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## **THE DIVERSITY OF CORPORATE GOVERNANCE MODELS. OVERVIEW AT THE COUNTRY LEVEL**

**MOHAMMED SUBHI AL ESSAWI, PETRE BREZEANU \***

**ABSTRACT:** *This paper concentrates on the key features of corporate governance models; first, it highlights the correlation between corporate governance and the economic welfare; secondly it sets forth the characteristics of the models at the country level. The focus is placed on the correlations between the key elements that are intrinsic to the governance evolution in time.*

**KEY-WORDS:** *corporate governance; system; conflict of interest; one tier model.*

**JEL CLASSIFICATION:** *G30; G32.*

### **1. INTRODUCTION**

Sustainable economic growth is highly supported by innovative technology as well as by social and institutional development. At the worldwide level, in the context of the natural resources rarity and informational technology development, economic performances of different countries are highly interdependent.

An actual key-concept is represented by corporate governance. *Stricto sensu*, corporate governance encompasses a system of elements based on which a company is managed and controlled. In a market based economy, where a key role is played by investment process, corporate governance is represented by the assembly of economic, legislative and institutional elements which protect investors' interests.

From a wider perspective, corporate governance represents an assembly of policies and control mechanisms that are applied in order to protect and to harmonize various interests, frequently contradictory, of different entities acting within a company.

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Beginning with '80, a deep focus has been oriented towards corporate governance area. This aspect can be explained by Anglo-American codes of good corporate governance, like the Cadbury Code (1992) in UK and the Principles and Recommendations of the American Law Institute (1984) and the Treadway Commission (1987) in the USA. These determined other countries to consider the possibility to implement different version of these codes adapted to their national systems.

In parallel, international organisations such as OECD and the World Bank set forth own standards on corporate governance, including corresponding recommendations and principles.

Other entities deeply involved in the phenomenon such as corporate managers or financial managers were at the core of these actions.

Another key element that generated the development of the corporate governance standards was represented by the obligation for the companies that are listed on the stock exchanges to implement the corporate governance standards.

## **2. HETEROGENEITY OF CORPORATE GOVERNANCE MODELS**

The diversity of the corporate governance codes reflects the peculiarities at the country level. Literature contains several discussions regarding the impact of the financial globalization on the corporate governance models, especially from the perspective of a potential alignment of corporate governance systems to identical standards. The hypothesis of a unique corporate governance model generated many controversial discussions on the model at the country level that would represent the reference pillar in accordance with which there will be elaborated the single model.

The polemic on a single corporate governance model triggered numerous pros and cons, being unlikely to reach a certain compromise.

The pros generally rally upon the idea that harmonized policies in terms of employment, production and marketing give incentive to a highly competitive environment.

The cons assume the impossibility to align different corporate governance because of intrinsic diverse features originating in different legal systems, financial markets or social environments.

Academic literature on this topic pointed out that in some countries managers proved to protect primarily investors' interests (USA, UK) while in other countries the focus was oriented towards stakeholder's interests (Japan).

Recently, theories regarding corporate governance rallied upon control mechanisms that are specific to the shareholders and managers relationships; the control becomes effective at the level of the tripartite relationship between institutional and private investor-creditor-manager as well. From a theoretical perspective, these relationships ground on divergent objectives. Classic theories acknowledge that shareholders aim at company value maximization while private investors look for profit maximization.

In opposition, institutional investors focus on the social dimension, deeply anchored in corporate social responsibility area.

Despite the so-called objectives divergence, explained by different interests incurred by various entities, analysts confirmed that a common goal support the relationships characteristic to corporate governance area: profit increase.

This common objective lies behind different corporate management strategies; although there are different manners by which these strategies are elaborated, the common goal determines an alignment of interest. In line with this idea, the agency costs tend to reduce this asymmetry, revealing the importance of the control mechanisms that in essence aim at ensuring all the parties involved in a business that rules are complied with and all the actions and measures that are taken subscribe to wealth accumulation.

There are several discussions on the management and corporate governance activities; some analysts consider them to interfere to a large extent, but the majority of the opinions assume the clear differences between them.

