countries exceeding a certain threshold, either by means of a successive limitation algorithm depending on their size, or as capping, considering that, over a certain limit, the income does no longer influence the human development, they have subsequently stopped adjusting the incomes, so that since 2010 they have been working with the real values at PPP. These amounts are not included in the GNI index calculation formula; they have been using their logarithmic transformation as far back as 1990. Thus, the ratio between the incomes of the countries is extremely abruptly reduced (so the adjustments were not even necessary): the ratios type 1 to tens, hundreds and even one thousand are reduced to the value 1 to 2, or 1 to 2.5 at most. For year 2011, the GNI/inhabitant to maximum PPP at world level was 107 721 \$ (Qatar), and the minimum was established at 100 \$ (although the real minimum of the reference period was 163 \$ – Zimbabwe, 2008 – and this value was used in HDR 2010). The next year however, they considered that it would be well-grounded to adopt the minimum of 100

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70 Mărginean I., Romanian Performance within human development field, Quality of life magazine, p. 276-284



\$ inhabitant to PPP, because unmeasured subsistence income is left anyway, and at world level, in the case of women, the respective minimum had this value. For the afore-mentioned maximum and minimum amounts of GNI, the values of the logarithms are 5.03; 2.21 and 2.0, so that the ratios of 1 to 660 and 1 to 1077 have been reduced to those of 1 to 2.2 and 1 to 2.5.

HDI components were the *Life expectancy at birth* (LEB), *Mean years of schooling* (MYS) (adult population of 25 years old and more), *Expected years of schooling* (EYS), *Gross national income* (GNI) per inhabitant at PPP. Among these four indicators, Romania's most favourable situation, for year 2011, refers to the *Average schooling years*, i.e. 10.4 years, a good value, which places our country on the 32<sup>nd</sup> position of 187 countries, together with other four states (Spain, Kazakhstan, Iceland and Andorra). As a size grade, the indicator value is the 18<sup>th</sup> at world level (the highest value is 12.6 years in Norway, followed by New Zealand – 12.5 years, and USA – 12.4 years). In no other human development classification has Romania had a better position than in the case of this indicator (centile 84). The difference as compared to the world maximum is however 2.4 years, which is a lot. Please note that in 2010, this indicator was 10.6 years for Romania but has subsequently been revised.

The indicator with a better value is *Expected years of schooling* (EYS). The size of this indicator is 14.9 years, the 19<sup>th</sup> value at world level (together with Slovakia), being preceded by 37 countries (centile 80). In 2010, the indicator value was slightly higher (14.8 years). So, Romania's classification was also good from this perspective. This time, the first position in the world hierarchy is held by several countries which have reached the imposed limit of 18 years (Australia, New Zealand, Ireland, Iceland). Surprisingly, Cuba is on the second position (17.5 years). Cuba also follows Romania regarding the HDI size in 2011, due to the expansion of education lately and also due to the higher life expectancy at birth; the GNP is however extremely low.

The indicator where Romania is on the third position of the analysed four is the *Life expectancy at birth* (LEB), with a much lower performance, i.e. the 48<sup>th</sup> country at world level (centile 75), and is preceded by 71 countries, while the indicator value is 74 years (73.2 years in 2010). Japan is on the first position, with 83.4 years, followed by Hong Kong (82.8 years) and Switzerland (82.3 years). In the first edition of HDR (1990), the life expectancy at birth in Romania (year 1987) was 71 years, while the world maximum is 78 years (Japan). As one can see, the gap between the two countries increases from 7 years to 9.4 years. The increase of lifetime in Romania, as achieved in the 24 years, is to a certain extent, related to the decrease of infantile mortality from 27 per mille to 10 per mille, a value which is however three times higher than in the well-developed countries (NIS, 2011).

Finally, the fourth place regarding the country's performance refers to the Gross National Product (GNP). With 11 046 \$ /inhabitant, the GNP to the Purchasing Power Parity (PPP), Romania occupies position 70 (only to centile 63, this is also the rank of the respective value). In 2010, the GNP/inhabitant PPP was 12 844 \$, and in 2009 it was 14 460 \$, by 8% under the level of year 2008 (World Bank, 2011). In this context, we must mention the fact that the updating of the calculations for year 2008 has meant a significant increase of GDP/GNP, i.e. inside the country the prices remained low. It is expected that, when the number of the Romanian population is

published, approx. 20 million according to the Census of 2011 as compared to 21.4 in the official statistics, the resulting GNI per inhabitant shall be higher by at least 700 \$.

The maximum size of GNP/inhabitant to PPP is an exception, of 107 721 \$ (Qatar). The following positions are occupied, at a great distance, by Liechtenstein (83 717 \$) and the United Arab Emirates (59 993 \$). So, on top of the world hierarchy, we can find countries with large resources of oil and gas. As a curiosity, we note the increase by 27% of the GNP in the case of Qatar, in 2011, as compared to 2010, when it had 79 426 \$, and occupied the second position after Liechtenstein (81 011 \$).

In the reference period, the indicator of the economic standard expressed in GDP followed a sinuous evolution in Romania, with decreases in the first part, which has also affected the HDI size. Thus, the value of 3 000 \$ inhabitant to the Purchasing Power Parity (at the level of 1985–'88) has decreased to 2 800 in 1990, and started to re-establish since 1993, and register increases during 2000–2009, and then it decreased again. Regarding this indicator, the differentiation as compared to the world maximum and also to the following values is irrelevant. However, we will show that in Germany the respective value is three times higher, in France, 2.7 times, in Italy, 2.5 times, in Slovenia, 2.1 times. In fact, the GNI in Romania is the lowest as compared to all the EU countries. It is also lower than those of Serbia and Ukraine.

As for the HDI size, Romania occupied, in the classification of the countries for year 2011, position 50 (centile 74) and the 42<sup>nd</sup> value globally, with 0.781 (84% of the maximum of 0.943, Norway), at a distance of 0.162. The position held by Romania regarding the HDI value is in the immediate vicinity of the countries considered to have a very high HD (the first quarter of the total countries, i.e. 47 of 187). The distance from the last country in this category is 0.012 (Barbados), while as compared to the average of the countries with a very high HD is 0.108. If we refer to the average value of HDI for the countries with a high HD (still 47 countries), to which Romania also belongs, the level of the country is 0.040 higher.

In the world classification of the group of countries with a high HD, Romania is immediately preceded by a small state in the Pacific, Palau (included in 2011, with 21 thousand inhabitants) and Uruguay, while three positions after Romania are held by Cuba, Seychelles and Bahamas.

Further to the analyses, most of them based on comparisons, we find that Romania's human development is close to the group at the top of the world hierarchy (the first quarter). It is not a performance matching up to the potential of the country's human development, and what is dragging it down is, first of all, the GNP value. The first transition years resulted in HD costs, not only because of the economic restructuring, but also further to wrong decisions, such as reducing the mandatory education to 8 years, although the 14-15 year old graduates could not enter the labour market. It must also be mentioned that also in Romania, as in many other countries, the increase of the middle school graduation population has occurred in at least two ways, namely: the increase of the schooling coverage, but also the exchange of generations (as the elderly people have a lower schooling level). In the educational field, the main issue consists in maintaining the current level of participation, and possibly its increase in the future together with the improvement of competence.

The relation between the state of health, labour resources of a country and its human capital is involved in each of the components of the human potential.

**Firstly**, if we direct the analysis from general to particular, the conclusion is that the state of health is one of the indispensable conditions of the functionality of the occupied population and manifestation of the potentially active population. No occupied person, no matter how instructed and irrespective of the living conditions he/she enjoys, cannot completely and effectively fulfill his/her working role, as well as the other social roles – in one field of activity or another, in one form of his/her life or another – if he/she is not healthy. Health becomes thus not only a component and a feature of the human capital, but also of an ampler entity of the people's natural and social existence called the quality of life. In the absence of the occupied persons' health, the social activities (economic, technical and scientific, cultural, etc.) would either not take place, or would defectively take place, with interruptions and qualitative and quantitative diminution of the results. As not all occupied persons are ill/healthy at the same time, the improvement of their state of health is the human support of stability and increase of the social activities.

**Secondly**, the state of health/illness amplifies/reduces, restricts/increases the degree of freedom of the unemployed persons and of those who turn the legal age for work, in their actions to occupy a workplace. The fluidization of the workforce offer, the professional, territorial and social mobility of the workforce carriers depend, to a significant extent, on the state of health/illness.

**Thirdly**, the natural movement of the population, with its specific phenomena, depends on the state of health and vigour of the population: birth rate, mortality, natural growth, average lifetime, etc., while the demographic phenomena greatly condition the total population and the weight of its two components: the active population and the economically inactive population. In their turn, the active population and inactive population components become variables on which the sizes of the labour resources depend.

**Fourthly**, the human capital-society relation must be regarded from the perspective of the middle human capital or social instruments of development. In this social context, the development is manifested as a means used for improving the quality of people's lives, which, among numerous parameters characterizing it, also include the human capital, where the state of health is included. The effective attracting and capitalization of the human resources available in the economic and social activities amplify the national wealth, diversification of goods and services required by the population, improve their quality, and increase the incomes of persons and families. Motivating people by means of the increasing incomes obtained from the performed activity, together with the distribution of goods and incomes based on the social equity are premises which contribute to the improvement of the quality of life: people spend more for their personal and social welfare, invest more in the human capital, in their living and dwelling conditions, in education and qualification, in culture and health. As soon as the human capital is enriched, a new social basis is formed for the economic growth and achievement of the progress in the field of the quality of people's lives.

The progressive impact of the human capital on the growth and development processes, specific to the IT society and new economy, cannot completely be understood outside the sustainable development, in its relatively recent sense of human development.

The humanization of the economic and social development, a long-term process in each country and globally, implies the fact that the population, i.e. the

human, is the main axle around which all the components of the social life gravitate. The development in each field and the general social progress must directly serve the individual, and satisfy their generally human prosperity and social peace needs and interests. The interest to cash in economic private profit, to obtain personal economic and social advantages beyond and to the detriment of others' prosperity, are moved to a secondary position, as compared to the social effectiveness, social benefit, ecologic gain, and general welfare. The development, as a whole and through its every component, shall not only be the resultant of spontaneity and hazard, of the blind struggle for imposing the selfish interests of each individual towards the others, of everybody's struggle against everybody, but a strategy projected and grounded on the prosperity of all people, it is true, in different proportions and in a long historic perspective.

Selfless and visionary, based on the realities in progress of the mankind's movement towards the IT society, but also on desires whose fulfilment cannot clearly be glimpsed, the human sustainable development intends to be:

1. a reconciliation, compatibilization and non-aggressive cooperation between the individual and his natural environment;
2. a reconciliation and compatibilization of the interests of any kind of all people and all social groups who live simultaneously, at a certain time, by providing the individual and general welfare;
3. the harmonization of the economic and social progress interests of all populations living at the same time on our planet, so that the world progress in any field would form into a universal asset by which all people would openly benefit;
4. a reconciliation and harmonization of the interests of the current generations with the development interests of all the generations that will live on Earth.

It goes without saying that, by becoming a reality which is self-reproducing, the human development generates a new quality of life, and contributes to an actual explosion of the social importance of the human capital, within which the education, science, culture and health appear as number-one components. On a larger scale, the factors related to the sustainable human growth and development are familiar with two trends which are only apparently opposite: the specialization and consequently autonomization of a large number of factors, on the one hand, and the association, i.e. progressive aggregation a certain factors, which have one or several mutual features, in the functional process of their use, in order to create wealth, on the other hand.

The scientific reflection of the interrelation between the diversification and aggregation of the development factors capitalizes a relatively simple idea of the economic science, expressed by Irving Fisher in the third decade of the 20<sup>th</sup> century, according to which any stock of resources which has the capacity to create flows of future incomes or future utilities is turned into a capital. And, as all the resources underlying the contemporary development are capable of bringing useful effects or future incomes, they have become capital, so that in the sustainable human development strategies, they use three sociological concepts of maximum aggregation: ***natural capital, anthropic capital and social capital***, whose scientific content has not completely been defined yet.

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# **THE CLUSTER, STRATEGIC MODEL OF COMPETITIVENESS IN TOURISM**

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**Abstract:** In the tourism sector can be established associative forms that include organizations: tour operators, travel agencies/tourism guides, local and national authorities, suppliers of the tourism industry, leisure and entertainment industry, transportation companies, Universities, training institutes, another organizations that can collaborate and compete well for competitive advantage.

The tourism cluster consists of a group of tourist attractions, businesses, and institutions directly or indirectly involved in tourism concentrated in a particular area.

This paper addresses a strategic model for developing tourism cluster that is different from traditional models and highlights the effects on competitiveness clusters, considering three essential aspects: the role of transnational corporations and foreign direct investment in tourism cluster development; interconnection between cluster actors, and the separation between cluster actors and conditions of the business sector.

The approach extends classical tourism cluster influenced by the "home-based environment" to globally, with effects on competitiveness and global socio-economic prosperity.

**JEL classification:** M11, M16, M21

**Key words:** tourism cluster, competitive advantage, Porter's diamond model, transnational corporations, model for global competitiveness

## **1. INTRODUCTION**

The tourism industry has gained great momentum in recent years due to the development of the communication infrastructure and many facilities to travel around the world, which led to an increasing number of tourists daily.

Many countries try to attract tourists with scenery, culture, traditions, history, sport, recreation, sea, mountain, art, organizing events (seminars, conferences, art competitions, camps, fairs), thus generating significant revenues and thus economic progress and socially.

Countries' strategies of strengthen economic growth through tourism development is based on the argument that the industry is an effective incentive when there is no local capital or skilled labour, but there are natural resources.

Tourism is an area of national interest highlighted as a priority in national development plans public, and in international trade policies through small and medium players in the global industry.

Internationally there is a strong international competition for tourist markets, while national economies are influenced by the emergence of transnational corporations and by the foreign direct investment that had come from West.

In the context of globalization and economic growth through tourism development, researchers and policy makers have conducted studies to identify a successful strategic model applicable in tourism, leading to value added growth.

This paper analyzes the concept of tourism cluster and shows a tourism cluster model using Porter's theory as foundation and focusing mainly on the role of transnational corporations in tourism and the connections between cluster members.

## **2. CONCEPTUAL FRAMEWORK**

Researchers, tourism experts, economists, policy makers have sought to develop concepts, models, and strategies to maximize the positive effects of tourism development. Most case studies of tourism cluster have applied Porter's model focusing primarily on investigating the potential of tourism competitiveness through the four categories of forces: factor conditions, demand conditions, context for firm strategy and rivalry, related and supporting industries. Porter made a significant contribution to the definition of cluster, providing a model of understanding of national and regional Competitiveness.

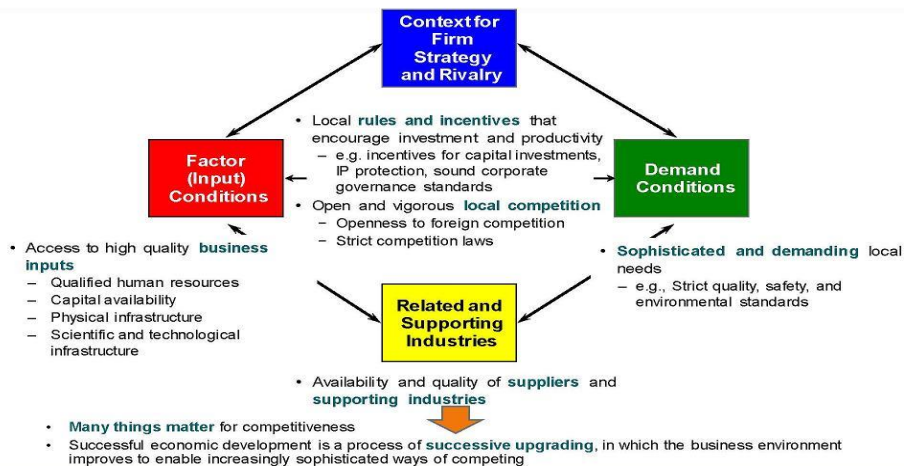
Porter has defined the cluster in 1998, as “a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities.”

The competitive advantage of tourism is determined by four factors forming the “diamond” Porter:

- Factor Conditions - natural factors, cultural and creative man, including natural, geographical, cultural and historical resources (monuments, museums, art collections, customs, crafts, events), capital resources and infrastructure (accommodation, transport, development of the area), HR;

- Demand Conditions for tourism products and services refer to the size of the market, its structure (basic diversity, seasonality, the degree of internationalization, share integrators etc.), position in emerging markets, cultural consumption habits, first time visitors, sophisticated tourists (giving trend).

- Activities/industries supporting the access to tourist activity - railway infrastructure, road, air, sea, parking utilities, cultural facilities, recreational and sports nutrition, products and sophisticated restaurants, facilities for shopping, providing high quality travel services, prepared for tourists, satisfactory quality tourism;



Source: Porter, M. E. *Clusters and the new economics of competition*. Harvard Business Review, 76(6), 77-90, 1998.

Figure no. 1 Porter's Diamond

- Context for firm strategy and rivalry target marketing strategy, organizational structure structured on market competition, size of firms, cooperation between SMEs and individual firms cluster management quality, image organizing strategic alliances.

Porter's cluster theory emphasizes the interconnection relationships between members of the NGO, namely between companies and suppliers, and between companies and other relevant institutions. This approach is useful for the tourism sector, characterized by a fragmented structure, consisting of small and medium enterprises and a network of participants who are not involved in the same sectors.

In defining the determinants of tourism cluster was found that competitive politics is conditioned by involving of the private and public sectors. For the analysis of competitiveness in tourism can be used tools as tourism management, traffic planning, regulations on housing, taxes, with site and area of intervention specific strength and weaknesses.

Porter appreciate in 1998 that the clusters can affect competition by increasing company productivity through innovation and by stimulating the formation of new businesses that extend and reinforce the cluster.

Porter's theory of competitiveness of nations and the concept of cluster was considered one of the successful theories, applicable models of local development, including tourism.

While literature on competitiveness focuses on supply-, Porter stressed demand conditions, its sophistication that allows response to changing needs of the domestic and international market.

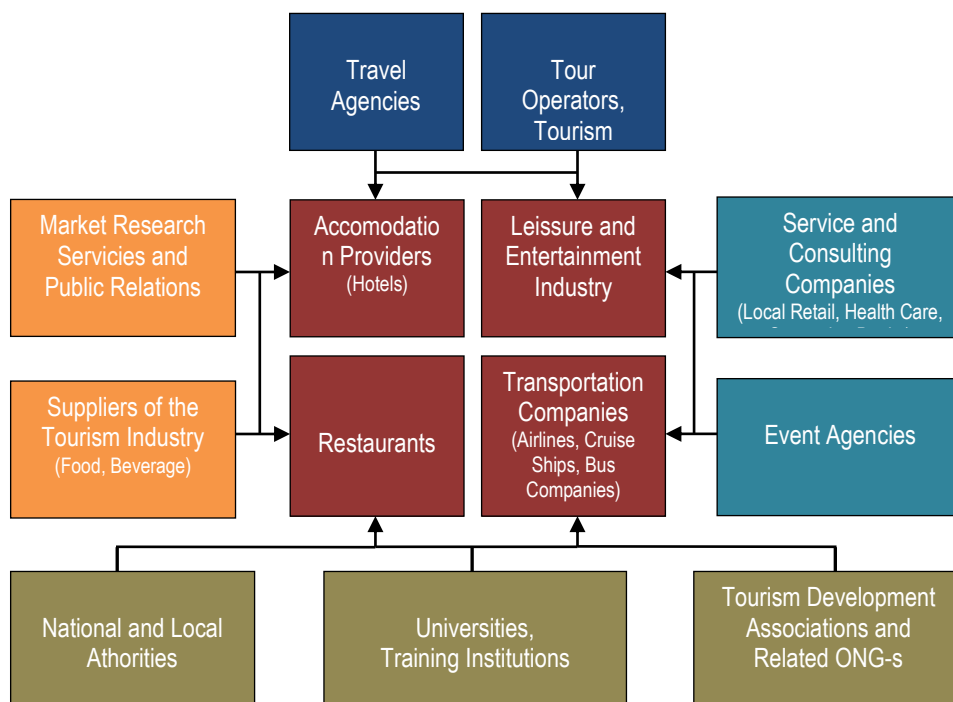
The tourism cluster is an accumulation of resources and attractions, infrastructures, equipments, service companies, other supporting sectors, and administrative organism whose integrated and coordinated activities allow providing services to the customers.

The members of tourism cluster are:

- Tour operators/Travel agencies/Tourism guides;
- Tourism development associations and related NGOs;



- Local and national authorities;
- Market research services;
- Event agencies;
- Accommodation providers (hotels, hotel chains);
- Suppliers of the tourism industry (equipment, food, beverage);
- Leisure and entertainment industry (casinos, tourist parks, sports, etc.);
- Transportation companies (airlines, bus companies, etc.);
- Service and consulting companies;
- Universities, training institutes.



Source: Own processing

**Figure no. 2 Tourism Cluster Model**

The cooperation, competition, and competitiveness in tourism cluster members determine the competitiveness of clusters. Continuous communication between them and the outside partners allow the identification of operational opportunities and of threats.

Objectives of tourism cluster:

- Innovation and diversification: Development of innovative tourism products and services to attract new tourists;
- Rise of competitiveness: optimize the value chain in the tourism industry;
- Quality: improve the quality of the touristic service;
- Cooperation: exchange of ideas and joint projects between the touristic region;

- Promotion: promote touristic regions as “destination of excellence”;
- Networking: Organisation of regular meetings of tourism stakeholders;
- Thematic working groups (development of new tourism products and services, quality management, events, tourism promotion);
- Training to improve the regional tourism value chain (suppliers – agencies – service providers);
- Participation to international trade fairs;
- International cooperation/ international benchmark with leading tourist destinations;

Analyzing rural tourism in Australia, Michael Ewen has developed in 2003, the micro - cluster term. He used the concept of “clustering diagonal” referring to the concentration of complementary companies (or symbiotic), in which each company add value to the other companies activities, even if their products can be quite different (Michael Porter 2003:138). Travellers consume the tourism product created by firms that supply separate goods and services as a whole element.

Jackson and Murphy (2006) and Jackson (2006) have applied Porter’s model at the regional level in Australia and China and have examined in which areas and to what extent the four forces are affecting the diamond potential of the cluster formation in the studied regions. They found that the clusters allows the shift from comparative advantage to competitive advantage and the factor "conditions" of the four of diamonds is to enhance the competitive advantage of a region.

### **3. TOURISM CLUSTER DEVELOPMENT MODEL FOR GLOBAL COMPETITIVENESS**

Porter has not taken into account and has underestimated the role of transnational corporations and foreign direct investment in addressing competitiveness.