Management refers strictly to coordination, organisation and internal control activities, being deeply anchored in the internal environment of the company.

Corporate governance is rooted especially in external environment, referring to the control exerted by shareholders on the company managers.

The two types of control –internal and external- are exerted on different layers, triggering the involvement of third entities represented by the capital market or banking industry; the involvement of these entities is triggered by the necessity to make financing operations.

The first main challenge in terms of corporate governance analysis is represented exactly by the necessity to define corporate governance systems.

There are two approaches as for corporate system definition:

- *a narrow one*, referring strictly to the relationships between managers and board of directors and especially to the manner in which this relationship is structured. This type of definition is frequently encountered in the corporate governance codes and the *OECD Principles of Corporate Governance*, issued in 2004.
- *a broader one*, grounding on the relationship between shareholders and managers. This broader definition is related to a larger extent to the internal environment of the company, reflecting the involvement of the institutional investors and of the financial markets in the current life of the enterprise.

The difficulty to capture the characteristics of the corporate governance into a strict definition is determined by its complexity.

Out of the control mechanism dimension, corporate governance area can be associated with the process of wealth creation and distribution (Klein, 2002, pp.375-400).

There are various classifications of corporate governance systems, taking into account the country, company or social level peculiarities. Nevertheless, literature contains many variations on two basic models: on one hand the liberal model and on the other hand the social model.

The liberal model envisages the company to be the property of shareholders while the social model reflects the company under the form of a social community,

with multiple entities incurring various interests. These different interests represent the rationale for agency theory that includes the perspective of various entities such as managers, employees and stakeholders.

An extension of the social model allows a classification of the corporate governance models at the country level. In Germany, France and Japan, the financial markets exert a deep impact on corporate governance models; analysts uncovered that important features characteristic to corporate governance models are derived out of the effect bearing the mark of the financial market (La Porta, et al., 1999, pp.471-517).

The financial globalization represents a challenge for the multinational companies from the perspective of the corporate governance model that have to be implemented in the organizational structure at the worldwide level. This process implies the necessity to select a benchmark corporate governance model in reference with which there will be elaborated the global model.

### 3. CLASSIFICATION OF CORPORATE GOVERNANCE MODELS

Corporate governance structure relies on the following key actors: shareholders, managers, employees, suppliers and creditors that interact in a different manner within three various corporate governance systems: traditional model, co-determination model and stakeholder model.

**Traditional model** (*North-American model*) bases on two legal relationships and three levels: one is established between shareholders and board by the virtue of an agency contract while the other one is established between board and managers. In the latter, managers dispose of a form of authority that derives from the board authority. This model is assimilated with shareholders' revenues maximization model; the overall firm risk is concentrated on the capital provider who ultimately asks for residual revenues.

Shareholders select company's Board of Directors; possessing a share is equivalent with a vote right and the Board of Directors selects the management which is assumed to make the proper decisions in order to maximize the shares' value. In this case, shares value is based on the present value of future dividends which derive out of the net profit.

In the **co-determination** model (West European countries model) there are three legal relationships and four hierarchization levels; one is established between shareholders, managers and employees' representatives, another level is established between managers and employees' representatives and the last one becomes effective through the relationships between managers and shareholders.

In comparison with the traditional one, this model introduces a system of participative management, grounding on the assumption that business risk is lower for shareholders in comparison with employees because of the impossibility to diversify investment portfolio from the perspective of the last ones.

As for the relationship between shareholders and board members, it is very important to mention that there is a superior council that interposes between; this council is composed out of shareholders' and employers' representatives.

The role of the superior council is identical with the role of the shareholders from the perspective of certain aspects since it exerts the control function, analyzes the strategic objectives of the company and formulates recommendations to the board members.

In the **stakeholder model** there are two legal reports and four levels: one between shareholders and employees representatives, clients, banks, suppliers, state or public administration and a report between managers and employees' representatives and the other entities: clients, banks, suppliers, state or public administration.

It is forbidden to interpose another entity between shareholders and managers.

The rationale of this model consists of the necessity that the activity of a company should not be affected by the relationships that are created between entities that incur different risks and interests.