Transnational corporations are a main force of transnational economic integration, which creates economies of scale or scope and lead to significant gains through common government of benefit activities.

Considering the important role of transnational corporations, Dunning (1993), Rugman and D'Cruz (1993), and others have reviewed domestic Porter's diamond model and created a "double-diamond" or "multiple diamond" models (Clancy, A O'Malley, O'Connell, & Van Egeraat, 2001; Moon, Rugman, & Verbeke, 1998 O'Malley & Van Egeraat, 2000).

Using Porter's concept, Crouch and Ritchie (1999) constructed a model of competitiveness, CR's model, making the transition from the traditional approach (focused on attractiveness of destination) into the competitiveness of destination.

Using both specific elements of tourism, they have found that four major components determine the competitiveness of the tourism destination, taking into account the influence of micro and macro environment that affects these components, namely:

- qualifying determinants (location, dependencies, safety, and cost);
- destination management (resource stewardship, marketing, organization, information, and service);
- core resources and attractors (physiographic, culture and history, market ties, mix of activities, special events, and tourism superstructure);



Figure realizes a systemic approach to tourism cluster, within which supports cluster actors - organic system comprising symbiotic relationships and networking.

The "Basic Resources and attractions" are the main resources that attract tourists to destinations and are primary factor in the creation of tourism products. This includes natural resources (mountains, lakes, beaches, rivers, resources or cultural heritage, culinary assortment traditional handicrafts, culture and history of the destinations) and created resources including special events or activities available in a tourist destination of entertainment and shopping.

The destination management factor includes marketing activities of the destination, information and technology, human resources management, and environment management, which are designed to increase core resources to enhance the quality and effectiveness of complementary factors, and adapt best to the constraints required qualifications.

The complementary conditions factor contributes to adding value to core resources and includes accommodation facilities, food services, transportation facilities, and other resources, which many view as the private sector component of the tourism industry.

The demand conditions factor is important factor in tourism competitiveness and includes three elements: demand - awareness, perception, and preferences.

Cluster actors cooperate, realizing the benefits of maximizing both individual and cluster the positive effects of tourism in the region/country.

Companies and universities can collaborate with transnational corporations or governments to improve productivity and ability to innovate.

The arrow between companies and transnational corporations indicates their dual capacity as competitor and collaborator and the symbiotic relationship of competition and cooperation between them, which determine obtaining individual benefits, and benefits for tourism cluster as a whole.

Existing hotels TNCs in the host country connects these countries in international tourism and international tourism networks, leading to increased inflows of tourists and generating revenue.

Since not all tourist destinations have attracted foreign direct investments and transnational corporations, their role is presented in the figure by the dotted line.

The four factors are tourism cluster and maintain competitiveness of tourist destinations. When the clusters allow sufficient inputs such as skilled labour, assets, and attractive resources and offer a good resource of relevant information about products and tourist needs, the clusters gain competitive advantage.

Cluster actors - governments, universities, companies related to the tourism industry, transnational corporations, NGOs, when cooperating create competitive advantages in the global market, contributing to the socio- economic prosperity at the regional and national level.

#### **4. CONCLUSIONS**

The tourism is a vehicle to bolster the economy, which usually lacks resources, skilled labour, SMEs, and capital and is a potential growth sector.

Tourism cluster is an effective way of organization of enterprises operating in this area, which can achieve competitive advantages.

The Tourism Cluster Development Model for Global Competitiveness foundation highlights:

- The role of international corporations and foreign direct investment in improving productivity and capacity to innovate tourism cluster actors from emerging countries affected by global competition ;
- The role of interconnection between all groups that are collaborating and are competing;
- The distinction between condition factors and cluster actors by separating each other (the distinction between state factors and actors in the model).

The limits of this model of tourism cluster development consist of a descriptive character without a detailed approach of relationships between cluster actors, the impact of the four determinants of competitive advantage on the socio- economic prosperity, or the impact of transnational corporations and foreign direct investment.

However, the model can be used in the formation of clusters of tourism, offering integrated decision makers for sustainable development of natural environments, cultural and business travel destinations, as well as local and regional economic progress.

Policymakers should promote strategies that encourage association of firms in clusters of tourism and to highlight the effectiveness of the cluster as a way to support the sustainability of tourism. - As a way to enhance sustainable tourism clusters.

In the context of European Union funding for the programming period 2014-2020, the formation of clusters by using EU funds for tourism represents an opportunity and a sustainable development solution.

Public policies should develop innovative clustering based on cultural cooperation, competition, and competitiveness by supporting sustainable competitive clusters in all sectors, both nationally and globally.

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# **Bank lending in Romania in 2014: between optimism and reality**

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**Abstract:** In 2014 lending forecasts are especially optimistic that the Central Bank has reduced last year from July to August, September and November and most recently in January 2014, the key interest rate to a historical low of 3.75%. The actions carried to cheapening credit continued reduction in reserve ratios on deposits in RON and in foreign currency. From the theoretical point of view there are advantageous credit conditions; it remains to be seen to what extent customers of banks, individuals, and legal entities will appreciate the effort of Monetary Authority. The external environment is the bank that will determine the decision to enter a new credit or ability to repay a loan in progress.

JEL classification: G 28, G 29

**Keywords:** loan, monetary policy, crisis, performance

## **1. Introduction**

After nearly four years of stagnation in lending while stagnating consumption and investment banks in 2014 come with tempting offers regarding lending.

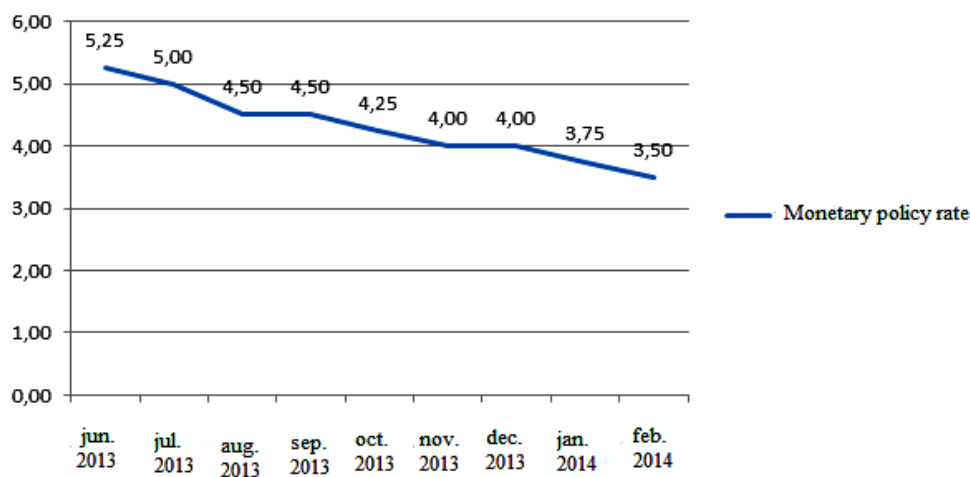
Credit recovery should take place on the re-launch economic activity amid a stable socio-political climate, amid increasing domestic consumption and not least the need to revive lending and, cleansing "of bank balance sheets, encumbered by loans bad.

Decisions on credit recovery will primarily aim to domestic economic conditions being agreed that the economy needs large projects not only low interest.

## **2. Economic developments optimistic for 2014**

The renewal of the crediting was created in the second half of 2013, the central bank lowered the key interest rate in five consecutive sessions, in July, August,

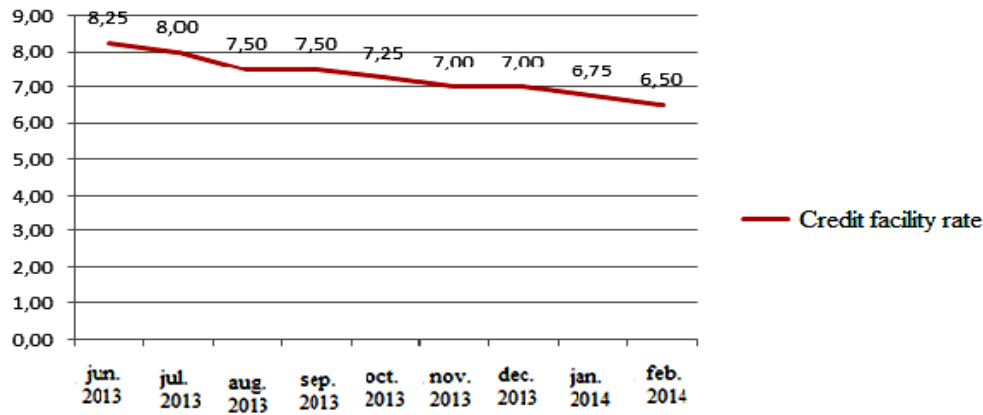
September and November, the action continued in January 2014, which means money cheaper for banks. graphic one which led to the location of such interest to a historical low of 3.75%.



Source: NBR data, the graphic authors

Figure no. 1 The interest rate monetary policy

In this context, the central bank reduced the interest rate on the credit facility for the period June 2013 - February 2014.

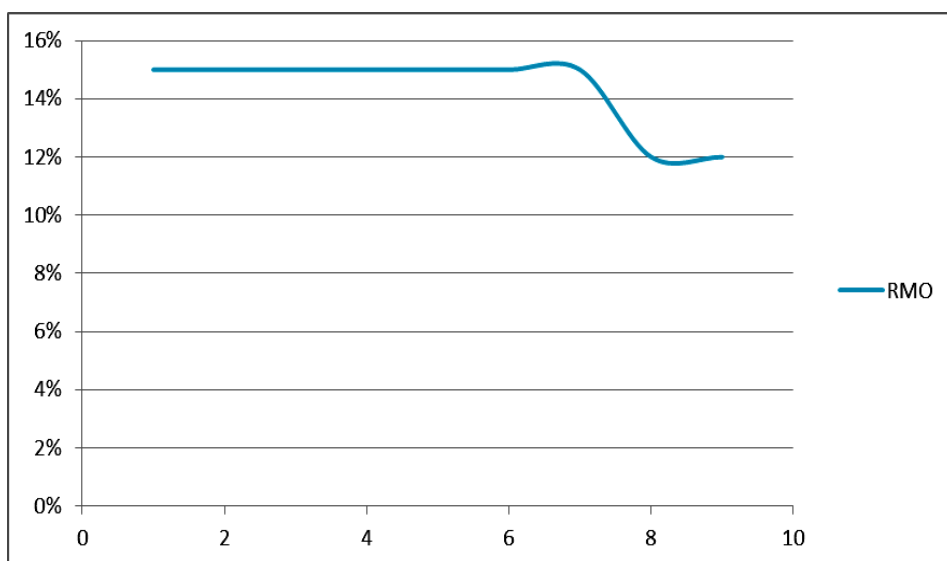


Source: NBR data, the graphic authors

Figure no. 2 The interest rate on lending facility (Lombard)

NBR further action in this regard and reduced MMR rate in liabilities in lei and in the currency, which leads to release amounts from reserve requirements, which will boost lending, leaving more resources for financing banks large term.



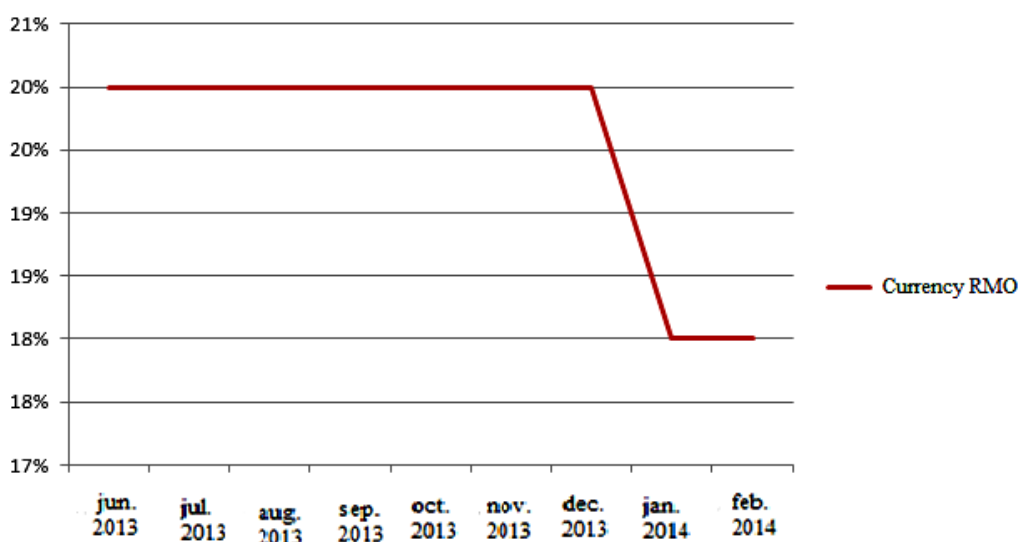


Source: NBR data, the graphic authors

**Figure no. 3 RMO LEI**

From the point of view of the authorities, the renewal of the crediting is generous and banks began to make loans cheaper, both companies and individuals, but the problem is not only related the crediting costs, interest rates are at a competitive level, but rather one related to loan demand.

Banking system is expected to increase by 4-5% in 2014 of new loans, from the previous year and in particular is projected to keep rising trend of domestic currency loans contracted.



Source: NBR data, the graphic authors

**Figure no. 4 RMO FOREIGN CURRENCY**

Another good news is that the 2014 is anticipated and increased household consumption and investment, together with a slight increase in wages (in 2014 the minimum wage increased in January from £ 800-850, followed in July to reach £ 900) and increased absorption of EU funds. Consumption could increase by 1% because 2014 is an election year.

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Corporate lending will rise on agriculture and related areas and in areas that bring added value to the economy, such as construction and horizontal industries related to the sector, health services, food and manufacturing, IT, transport.

Obviously, the increase of credit for agriculture, although starting from a very low base, has a positive connotation, good for farm capitalization or by increasing direct investment in agriculture by financing inputs (intermediate consumption) growth assumption yields and farm profitability.

Should not be omitted, however, optimistic tone with all the problems in the industry institutions such as the level of capital and liquidity, structural reforms, some painful.

Regarding individuals is expected to increase mortgage lending and refinancing but the big problem banks in dealing with these customers is the so - called unfair terms that create damage to the image banks.

The retail sector lending, particularly important is the First house which, according to GD 5/2014, shall be allocated a maximum of collateral that may be emitted 1,200 million. It offers easy access to mortgages for those interested. The state guarantees 50% of the bank loan is charged a minimum down payment of 5% of the dwelling, for values up to 60.000euro, and for more than the minimum down payment is 3000 euro + (purchase price - 60.000euro).

To build a home with a value of up to 70,000 euros, will be charged a deposit of 5% advance constructions above this value is calculated as: 3500euro + (value of construction - 70.000euro).

Loans under this program have the maximum 30-year repayment guarantees are granted and paid only in national currency and interest rate will not exceed £ ROBOR 3 months plus 2.5 percentage points.

It seems that this program is a success. According to statistics, 24,500 Romanians have accessed loans through the program from January 2013 to mid-December 2014 with a total value of 900 million euros.

In terms of volume of credits in lei, from August 2013 until mid-December 6500 guarantees were given amounting to 940 million lei.

New for 2014 related to this program is that they have allowed bank loans with government guarantees for complete rehabilitation of residential buildings. This program is designed for individuals but stimulate business growth by unlocking funding mechanisms, while the construction market recovery, with positive impact on the number of jobs.

**Table no. 1 Annual evolution of the number and volume of loans  
granted to date first house**

| Year   | Number of securities | Funding        |
|--------|----------------------|----------------|
| 2009   | 12.000               | 495 mil. euro  |
| 2010   | 23.000               | 935 mil. euro  |
| 2011   | 19.000               | 740 mil. euro  |
| 2012   | 27.000               | 1,01 mld. euro |
| 2013*  | 24.500               | 900 mil. euro  |
| Total: | 105.500              | 4,08 mld. Euro |

\* Preliminary data, available by mid-December 2013

Source: FNGCMM

The program was launched in 2010 by the Ministry of Regional Development and Public Administration (MDRAP) and the state has granted 100,000 guarantee with a total value exceeding 4 billion.

There are currently 16 participants in the program funders and expect this year to increase their number more of the two IFNs (CreditCoop and IMOCREDIT) required to enter the program

In conclusion, the current year will continue the process of stimulating the economy by lending to support the efforts of 2013, especially for companies that have crossed safely crisis and the potential development

**Tabel no. 2 Accessed credit situation in 2013 on categories of customers**

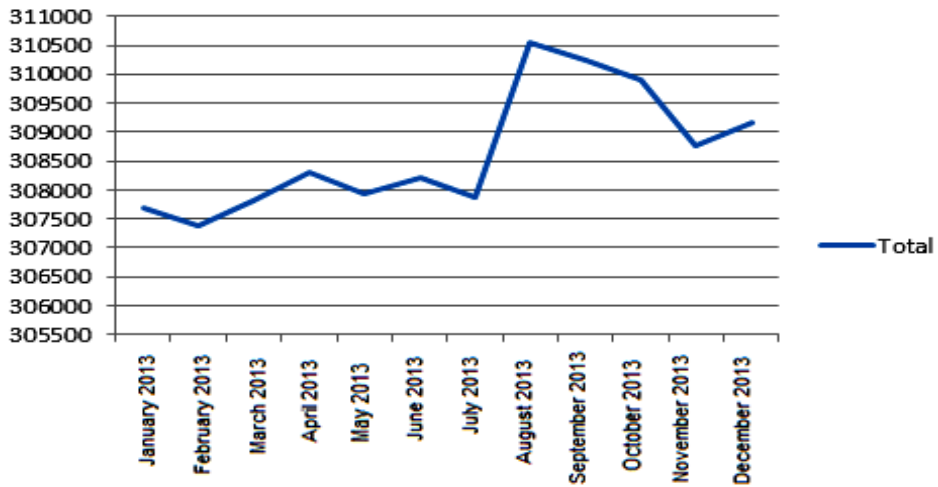
| Period         | Total amounts granted | Sector of activity |          |             |                                |  |   |             |
|----------------|-----------------------|--------------------|----------|-------------|--------------------------------|--|---|-------------|
|                |                       | Industry           | Services | Construcții | Agriculture, forestry, fishing | Activities of Intermediation financial and Insurance | Public administration and defense, compulsory social security, education, health and social | Individuals |
| January 2013   | 307 675               | 57 010             | 83 690   | 33 878      | 11 339                         | 6 686  | 16 402  | 98 670      |
| February 2013  | 307 390               | 57 294             | 83 295   | 33 906      | 11 411                         | 6 374  | 16 439  | 98 670      |
| March 2013     | 307 821               | 57 773             | 83 057   | 33 954      | 11 215                         | 6 408  | 16 527  | 98 886      |
| April 2013     | 308 293               | 56 865             | 83 331   | 34 376      | 11 263                         | 7 171  | 16 303  | 98 984      |
| May 2013       | 307 941               | 56 916             | 82 985   | 34 180      | 11 113                         | 7 263  | 16 252  | 99 232      |
| June 2013      | 308 219               | 57 064             | 83 188   | 34 004      | 11 046                         | 7 329  | 16 171  | 99 416      |
| July 2013      | 307 886               | 57 673             | 82 774   | 33 845      | 10 633                         | 7 290  | 16 280  | 99 390      |
| August 2013    | 310 545               | 58 851             | 82 928   | 34 245      | 10 889                         | 7 374  | 16 468  | 99 790      |
| September 2013 | 310 234               | 57 852             | 83 191   | 34 426      | 11 059                         | 7 426  | 16 467  | 99 814      |
| October 2013   | 309 900               | 58 132             | 83 068   | 33 838      | 11 138                         | 7 504  | 16 306  | 99 915      |
| November 2013  | 308 752               | 58 224             | 82 564   | 33 510      | 11 181                         | 6 967  | 16 125  | 100 181     |
| December 2013  | 309 152               | 59 200             | 82 192   | 33 239      | 11 166                         | 6 944  | 16 428  | 99 983      |

Source: National Bank of Romania, Monthly Bulletin, 12/2013, page 60

Representing graphically previous data, we observe an increase in lending in the second half of last year.

### Crediting by sector in 2013 – total

Graph 5

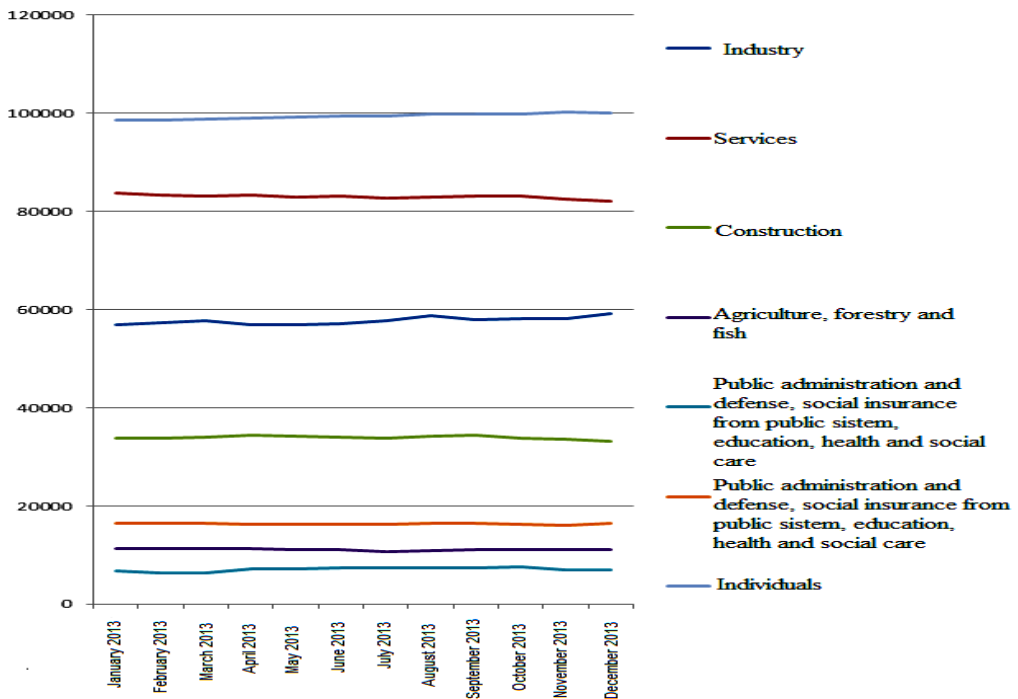


Source: NBR data, the graphic authors

By sectors, we see that the industry benefited mainly by loans with a rate of 6, 928% of total loans, while the agricultural sector to access credit at the rate of 1.334% of total loans.

### Crediting by sector in 2013

Graph 6



Source: NBR data, the graphic authors

Optimistic tone about the crediting recovery is not just in Romania. Signals coming from, good people "shows that the global economy is on track and finally starting to feel the economic recovery period, with the crisis of the euro area economies and the UK.

Banks are required to meet customer needs, will focus on innovation in new products and expanding channels to attract new customers.

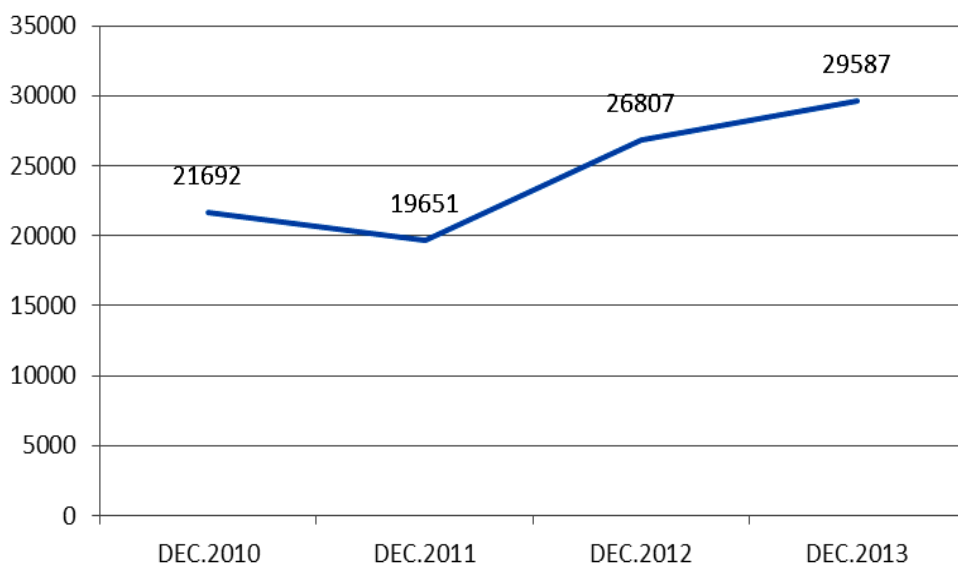
### 3.What happens in the economy?

But what is the reality on the field "? According to data from the National Trade Register Office, in 2013, became insolvent companies 29 587, with an increase of 10.37% compared to 2012 when 26 807 company organize insolvencies.

It is easy to understand that resulted and a new non-performing loans and bank credit is impossible for these companies.

**Evolution of the firms entered in the solvency**

**Graph 7**



Source: National Office of Trade Register / statistical situations / companies became insolvent, graphic authors

According to data published by the Central Credit risk, in January of this year, overdue bank loans have increased by 650 million compared to December 2013 levels reaching 32.2 billion lei. Only loans exceeding £ 20,000 have a rate of 10.35% of total loans granted.

Finding new sources of finance is a problem for companies that already have loans taken from various banks or certain IFNs. These companies have trouble being eligible loans ongoing as they have a high degree of leverage what creates problems to pay the debts and accordingly access to a credit more difficult again.

For example, in agriculture, in addition to the disadvantages arising from the low level crediting in this sector, an equally unfavorable Romanian farms is determined by the cost of bank credit in lei, which is much higher in Romania than in developed countries of the Union European. Interest rate requested by banks, which are added various additional costs (mainly the nature of charges) induces a real cost of bank credit in lei triple the cost of financing sources of the other developed countries of the EU.

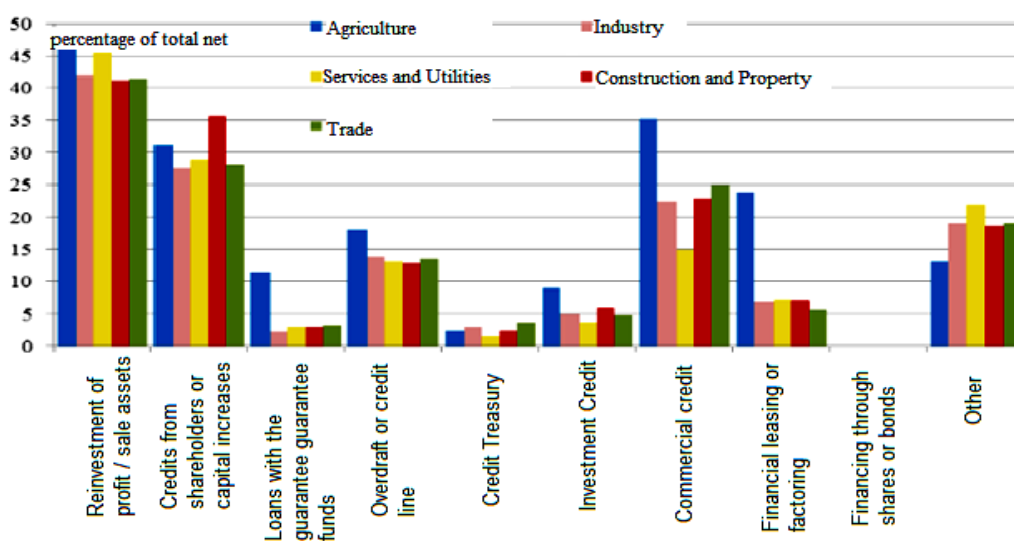
In these conditions, where firms take money?

Sources of funding are internal ones, since it was reinvesting profit capital increases crediting to shareholders and not least, the sale of certain of their heritage actives.

Taking the example agriculture ,companies in this sector, they provide 29% funding from bank loans, 35% comes from commercial loans, financial leasing type products 24%, the rest being covered by EU funding or grants.

**Development of funding sources used by the company**

**Graph 8**



Source: [www.guvernare.ro](http://www.guvernare.ro)

Reasons for which firms resort to funding sources outside the company are paying suppliers, formation working capital, development of investment projects.

Why not European funds? Although 7 years have elapsed since Romania joined the EU, we find that a small percentage of firms, 2%, accessing European funds, 92% of firms stating that they have no experience with European funds.

In reality require measures to support the economy to compensate firms easy access not just to new loans by reducing taxes, reducing the employer's Cas, not least, political climate, economic and legislative stable.

With regard to individuals at the end of last year, about 700,000 Romanian recorded outstanding loans, worth £ 32.7 billion, which represents approximately 15% of total loans. For currency loans at the end of December 2013, a record level of 19.7

billion lei, and for credits in lei, in the same period, registering a volume of 13 billion lei.

It would be useful reprieve for debtors, as the government wants? From this provision would benefit nearly one million Romanian who have high rates but low income and who fulfilling the certain eligibility conditions will only pay half of monthly rate principal over a period of 2 years. In this way, those who would benefit from such a facility, which would redirect not give the bank, for consumption, which would stimulate its revival.

Under the proposal, this reprieve candidates are people with incomes below the national average of 1,600 lei, with difficulties in payment rates, but not beyond the maturity of more than 90 days, the reduction may not exceed 500 lei.

Practically the application of this provisionan amount of nearly 4 billion lei would be made available by banks to individuals. The state will support a tax credit on the income tax difference. At the end of two years, the client will resume payment, including the reduction.

The news was not received with enthusiasm by specialists draw your attention that such a reduction would discourage those corrections that make efforts to pay their installments on time banks.

On the whole loans granted by the Romanian banking system , in December 2013, 22% being the procent of non-performing loans.

Banks must follow that order of priority:

- restructuring of non-performing loans, which are a,, ballast 'credit portfolios;
- attracting deposit activity, especially if banks do not receive money "from abroad ";
- restructuring of internal activities, by giving up operational units that are not profitable;
- once solved the three problems mentioned above, will be able to talk about credit recovery on performance.

#### **4. Conclusions**

For 2014, the banking system must respond the following challenges: the phenomenon of insolvency, NPL management, finding directions lending performance.

Another challenge for banks is to get rid of the image, "guilty of Service "who created the economic problems and social crisis which has generated optimism, the authors say that we exceeded it. At the same time felt the effects of the banking system and the banks and their shareholders have juggled large sums of money to survive.

The Romanian economy can not live forever in agriculture or foreign loans taken by the state. It requires domestic consumption and credit recovery but performance conditions.

Banks argue, as is natural, eligible individuals and businesses that need financing, although the reality does not announce a revival of lending before 2015.

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companies became insolvent



# THE COMPUTATIONAL INTELLIGENCE TECHNIQUES FOR PREDICTIONS - ARTIFICIAL NEURAL NETWORKS

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**Abstract:** : The computational intelligence techniques are used in problems which can not be solved by traditional techniques when there is insufficient data to develop a model problem or when they have errors. Computational intelligence, as he called Bezdek (Bezdek, 1992) aims at modeling of biological intelligence. Artificial Neural Networks( ANNs) have been applied to an increasing number of real world problems of considerable complexity. Their most important advantage is solving problems that are too complex for conventional technologies - problems that do not have an algorithmic solution or for which an algorithmic solution is too complex to be found. In general, because of their abstraction from the biological brain, ANNs are well suited for problems that people are good at solving, but for which computers are not. The ability to accurately predict the future is fundamental to many decision activities in many functional areas of business. In this paper emphasize the advantages and disadvantages of using ANNs for predictions.

JEL classification: C45, C53, C63

**Key words:** Computational intelligence techniques, Artificial Neural Networks, prediction

## 1. INTRODUCTION

The ability to analyze massive data lags far behind the capability of gathering and storing it. This gives rise to new challenges for businesses and researchers in the extraction of useful information.

Increasing accuracy of forecasting can save millions for a company and is a major motivation for using formal methods of forecasting and systematic investigation of new methods and better prognosis.

Information technology in the past several years have created a lots of innovations in the area of business. More businesses and organizations are collecting high quality data on a large scale. The world is rather nonlinear and complex than linear because there are so many possible nonlinear relationships or structures. Most nonlinear models developed during the last two decades are likely parameters.

To use these models, the model must be specified first. Therefore, these models cannot be used if the data characteristics do not fit the model assumptions involved. The parametric approach is quite suitable for nonlinear problems with complex structures, but there is a lack of theories to suggest a specific form of the structure.

Artificial Neural Networks are algorithms and techniques that can be used to perform nonlinear statistical modeling and provide a new alternative to logistic regression, the most commonly used method for developing predictive models.

Artificial Neural Networks offer a number of advantages, including requiring less formal statistical training, ability to implicitly detect complex nonlinear relationships between dependent and independent variables, ability to detect all possible interactions between predictor variables, and the availability of multiple training algorithms.

## **2. OBJECTIVES**

The main objective of this study is an analysis of the advantages and disadvantages using Artificial Neural Networks. An overview of the features of neural networks is presented, and the advantages and disadvantages of using this modeling technique are discussed.

## **3. METHODOLOGY**

An Artificial Neural Network (ANN), is an information processing paradigm that is inspired by the way biological nervous systems, such as the brain, process information. The key element of this paradigm is the novel structure of the information processing system.

It is composed of a large number of highly interconnected processing elements working in unison to solve specific problems. ANNs, like people, learn by example. An ANN is configured for a specific application, such as pattern recognition or data classification, through a learning process. Learning in biological systems involves adjustments to the synaptic connections that exist between the neurons. This is true of ANNs as well.

A Neural Network is a parallel computing system of several interconnected processor nodes. The input to individual network nodes is restricted to numeric values falling in the closed range  $[0,1]$ . Because of this, categorical data must be transformed prior to network training .

Another definition is given by Haykin : A neural network is a massively parallel distributed processor that has a natural propensity for storing experiential knowledge and making it available for use. It resembles the brain in two respects:

Knowledge is acquired by the network through a learning process. Interneuron connection strengths known as synaptic weights are used to store the knowledge.

In 1982, John Hopfield published a paper showing how neural networks could be used for computational purposes. In 1984, Kohonen introduced a new algorithm he called an organizing feature map, which allowed for a process of using neural networks for unsupervised learning.

This opened a new branch of neural network research where no correct answer is required to learn or train a network. In 1986 Rumelhart, Hinton and Williams wrote a paper on the back-propagation method, which opened up a flurry of activity in the late 1980s and 1990s.

Neural networks are used extensively in the business world as predictive models. In particular, the financial services industry widely uses neural networks to model fraud in credit cards and monetary transactions.

Some of the well known types of neural networks are: Competitive Learning, the Boltzmann Machine, the Hopfield Network, the Kohonen network, the Adaptive Resonance Theory , and back propagation neural networks.

Although there are many other variations of neural networks, the back propagation network and its variants, as a subset of multilayer feed forward networks, are currently the most widely used networks in applications.

Neural networks attempt to mimic a neuron in a human brain, with each link described as a processing unit. Neural networks learn from experience and are useful in detecting unknown relationships between a set of input data and an outcome.

Like other approaches, neural networks detect patterns in data, generalize relationships found in the data, and predict outcomes. Neural networks have been especially noted for their ability to predict complex processes.

Processing elements, or processing units are linked to inputs and outputs. The process of training a network involves modifying the strength, or weight, of connections from the inputs to the output.

Increase or decreases in the strength of a connection is based on its importance for producing the proper outcome. A connection's strength depends on a weight it receives during a trial-and-error process.

This process uses a mathematical model for adjusting the weights, and is called a learning rule.

Training continues until a neural network produces outcome values that match the known outcome values within a specified accuracy level, or until it satisfies some other stopping criteria.

Figure no.1 demonstrates a neural network. Each of the processing units takes many inputs and generates an output that is a nonlinear function of the weighted sum of the inputs.

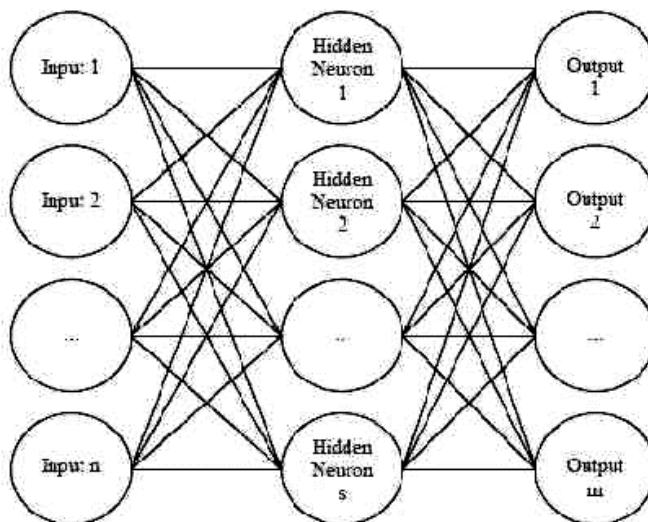


Figure no.1 An ANN model

The weights assigned to each of the inputs are obtained during a training process in which outputs generated by the nets are compared with target outputs. The answers you want the network to produce are compared with generated outputs, and the deviation between them is used as feedback to adjust weights.

The process of readjusting weights is important to increasing a model's accuracy. Notice there are also hidden nodes, or middle layer nodes, in Figure 1. These hidden nodes are associated with the weighting process. The number of hidden nodes can be adjusted and there can be multiple levels of hidden nodes. The number of inputs, hidden nodes, outputs, and the weighting algorithms for the connections between nodes determine the complexity of a neural network, its accuracy, and the time it takes to create the neural network model.

Because the configuration of hidden nodes and weights is so critical to neural networks, there are many approaches for finding the right number of hidden nodes and readjusting weights.

**Network Design Parameters:** Employing a neural network requires an understanding of a number of network design options. Be advised that there are no definite rules for choosing the settings of these parameters a priori. Since the solution space associated with each problem is not known, an number of different network runs must be undertaken before the user can determine with relative confidence a suitable combination.

**Number of Input Nodes:** These are the independent variables which must be adjusted to fall into a range of 0 to 1. The number of nodes is fixed by the number of inputs. Inputs must not be nominal scale, but can be binary or better ordinal. Such inputs can be accommodated by providing a separate input node for each category which is associated with a binary (0 or 1) input.

**Number of Output Nodes:** The number of output nodes depends on the purposes of the research and they are also adjusted to fall within the range of 0-1.

**Number of middle or hidden layers:** The hidden layers allow a number of potentially different combinations of inputs that might results in high (or low) outputs. Each successive hidden layer represents the possibility of recognizing the importance of combinations of combinations

**Number of Hidden Layers:** The more nodes there are the greater the number of different input combinations that the network is able to recognize.

**Number of Nodes Per Hidden Layer:** Generally all nodes of any one layer are connected to all nodes of the previous and the following layers. This can be modified at the discretion of the user however.

**Initial Connection Weights:** The weights on the input links are initialized to some random potential solution. Because the training of the network depends on the initial starting solution, it can be important to train the network several times using different starting points.

Some users may have reason to start the training with some particular set of link weights. It is possible, for example to find a particularly promising starting point using a genetic algorithm approach to weight initialization.

**Initial Node Biases:** Node bias values impart a significance of the input combinations feeding into that node. In general node biases are allowed to be modified during training, but can be set to particular values at network initialization time. Modification of the node biases can be also allowed or disallowed.

**Learning Rate:** At each training step the network computes the direction in which each bias and link value can be changed to calculate a more correct output. The rate of improvement at that solution state is also known. A learning rate is user-designated in order to determine how much the link weights and node biases can be modified based on the change direction and change rate. The higher the learning rate (max. of 1.0) the faster the network is trained. However, the network has a better chance of being trained to a local minimum solution. A local minimum is a point at which the network stabilizes on a solution which is not the most optimal global solution.

**Momentum Rate:** To help avoid settling into a local minimum, a momentum rate allows the network to potentially skip through local minima. A history of change rate and direction are maintained and used, in part, to push the solution past local minima. A momentum rate set at the maximum of 1.0 may result in training which is highly unstable and thus may not achieve even a local minimum, or the network may take an inordinate amount of training time.

If set at a low of 0.0, momentum is not considered and the network is more likely to settle into a local minimum. A process of "simulated annealing" is performed if the momentum rate starts high and is slowly shifted to 0 over a training session.

Like other statistical and mathematical solutions, back propagation networks can be over- parameterized. This leads to the ability of the statistics to find parameters which can accurately compute the desired output at the expense of the system's ability to interpolate and compute appropriate output for different inputs.

To ensure that a back propagation neural network is not over parameterized, the training data must be split into a training and a testing set. It is the performance of the trained network on the data reserved for testing that is the most important measure of training success.

#### **4. ANALYSES**

Neural networks, with their remarkable ability to derive meaning from complicated or imprecise data, can be used to extract patterns and detect trends that are too complex to be noticed by either humans or other computer techniques.

Other advantages include:

- **Adaptive learning:** An ability to learn how to do tasks based on the data given for training or initial experience.
- **Self-Organization:** An ANN can create its own organization or representation of the information it receives during learning time.
- **Real Time Operation:** ANN computations may be carried out in parallel, and special hardware devices are being designed and manufactured which take advantage of this capability.
- **Fault Tolerance via Redundant Information Coding:** Partial destruction of a network leads to the corresponding degradation of performance. However, some network capabilities may be retained even with major network damage.

Neural networks are universal approximators, and they work best if the system you are using them to model has a high tolerance to error. However they work very well for:

- capturing associations or discovering regularities within a set of patterns;
- where the volume, number of variables or diversity of the data is very great;
- the relationships between variables are vaguely understood;
- the relationships are difficult to describe adequately with conventional approaches.

The greatest strength of neural networks is their ability to accurately predict outcomes of complex problems. In accuracy tests against other approaches, neural networks are always able to score very high.

There are some downfalls to neural networks.

First, they have been criticized as being useful for prediction, but not always in understanding a model. It is true that early implementations of neural networks were criticized as “black box” prediction engines; however, with the new tools on the market today, this criticism is debatable.

Secondly, neural networks are susceptible to over-training. If a network with a large capacity for learning is trained using too few data examples to support that capacity, the network first sets about learning the general trends of the data. This is desirable, but then the network continues to learn very specific features of the training data, which is usually undesirable.

Such networks are said to have memorized their training data, and lack the ability to generalize.

The mathematical theories used to guarantee the performance of an applied neural network are still under development.

The solution for the time being may be to train and test these intelligent systems much as we do for humans. Also there are some more practical problems like:

- the operational problem encountered when attempting to simulate the parallelism of neural networks. Since the majority of neural networks are simulated on sequential machines, giving rise to a very rapid increase in processing time requirements as size of the problem expands. One solution to this problem is to implement neural networks directly in hardware, but these need a lot of development still.
- instability to explain any results that they obtain. Networks function as "black boxes" whose rules of operation are completely unknown.

## 5. CONCLUSIONS

ANNs provide an analytical alternative to conventional techniques which are often limited by strict assumptions of normality, linearity, variable independence etc.

Because an ANN can capture many kinds of relationships it allows the user to quickly and relatively easily model phenomena which may have been very difficult or impossible to explain otherwise.

Depending on the nature of the application and the strength of the internal data patterns you can generally expect a network to train quite well. This applies to problems where the relationships may be quite dynamic or non-linear.

Combining multiple models to improve forecast accuracy has been extensively studied in the literature.

The idea of association models is the assumption that the basic structure of real data is difficult or impossible to model by an exact model and the fact that different models can play a complementary role in capturing different data models.

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# DISTRIBUTED LEARNING PERSPECTIVES

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**Abstract:** Today's competitive economic and social environment asks for high educational expertise. There is a tremendous demand for education and training, and many countries fail to meet such requirements. Overall, there is a discrepancy between the need of the economy and society nowadays and what education manages to provide. Moreover, with a rapid growth of educational content, providing a qualitative learning experience is not an easy task. Technology expansion can augment traditional, instructor-centered learning. Distributed Learning Environments successfully combine campus-based teaching with computer-oriented, e-Learning facilities, towards the delivery of qualitative education. An attempt to setting up a qualitative learning environment in an academic European network is ViReC (Virtual Resource Center) e-Initiative. Providing a collaborative, time and location-independent, and interactive mean of learning represents the key to an increased competitiveness for high-level education institutions.

**JEL classification:** I20, I21, I23, I25

**Key words:** distributed learning; e-learning; education; virtual resources; virtual web portal

## 1. INTRODUCTION

In the competitive economic, social and educational context nowadays, there is a high demand for educational expertise and many European countries fail to meet such requirements. Overall, there is a mismatch between what education provides and what society and economy needs in the sense that there exist a discrepancy between what is taught in schools and what is needed in the workplace. One solution to reduce this gap is to adopt a collaborative, time and location-independent, and interactive mean of learning. Providing a Distributed Learning Environment (DLE) is essential to education provision, especially in high-level educational institutes. Each institute aiming at high-level, student-centred education delivery needs to develop a DLE build-up strategy. The strategy of adopting such a platform is the success key in today's competitive educational environment.