In comparison with the co-determination model, this model extends the system of participative management, although it does not reflect in a sufficient manner the rights and the obligations of every person in the balance that has to be kept from the perspective of the decision making process. The decision making process has as main objective to increase the revenues of the company and to enforce its financial position, rendering difficult the management control by shareholders since the principle of „one share – equals one vote” does not perform.

### **3.1. The single-tier model of corporate governance in the UK**

In UK, corporate governance relies upon the one-tier model that implies a deep control exerted by the board of directors on the global activity of the company; the current management responsibilities are delegated to some of the executive directors. An interesting aspect consists of the fact that executive directors are partly involved in the board.

The UK model envisages the shareholders to be the unique owners of the company. In 1985 there has been adopted the Companies Act as a reform measure that asked for considering the employees interests as well, not only the shareholders'. Nevertheless, the act did not manage to trigger any enforceability of a potential involvement of the employees to participate in the management structure of the company or in the oversight of the board activity.

Literature reflecting the evolution of the corporate governance theories revealed that even during this period of time the role of the managers was represented by the administration of the company in the best interests of the stakeholders.

Another interesting element consists of the fact that UK is the first UE country that initiated important measures regarding the elaboration of precise corporate governance standards. Consequently, in 1992 the Cadbury Committee elaborated the Cadbury Code of Corporate Governance under the protection of the London Stock Exchange and the Order of Financial Auditors.

The Cadbury Code represents an important step in the evolution of corporate governance systems; its main peculiarity derives from the obligation imposed to the companies that are listed on the London Stock Exchange to obey to the rule of comply-or-explain principle.

Another step in the evolution of the corporate governance system is the report published by Greenbury Committee, together with a code attached including principles on the disclosure relative to director remuneration; shortly, this aspect became compulsory for the companies listed on the Stock Exchange.

Even if the specialists made efforts in order to elaborate different standards governing the issues of corporate governance, there was a problematic aspect regarding the high degree of complexity and even bureaucracy relative to these standards.

That is why in January 1998, the Hampel Committee Report made a research on the implementation of the Cadbury guidelines and revealed some deficiencies caused evenly by their bureaucracy. This is the reason that lies behind a modified version of a Combined Code dating from 1998; this version represents in fact a synthesis of the former codes that diminishes the bureaucracy degree.

Another reference point in the evolution of corporate governance model is the Turnbull Report focused on the internal control mechanism.

In January 2003 the Higgs Report highlighted the role and effectiveness of non-executive directors in the context of the financial scandals occurring that time in USA.

An important point consists of the persistency of this Combined Code until present; nevertheless, there were slight changes made in 2006 and 2008.

UK preoccupation for the development of appropriate corporate governance standards continued until the present period; this deep interest is supported by numerous associations in this area such as Association of British Insurers, National Association of Pension Funds and the Institute of Chartered Accountants in England and Wales (ICAEW). These legal entities elaborated their own policies in the field of corporate governance, many of them containing more strict requirements than those that are promoted in the Combined Code.

Literature unveiled that the UK corporate governance code, together with other European countries codes, concentrated on the necessity to obey managers to disciplinary actions so that they should not be capable of tailoring the company strategy to their own interest.

A lot of studies revealed that managers do not have to be the object of such measures as long as their activity envisaged competitive products and services. Analysts disclosed that this aspect can be figured out as a compromise solution that could solve out a potential conflict between the interests incurred by different entities. If the managers are preoccupied by competitive products and services, then the economic growth and implicitly the profit accumulation were ensured. This superior level of the quality created the opportunity of a competitive advantage in relation with the other companies in the market.

In fact, the essential objective of corporate governance code consists of the process of value creation. Principles underlying corporate governance code aim at creating all the premises in order to give incentive to value creation. Academic studies disclosed that this process is highly dependent on a key management competency consisting of the managers' capacity to create an adequate work environment, characterized by a strong team spirit, in compliance with sound governance principles (Lins, 2007, pp.3-51).