At a closer look at the global e-learning today, we may deduce that e-learning is quickly becoming an industry. With a rapid growth of educational content, providing a qualitative learning experience is not an easy task. Technology expansion has the



potential to augment traditional, instructor-centred learning. DLEs successfully combine campus-based teaching with computer-oriented, e-Learning facilities, towards the delivery of qualitative education. However, the advantages of the technology's expansion nowadays are not fully exploited. Moreover, the DLE needs to be regarded as an extension of traditional, classroom-oriented education provision and not as its substitute.

A former project - ViReC (Virtual Resource Center) aims at setting up a qualitative learning environment in an academic European network. ViReC Web portal targets regular students from European universities, students with locomotor handicap, individuals who seek retraining, companies who seek personnel retraining, companies specialized in personnel retraining, academic staff and teachers/trainers acting in the public/private sector. Not only, the portal represents the access point to a large collection of resources: textbook materials, tutorials and exercises, but the novelty of the DLE system consists in the synchronous section which provides facilities for remote live presentations and experiments based on real equipment that is accessible, configurable and testable over the Internet. ViReC serves as basis of deducting helpful information on the development of DLEs. A careful analysis of ViReC can provide insights into three directions: user (namely, the student), instructor and administration. Moreover, outcomes of ViReC permit dissemination on issues as distance learning, online courses and instructional materials, interactive multimedia textbooks, access to remote systems, synchronous and asynchronous group communications, experiential learning, course and content management, online testing and assessment. ViReC covers subjects in Computer Engineering; however, its applicability can be easily extended to any area of study.

The paper synthesizes past and current approaches on DLE and on its variations: distance learning, e-Learning and virtual learning and presents the results of the joint efforts of universities and high-education institutes across Europe in developing ViReC project. ViReC Web Portal is an important component of a DLE and offers open access to a large collection of differently located resource, including virtual laboratories. Section 2 provides an overview on various distance education forms and summarizes DLEs current approaches. In Section 3, the ViReC platform is described with focus on the architecture, functionality and actors and finally, the results of the project are discussed in Section 4.

## **2. BACKGROUND**

### ***2.1 Distance Education, e-Learning and Distributed Learning***

Before delving into practical details of the DLE, we need to provide a clear understanding of the terminology. Practice and theory reveal three main forms of distance education that support multiple variations: distance learning, e-learning and distributed learning. We need to distinguish between the three concepts and for that purpose a concise definition is worth being formulated.

Literature attests that distance learning is the first form of non-conventional education in history that overcomes time and space barriers. There have been traces of distance education since two centuries before – Peraton (1981), Simonson (2000), Palloff (2001), Spector (2008), Moore (2010). Ever since, it was foreseen that the number of students studying at distance will overcome the number of classroom

students – Simonson (2000). In time, distance learning has become a familiar term and “has managed very well without any theory” – Peraton (1981). A common understanding matches distance learning to the ability of providing learning facilities to geographically distant students. Over the years, distance learning has suffered various transformations that lead to variations as: distributed learning, online learning, e-Learning, technology-mediated learning, online collaborative learning, virtual learning, Web-based learning, etc. Moore (2010), Conrad (2006).

Nichols arises and discusses ten hypotheses or fundamental principles for e-learning – Nichols (2003). In theory, e-learning “is a means of implementing education that can be applied within varying education models and educational philosophies” - Nichols (2003), while in practice e-learning is often regarded as educational content hosted on a website. But, e-learning “is a multi-faceted and complex area” – Conole (2006). According to Conole (2006), e-learning “is the term most commonly used to represent the broader domain of development and research activities on the application of technologies to education”.

Distributed learning is another successor of distance learning, hybrid in its nature since it “combines the most advanced forms of distance learning technologies with aspects of conventional, campus-based education” – Matheos (2004). Moore et. al conducted an elaborated analysis in order to provide a better understanding upon distributed learning – Moore (2010).

## **2.2 Distributed Learning Environments**

The support material of distributed learning vary from plain textbook materials to multimedia presentations, live courses and laboratories, and even much more sophisticated electronic technologies such as intelligent tutoring system and computer-based training – Capuano (2006), Wisher (2004). Therefore, an appropriate platform needs to incorporate as many features as possible in order to guarantee the success of a qualitative learning experience delivery. Another success factor is adopting a user-centred approach: “the learner support must be an integral component throughout the development and delivery of distributed learning” – Matheos (2004). These arguments lead to an appropriate definition of DLE, proposed by Bates and Mingle: “A distributed learning environment is a learner-centered approach to education, which integrates a number of technologies to enable opportunities for activities and interaction in both asynchronous and real-time modes. The model is based on blending a choice of appropriate technologies with aspects of campus-based delivery, open learning systems and distance education” – Bates (1997). Lessons learned and best practices on the delivery of distance education are also discussed by Palloff and Pratt (2001).

A DLE is the tool which enables the delivery of distance learning. It represents a complex topic which regards multiple issues. In the development of DLEs, technology is a powerful argument. However, pedagogy is a critical factor too and “there is always the need to keep the focus on learning, carefully selecting the technology to support the pedagogy” – Matheos (2004). Besides the pedagogical issues, the collaborative aspects of a DLE are often ignored, with lots of focus on the content delivery – Capuano (2006). The communication pillar for cooperation in this area is critical and requires great care for different socio-cultural contexts, values and expectations – Gunawardena (2008).

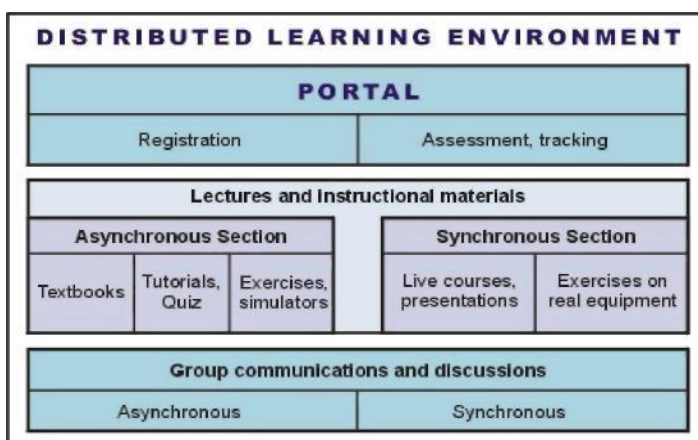
A current, challenging aspect of DLEs is the Virtual Learning Environment (VLE). VLE is a software solution that enhances computer-based distance learning. VLEs integrate heterogeneous technologies and multiple pedagogical approaches, they are not restricted to distance education and most virtual environments overlap with physical environments – Dillenbourg (2000). The particularities of virtual labs are that they manage to include real experiments and to incorporate scientific methods. Although, beneficial laboratory work has been asserted several times in literature – Johnson (2009), Bryant (1987), virtual laboratories manage to overcome multiple challenges attracted by the realtime labs. Time dependencies, space constraints, hazards, resource sharing, traveling costs, equipment acquisition, set-up and maintenance costs are few of the issues solved by virtual labs which lead to productivity enhancements.

### **3. THE VIREC E-INITIATIVE**

The project is oriented towards setting up a qualitative distributed learning environment in an academic European network environment and arising awareness of the impact of ODL and the use of ICT in education. The project spans universities and research centres across Europe. Among the participants, there are University of Craiova, Romania, which is the coordinating institution, IPA Automation Engineering Institute, Romania, University of Applied Sciences, Regensburg, Germany, University of Duisburg-Essen, Germany, Institut Arbeit und Technik, Gelsenkirchen, Germany, University of Limerick, Ireland and Technological Educational Institute of Piraeus, Greece. The goal is to develop innovative practices and services in distributed education by implementing a collaborative DLE.

VWP provides open access to a large collection of differently located, educational resources, to a vast instructional support and enables real-time experiments with real equipment that is accessible, configurable and testable over Internet, by means of reservation. Moreover, ViReC enables assessment tracking (see Figure no. 1). According to Allen (1998), assessment is a key factor in a successful learning process: "without assessment, there is no quantitative measure of student performance or effectiveness of teaching".

The DLE includes instructional materials developed using multimedia technologies: textbooks, live presentations, tutorials, quizzes, simulators for laboratory exercises implemented as Java applets and exercises on real equipment. Among the challenging contributions of the platform is the creation of virtual laboratories. By means of registration and reservation, remotely exercising on real devices is possible. For that, a reservation system provides remote access to a certain device for only one student at a given time. After the exercise is completed, in order to bring the devices to the original condition, an initialization procedure is automatically launched. The communication between students and teachers is based on several tools such as: videoconference, forum and chat.



**Figure no. 1. ViReC Distributed Learning Environment**

### **3.1 ViReC Web Portal: Architecture and Functionality**

In order to analyze ViReC's functionality it is worth regarding the modular structure of the portal. The modules are: Registration, Edit Data, Reservation, Validation and Feedback.

A non-registered visitor has privileges only upon the public section of the portal. The architecture of VWP's enables multiple categorizations and from the visibility point of view we distinguish two sections of the system: public and private. The public section contains pages with general informational content that can be viewed by non-registered visitors of the portal: general information about the VWP, features, information about the private content, etc., while the private section is available only to registered and approved users. The portal permits registration of a new user by filling in a registration form. Registration requires personal information such as: title, name, surname, address, e-mail, telephone, university and enrol number, and also credentials: username, or login name and password for further authentication (Figure no. 2). Inserted information needs to be validated within the Validation module. Once the registration form has been submitted, the personal information is recorded in the database and the status of the user will become "registered". However, a registered user is not allowed to access the private section of the VWP. For that, approval from the administration side is required. The administration processes the registration information and approves the registration. Now, the status of the registered user turns into "approved" and the user may now authenticate. After successful authentication, the user can browse the content of the private section of the portal and register to virtual laboratories. A newly registered user cannot access ViReC's resources until the administrator has granted this right. The private section is restricted to registered, approved and authenticated users. Moreover, an authenticated user can anytime edit their personal data. The Edit-Data module consists in a Web Administration section where authenticated users can view and edit the users database. In addition, users can view the current activity in the portal (authenticated users and brief users' activity logs) and also, see new registered users which were not approved. Registration and Edit Data modules. The Reservation module enables users to practice on real devices for a limited period of time. The module provides a user-interface that allows users book a time period for real-time experiments. A Time Share Reservation Mechanism is

responsible for permitting single user access to the environment. Simultaneous reservation of the same exercise from two different users or simultaneous reservation of two different exercises from the same user is not allowed. Only one user is able to access and work with a piece of equipment during the reserved time. There is a limit of three hours per user per exercise. Time is expressed in user's local time and the VWP and the exercise stations at the participating universities are synchronized. User-Feedback module uses an anonymous report tool where users can provide suggestions related to the ViReC Portal and the DLE. The reports are visible strictly for the Administration. The submission of a new report is automatically signaled in the administration module and, optionally, notified via e-mail.

Register new user

Title:

Enter your titles or address model (Mr. , Ms. , Dr.)

Name:

Enter your first name!

Family Name:

Enter your name!

Login Name:

With this name you can login later. ( max. length is 10 char.)

Password:

Enter your password. You will need it later to login.

retype Password:

Enter your password again!

E-mail:

Enter your email address.

Home Address:


  


Enter your full home address!

Phone:

Enter your Phone number!

School/University:


If you are a student enter the full address of your university, etc.

Enroll number:

If you are a student enter your enroll number

register

Figure no. 2. New user registration interface

The modular approach of the environment captures the functionality of the system from the user's perspective. Additionally, regarding the platform from the administration point of view provides different insights. The administrator is in charge of the control and monitor of users' activity, namely new users' registrations, awaiting admin's acceptance and users' activity within VWP: log in/log out times, reserved exercises, exercises' results etc. In addition, administration is responsible for the maintenance of the system maintenance. At maintenance times, it is forbidden to reserve and to work on the equipment.

The administration core resides at University of Craiova, Romania. It is their responsibility not only to administrate the server on which the administration system is running, but also to maintain the content in the VWP. The administration of the equipment and lab condition falls under the responsibility of each provider of the correspondent learning resource.

### 3.2 Roles and Privileges

Aside the user-administration approach, the environment allows a refined classification of roles in the system. Up to now we have regarded the user as a visitor of the portal. This is mainly the student. In addition, the user can also be content creator – the instructor. In such manner, we distinguish two types of users: student and instructor. Overall, there are three main actors in the system: student, instructor and administrator.

The student can and needs to submit a registration form and register as new user. After registration approval, the student is able to edit personal data and view activity log, fully access resources and reserve classes. In addition, the student can communicate and exchange experience with other students or require instructors' support in public or private chat, and send feedback reports to the administration.

The instructor is only added by the admin. Privileges of instructors include editing of personal data, adding and editing instructional materials, accessing resources, communicating and sending feedback reports. The small description of the materials can be made using HTML for formatting.

Finally, the administrator monitors the entire activity in the system. The main role of the administration is to accept new user, namely to add new instructors and to approve registration forms from the students side. Moreover, the administrator has access to the database, can view usage log and edit instructional material (Figure no. 3).

| Id  | Name              | Is Valid | Is Allowed | Is Restricted | Delete User |
|-----|-------------------|----------|------------|---------------|-------------|
| 272 | Dumitrescu Radu   | Yes      | Yes        | No            | X           |
| 15  | Foldi Andrei      | Yes      | Yes        | No            | X           |
| 105 | G. G.             | Yes      | Yes        | No            | X           |
| 58  | Sorocanu Alexandu | Yes      | Yes        | No            | X           |
| 51  | Gonea Kurt        | Yes      | Yes        | No            | X           |

Figure no. 3. Administrator's monitoring activity interface

## 4. ACHIEVEMENTS

The platform hosts courses, tutorials and laboratories. The current disciplines are: Network Management, Network Security, Computer Architecture and Database Systems.

A remarkable output of the project is the creation of interactive tutorials. In order to provide a clear understanding of the topic, tutorials combine various multimedia materials: text, pictures, animations and audio. The screen is divided into a theoretical part, where text description is provided and an interactive, visual half, accompanied by audio explanation. In Figure no. 4, there is an example of a routing tutorial – building a dynamic routing table. The tutorial benefits of a high quality implementation based on multimedia technology and a flexible navigation system.

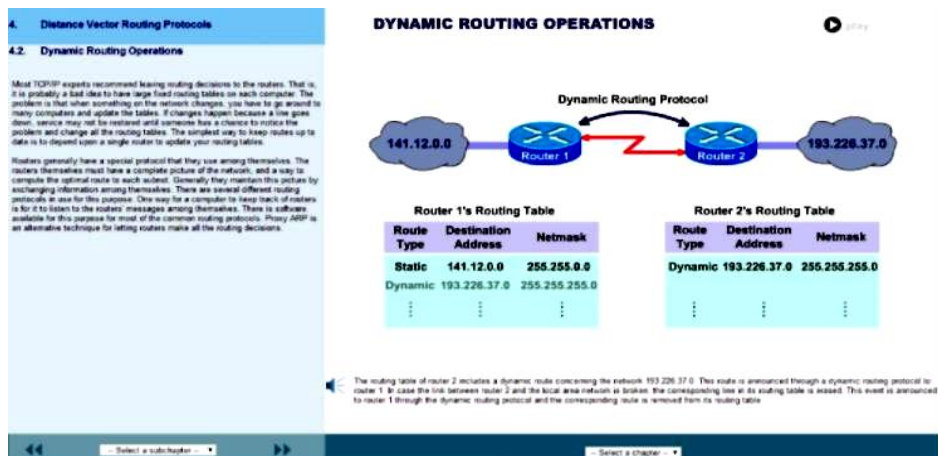


Figure no. 4. Example of a tutorial interface; dynamic routing operations

Working on real equipment by signing in virtual laboratories is another challenging achievement. Resource sharing becomes a reality, improving the utilization of costly equipment. The interface of a virtual lab is depicted in Figure no. 5.

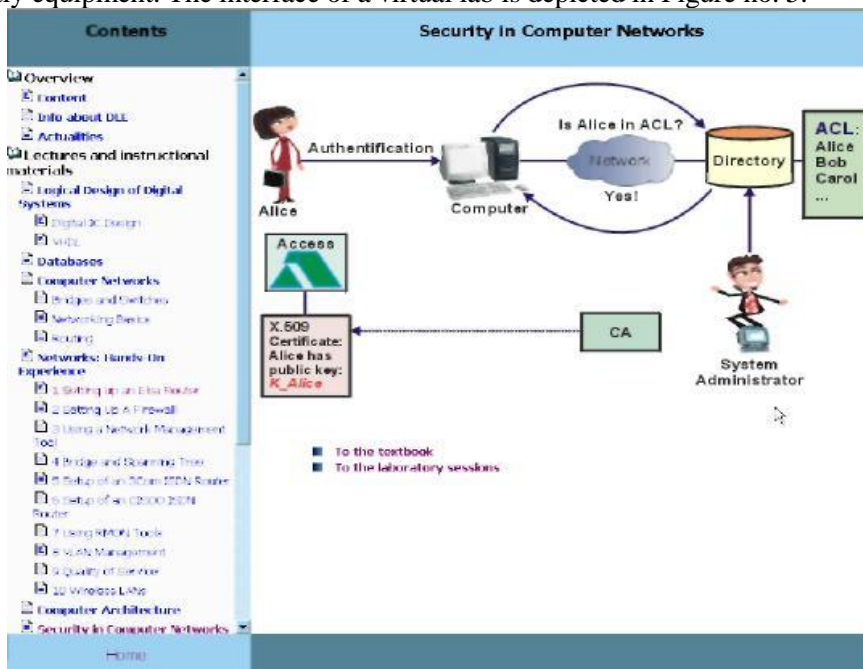


Figure no. 5. Virtual lab in ViReC

The portal hosts Linux operating system and the application uses Java Servlets technology. Servlets technology offers distinct separation between presentation and content. The Web server Tomcat from Apache is the proper solution that implements Servlets technology as it can deal with large amount of client requests without speed or performance penalties. For network threats and attacks simulation we have used virtual machines.

## 5. CONCLUSIONS

Many of the Web-based DLEs emphasize a user-centric, collaborative learning environment. The teaching and learning process are facilitated since they are not confined by space or time. Students and faculty can access the virtual classroom which is increasingly important to many institutions interested in drawing non-traditional students into their programs. The development of such a platform is relatively quick and easy and the usage is even easier. WWW navigation software nicely integrates access to all types of resources by means of a user-friendly interface. But, the true beauty of the Web lies in the ease of access readily available resources. In addition, human resources are often readily accessible for guidance, allowing enhancing the virtual classroom with the introduction of guest speakers and content experts into your chat areas or discussion groups. "The internet and online communication environments provide stimuli for joint action" – Toprak (2014). Nevertheless, updating and disseminating information is an easy task when it comes to DLEs.

The aim is to make the virtual laboratory a reasonably extensible and reusable platform that can be used collaboratively by large groups of students through a distance-learning format, thereby overcoming several weaknesses of the conventional laboratory-based educational system. However, "most technological substitutes for labs are really just computer-based demonstrations that miss the essential elements of science methodology" – Matheos (2004). In this direction, the virtual laboratory needs to be a computer environment can support different kinds of experiments and analytical requirements. The virtual laboratory has the potential to become a hosting infrastructure for distance learning or training that can align with the needs and practice of curricula programs and industrial attachment scenarios.

Future work can be performed in the challenging aspects of VLEs. An important issue is the student guidance and the student-instructor interaction may easily fail in providing the desired results. Constant improvement should be done on the support material maintenance. Courses, tutorials and other materials need to be constantly updated. Finally, interactivity is a key factor for a successful VLE. Web environments with a reduced level of interactivity may lead to a rapid interest loss on the student's side.

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# THE IMPLICATIONS OF ADOPTING THE OPTIONAL VAT AT COLLECTION

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**Abstract:** The value added tax (VAT) collection system, which is applied to any company with a turnover of up to 500,000 Euros, has become optional from 1 January 2014. Since January 1, 2014, taxpayers may choose the optional introduction of new system of VAT collection anytime during the year 2014 by filing a notice from the IRS, SELF removal from the register of taxable persons applying this system. By making changes and deregistration itself, taxpayers will continue to apply the system of VAT collection. For operations whose VAT chargeable event occurred until 31 December 2013 for the invoices issued before that date, in the event that the 90th calendar day from the date of invoice or the date set imitates the chargeability of tax occurs on full or partial consideration receipt of goods delivered or services rendered.

Changing the Tax Code is provided in GEO no. 111/2013, published in Official Gazette no. 809 of 19 December. New tax rules allow taxpayers to decide if they want apply VAT at collection system, this decision targeting about half a million taxpayers from Romania.

**Jel Classification:** G0, G32, M21.

**Keywords:** VAT, taxpayers, small and medium enterprises (SMEs), Non-exigible VAT, operations

## 1. Introduction

Thus, according to the article 2 of GEO no. 111/2013, beginning from January 1, taxpayers who currently apply VAT at collection system have two options:

1. To continue applying VAT at collection system if they meet the eligibility criteria

In this case they do not have to file any notice, the IRS considering that they opted to continue the application of this system.

## 2. To request not to apply VAT at collection system

Taxpayers may choose to not apply VAT at collection system at any time during the year 2014 by filing in a notice with the IRS to be struck from the Register of taxable persons applying VAT at collection system.

In this situation, the tax authorities will operate deletion of records starting with the date of 1st of the tax period following that in which the notice was filed.

Obviously, until the changes and deletion itself are made, taxpayers will continue to apply the VAT at collection system.

For both the taxpayers who will continue to apply VAT at collection system and those who will come out of this system, in the case of operations giving rise to the charge occurred until the 31<sup>st</sup> of December 2013 inclusively, as well as for invoices issued before that date, where the 90th calendar day from invoice date or deadline required by law to issue the invoice is after December 31, 2013, the chargeability of tax occurs on full or partial consideration receipt of goods delivered / services rendered.

## 2. Objectives

The new fiscal rules require that those who register as VAT payers during 2014 and opt to apply VAT at collection system are compelled to apply this system at least until the end of 2014.

The only exception is done only for taxpayers exceeding 500,000 Euros for this year, who are forced to pass to the normal regime of collection and deduction of value added tax even during the year.

This decision to introduce the possibility of option comes after the system of value added tax (VAT) collection system created distortions in the market and has disadvantaged small and medium enterprises (SMEs).

If VAT at collection system for companies with turnover up to 500,000 euro had not become optional starting on 1 January 2014, Romania risked triggering infringement procedure for non-respecting EU regulations, because it was violating European provisions.

Transformation of value added tax (VAT) system from mandatory to optional for companies with a turnover of up to 500,000 Euros, and elimination of the 90 days deadline were included in three draft laws in 2013, but they were not adopted in the fiscal year 2013.

From the 1<sup>st</sup> of January 2013, the VAT regime for about half a million taxpayers was amended mandatory, after the VAT at collection system was introduced which implies the chargeability of tax supposedly occurs when cashing the value of deliveries / supplies made or, in the case of unpaid bills, in the 90th calendar day from the date of invoice.

The system should be applied by all taxpayers who have a turnover ceiling lower than 2.250.000 lei (500.000 Euros).

VAT at collection system was introduced in the Tax Code by Ordinance no. 15/2012, published on the 29<sup>th</sup> of August, and its implementation was clarified by the Implementing Rules of the Tax Code, that were changed in the 8<sup>th</sup> of November through G.O. no. 1071/2012.

Subsequently, on the 26<sup>th</sup> of November 2012, Ministry of Public Finances has published an official guide for the application of the system, bringing together in a single document all legal provisions of the code necessary for the operations that fall under the VAT at collection system, while providing practical examples and explanations about the law.

Procedural rules regarding VAT collection has been updated and completed during 2013, by the Government Ordinance no. 8/2013, and the regulations were changed once more in April about cash payments.

When referring to what the state lost and gained from this system, the state has met difficulties when it came to applying the new VAT system.

Thus, in terms of tax administration, the authorities had to manage an additional statement (Notice 097) and operate registrations and deletions in the Register of taxable persons applying VAT at collection system.

In addition, fiscal control was hampered by the need of checking an additional volume of information.

From the perspective of tax control, tax inspectors had to familiarize themselves with new models of journals (increasingly different from one company to another), the new accounting records in account 4428 Non-exigible VAT and to additionally check out payment documents (extracts account, payment instruments, compensation orders, contracts of assignment).

In connection with the new VAT system, **the state had an undeniable benefit**. Tangible benefits for the state emerged from the controversial limit of 90 days.

The obligation to collect occurs not later than 90 days from the date of invoice or the obligation to issue an invoice, while the right of deduction has no exemption to 90 days.

Assuming that a company was required to apply VAT at collection system, and it received an invoice for supplying some goods in January 2013, all goods were sold in January 2013, but it paid the invoice received in December when it collected money from client. This has the obligation to collect the bill in April 2013, but can only deduce it in return in December 2013. For eight months, the amount of VAT is belonging to the state, as a **gift loan without interest** from the company.

**For taxpayers, the implementation of VAT at collection system came up with many major inconveniences.** Difficulties the companies encountered were, in the first phase, of administrative nature, forcing them to draw new VAT journals and manage a new format of the VAT statement and invoices.

In addition, implementation of the new VAT regime also meant increasing administrative costs because the right of deduction of VAT is granted only if, in addition to invoices accompanied by supporting documents to justify transactions, taxpayers also show documents on paying / cashing them.

And the bureaucracy has increased with the implementation of the new VAT system since, in the case of failing to indicate on invoices "VAT collection" formulation by suppliers / providers, beneficiaries are required in order to avoid problems with deductibility, to check the status of suppliers in the register of taxable persons applying VAT at collection system available on NAFA site, resulting in an additional administrative work.

### 3. Methodology

**The new VAT regime had a negative impact on cash flow**, cash flow impact being felt both by some small companies required to operate this system and large companies working with small companies applying VAT at collection system, in the sense that they will be able to deduct VAT on purchases from them only after the payment of the bill.

Also, although the VAT at collection system should be a measure able to release liquidity to the market and help companies during a period in which banks are still not open to financing; it was proved by its regulations that the system is not really a pay of VAT at the moment of collection, but rather a deferment of payment until the 90th day from the time of invoice, which does not bring significant benefits to taxpayers.

Moreover, the new VAT regime led, in some cases, even at the elimination of small firms in the market, as some large companies, which are not eligible to apply VAT at collection system, selected suppliers of goods and services depending on who applies or not the new VAT system. Suppliers who applied VAT to collection were excluded because big companies want to avoid administrative costs and to streamline cash flow.

Through the new legal provisions made by GEO no. 111/2013 regarding VAT collection, some changes and features applicable from the 1st of January 2014 may be noticed, namely:

- starting on January the 1st, 2014, implementation of the system is optional;
- application of the VAT collection can be made by taxable persons registered for VAT purposes who have established their business in Romania, if they achieved a turnover of less than 2.250.000 lei in the previous calendar year ;
- about chargeability ( collection )of VAT, it comes in at the date of total or partial cashing of the goods delivered or services rendered, for the taxpayers who choose the application of the VAT at collection ;
- it has been repealed the obligation to collect VAT in 90 days for invoices of supplyingservices/delivering goods in the VAT at collection system, a situation that until now was considered by experts as violating the principle of neutrality of VAT.

### 4. Analyses

#### **The fiscal implications of the Ordinance on VAT**

- Re-invoicing of insurance made by leasing companies, respectively the amounts collected in a client's account, are exempted from VAT.
- VAT taxable base is reduced as a result of cancellation of the contract or in the case of total or partial denial of the quantity, quality or price of goods delivered / services.
- VAT taxable base is also reduced as a result of total or partial abolition of the contract, either by written agreement of the parties or by arbitration or following the court's decision.
- VAT is not adjusted for goods stolen, destroyed or lost that are properly justified. Documents for stolen goods may be issued by judicial bodies.

· the main change is that it is not necessary the court's decision to certify the theft.

· This justification for stolen goods issued by a judicial body applies for capital goods

The following taxable persons are not entitled to apply VAT at collection system :

- people who are part of a single tax group;
- taxable persons who are not residing in Romania;
- people who in the previous year exceeded the turnover of 2.250.000 lei;
- people who register for VAT purposes in the current year or are registered and have exceeded the ceiling of 2.250.000 lei during the financial year.

As a general rule, the person who opts for the application of the VAT at collection:

→ must submit a notification presenting the turnover of the previous year until January 25;

→ in case of newly created company wishing to register for VAT and wanting to apply the system of VAT at collection, notification is submitted upon registration for VAT purposes;

→ if opted for VAT at collection system, this system is compulsory in the current year, considering that it does not exceed the ceiling of 2.250.000 lei.

In case someone wishes to quit VAT at collection system must fulfill the following conditions:

→ the ceiling must not exceeded 2.250.000 lei;

→ since the first year of application is mandatory, the VAT at collection system can be given up starting with the next year.

The new rules are general and GEO no. 111/2013 has transitional provisions applicable to those who have already applied the system of VAT collection on the 31st of December 2013.

## **5. Conclusions**

Effect of practice on small and medium enterprises hasn't been that of creating an advantage and it was not felt as a supportive fiscal measure to meet the needs of the company. On the contrary, application of the VAT collection led to meet the difficulties taxpayers required to apply this system due to many causes.

Large companies, those which were not obliged to applying the system of VAT cashing have started to select their suppliers depending on their obligation to apply VAT cashing or not. The reasoning behind this could be explained as following: large companies are not eligible to apply the system, have the right to deduct VAT on purchases from companies eligible to apply only at the time of bill payment system by such providers. On the other hand, these large companies are required to pay VAT on the state budget without any delay.

This created a downside from a cash flow perspective. In addition, reporting obligations invoices received from suppliers eligible for application of the more complex system, requiring attention and additional time spent (payment documents must be available and attached invoices, declaration of VAT not due in the month of

receipt of invoices and tracking carefully fee until settlement providers, darkening reporting system on VAT, etc.).

To avoid all these difficulties (from a cash flow perspective but also from an administrative perspective the reporting of transactions and preparation of VAT returns), large companies have started to select suppliers of those who are not required to apply VAT collection. Automatically, this reflected the business of these companies. Many of them came into difficulty because of this.

Measure which was desired favorable and advantageous proved to be the one who participates at the elimination of SMEs out of the market because the preparation of statements and documents VAT has become more difficult due to the introduction of this system.

Taxpayers had to follow carefully when the payments were made to suppliers (because only at that time were entitled to deduct VAT on invoices issued by concerned) had to keep a record of VAT registered due to 'postponement' payment / deduction of the respective amounts of VAT.

Under its administrative costs and time resources for strict observance of the law in terms of preparing accounting statements and record keeping of the tax increased for taxpayers eligible for the application system and beyond. In addition, depending on the application of the VAT system receivable (2,250,000 lei), taxpayers entered, and exited the "system". Obviously, the fiscal authorities should have been notified in this regard by filing additional statements.

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# ACCOUNTING INFORMATION AND ITS ROLE FOR STAKEHOLDERS

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**Abstract:** Good management is achieved through a relevant and timely information to decision-makers, and other users of accounting information. Responsibility for the development of the economic entity, the overall economy and their performance is primarily managers and equally, accountants and auditors. Obviously, they join the users of accounting information, which should be responsible for the use of the information they possess.

**JEL classification:** M41, M42

**Key words:** accounting information, economic performance, information system, users, investors, Financial Reporting

## 1. INTRODUCTION

Modern society can not be conceived without information , it becomes the key element in any " construction" predictive , whether economic or political . This would be the reason why the financial and accounting information are interested in a more general group of users , looking for continuous improvement and adaptation of its contents. The challenge is equally the producers of accounting information , which should decide the minimum presentation summary information contained in the documents and the recipients of information, experience information needs more complex, sometimes contradictory , but essential in the management .

Economic development and its performance depends on public confidence in accounting information transparency , to be accompanied by a clear assumption of responsibility. The responsibility belongs primarily economic management of each entity , and professional accountants who are responsible for applying accounting rules objectively and impartially.

## 2. RESEARCH METHODOLOGY

Research methodology used in this work harmoniously combined into a quantitative research with qualitative research, analyzing, while Romanian authors contributions to increasing the role of accounting information to stakeholders.



### **3. ACCOUNTING INFORMATION: ROLE AND PERSPECTIVES**

Investors who use accounting information also bear responsibility for their use in good faith in the performance evaluation and investment decisions. Responsibility lies, not least, the statutory auditors to express information to be provided in the audit report, which can not miss the references to matters on which they draw attention without the auditors' opinion have reservations about the degree of compliance the management report on the quality of the accounting information contained in the audited annual financial statements.

Transparency requirements should be provided by the components of the financial statements and the whole information to be disclosed in the notes so that, based on these financial and nonfinancial users of accounting information to know the real situation of the position and performance of the entities in which they have interests.

Given that performance management is achieved only through a relevant and timely information to decision-makers, and other users of accounting information, which is why in this paper we addressed the need to attach due importance to knowledge and analysis of accounting information as a source of credible information for stakeholders.

An important element in the development of Romanian accounting system was to support international bodies issuing specific regulations accounting, in particular the International Accounting Standards Committee, which authorized the publication of the official version in Romanian International Accounting Standards.

Since 1990, all these developments have been favored by the profound changes in the Romanian economy, the growing demand for relevant and reliable information coming from investors and other financiers categories based on their objective needs assessment of the risks inherent their investments and the income that they can bring.

Being a tool of prime importance in decision making and a "stake" social accounting language must be understood by all users of the national area, but also across national borders, which requires accounting language internationalization through normalization, harmonization and compliance.

The quality of accounting information is modeled by the act of accounting normalization . We emphasize on this occasion status communication language incumbent accounting was in a permanent dynamic skyrocket in communications technology development. We note here the important role of the two professional groups interested in accounting information, namely its producers and users.

Demand and supply of information is controlled and restricted by the accounting system through its normalization by the quantity and quality of accounting information, the costs of production, distribution and processing it. Demand diversity in form and structure, led to the need to build and use a common language, universal communication in the business world, made by accounting harmonization policy.

The evolution of information needs generated economic development of an information system in which accounting information is the primary element and the starting point for any analysis of economic phenomena. The quality of this information influences decisions and their outcome, whether we refer to an economic entity managers, whether we consider its investors or creditors.

We believe that current developments of modern society require continuous improvement of accounting information. It must be so constructed that it meets the requirements for management decision making and information needs of partners of the economic entity.

At the economic level, economic information in the form of specific data that is afforded some internal or external communication within the organization and serve to some recipients. Road map for information on obtaining and harnessing it to pass through several stages: collection - processing - transmission - reception - use as *"whole, methods, techniques and tools used for the collection, recording, transmission, circulation, processing and selling information in a system is the information system"*<sup>71</sup> and *"informational activities can be described as the set of actions relating to the production and use of information."*<sup>72</sup>

Meaning information can not be explained only in relation to the other two terms, data and knowledge . Once a sign, a symbol, which derives directly from observation of facts, is a raw material by treatment, will be transformed into information. An information resulting from data processing to meet the needs of a user, in a context that is proper.

Knowledge of the economic universe from the environment is achieved through information products, which in accounting, have a documentary imposed by synthesizing and generalizing the information in time and space, different organizational levels. Initiating any cognitive process in observing systems and business processes is followed by the organization of information, according to the practical needs in some form of presentation, recovery and storage of accounting products, reflected in the accounts of synthesis.

The hierarchy continues in constant change, the economic and social reality, the user needs resulted in a corresponding development of the summaries and accounting reporting, which is called to generate an information system needed to satisfy the requirements of the recipients of the information accounting. The annual financial statements are the main communication channel between producers realized accounting information and stakeholders.

According to Tatiana Dănescu<sup>73</sup>, *"created from economic practice, summary documents and accounting reporting is prelude to a user reaction, the expression of quantitative and qualitative relations equilibrium values of heritage management."*

Although data, information and knowledge provided by accounting not only that of a particular unit heritage, they are an essential element analysis and appreciation of the situation that entity, so that the accounting is considered for management, core information system.

In conclusion, the main purpose of accounting information system is to provide each user, depending on the responsibilities and tasks, all necessary information, representing both an interface between the operating system and the management of the entity, and an element link between internal and external environment it.

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<sup>71</sup> Oprean, D., Racovițan, D.M., Oprean, V., *Information Management and managerial*, Eurounion Publishing House, Oradea, 1994, Pag. 49

<sup>72</sup> Minu, M. *Accounting as a tool of power*, Economic Publishing House, Bucharest, 2002, Pag.20

<sup>73</sup> Dănescu, T., *Annual accounts: summary documents and accounting reporting*, Dacia Publishing House, Cluj Napoca, 2000, Pag. 56

Given the multifaceted growth and economic realities of pressure in the direction requested by the users of accounting information, we believe that the success of an organization depends on how accounting information that the accounting information is obtained from data processing and distributed by the users organization is determined, on the one hand, the economic and political factors, and on the other hand, the requirements of users.

We find that accounting information contributes to economic information system functionality, presenting acquisition flexibility, the possibility of change in the circumstances of increasing need for information, especially decision makers. Information users have different interests and create their plans or make decisions regarding the interpretation of accounting information. Developing the right decisions in a timely manner is possible only through managers at all hierarchical levels, which must have the availability of quality information. Performance of an entity depends heavily on work teams within them, professional management, which is recommended to participate in continuous training programs and training.

However, accounting remains an indispensable basis of information for different users, but was limited as a tool for management, both in space and in time. And as all future projects predictions requires an analysis of past research that accounts permits, mention that it can never be accurately warn on what can be done, so that explains the need for research and development of complementary tools analysis, statistics, econometrics, etc.

Accounting as social science model and improved in such a way as to meet the information requirements of the moment. The improvement involves change, and accounting has evolved over time, as an open system, responsive to the changing political environment, economic, social and cultural. Therefore, the idea of adopting a common language for financial reporting in order to develop international comparability of information has become a reality due to the globalization of financial markets.

Utility analysis of accounting information on economic transactions, as shown in the annual financial statements addressed in this paper in terms of quality, has become a significant problem for organizations accounting normalization because the accounting information is done both managerial decisions and communication management of those entities with external users .

Although the world is recognized that modern developments emphasized the social purpose of accounting, but if we look at it as a tool for representation of the economic reality of the entity, we find that it has become a challenge for the various protagonists of accounting information, namely: manufacturers and users normalized, each pursuing their own interests, which is why we consider that the accounting information, the final product provided accounting can only be the result of a compromise between the requirements and expectations.

#### **4. CONCLUSIONS**

We conclude that responsibility in the development of the economic entity, the overall economy and their performance is primarily managers and equally, accountants and auditors. Obviously, they are joined by stakeholders who should be responsible for the use of accounting information in their possession.

We are thus witnessing a relocation of economic values, and we believe that the professional accountant is not only a witness of this process, but an active, with special responsibilities.

We believe that the analysis presented in this perspective still offers a wide field of theoretical investigation, increasing the role of accounting information quality in order to increase the contribution to the economy and its performance, desire manifested more and more lately by stakeholders.

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# **Approaches Regarding the Public Administration Services, Part of the Tertiary Sector**

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**Abstract.** The matter of services can be found more in the specialised literature and more frequently, particularly during the last half of the century- taking into account, on the one hand, the significant structural mutations that have been taking place in the economic activity, mutations which have led to a so-called tertiarization of the economy; and, on the other hand, the description of nowadays society as a society of services, after which followed the autonomization of its quaternary sector, with direct references to the scientific research<sup>74</sup>.

The importance of public services is even bigger to society as long as the state and its administrative-territorial constituents appear as indispensable tools, meant to assure the life standards its citizens are not able to find in any other way. Thereby, when the state proposes itself to satisfy a need of society by means of its authorities, it ascertains the institution that is to satisfy this need, determines its competences and offers it the material, financial and human means that are needed to fulfill the ascertained goal.

**JEL classification: P35, H83**

**Keywords: public services, private services, tertiary sector, immaterial, public administration**

## **Conceptual Aspects and Characteristics of Public Services**

The immaterial economy concept has been defined by Cristureanu C.<sup>75</sup> by three elements: “the immaterial as the final outcome of the activity of an enterprise or economic sector (immaterial artifact), the immaterial as a production factor or assets used by the producer to create and distribute a product or a service addressed to consumption (tangible assets), and the immaterial as a development strategy applicable to all economic sectors, creating new principle of organization, competition and valorization(capitalization). The economy of immaterial transforms the conventional economic expansion model into a complex one, based on the connections ascertained between the economic, social, political, spiritual, cultural order of a changing society, focused on services and creative-content activities.

At first, services have been classified under a class of activities with common features that do not contribute to the long-term economic expansion. As a result of the

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<sup>74</sup> Ecalle Fr., *L’conomie desservices*, PUF, Paris, 1989, p.3

<sup>75</sup> Cristureanu C., “The Economy of the Immaterial: International Service Transactions”, Beck Publishing House, 1999, p.4-5

immaterial feature, they have often been defined by a residual manner, the focus being put on what they are not. The conceptual delimitation of services has been strongly influenced by the classic school of the 19th century, centered on “materialism”. The term of “services” first appeared in P. Le Pesant de Boisguilbert’s pieces of writing (1707), referring to the activities which do not participate in the wealth production and are placed at the origins of the expenses that appear in the economic circular flow.<sup>76</sup>

The extreme heterogeneity of services, which include and serve a wide range of economic branches, is characterized by distinctive production processes, different ways of supplying, different providers and customers and different market structures, making the defining of the “service” term and its classification difficult.

Most of the definitions focus on one or more of the characteristics of services, which generally differentiate them from the tangible products. Other definitions underline the utilities, advantages and satisfactions obtained from service activities or from the changes determined by them regarding goods, individuals or social relations. The conclusion drawn by many economists who have studied service activities is represented by the fact that they can not be differentiated either by the production activities in the material goods field, or by the manner of combining the utilized production factors, or by the utilized technologies, but by means of the outcome of the activities.

Thereby, services can be divided into categories based on their capacity of being transacted on the market as distinctive merchandise. Thereby, we distinguish the merchandise or commercial services, obtained by means of sale-and-purchase documents, and public, collective services, which assure performance in the benefit of the collectivity. Due to the technical progress and the dynamism of the economic life, a significant part of the non-marketable services has been transferred to the field of the marketable ones.

In time, a group of heterogeneous services addressed to the fulfillment of a collective need- generally speaking, for all people, known as public interest needs, needs of a human community related to survival, organizational, social assistance, transport requirements etc.- has been implemented to the tertiary sector. Thus, the public services are utilities resulted from activities which satisfy the public necessities, whose deployment imply the public authority mandatorily. The public services can be: governmental, representing the state’s function and being executed by means of institutions; local, being executed by means of excises, institutions and externalization.

The public authority is thought to be in the service of the citizens, responsible with the development of some work processes which are to serve the whole society, it is a general entrepreneur who either establishes companies with state capital or authorizes private companies, by specific procedures, so that they might provide public utilities. Thus, the execution of the public service is done by: public institutions, concession addressed to a private entrepreneur, foundations and public interest associations, companies with mixed public-private capital, professional associations, autonomous excises. Public services are to be characterized by some features: efficacy, the consumption of public funds, general access to all citizens, decentralization towards the local community.

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<sup>76</sup> Bobirca A., “Services in the Dematerialised Economy”, The Economic Publishing House, 2010, p.29

In the European Union public services are seen as a derogation from the principle of free competition so that services of general interest shall be performed.<sup>77</sup> The main public services are:

- governmental services: the guard service (the public guardians group), the civil protection (part of the national defense), the construction authorization, the civil status;
- town administrative services: the distribution of gas and electricity, thermal energy distribution, water supply and piping, urban transport, green spaces maintenance, scavenging, road maintenance;
- commercial services: market administration (establishes taxes, sanitary and hygiene norms), parking lots, private transport (authorization-licensing), the execution of job specifications and conditions registers, routes, staff trainings, etc.), advertisements (installed on the public space), graveyards, animal shelters;
- cultural activities: education, art, culture, health. The execution of these activities is run through inspectorates or directorates, in particular excise or in collaboration with governmental and non-governmental institutions.

The consumption of public services is “socialized”, which means that it is decided by society, whereas the customer does not execute a real, direct choice because of the manner of repartition of these services, that are decided by the collectivity.

Lately, we have been assisting to the transfer of some public services from the administration of the government to the administration of some private individuals (e.g.: health, cultural, educational services)- such public services are executed by private companies without being assigned by the public power, by the state, but from underneath its supervision.

As a consequence, the possibility that public services should be executed also by the private sector has arisen, on the condition that the following three conditions should be obeyed:

- a) the satisfying of the general interest- this one, however, states a delicate question, namely that of the delimitation between general interest and particular interest. The distinction which is necessary and which is thought to be the most suitable one, is that risen from the necessary activities for the collectivity and from the activities developed on commercial bases (profitable). The primary purpose of public services is the satisfaction of the interests of the ones who are being administrated (governed), and not getting a profit;
- b) the means of public power are privileges given to a private company which serves the general interest and therefore, enjoys authority (and not equality) in report to the third party. The authority ratio allows either the monopolization of a certain service, or the issue of certain documents with a unilateral character, or even the setting of some taxes;
- c) the control of the administration over the public services execution activities – this condition derives from the fact that the private company can execute a public service on the condition that it possesses a delegation (by proxy) received from a public person. The delegation can be executed by a contract or an administrative document.