Previous researches pointed out that the working climate is highly supportive to the value creation process; an important element of this working climate is exactly the capacity of managers to avoid the conflicts at the internal and external level.

Internally, conflicts may intervene between managers and employees while external conflicts are likely to appear between managers, board representatives and shareholders.

Enron scandal and Madoff fraud revealed that managers' delinquent actions are at the root of the company collapse. From this perspective, corporate governance system contributes to sustainable corporate growth.

### **3.2. The interpretation of the market model for corporate governance in the U.S.**

The US corporate governance model assumes that company managers make efforts in order to increase the profit. The strategies they conceive in order to obtain benefits consist either of involvement in risky actions, commensurate with the company risk profile. A key element of the US corporate governance model consists of the limited responsibilities held by lower-level managers.

Jensen (1986) elaborated on the free cash-flow theory, suggesting that managers are reluctant to dividend distribution to shareholders, preferring rather to implement less profitable investment projects; this attitude can be explained by their willingness to exert control on the company financial resources.

The agency theory gave incentive to further reflections on corporate governance, leading to the idea of managers' motivations by the intermediary of capital they possess.

Literature revealed that if managers hold a certain percentage of the enterprise capital, they are more motivated to implement business strategies in compliance with company sustainable growth perspectives (Dahya, et al., 2002, pp.461–483).

Analysts showed that business strategies look usually for company value maximization; what is really important for company sound governance system consists precisely of the manner in which this objective is pursued. Only sound practices that are in line with a sustainable long term growth ensure an adequate corporate governance system (Drobotz, et al., 2004, pp.267-293).

The US corporate governance model highlights that shareholders confer to the managers the power to make decisions; this is made in respect of the agency costs. Researches at the level of US companies (Hermalin, 2004, pp.2351–2384) unveiled two key features of US corporate governance system:

- ✓ a high degree of dispersion among shareholders;
- ✓ moreover, a high percentage of company shareholders holds a low level of company capital.

These two key components reveal the unwillingness of company shareholders to bear the agency costs implied by the management oversight. Smith & Warner (1979) identified four sources of conflict between shareholders and creditors: the policy of dividend distribution, the risk of debt dilution, asset substitution and underinvestment.

Another important entity enclosed in the US corporate governance model is represented by the *company' creditors*.

Financial resources impact company overall business, especially from the perspective of financial costs involved by external financing.

Credit granting is highly dependent on the company financial standing that is precisely subject to the financial analysis performed by the bank officers.

Literature unveiled that financial analysis, made prior to credit granting, may not reflect the main problematic aspects implied by the company activity (Franks & Mayer, 2001, pp.943-77). It is possible that credit may be extended to a company which do not fulfil the bank requirements in terms of solvency. This is likely to occur because of unreliable financial data reflected in the financial documents.

This aspect can lead to moral hazard phenomenon since creditors may be exposed to additional risks that are not captured by financial documents. Moreover, academic studies uncovered that there are frequent cases when, in a first stage, a company meets the solvency conditions imposed by the bank credit strategies, but it is possible for the company managers to behave subsequently in a manner that is non-compliant with sound corporate governance standards (Wymeersch, 2006, pp.1-14).

A fundamental aspect of US corporate governance model consists of its focus on shareholders' interests and on financial markets.

Literature revealed that a good part of the company financial revenues origin in investments in the capital market; this aspect was encouraged by the strong growth recorded on the financial market during the period of 2002-2007 (Pérez, 2009, pp.78-80). Moreover, financial markets offered the opportunity of retirement plans which were strongly promoted during the last periods.

The orientation of USA corporate governance model towards the financial markets can be explained also by the households' propensity to buy debt securities issued by corporations. From this perspective, this type of corporate governance model brings forth collateral entities such as pension funds, commercial and investment bankers, financial analysts and brokers of an essential importance for the structure of corporate governance model.

The sustained level of corporate growth recorded in USA gave incentive to other countries to implement a similar shareholder oriented corporate governance model. Experience showed that the implementation of such a model is not effective because of the financial market development degree. Only in the countries that possess a developed capital market this model can perform to the utmost effects.