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<sup>77</sup> Plumb I., “The Reengineering of Services”, lecture notes, E.S.A. (ASE), p. 6, [www.ase.ro](http://www.ase.ro)

The Public interest represents, according to the general understanding, the totality of interests expressed by a human collectivity regarding the organizational, cohabitation, social assistance, transport requirements etc. However, the ones which address some individual needs, but are financed from the public budget (public education, public health etc.) are also thought to be public services, with the specification which is necessary in our opinion, that these should be situated at the interference between the individual and the social. The classification of services in private services and public services endorses the nature of the provider at the same time, which means that the private services are offered by private companies and organizations, and the public services are offered by institutions, organisms and public organizations.

In many cases, people resort to public services out of necessity, and not pleasure, or when they find themselves in difficult positions. This applies to health, insurance or mandatory education services, or to social assistance, juridical services etc. Moreover, what is to be remarked is that many public services are standing as a monopoly power reported to their consumers. According to some opinions, this type of characteristics would make public services not to be accepted by the greater amount of the population (not to be popular among them)<sup>78</sup>, generally speaking, on the basis that nobody is willing to (and nobody enjoys) asking for help to get out of a difficult situation, and because they are executed by individuals who know that they are in a monopoly situation. As a consequence, the managers of public services are disadvantaged in relation to the managers of private services regarding the attitude of the customers and the perception on the services.<sup>79</sup> Moreover, some public services are carried out even against the will of the client (hospitals for mental patients, prisons-penitentiaries etc.)

The characteristics of public services have an impact on the attitude of the providers regarding the demand of the customers (consumers). In the case of market private services, their producers are preoccupied with the identification of the needs, the wishes, the preferences and, eventually, the demand of the consumers (customers), who can be either actual customers or potential customers, and act in order to satisfy and stimulate these demands; in the case of public services, the purpose of the producers is to diminish the demand and rationalize the offer. Regarding this purpose, the social assistance, the maintenance of public order, the healing services etc. represent significant examples. It is natural that in such cases there should be courses of action taken for the causes why people end up in difficult positions- mainly economic causes, but they can also be determined by the lack of education.

In regard to public services, we believe that we should also analyse the interface of those with political aspects, which is supported by the fact that the repartition of the public funds (from the public budget) depends on the decisions of economic and social policies of the central, regional and local public authorities. The specialized institutions of the public authorities are confronted with a limited (and insufficient) character of the financial (monetary) resources more and more often (especially in the states less economically developed), reason why they turn to

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<sup>78</sup> Ioncica M., "The Economy of Services. Theory and Practice". Uranus Publishing House, Bucharest, 2002.

<sup>79</sup> Jones P., "Management in Service Industries", Pitman Publishing, London, 1989, p. 98-103



management methods and techniques (administration) specific to the private sector more and more often and claim more decisional autonomy. Also in the purpose of activity efficiency, some organizations which execute public services and more and more compete with the private sector, are using the external contracting formula, respectively the one of an agreement with private companies to provide such services. For instance, hospitals externalize catering and cleaning services (they resort to catering and cleaning services which are executed by private companies). However, this solution implies new problems for the management, in regard to the negotiation and the settlement of a contract, the clauses and specifications in order to react accordingly to the financial constraints and to the exigencies related to the quality of services. The long-term contracting induces the bold differentiation of the public sector organizations which, instead of producing services directly, contracts and organizes them. The external contracting offers a solution to estimating the performance of the public services, to a certain degree, as the contracts have to specify the performance level regarding the quality of services.<sup>80</sup>

The Romanian specialized literature distinguishes the following public services categories<sup>81</sup>:

a. the enactment service which implies the participation of the parliament, whose purpose is to adopt mandatory norms, which should be executed uniformly on the entire territory of the country;

b. the public juridical service which is established by the juridical organisms, which settle the juridical conflicts and penalize the ones who break the law;

c. the public services exercised by the administration, which assure the execution of laws and juridical verdict and creates the development conditions of activities in fields such as health, public training, transport, culture.

There is also a difference between the public service, which is established by a public organization, and the public utility service, which is founded by non-governmental organisms (associations and foundations, established by particulars and which are developing a public interest activity, with a non-profitable purpose).

## **Administrative Public Services**

Whereas the normal purpose of the actions of the particulars is to obtain personal advantages, a human achievement-where the least interested identify their acts with a common goal at most-, the purpose of the actions of the administration is basically disinterested in satisfying the general interest<sup>82</sup>.

The general interest does not limit to the interest of the community only, seen as a distinctive and superior entity from the ones who form it, but also assumes and develops some human necessities of the individuals. The action of the administration aspires to the satisfaction of the general interest, but this purpose does not exclude a cautious management according to economic efficiency and profit. Nowadays, there is a tendency to include an economic activity which claims a certain approach to the

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<sup>80</sup> Ioncica M., the quoted piece of writing

<sup>81</sup> Alexandru I., "Administrative Law", Omnia Publishing House, Brasov, 1999, p. 112

<sup>82</sup> Jean Riverosi Jean Waline, "Droit administratif", Dalloz-Sirey, Paris, 2002, p. 10

private activity, in order to satisfy the general interest<sup>83</sup>. The means of action used by the administration in order to satisfy the general interest resume to the public power. The public power represents the totality of prerogatives given to the administration so that it might prevail the general interest to the interests of the particulars.<sup>84</sup> But it is always necessary to appeal to the public power in order to obtain the general interest, the will of the administration meets the will of the administrated and it can resort to the contract technique. But resorting to unilateral decisions remains the typical and widely used method of operation in the administration.. The administration appears in the above described context as a public authority activity, which can use public power prerogatives when needed, in order to satisfy the general interest<sup>85</sup>.

Sometimes even commercial societies with integral or state majority capital, as well as other public interest organizations can carry out public administration activities and issue administrative documents, which implies that the administrative authority notion be interpreted in a broad sense, especially so that these administrative acts could be appealed in the court according to the 554/2004<sup>86</sup> Law of the disputed claims office(legal department). The public administration is mainly carried out through normative or individual administrative acts, through juridical material deeds and technical material operations.

Administrative public services are as follows: services with an exclusive administrative character which the public authorities cannot entrust to other persons (civil protection, tutelary authority, civil status, urban services or transport licensing, election organizing and census); hygiene services; educational services (schools, high-schools, kindergartens, crèche); cultural and sports services; assistance and social help services.

The 215/2001<sup>87</sup> local public administrative law in Romania states that, in Chapter IV, Section II, entitled “Communal and city public services and the authority local public management’s own special apparatus”, uses these two syntagms, which lead to the idea that two categories of local public services exist, as follows:

a) public services handled by local public administrative authorities in main activity domains, according to local specifics and needs, with following legal issues and financial limitations – i.e. organized public services such as autonomous overhead charges (excises) and commercial societies established by local authorities which carry out general economic interest services for a commune or city;

b) public services run by the local public administration authorities – i.e. services contained in the city hall’s flow chart and run by the mayor, which are exclusively administrative, as well as organized services such as public institutions in the educational, cultural, health, youth, sports, social aid etc. domains run by the city hall.

According to the local public administrative Law, local councils can establish public institutions, commercial societies and local interest public services. They supervise, control and analyze their activity, initiates, while following the general

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<sup>83</sup> Ibid, p. 10

<sup>84</sup> Ibid

<sup>85</sup> Ibid

<sup>86</sup> Posted in the Romanian Official Monitor, part I, no. 1154 of December 7<sup>th</sup>, 2004

<sup>87</sup> Posted in the Romanian Official Monitor no. 204/2001

criteria stipulated by the law, organizational and functioning norms for institutions and local public interest services.

At a local and country level, public services are classified as follows:

a) administrative type public services – protection services ensured by the public guards core; civil protection services; construction authorization services; civil status services; tutelary authority services; child protection services; urban and territory arrangement services; tax and contribution collecting services; communal public services for emergency situations; communal public services for inhabitants registration; police communal public services.

b) social, cultural, educational, youth and sports public services;

c) public community services for public utilities<sup>88</sup> which ensure: water supply; sewage and filtering for used and pluvial water; local scavenging; centrally produced heating energy supply; natural gas supply, electric energy supply; local public transportation; public locative fund management; public domain administration.

The public domain administration groups activities and public interest utility actions, which aim at: street, road, bridge, viaduct, road passage and underground and over-ground traffic construction, modernizing, exploitation and maintenance; arranging and taking care of green spaces, parks and public gardens, sport fields, recreational areas and children play grounds; arranging, exploiting and taking care of lakes, beaches, treatment and relaxation establishments; deratization and disinfection of public institutions, residences, commercial and public alimentation grounds, service and production units; constructing, modernizing, maintaining and exploitation of market places, bazaars, enclosures and markets; pedestrian and ruttier traffic organizing and optimizing, traffic signaling and control; snow removal and prevention of frost and glaze frost development; arranging, organizing and exploiting parking lots, public display areas, advertisements, commercial panels, urban and ambient furniture; private and/or public locative fund maintenance services, current redress and rehabilitation; establishing, organizing and exploiting chemical washhouses and cleaners, auto workshops; establishing, organizing and exploiting public bathrooms, gyms and physiotherapy halls, sports areas and halls, skating rinks and tracks and ski installation, cable transport, camping sites; cohering, knackery activities, graveyard, botanic gardens and zoos management; public illumination services.

The good operation of the administration and of public services has become an element of peacefulness as well as the bad state and flawed operation of the public services is the cause of many political crises and people's riots. The state must pay more and more attention to the number of agents and, at the same time, must not forget that when the administration is overdeveloped, it can become a power and seeks to obtain advantages. The modern state, endowed with an enormous administrative apparatus, must be firm, in order to stay clear of losing control over the administration, not to face helplessness, despite its gigantism, or because of it. More than ever, in today's world, the administration's equality and neutrality qualities must be ensured.

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<sup>88</sup> Law no. 51/2006 concerning public utilities communal services, posted the Romanian Official Monitor, Part I, no. 254/21.03.2006

## CONCLUSIONS

The administrative reform constantly holds an important place in governmental programs, as well as in citizens' quasi-anonymous urgings. Due to this, the subject has become a tenor and even a myth, in this sense there are examples of political figures' speeches, which, in this way, give the illusion that the administrative reform fully clears public administration of all its vices. The subject's consistent presence, however, remove this illusion. This is because the public administration reform can improve the "administrative machine's" working, but its perfecting will never allow it to reach perfection.

In essence, it seeks to adapt the public administration to the law stipulated duties and, in this sense, the adaptation effort must be constant. The idea of an administrative reform, especially if it implies a certain amount of ostentation and amplitude, is evidence of that certain public administration passing through a crisis. In this way, "the ascertainment of constant discrepancies between the administration and society, breeds what is usually called *administration crisis*", reduced, "at first glance into the administrative apparatus' inadequacy to its social environment" after which "the legitimacy, identity, effectiveness crisis appears"<sup>89</sup>. Alternatively, it can also be the consequence of a financial or political crisis, which requires from the state an administrative organisatory reform. In addition, the administrative reform can justify even the fact that the political power has not correctly defined its purpose and, as such, the public administration will appear as a response of political uncertainties and failure.

For this reason, it has been considered that the public administration reform represents, in essence, a new form of its structuring, compatible with the political, social and economic situation in a certain moment of a state's evolution<sup>90</sup>. The administration reform signifies, at the same time, a correction made to the administrative structure and action to that certain level of scientific and technological accomplishments or to the realities and perspectives of European and Euro-Atlantic integration effects and, last but not least, the bonding of the public administration with the citizen and his/her needs<sup>91</sup>.

The necessity of the public administration reform is based on six categories of main statements:

- a) economic; through reduced economic growth and the reduction of budgetary resources given to public administrations; the private sector's need to have an administration which is modern, flexible, and open to public-private partnership;
- b) technological; by introducing computational and communication technologies in the public administration ;
- c) social; citizens, as a public services beneficiary, are more exigent and do not accept their needs and wishes to be exclusively determined by what the administrations offers them;
- d) institutional; Romania's integration in the European Union structures implies a different sort of service administration; the highly formed

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<sup>89</sup> I. Alexandru, *Administration Crisis*, All Beck Publishing, Bucharest, 2001, pg. 89

<sup>90</sup> C. Manda, quoted work, pg. 275

<sup>91</sup> Corneliu Manda, *Administration Science*, Lumina Lex Publishing, Bucharest, 2004, pg. 274

hierarchical system must allow enough space to new types of organizations based on decentralized structures.

The diminishing of the state's authoritarian function and the strengthening of its functions regarding services and their promotion make the administration's activity become a professional activity, by fixing certain adequate rules and procedures. The existing conditions in the Romanian society require the change of the administration on a strategic level, i.e. defining the state's role in relationship with private organizations and on a legal level, aimed towards a reduction of legislative density;

- a) organizational; by reducing hierarchy, by simplifying the procedures of delegation of public service fulfillment by authorities which are not part of the public administration;
- b) cultural; by changing the value and way of action of the politically chosen, of the public employees, of the interest groups users and the citizens.

The reform process' principles at this level are, among others, the severance of the political and administrative functions; the creation and strengthening of a body of the public employee's career, professionally and politically neuter; the taking of decisions by authorities closest to the citizens, decisional autonomy, decisional transparency of the public administration, the simplification of the administrative procedures and respect towards the citizen; appointing certain jurisdictions and decentralizing certain services; protecting the citizens' rights and liberties.

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# COMPETITION IN ECONOMIC AND LEGAL THEORY

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**Abstract:** Competition is a main feature of the free market, the content of which enriched the community involvement. Various known forms of the type according to the market which is manifested. The increasing complexity of economic and social life requiring multiple measures regulations of various types of market competition.

**JEL classification:** D41, K33, D03

**Keywords:** competition, economic liberalism, neo-classicism, the subject of competition, competition functions, forms of competition, competition regulation, primary law, secondary law, regulations, directives, recommendations, opinions

## 1. Economic and legal content competition

Actions of economic agents in the business process in a market economy based on competition. This is the engine of economic development, the system moves the links between economic operators transmits economic life requirements arising from the needs of consumers and bidders in the form of objective economic laws .

Effectiveness of economic agents depends on the integration of market relations, the competition that takes place in order to obtain better conditions for production, sales, conducting monetary operations or other activities in order to obtain as many benefits.

The competition is a feature of the market economy has accompanied economic development since generalization exchange economy and capitalist relations of production. And now it reflects the natural evolution of economic life is found in various forms.

Investigating the evolution of economic thought on the content and the role of competition, competition law regulations require that steps be taken to strengthen the market economy and the multiplication of market relations. Economic literature considers that competition regulation is the body early U.S. antitrust laws, continuing with the national laws of European countries, reaching supranational regulatory rules contained in the Treaty of incorporation of the European Coal and Steel Community, the Treaty of Rome the European Economic Community, Maastricht Treaty on European Union and the Lisbon Treaty on the Functioning of the European Union.

Economics has several definitions of the concept of competition :

- a situation in a market in which firms or sellers independently struggle to win buyers customers in order to achieve an economic objective, for example, profits, sales and/or market sharing ;

- a confrontation between economic competition is the same or similar activities, carried out in areas open and conserving the market to win customers, to cost effectiveness to own businesses ;

- a competition is a confrontation between operators in order to obtain better conditions for production, sales, and making monetary transactions or other economic activities, in order to obtain as many benefits ;

- a competition is the determining factor in the success or failure of firms. It determines the appropriateness of those activities of a company that can contribute to its performance , such as innovations, a unified culture or a judicious implementation.

Currents of thought of economics that marked the economic policies of industrialized countries since the eighteenth century have interpreted differently the development of competition on the free market:

- economic liberalism surprised dynamic perspective on competition, outlined by Adam Smith in his treatise economic, *An inquiry into the nature and causes of the wealth of nations*, which shows that the market, the function that performs the confronts producers and consumers is presented as a mechanism for regulating economic life, is the invisible hand that regulates the optimal and equitable performance-based resource allocation;

- neoclassicism promoted model of perfect competition or pure, conceived the fulfillment of assumptions, three, expressing the purity of competition: atomistic supply and demand, product homogeneity, free entry and exit to/from the market and two expressing its perfection: transparency perfect markets and perfect mobility of factors of production;

- John Bates Clark, the early twentieth century, representative of American economic thought has fought idyllic vision of perfect competition and pure and launched the concept of workable competition, designed as a tool for identifying conditions capable of providing economic policies that ensure company achieve competitive advantages provided;

- The Chicago School of pure and perfect competition model fought, taking into account actual market model, existing, often characterized by a small number of economic and regulatory policies of competition;

- School evolutionary economics competition launched two solutions: first, that consists in adopting interventionist industrial policies that could lead to the conquest of parts of the market, and second, finding ways to enable dissemination and global homogenization antitrust rules of origin U.S.

- School of Brussels designate economics and competition policy which can be found in the Treaty of Rome establishing the European Economic Community developed other for treated of constitution and functioning of the European Union, considering the competition as a fundamental principle and condition of the functioning economy market based on private property .

Today, however, the picture on the competitive market as a mechanism for regulating economic life has changed profoundly, thanks to the intervention of large corporations and the state, who turned invisible hand market mechanism as the one called invisible fist that reflect the new realities of the contemporary world.

The reason for creating the single market of the European Union aimed at providing conditions conducive to free competition and competition rules is currently a prerequisite for the effective functioning of the market. Integration in the European



countries involved in addition to sharing the principles and values and the ability to cope with competitive forces within the Union. Therefore, countries had to build a system to adopt legislative and institutional requirements and specific Community rules adapted internally. Community competition rules consider the existence of a market economy as a necessary but not sufficient to promote competitiveness, requiring government intervention that is not condemned, but how often used. Therefore, governments have a responsibility in this area, both by establishing legislative rules and by promoting a culture of competition, which now has become not only a necessity but also an obligation for everyone involved. Mechanism of the market economy can not be explained and implemented without understanding the culture of competition, allowing thorough knowledge of the rules of competition. In this role it has priority national authority, that the Competition Council.

## **2. Functions and types of competition**

The development and economic liberalization makes manifest the intensity of competition is different from one stage to another and from one domain to another, depending on the ratio of supply and demand, and the extent to which the company has the ability stimulate creativity operators.

The purpose of competition is to obtain as many advantages as higher profits and more secure. The competition is conducted between businesses to attract the customers and their access, on favorable terms, the factors of production. Conducting competition involves a struggle , a competition between operators from coming out winners and losers. Businesses losers will mobilize to keep up with the competitive and non-competitive ones will be eliminated making way for others.

Competition in the economic actors acting out of interest: buyers looking to find sellers lowest price, best quality, the most favorable conditions for the delivery of consumer goods and production factors. Vendors compete for money to customers for the first customer purchase order to attract more buyers and higher economic force. Must be emphasized that the object of competition but it is only the product price, distribution, promotion through advertising and other marketing elements. Therefore, experts consider that the success of an economic agent in the battle of competition depends on the quality of the product, the market launch of new products, competitive pricing practice, firm location in relation to markets and supply, firm size and importance, methods of sales and distribution, advertisement and promotion.

Competition between economic operators in the fight competition occurs through specific ways. They may be economic: reduce selling prices, lower production costs, increase the quality of goods and services, launching new products, organizing the sales and after sales services, advertising and publicity etc., and non-economic nature: theft information, spreading false information about competitors or aggressive actions .

By effects that trigger economic actors, but also for the whole society, competition is one of the most important laws regulating economic life of technical and economic progress of society. Therefore, the conditions in which the openly loyal and is coordinated and supervised by the public authorities, competition fulfills important functions:

- Competition stimulates and maintains the overall progress of society. That competition between operators maintain open avenues for profits convenient for all participants and those favoring skills and eliminating those who can not adapt to the competitive environment. Goals pursued by traders, driven by a free and balanced competitive environment means progress, dual result: efficiency for producers and consumers maximize utility. Competition between operators in the market, interest pursued obtaining maximum benefits, mobilizes to work continuously to modernize production by introducing scientific and technical progress.

- Competition acts as the driving mechanism of the market economy. Representing open confrontation, rivalry between operators using market instruments, competition trigger the whole system of linkages between economic actors who, acting in accordance with market requirements, will have the ability to comply with objective imperatives of production, distribution, circulation and consumption of economic goods. Competition becomes the factor that stimulates economic life economic laws trimmed requirements.

- Already operating in a competitive environment, every manufacturer can guide and organize their production leading to reduced production cost and selling price. Businesses can become competitive and hold advantageous positions for consumers in their affordable, which requires actions to reduce production costs. Reduced selling prices and maintain them at a real will make higher profit result and increase sales volume. Therefore important way to increase sales is to reduce the price, it 's growth, a lower price, more accessible, increasing demand . Mass reasonable prices attract more customers, leading to a higher volume of dissolution will lead to a better return than that which would have been obtained by increasing prices.

- Competition is conducted and improving quality of goods produced and services rendered. An important element of competition between operators is the quality of having a special role in conquering the market and attract consumers. The competition provides a strong economic incentive to renew production to create and produce quality goods that maximize consumer satisfaction.

- Introduction of new products into production, the quality of scientific research results, we favor the skilful and ingenious and eliminates the weak who fail to adapt to market requirements. Differentiation occurs as businesses. Those who win the competitive struggle develops, increase the size of capital accumulation, accumulate riches, and the less skilled are removed from the market, becoming ofetanți labor. As a result, competition serves as a mechanism of income distribution. Businesses that have the highest efficiency have higher profits, and those who do not perform will suffer losses and then will be eliminated under the laws of competition.

- In a free market fair competition based on economic instruments prevents some companies hold monopoly positions and earn monopoly profits. The market economy but also allow the existence of monopolistic enterprises in various forms, is a reality of modern economies. The government intervention is more effective and permanent the limited opportunity to use in the fight monopolies competition and non-economic tools to dominate the market.

- Competition fulfills an important psychological function among economic agents by stimulating initiative and creativity, the desire to maximize profits and boost consumption. Competition creates changes in the value system of consumer

psychology and behavior by changing market demand agents, producers and consumers, generating options for a new lifestyle and a new behavior in society.

- Often, the virtues of competition are overshadowed by some negative effects explained by economic agents in their action to conquer the market and survive by any means, shall deteriorating product quality, environmental pollution cost reduction actions to become competitive through lower prices.

Therefore, the competition should be understood as being able to solve its own problems because the economy and society, as we have shown, in addition to the effects of positive order, can generate negative effects on economic and social life. Therefore it is necessary legislative and governmental intervention in this process to protect, maintain and stimulate normal competition. Market competition that occurs among economic agents differ depending on several factors: the number and economic power of the transaction participants, the degree of differentiation of goods that satisfy a human need; facilities granted or restrictions on entry into a branch; degree of market transparency, degree of mobility of factors of production, the ratio of supply and demand, domestic and international political situation etc.

The report and the way it combines these elements and working out competitive mechanisms at different stages of economic development, there are several types of competition: direct competition and indirect competition, fair and unfair competition, competition in homogeneous and heterogeneous competition, perfect competition and imperfect competition.

Direct competition define those relationships that competition between economic operators carrying out the same product and satisfy the same needs , squaring them and the same consumers as customers. The winner stands out by the quality of the product, brand

(originality) product, service mode, after sales warranties. All are direct competition and competition relations that occur between operators that produce substitutable, and the winner is distinguished by the quality of products, prices, product promotion policy. Competition defines those relations indirect competition arising between operators that offer different products on the market but serve the same customers - consumers. Using the competitive struggle, discrimination, economic instruments: the economic power of each Participant, product quality and limits the possibility of maintaining cost efficiency, the possibility of those competing to support mobility market price of the product, enable economic bidders offer customers additional economic benefits etc. generate fair competition and fair competition. The use of means that are inconsistent with the rules and regulations ( extra- tools ) hoarding pursuing market penetration of a given market, creating artificial situations of certain goods market for speculative purposes Slut influence tax evasion, etc. Moral pressure generates unfair competition, unfair competition, considered unlawful, being rejected by regulations of governmental institutions.

When a free market enter in competition operators offering substitutable product , the competitive struggle using economic instruments (quantity, quality , price), we distinguish homogeneous competition, and when offering diversified products, substitutes, using the same economic instruments we distinguish heterogeneous competition.

Perfect competition is the kind of competition that determines the efficient functioning of the economy and market relations requires that operators are able to sell

their entire production at market prices, without being able to midify together or separately. The market situation in which economic agents participating in the battle of competition by their unilateral actions can influence the relationship between supply and demand, the price of goods and services in order to maximize profit defines imperfect competition.

### **3. Enforcement of competition**

The main form of national and Community trade is the trade. Freedom of trade and industry is based on the principle of free competition which is the foundation of modern economic systems. But free enterprise and the freedom to decide - principles of liberal inspiration led to a series of abuses, for which the legislature has intervened in the way regulations to determine more precisely the limits of freedom of action in the free competition. Businesses can no longer act as freely as in the past, are obliged to respect a number of legal and administrative provisions. Compliance with these provisions is currently pursued by the national authorities closely with the European Community which, while respecting the freedom of competition has developed a series of rules and regulations that discourage traders to use procedures and customary practices against national and Community trade.

Competition regulation is necessary for several reasons:

- competition is a competition between operators can only take place on the basis of uniform rules and common leeway scrolling down according to their previsions;
- breach of competition imposes negative shade measures in situations where buyers are deceived by price advertising, false labeling, as to the source of origin of the product, product structure, etc.;
- stopping achieve the interests of the powerful at the expense of others and consumer interests by force, giving the social responsibility they have;
- stopping anticompetitive agreements whereby participants seek advantages over other competitors, ultimately from consumers .

Competition regulation at Community level is based on EU law , which is an autonomous right, original, with its own institutions and legal norms. According to the Treaty on the Functioning of the EU, the rules of Community law are found in the content of national law, but EU law has supremacy over national law. Any breaches of Community law by Member States or operators are tried before the Court of Justice of the European Union member states competence is required.

Functioning of the European Union demonstrates unity of will and action of the Member States , and the acceptance by each state to the surrender of part of sovereignty to EU institutions. With regard to Article 3 of the Treaty competition running EU states: the Union shall have exclusive competence to establish the competition rules necessary for its operations, The Commission, however, Member States play a part in skills competition law to apply the principle of subsidiarity. This means that decisions will be made and actions to be taken at a higher level only when the interests of those affected can not be protected by Louat decisions at lower levels (national, regional, local), or the interests of those affected can be better protected if decisions are taken at higher level.

Under the principle of subsidiarity as set out in the Treaty of Lisbon, in 2007, in areas which do not fall within its exclusive competence, the Union shall act only if and insofar as the objectives envisaged section can be sufficiently achieved by the Member States nor the central level or at regional level of the scale and effects of the proposed action, be better achieved at Union levels. Under the provisions of the Treaty of functioning of the EU (Lisbon Treaty, 2007) Community institutions involved in the legislative process of the competition are: EU Council, European Parliament, European Commission, European Court of Justice and national authorities.

Community competition law includes primary law (the Treaties) and secondary legislation (resulting from the implementation of treaties). Primary law competition established by the Treaty of Rome creating the European Economic Community and the European Atomic Energy Community has undergone changes and improvements in the Treaties of Maastricht, Amsterdam, Nice and Lisbon. Under Articles 101 and 102 of the Lisbon Treaty is declared incompatible with the common market and prohibited agreements between companies which may affect trade between Member States, restriction or distortion of competition within the internal market , the abuse of a dominant position within the internal market, Articles 107, 108 and 109 governing State aid and Article 106 provides rules - public enterprises to meet specific competition rules. Council of the European Union under the provisions of Article 103 of the Treaty on the Functioning of the EU has developed secondary legislation implementing rules, which consists of rules of the EU Council, European Commission and European Court of Justice in the form of regulations that apply to Member, companies , authorities and citizens Directive, which sets the objectives to be pursued; decisions that apply to a specific situation, recommendations and opinions, which are not legally binding.

In the right derivative of the five acts manifesting: regulations, directives , decisions, recommendations and opinions, regulations and decisions have importance for competition because they are directly applicable in the Member States without the need for transposition into national law Member State by an act or law.

In the EU, regulatory and competition are used atypical, which belong to the so called soft law (communications, guidelines, white papers, green papers) who only informative, being developed uropean Commission.

In Romania competition is governed by the Competition Act (Act no.21/1996 ) with subsequent amendments made through Emergency Ordinance 75/2010 and Law 149/2011, becoming a modern law, harmonized with EU competition requirements .

The stated purpose of the law is to protect , maintain and enhance competition to promote consumer interests and apply to acts and deeds that restrict, prevent or distort competition committed by operators, authorities and institutions of central and local government. Implementation of Competition Law The Competition Council, an autonomous administrative authority created for this purpose. Where acts or facts enterprises affects trade between Member States of the European Union and the Competition Council has the task of applying article 101 and 102 of the Treaty on European Union. Content Competition Council's activity is to achieve the objective of ensuring operation without distortion of competition in Romania, to allow consumers to have more choice, encouraging technical and technological innovations and price competition. The Competition Council has an important role in the dissemination of competition culture in order to create the necessary environment to avoid distortion of

competition nationally. Knowledge, promoting, nurturing and strict adherence to the rules of competition creates a transparent business environment, the market becoming more stable and attractive to investors.

The competition advocacy Competition Council acts in two ways: law enforcement and competition protection and promotion of competition culture. Competition advocacy by the Council includes two components: activities directed by the regulatory authorities responsible for the regulation and activities aimed at all parts of society for awareness of the benefits they can bring competition and competition protection activities.

Competition advocacy by the Competition Council is done through the following ways: seminars, conferences, symposia for businessmen and professional development of staff on competition and state aid, presenting the principles of protecting competition on the media, press releases decisions taken and the solutions adopted in different test cases of violation of competition: the communication of instructions, use of publications: journal □ Profile: Concurrent □, annual reports of the Competition Council, newsletters and so on, thereby ensuring greater visibility of the Competition Council.

Competition Council was reorganized based on the requirements of the Competition Law, representing a device territorially by the staff that worked on the ground in the Competition Office. Currently Competition Council has representatives in all counties in the 15 counties where there is Court of Appeal has inspectorates involved coordinating role in the monitoring of state aid granted to local budgets.

Competition authorities in Rome and the European Union cooperate in international forums Committee Organization for Economic Cooperation and Development, competition law and competition policy, Intergovernmental Panel of the United Nations Conference on Trade and Development (UNCTAD), in law and competition policy: working Group of the World Trade Organization (WTO), the interaction of trade competition. Therefore, the analysis of the competition rules to consider a number of international regulations emanating from the UN, OECD and WTO.

The United Nations has campaigned for the creation of the World Trade Organization to contribute to the progressive abolition of restrictions on international trade and the adoption of general rules and conduct international trade.

Efforts have resulted in: General Agreement on Tariffs and Trade, GATT, in 1948, the World Trade Organization, WTO, in 1994 and the United Nations Conference on Trade and Development UNCTAD, 1964, the organ of the UN General Assembly U.S..

Among the issues examined included the UNCTAD Competition Policy and Consumer because: a globalized economy based on competition rules more efficient and fairer by promoting a competition culture is accelerating the development of developing countries, by applying the rules competition enhances quality of goods and services and the choice appears to lower prices of goods and services.

As a result of discussions that took place for nearly a decade (1971-1980) in the UNCTAD on competition was developed and adopted ensemble of rules and principles of the United Nations competition, which is recommendatory in character and whose implementation is supervised and monitored by the Intergovernmental Panel on competition and United Nations conferences.

Organization for Economic Cooperation and Development, in competition matters and encourages acts on governments to stop and fight restrictive business practices and competitive market development . In the OECD Committee operates a competition consisting of representatives of the competition authorities of the Member States and observers from non-member states, and Division competition are developed analytical, statistical summaries, recommendations and provides assistance and practical support of governments seeking to strengthen organize the national competition.

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# **OBJECTIVES AND MEANS OF ACTION WITHIN THE DEVELOPMENT STRATEGY OF THE TOURISM IN SOUTH MUNTENIA REGION**

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**Abstract:** : In order to cope with the tourism competition both at the national and international level it is necessary the modernization, relaunching and the development of the tourism in South Muntenia region and also the creation of modern tourism products that would be competitive on the tourism market. It is thus required, in addition to the modernization of the tourism structures, tourist resorts, the creation of new tourism products, resorts, original, attractive and genuine programmes that could, by means of a sustained promotion on the market, direct significant tourist flows to the region.

**JEL classification:** O1, O11, O21

**Key words:** tourism, structure, development, strategy, region

## **1. INTRODUCTION**

The purpose of building the strategy is to create a concept about the future, which having real bases, brings value to the life of the inhabitants. The tourism development strategy adapted to the national strategy can contribute to the improvement of living standards. The implementation of the strategy aims at the general economic development of the region, environmental protection and last but not least improving the well-being.

The fundamental objective of the fundamental strategy within this chapter consists in affirming the regional identity, enhancing spatial cohesion, developing competitiveness and sustainable development, and the general objective is described in detail into three major strategic objectives with impact in developing the tourism in South Muntenia region:

1. Connection to the European network of development poles and corridors.
2. Consolidation and development of inter-regional links.
3. Protection, development and exploitation of the natural and cultural heritage.

At present, it is vital that the regional tourism development plan to be integrated with the environmental management system and vice versa. Similarly, the conservation of cultural heritage could go hand in hand with tourism development. In both cases, a careful monitoring is needed in order to ensure the maintenance of high standards of conservation.

In addition, if tourism and travels are to be a tool for the rural development, it is therefore vital the involvement of these communities in this domain. The



connections between different sectors and the local producers should be promoted and the involvement and communication of the factors involved should be prioritized.

The present strategy brings an original contribution by integrating economic and social aspects that manifest within the space of South Muntenia region, in the context of the challenges that the current transformation process induced by the European Union enlargement entails.

The attention has focused on tourism, given the natural and anthropogenic potential, as well as on the particularities of this sector of economic activity to create opportunities for attracting foreign investments and developing private sector in tourism. It has been given a particular emphasis on the development potential of mountain tourism in all its forms, of balneary tourism in its new international vision - SPA, cultural tourism, rural tourism - routes development (wine / monasteries, gastronomy, traditions, customs and festivals promotion), MICE - business tourism, being presented in detail the aspects regarding the action programmes for the development of tourist facilities, implementation, providing human resources, local community involvement, marketing and promotion. Carrying out some nature protection projects that contribute to restore some valuable ecosystems not only scientifically, but also in terms of their potential for practicing some new, genuine forms of tourism, for which there is a growing demand from the largest emitters of tourists, has constituted a new argument for analyzing the impact of tourism development.

## **2. PRINCIPLES OF THE STRATEGY**

The tourism strategy of South Muntenia region should be based on a number of principles, according to which should be then carried out a series of actions that will precede arrangement decisions adoption. Observing the following strategic principles of territory arrangement is decisive for the implementation of the territory *planning*:

*The principle of harmonious integration of the built structures in South Muntenia area with the environmental conditions*, the services structure and the infrastructure. The tourist arrangement is usually done within a territory with "a material load" made up in time by developing industrial and economic activities, agricultural activities etc. Therefore, the tourist buildings that will be grafted on the existing material structure must be "interspersed" among the economic activities and the social organization of the territory. For the use of the tourism industry, the territory must respond as well to certain aesthetic requirements for the fulfilment of which it is necessary that the built elements to integrate themselves both quantitatively and qualitatively into the natural conditions and the structures already existing on the territory in question. The integration includes both natural, historical as well as economic activities, the infrastructure and the superstructure of the territory, in a balanced and harmonious synthesis. The synthetic indicator expressing the tourist quality of a territory being represented by its attractiveness, the integration of all the territory components must meet the most demanding aesthetic requirements. At the observance of this principle should contribute various professional groups: architects, geographers, historians, plastic artists, economists who, forming a working group, can adopt the most appropriate solutions and directions of action.

*Flexibility or evolutionary structures principle*, according to which South Muntenia Region has to be arranged in a multifunctional system, that can be adapted to the evolution and structural changes of tourism demand. Complying with this principle is meant to alleviate the stiffness of the tourist offer, mentioned during its approach and, at the same time, to increase the efficiency of the valorisation and development of the tourism offer.

*The principle of the main activity and the secondary reception* reveals the specific character of the tourist consumption, which is stimulated by the attractive material elements of the offer, designed to meet the consumption motivation - considered as main activity. The functional elements of the offer, in which is comprised the reception (accommodation + meals), contribute to the achievement of consumption, but it is not its purpose. Therefore, in the tourist territory arrangement it shall be started from sizing the capabilities to provide main tourist services in relation to the consumption motivation and possibilities to satisfy it, then it will take place the adaptation of the functional capabilities that will complete the tourist offer.

*The principle of interdependent networks* aims at integrating the tourism network, composed of the material basis, tourist services, labour and consumers (tourists) in the socio-economic structure of South Muntenia region. Observing this principle will prevent the emergence of contradictions that may freeze the conflict state between the tourist and the resident population. A contribution to the adoption of the most suitable solutions can be brought in by sociologists and psychologists that should study the behaviour, aspirations, and social structures of the resident population, choosing different ways to establish contacts between the two categories of population.<sup>92</sup>

The process of strategy foundation and development should be based on taking into consideration the following specific and important aspects of the South Muntenia region:

- the existence of certain areas characterized by a suitable environment, which contribute to its attractiveness for residents and tourists and to its competitiveness given the business location.
- the nature and the diversity of the region that requires specific measures and activities;
- the existence of polycentric settlements, including major growth poles offering good conditions for productive investment concentration;
- the fact that a significant percentage of the population lives in small towns, communes and villages, characterized by modest growth and that require interventions to support the economic development and diversification;
- the predominant agricultural character of the south area and the problems caused thereof;
- road networks with poor quality for the public transport and goods.

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<sup>92</sup> Cristureanu C. *Strategies and transactions in the international tourism*, CH Beck Publishing House, Bucharest, 2006, p. 235.

### 3. SWOT ANALYSIS OF THE SOUTH MUNTENIA REGION

Based on the conclusions of the socio-economic analysis, on the comparative advantages of the region, its strengths and opportunities, the politics, through its structure and content, it will pursue the balanced economic development of the Region, while developing its capacity to adapt and to respond to the key economic changes.

Important sector of the regional economy, the tourism provides new and alternative opportunities for the development and competitiveness of the region. Tourism makes an important contribution in terms of economic regeneration of the economic areas in decline, creating jobs and indirectly supporting other sectors. Diverse and fragmented, tourism is generally characterized by a large number of small and medium businesses and their relatively slow adaptation to the market changing conditions, to new technologies and efficient management practices. Increasing the competitiveness of the region and its attractiveness as a tourist destination depends on providing quality tourism, in terms of accommodation and services.

#### SWOT Analysis of the South Muntenia Region

| STRENGTHS  | WEAKNESSES  |
|--|---|
| The existence of the Pan-European transport corridors: 5 European roads (E574, E81, E70, E85 and E60) and the highways A1 (Bucharest-Pitești) and A2 (Bucharest - Constanta, partially exploited), Danube river  | Poor technical conditions of local roads, the highest rates of modernized public roads being recorded in the southern counties: Teleorman, Ialomița, each with over 33%.                    |
| The existence within the region of the airports Bucharest-Otopeni and Bucharest - Băneasa  | Low use of the ports on the Danube, low traffic generating profile activities decline.  |
| Diversified economic profile of the region: the northern part of the Region (Argeș, Dâmbovița and Prahova counties) is characterized by a high degree of industrialization (Prahova holds the 1 <sup>st</sup> place in the country in the industrial production); the southern part has a very high agricultural potential (71.1% of the entire area represented by agricultural areas, of which 80.2% arable land). | The decline of the traditional industry, currently undergoing the severe impact of the transition process towards the market economy, by closing down most representative industrial units. |
| The variety of natural resources (oil, natural gas, coal, salt, mineral water, arable land, forests)   | Low share of modern technologies used in industry and agriculture.  |
| Diversified tourism resources: the mountain resorts in the Prahova Valley - Bucegi massive, tourist localities and natural parks located in Bucegi Mountains and Piatra Craiului Mountains, the balneary resorts of Subcarpathians.  | Outdated tourism infrastructure, most accommodation structures of two and three stars as well as the leisure structures were built in the 1980s.  |
| The existence of certain representative private companies with foreign or mixed capital. In the region have been made significant foreign direct investments: Renault - Pitești, Holcim -  | The existence of many monoindustrial areas: Mizil, Plopeni, Urlați, Valea Călugărească and Câmpulung Muscel - in the northern counties, but some in the                                     |

|   |  |
|---|--|
| Câmpulung Muscel, Samsung COS - Târgoviște and others.  | southern counties: Turnu Măgurele, Zimnicea, Alexandria, Videle, Giurgiu, Oltenița, Călărași, Slobozia and Fetești.  |
| Flexible, cheap and qualified labour force, in the fields of petrochemical, mechanical engineering, manufacturing industry.   | The decrease in the active and employed population. The active population represents 38.2% of the region population, while the employed population represents 35.4%. On activity domains, 39.4% is employed in agriculture, 29.5% in industry and 31.1% in other services. |
| Settlements network developed in a balanced manner: 43 cities (including 16 municipalities), 488 communes and 2,030 villages.   | Degraded public utilities: high degree of degradation / under dimensioning of water pipes, low density of gas supply network.  |
| The existence of numerous industrial parks: (25% of the industrial parks in Romania)  | The increase of emigration rate, especially among the young population   |
| High share of SMEs in services domain (75.8%)   | Population ageing accentuated process  |
| <b>OPPORTUNITIES</b>  | <b>THREATS</b>   |
| High potential for tourism development, due to the rich natural and cultural resources, and due to increasing demand in the field of mountain, ecologic, cultural, balneary and climatic tourism. | Location of investors in certain areas, while neglecting others. Deepening the disparities between the developed areas in the north and the undeveloped areas from the southern part.  |
| Increase of foreign investments number  | Lack of capital to sustain the economy investments.  |
| Entrepreneurship development  | Deepening the lack of balance between supply and demand on the labour market   |
| The extension / modernization of road transport network   | Insufficient financial funds for infrastructure development  |
| Development of the cooperation with bordering Danube countries  | Negative demographic trend   |

In the context of sustained investments oriented to the development and diversification of tourism products and the supporting infrastructure, the region can significantly improve its attractiveness and external perception. Therefore,

The tourism strategy of the South Muntenia region must aim at enhancing the competitiveness in the domestic and international tourism by increasing the attractiveness of the region as a tourist destination, by developing the accessibility, by means of continuing and modernizing the infrastructure, by creating a multimodal transportation system; it is also particularly important to take into account to create an innovative accessibility system capable of providing fast and efficient links with international markets, capitalizing the particular geo-strategic position of the region.

In this respect we consider that the tourism strategy objectives in the South Muntenia region must be closely correlated with the overall objectives of economic and social development in the region:

- Creating favourable conditions for the location of new tourism investments (and not only) and strengthening the potential of the existing ones by developing the utilities and quality services system designed for tourists and tourism providing

companies, through the simplification, the transparency and acceleration of the administrative procedures and for obtaining the permits and creating conditions to increase productivity of the tourism enterprises by using innovative products and processes;

- Creating the conditions for a flexible labour market in which job offer to become able to continuously adapt to the requirements of employers and the changing demands of tourists, by promoting entrepreneurship, informational society and new services, in the context of accelerated dynamics of integrating the tourism activities in the European and international area;

- Creating new opportunities for sustainable economic growth and increasing quality of life through the development of tourist heritage and promotion of environmental politics; it will be taken into consideration the development of the management and control system of environmental factors already implemented in the South Muntenia region<sup>93</sup> (including removing the negative effects on the environment in cases of natural disasters, general improvement of the environment factors by protecting biodiversity, preserving forested areas, parks and green spaces in urban areas);

- Development of social and health tourism services by improving the infrastructure and equipment, by means of applying an effective management and increasing people's access to these services, especially of those in rural and isolated areas;

- Education sector development by improving infrastructure and equipment, by increasing the quality of education services in tourism and especially by diversifying the specializations offered by the regional education sector in tourism, the development of continuing education centres for adults, establishing school networks, the development of partnership between the educational establishments and tourism business environment, universities and public administration and supporting the research-innovation;

- Modernization of the agricultural sector and diversifying economic activities, other than agriculture, by exploiting the environmental, natural resources (fishery heritage, forestry, biodiversity), the cultural heritage (traditions and gained professional experiences) through tourism;

- Increasing the attractiveness of urban areas for investment and implicitly for the urban and business tourism, by improving standards of living (urban infrastructure, transportation and population mobility), valorisation of architectural, artistic and monumental heritage, by promoting cohesion and social inclusion through the development of urban services.

Only through consultation with the target groups of regional development the strategies can be modified in order to meet local communities needs that need to be strengthened. In terms of financing opportunities, on the agency site, at the address [www.adrmuntenia.ro](http://www.adrmuntenia.ro), is implemented a database of opportunities available for the current period. This database is easily accessible and can effectively respond to any type of requests. At the same time, any potential investor can address the agency, in order to obtain information or advice.

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<sup>93</sup> *Regional waste management plan in Region 3 South-Muntenia*, 2007.

Access to international, interregional and intraregional transport networks is considered an important development priority for improving access roads to economic zones of the South Muntenia region and strengthening the link between the economic poles in the region and European transport corridors. It is necessary to establish a balance between rail transport and road transport and to increase the role of air and naval transport (by sea and inland waterways).

Developing the transport infrastructure represents a necessary condition for the successful implementation of the other development priorities of the region, contributing to increase the mobility of people and goods, the integration of regional growth poles with the trans-European transport network, to fight isolation of the underdeveloped areas and not least, the development of regional and local transport infrastructure with obvious beneficial implications on tourist traffic. The roads network of the South Muntenia region is not adapted to the European traffic requirements in terms of comfort and transport capacities.

The railway network and the railway means of transport is inefficient and requires significant investments for rehabilitation and development in order to achieve the required standards enabling efficient transportation. The highways are an important element in ensuring the communication between economic centres / urban areas, allow labour mobility, tourism business development and create the adequate environment enabling the rapid development of enterprises in this sector. In order to stimulate tourist traffic and the entire tourism sector of the South Muntenia region we consider absolutely necessary:

- The development of existing terminal points and creating new terminal points of the transport networks, for the transport of goods / people, as well as the modernization of the services thereof, in compliance with the safety and environmental protection standards; ensuring the inter-modality by creating logistics centres for intermodal transport rail-road, rail-inland waterways, rail-sea, road-inland waterways, road-sea, road-air;
- Developing the links between terminals and urban centres with national and international transport systems (including ring roads), by developing different means of transport to reduce transport time in the total time allocated for tourist movement and increase traffic safety, maintaining and protecting environmental factors.
- modernizing and ensuring the access in rural areas in order to improve the living conditions in rural areas and to support economic and tourism activities.
- modernizing county and local roads networks.
- increasing mobility in urban areas, through the modernization of the urban public transport and development of the multimodal transport, in order to increase the comfort and safety degree of tourists and residents and encourage the development of tourism forms in urban areas of the South Muntenia region.

SMEs are the main source of job creation in the tourism sector of the South Muntenia region. Regional development should focus not only on the creation of new SMEs in tourism but also on the development of the existing ones. The main objective is strengthening the SMEs by developing the entrepreneurship of tourist providers, of the enterprise culture and labour force that will support the development of this sector.

Although their number in the region is relatively high, the analysis of this sector showed that most SMEs in the tourism domain are micro enterprises. This leads to a limited and reduced contribution to the regional GDP, but at the same time a great capacity to absorb the labour force and a greater flexibility to changes in the economy of the region.

Increasing the economic power of SMEs will be made by means of identifying and developing the tourism sectors with economic growth potential. The tourism businesses have to be supported in order to have access to training services in order to improve management and marketing skills in these companies.

In order to support the already existing SMEs as well as new private initiatives, it is necessary to extend the network of consulting centres in the field. These consulting centres will support tourism businesses in preparing and implementing business plans, will provide services for the business, marketing, management, consulting and assistance initiation for the organization of the informational system, extremely important for the dynamics of displaying the tourism products.

The practice of the crediting policy with high interest rates in recent years and the unfavourable socio-economic circumstance lead to a reduced access of companies to different forms of tourism and financing sources. Therefore, it is necessary to support this sector by creating and developing some attractive financial mechanisms.

In order to enter the international market it is required to equip the tourism companies and those sectors establishing a relationship with the tourism, thus being able to become the suppliers of important parts of the tourism product, with high technologies, the introduction of international systems of quality certification, their participation in international trade fairs and exhibitions, investments in innovative technologies in order to protect natural resources. We also consider that the following measures may enhance the development of the tourism sector of the South Muntenia region:

- create, extend, modernize the infrastructure of incubators and other business centres (dedicated to the sector);
- establishing some centres of standardization / certification of tourism units and tourism products;
- create some multi specialized theoretical and practical training centres, the tourist sector mobilizing a major proportion of the active labour force and requiring a wide range of specializations of the staff working in the sector;
- support given to the tourism companies for the development, promotion and internationalization of tourist activities;
- support for the creation of branded products and for compliance with the international quality standards;
- support given to tourism companies for the purchase of equipment and modern technologies for sector specific activities, services, including internet access;
- promotion and diversification of tourist offer (quality standards and services except for hotels);
- create online booking networks;
- improving the tourism infrastructure of local / regional interest;

- support for strengthening and modernizing the productive sector by tangible and intangible investments;
- support for purchasing professional services in order to implement European standards;
- support for the access to new markets and internationalization, in order to create regional brand and to promote the image of the South Muntenia destination;
- support for the integration of tourism enterprises in the international chains and networks;
- carrying out R&D projects in the field of tourism in partnerships with universities / research institutes and enterprises and complex research projects that enable the participation of high-level international specialists;
- support for the new tourist micro-enterprises and high technology spin-offs.

The gradual transition to the market economy has brought dramatic changes in some sectors and created changes in the structure of labour force, being registered the de-industrialization phenomenon, together with the migration of labour force unfortunately dismissed more to the agriculture and not to the region tertiary. The existing industrial structure which is not adapted to the new demands of the market in the region counties can permanently supply unemployment. For this reason the development of tourism sector is necessary, allowing the creation of viable employment alternatives. It is important that the educational and training system to be adapted to the regional labour market requirements, not only in terms of research and development activities that will support productivity and competitiveness of the local economy, but also in terms of providing new skills necessary for the labour force involved in the tourism sector. The training programmes must be adapted to the labour market requirements, have to be introduced programmes to meet the needs of the employed and the unemployed.

Creating, expanding and strengthening social partnerships at regional level will contribute to the transfer of expertise and validation of the identification process and capitalizing of new integration opportunities on the labour market. In order to increase the adaptability of the labour force support must be given, in order to develop and maintain human resources in order to ensure competitiveness in the process of changing economic and technological conditions required for tourism development by:

- application of the selective professional training, oriented to the tourism sectors with high growth potential
- identification of activation / reactivation opportunities on the labour market in the tourism sector of people in search of work, especially young people
- correlation of training with labour market demand
- providing training courses that meet the current working environment in tourism (IT, management, marketing, foreign languages)
- training courses for developing management techniques, entrepreneurship, tourism, quality management, services sector support
- development and implementation of professional distance training courses
- training to increase activity productivity and tourist attractiveness of the South Muntenia region



- development of entrepreneurial culture within curricular and extracurricular activities in preuniversity and university education in partnership with the business environment
- development of continuous training techniques
- development of education offers for secondary education, university / post university for professions in the tourism sector

One of the competitive advantages of which benefits the South-East Region, compared to other regions of the country, is the preservation and conservation of the natural environment, unaffected by human presence and activities. Thus, within the natural reserves, there are no few species of plants and animals declared as endemic or natural monuments. Moreover, forest and fish reserves conservation in the region is a top priority as long as they offer significant opportunities for economic development through rational exploitation (exploitation in accordance with the resilience capacity of those reserves).

The priority lines of intervention aiming at waste management will cover the expansion and modernization of collection, treatment and disposal system of wastewater, currently available in cities and towns. It should be noted that in the county capital cities such facilities are available, but some of them have trouble functioning, maintenance, have little capacity or are unfinished. Moreover, industrial wastewater treatment and modernization of filtration systems of pollutants emitted by industrial units have a significant importance for the region. There are already sustained the processes of consultation and introduction of new technologies and techniques in waste management.<sup>94</sup>

Special attention must as well be paid to public awareness through information campaigns on environmental issues and protection of unique natural resources and biodiversity in the region. Given the proximity of the region to countries facing similar environmental problems (industrial pollution, erosion, massive deforestations, etc.) there can be developed a series of cross-border cooperation projects between South Muntenia Development Region and the neighbouring regions. Taking into consideration the frequent events that caused significant floods and landslides, with implications for public safety and tourist activity a special attention is required and a reconsideration of the entire policy of preservation and conservation of the natural environment in correlation with the policy of prevention and intervention in case of natural disasters, by means of:

- the expansion and modernization of water and wastewater infrastructure systems;
- rehabilitation of areas affected by uncontrolled disposal of industrial waste;
- recreation of stability and safety conditions of the areas exposed to erosion, natural disasters and deforestation phenomena;
- promoting the use of unconventional energy and making more efficient the distribution and consumption systems;
- creation of the management and control system of environmental factors (monitoring units and regional intervention units);

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<sup>94</sup> Regional Waste Management Plan - Region 3 - South Muntenia.

- valorisation of protected natural areas, their expansion and identification of new natural areas and development of management plans for the areas belonging to Natura 2000 network;

An old problem of Romanian tourism in general but also of the South Muntenia region is the health system and the way the perception of tourists in terms of quality of medical services provided influences the purchasing decisions of travel packages. In this respect are required investments in the health infrastructure through rehabilitation, modernization and equipping of the buildings housing first aid centres, hospitals and emergency medical services and technology, in order to create a modern and functional health system, based on increasing the capacity and quality of medical services provided, so that in the strategy of tourism and economic development of the South Muntenia development region have to be included:

- creation, expansion, modernization and increase of the capacity of health centres in urban and rural areas, to cover local / regional needs and to create a favourable image of the region as a tourist destination safe from this point of view;
- construction, rehabilitation, modernization, restoration of buildings for multifunctional services and residential buildings and providing them with adequate equipment;
- construction / rehabilitation / modernization of hospitals buildings and ambulatory and specialty hospitals buildings;
- providing specialized medical equipment and utilities for health centres, hospitals and ambulatory buildings;
- development of SMURD integrated services, at local and regional level;
- the agricultural sector is characterized by a lack of modern equipment and techniques, which has a negative impact on productivity in the sector and quality / competitiveness of tourism products.

The dominance of the agricultural sector in the rural areas economy prevents the economic stimulation of the region which is an economic risk deriving from agricultural market vulnerability due to climatic conditions and demand of final consumers. Moreover, the lack of processing companies leads to the lack of added value of packaged and conserved products. Rural areas development in the region is made through diversification of the rural economy, stimulating economic sectors alternative to agriculture. In this regard it is necessary to develop new activities based on peculiarities and local resources, such as: natural resources, environmental resources and cultural heritage, tourism development and other local productive sectors (crafts, branded wines, organic products, products resulting from processing the wood, the fish, etc.) In this regard, the creation of alternative occupational opportunities can be sustained by:

- investments in tourism companies and tourism infrastructure;
- increasing the attractiveness of rural areas and villages renewal;
- maintaining natural landscape attractiveness and specificity and ethno-cultural values;
- rehabilitation, modernization and expansion of accommodation structures as well as the related facilities;

- development of agro tourist services by creating, rehabilitating and expanding the recreational infrastructure, including associated facilities such as: swimming pools, mini-golf , tennis courts etc;
- investments for companies that produce / sell typical local products, region brands;
- assistance provided for companies that promote natural / cultural heritage;
- restoration and valorisation of cultural, architectural, religious heritage in rural areas;
- creation of new structures for regional cultural heritage valorisation;

The South Muntenia region has an incredible tourist potential. Although at present this advantage is exploited in the northern part of the region, the southern part of the region is of particular interest, the development potential of the Danube bordering areas has not been sufficiently exploited yet. By means of investments, this area can become an alternative to the classic mountain tourism.

Another priority of the tourism strategy of the South Muntenia region is to sustain tourism projects in Arges and Dâmbovița counties, even if not bordering the Danube, have landscapes of a particular charm (see Annexes I and III). It would be a shame that these places, yet unknown to the general public, to remain hidden. It is particularly important that in a few years, tourism in the South Muntenia Region to no longer be restrained only to Prahova Valley.

The mountain resorts in the Prahova Valley - Bucegi massive, touristic towns and natural parks situated in Bucegi Mountains and Piatra Craiului Mountains, balneary climatic resorts - Slănic Prahova, Vălenii de Munte, Pucioasa, Câmpulung-Muscel - are heavily exploited tourist areas. In recent years, the investments made in the three northern counties - Prahova, Argeș and Dâmbovița - targeted hotel network expansion and services quality improvement. Weekend tourism, winter sports have brought great benefits to the investors in this area.

Rural tourism is also seen as a source of valorisation of the regional potential and the possibility of obtaining funding from pre-accession funds, until 2007 (SAPARD, PHARE), was used by some local partners to create tourist units, hostels, which offer the chance of countryside valorisation.

Although tourism infrastructure does not correspond - from the qualitative and quantitative point of view - to the requirements, it may be considered that there are some progresses in this domain, compared to previous years. As an alternative to mountain tourism in the north and for a comprehensive valorisation of the South Muntenia region, the investors and tourism authorities try to stimulate a greater interest for the southern part of the region by exploiting the potential of the area bordering the Danube.

Organizing various events - fairs, shows, concerts - can be an extremely important source for attracting foreign tourists. As in the case of other regions, tourism in this area needs investments in infrastructure projects, hotels network expansion, accommodation spaces and services quality improvement, and projects launching and access to European funds aim precisely these issues.

At the end of 2007, after the Ministry of Development, Public Works and Housing approved the eligibility criteria for Axis 5 "Sustainable development and tourism promotion", in the Regional Operational Programme, the interest of economic

agents in this field has considerably increased. The Ministry of Development, Public Works and Housing has launched a series of open calls for proposals for increasing the quality of tourism services aimed at involving local authorities, NGOs, SMEs in tourism activities.

Hotel networks expansion, services quality improvement, creating specialists in the hotel industry and tourism promotion centres have become a priority for local authorities in the field. The stake represented by improving the quality of tourism services in the area is even greater as this area surrounds the capital and, thus, can stimulate the interest in Romanian tourism in general.

A more active involvement of investors, social partners, investors in tourism activities as well as materialization of certain projects through European funds in order to make the Romanian tourism a source of economic growth are still in its infancy and have favourable premises for regional tourism potential valorisation.

Rural settlements providing the necessary infrastructure, recreational facilities and adequate spaces are necessarily development premises in tourism field. Protecting the cultural heritage through the restoration of cultural buildings, monuments or creating museums allow social and cultural activities, contribute to maintaining and improving areas identity, increasing their attractiveness and not least encourage tourism. Rural areas will be transformed in order to meet the demand for a living and attractive recreational environment. Rural areas provide an important potential for recreational activities, but it must be maintained and sometimes created or improved.

On the other hand, preserving the rural environment for its beauty, cultural and historic importance is not incompatible with the economic development. On the contrary, such protection can sustain the development - through tourism and other investments. But the natural heritage requires careful management, adapted to local conditions. Usually, this management will be conducted in close connection with agriculture, as agricultural workers play a central role in the management of rural areas.

The actions that have to be undertaken refer to global interventions, in order to preserve the traditional image of the villages, local architecture and rural heritage, while measures are fully compatible with the objectives of local tourism development. These integrated actions may relate to renewal of traditional elements of housing, protection and preservation of rural heritage traditional elements such as water mills, windmills, bridges as well as the preservation of customs and traditional rural life. Sustainability must always be borne in mind, meaning that tourism development must be carefully planned so as to be a balance between the economic, social and environmental impact.

In order to attain the development goals, the tourism strategy must be adapted to each area, depending on the data that individualize it and the priority objectives of the tourism sector. One of the most popular proactive strategy treating the issue of tourism development in terms of maximizing its positive effects on regional economic growth and on this basis the overall development, was presented in the U.S.A. in the "US Department of Commerce & Economic Development Administration".<sup>95</sup> The mentioned strategy aims at overall economic development through regional

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<sup>95</sup> James Gollub, Amy Hosier, Grace Woo, *Using Cluster-Based Economic Strategy to Minimize Tourism Leakages*, ICF Consulting Global Economic Development Practice (GEDP), San Francisco, California, 2000.

development, to which it grants a role in economic growth. The strategy premise formulated by its authors, underlines that ” in global economy, value is created at the regions level, as territorial entities defined especially based on geographic criteria, not as political-administrative structures, and regional economic growth is centrally accumulated and valued in accordance with economic policy and the national legal system”.<sup>96</sup>

In developing the strategy of tourism development in the South Muntenia region, in order to build the basis to implement a sustainable approach of tourism development, we have shown the need to use SWOT analysis results performed, of the statistical analysis and natural potential of the region. In this respect we consider that it needs to be made permanent for a suitable and permanent adaptation of the strategic action ways to the new realities, tracking the indicators that compare the volume, dynamics and structure of regional tourist traffic:

- Tourist flows, tourism demand, motivational factors etc;
- The number of Romanian / foreign tourists who turn to tourism services, the number of tourists visiting tourist sites;
- The share of domestic / foreign demand in total of the annual tourism demand, the rate of the change over time in domestic / external demand;
- Distribution by area of origin / country of foreign tourism demand and regional origin of domestic tourism demand, the index of foreign visitors, by countries of origin and geographical areas;
- The structure of tourist demand on the main means of transport used;
- The distribution of tourism demand on the main forms of accommodation, number of arrivals / overnight stays by types of tourist accommodation, for resident / non-resident tourists;
- Accommodation capacity - existent (places) / functional (thousand places - days), number of rooms / beds;
- Occupancy rate of the accommodation potential, net use index of accommodation places (capacity in operation), the average length of stay;
- The average length of stay for resident / non-resident tourists;
- The seasonality of tourism demand;
- The degree of tourists satisfaction;
- The number of visitors on the website, the number of online reservations;
- The investment amortization schedule;
- The tourism incomes level, the tourism incomes growth rate;
- The tourist average income per capita;
- The distribution of tourism companies in terms of turnover and number of employees;

#### 4. CONCLUSION

Based on the performed analyses we established the following objectives, actions and recommendations for tourism development in the South Muntenia region:

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<sup>96</sup> Cristureanu C. *Strategies and Transactions in International Tourism*, CH Beck Publishing House, Bucharest, 2006, p.233.

- Rehabilitation and development of infrastructure by upgrading / rehabilitation of national, county and communal roads; the rehabilitation / establishment of sewerage and water supply throughout the region; realization of the infrastructure and developing an integrated waste management system in the region;
- Rehabilitation of cultural heritage through the restoration of heritage sites with tourism potential and making appropriate arrangements for valuing them; identification and appropriate arrangement of certain locations within or bordering the cultural objectives, where tourists can enjoy a snack or a drink, so that the visit to a museum to be both a training and relaxing opportunity; improving interpretation of exhibits for visitors, including additional language materials;
- Rehabilitation of accommodation places and the creation / development of recreational areas in order to rehabilitate the accommodation places at European standards; the development of business tourism by creating the facilities for business meetings in the hotel structures;
- Creation, modernization and diversification of leisure facilities by developing and diversifying the physical recreational infrastructure needed in order to achieve leisure offer (riding, skydiving, extreme sports, etc ) on the outskirts of cities and resorts; creating certain areas of tourist attractions - entertainment parks, folklore / culture parks; sustaining the entrance into the international tourism circuit of tourist resorts;
- Enhancement of tourist guest houses by setting the environment of tourist guesthouses and enhancement of: area specific gastronomy resources, the architectural style of the buildings / houses / guesthouses, crops, farms, certain processes, site-specific processes, hospitality style specific to the area, providing a menu made of natural and specific food products;
- Providing an offer for external activities: what one can visit, see, buy and the tourist attractions around the tourist unit;
- The rehabilitation of balneary resorts by: renovating the accommodation places at least of 3 or 4 star standards, installing some modern treatment facilities, installing some additional modern wellness facilities, beauty and recovery, developing some additional attractions for sightseeing reasons, such have facilities for playing sports and conference rooms, *health* product promotion and less *medical* product;
- Development of mountain areas to provide facilities and attractions to guests throughout the year, developing some sustainability plans for national and natural parks, by which we can identify opportunities for expansion of existing tourism activities and introducing new ones, especially cycling, sports water, birds and mammals watching, etc.
- Developing a system of marking tourist attractions across the region (input / output signals, boards, maps, signs on national and county roads, in train stations, bus stations, etc); installation of brown tourism signs printed with white letters and icons according to European sights for tourist objectives;
- Creation of tourist information centres in all cities and towns with tourism potential and information desks in the tourist attractions areas, providing

tourist information, accommodation bookings, shows ticket sales, tourist maps and publications sales

- Development of communication networks between information centres in the region and the national and international one and their standardized integration through interconnection directly targeting the development and improvement of the booking system, creating online booking networking for tourist services
- Promotion of the tourism potential by creating tourist circuits in the region and/or thematic tourist routes, allowing visitors to know both urban attractions and heritage objectives and rural lifestyle, introducing rural areas in the tourism circuit - ecotourism development by valuing local traditions, local crafts, traditional architecture, flora and fauna, organizing fairs, museum exhibitions, ethnographic and cultural events, floral exhibitions, festivals, actions and campaigns to entirely promote the local tourist product and supporting participation in this type of events both domestically and internationally; editing promotional publications and audio-visual materials; drawing some GPS maps of all authorized circuits, circuits detailed presentation, point by point and in the form of circuits; improving and updating web pages dedicated to tourism; expansion of local administration sites with a complex and revealing chapter on tourism; developing a complex database on tourism domain; developing a partnership between the public and private sectors with a view to develop and promote tourism in the region
- Awareness in hospitality and tourism sector
- target groups: the hotel and restaurants staff, tour guides, tourist information centres staff, local authorities, factors indirectly involved in tourism but in direct contact with visitors (taxi drivers, museum staff etc), students, suppliers of general education and professional services, the public in general
- the approaching and implementation ways are different, depending on the interest groups
- Developing some awareness applied programmes consisting of:
- organizing short period seminars, no more than a day or two days led by specially trained instructors
- publishing and distribution of publications, brochures, posters, etc., for different target groups
- awareness media campaigns (radio, television, print media, events) regularly organized
- tourism education in schools and colleges
- Identification and development of a tourism destination brand based on the main attributes of the region's own tourism resources, attractions and facilities, with the following steps: selecting the team / company to achieve the brand, target market assessment, products identification, adapting products to market, brand formulation, its presentation to the tourism factors, preparing the communication strategy and the creation and development of new products.

The regional strategy for tourism development represents the instrument in facilitating the implementation of ideas, local development projects, trying to be a compass for authorities, local communities. The main purpose of tourism development is to improve the quality of life and thus contributing to the preservation of local values. Our objective was to develop a strategy to comply with the national strategy, that takes into account the local specificities but also the international trends. Moreover a development strategy is indispensable in attracting development funds and the activities proposed to be undertaken in the field of tourism must comply with it. Our goal is to provide a permanent link between the development projects designed at the central level and the local ideas, for making the fundraising process more efficient.

The strategy successful implementation depends in great extent on the factors involved, special services and offers, services quality and last but not least the communication channels chosen to promote the region.

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**ISSN 1223-365X**