The G8 countries made public their decisions to adopt effectively this market oriented corporate governance model. Precise strategies have been designed to this purpose and effective progresses have been remarked in this respect. Nevertheless, corporate governance models are still evolving, especially under the impact of recent financial turbulences.

#### **4. CONCLUSIONS**

Presented in detail modern theories on corporate governance in the light of control mechanisms that are specific to the shareholders and managers relationships; the control becomes effective at the level of the tripartite relationship between

institutional and private investor-creditor-manager as well. From a theoretical perspective, these relationships ground on divergent objectives.

The approach highlighted classic theories according to which shareholders aim at company value maximization while private investors look for profit maximization. In opposition, institutional investors focus on the social dimension, deeply anchored in corporate social responsibility area.

Despite the so-called objectives divergence, explained by different interests incurred by various entities, research revealed that a common goal support the relationships characteristic to corporate governance area: profit increase.

This common objective lies behind different corporate management strategies; although there are different manners by which these strategies are elaborated, the common goal determines an alignment of interest. In line with this idea, the agency costs tend to reduce this asymmetry, revealing the importance of the control mechanisms that in essence aim at ensuring all the parties involved in a business that rules are complied with and all the actions and measures that are taken subscribe to wealth accumulation.

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## **GENERAL OVERVIEW ON EVOLUTION OF SOCIAL SERVICES FROM ROMANIA AND HUNEDOARA COUNTY IN THE SOCIO-ECONOMICAL CONTEXT OF POST-COMMUNIST TRANSITION PERIOD (2000-2009)**

**FELICIA ANDRIONI** \*

**ABSTRACT:** *In the following, we make a general overview on social services provided by governmental and social institutions of NGOs in Romania and Hunedoara county in post-communist transition (2000-2009 period), before socio-economic crisis in Romania when the general trend was the development of social services. In this analyze used the following research methods: analysis documents, statistical analysis and comparative analysis.*

**KEY WORDS:** *social services; social-economic development.*

**JEL CLASSIFICATION:** *O10; Z10.*

### **1. INTRODUCTION**

Before 2010, in response to changing needs and societal challenges, social services are in the process of expanding being activated *services cantered on individual needs* focusing on: rehabilitation, adult education or childcare and *services focused on the collective needs*, while new social risks (aging population, implications of population mobility, changes in family structures, etc.), current created a new orientation and other social services (European Commission, 2009, p.20).

In view of Commission of the European Communities in 2008, at European level, there were recent increases in the diversity of services reflecting different orientations of the economy and society as a result of aging populations, climate change gender roles and family structures, technological change and globalization.

In Romania, the need for social services in the context of socio-economic changes after the post-December 1989 period, and the legislative context of developing

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national social protection system, becoming more elaborate and specialized, has generated an expansion of social services at national regional or local level. (Mărginean, 2003, p.10).

Social services are defined by Halloran and Calderon as "services provided directly to citizens to answer their needs in terms of employment, health, housing, education, social security and care, social services are generally covered and financed by the authorities at national, regional or local, but may be provided by public or private sector" (*Opera quoted*, 2005, p.12), and Dictionary of Sociology it defines as "all services that a community will provide total or partial, for all members or for segments particular showing a growing need for such services.

In this sense, in their scope included and services offered by local communities or by associations to their members". Also in Business Dictionary social services are defined as "Benefits and facilities such as education, food subsidies, health care, and subsidized housing provided by a government to improve the life and living conditions of the children, disabled, the elderly, and the poor in the national community" ([www.businessdictionary.com/definition/social-services.html](http://www.businessdictionary.com/definition/social-services.html)).

In Romania Government Ordinance 68/2003 stipulates that social services as a set of measures and actions addressing the needs of the population are offered by service providers and this providers may be: *public* social services at county and local levels, other public services specialist at the county level or local public institutions have established departments for social assistance or *private*: associations and foundations, religious and other forms of organized civil society, individuals authorized in the law, subsidiaries and branches of international associations and foundations recognized in accordance with applicable laws, international organizations profile (11, GO 68/2003).

## 2. EVOLUTION OF SOCIAL SERVICES IN ROMANIA

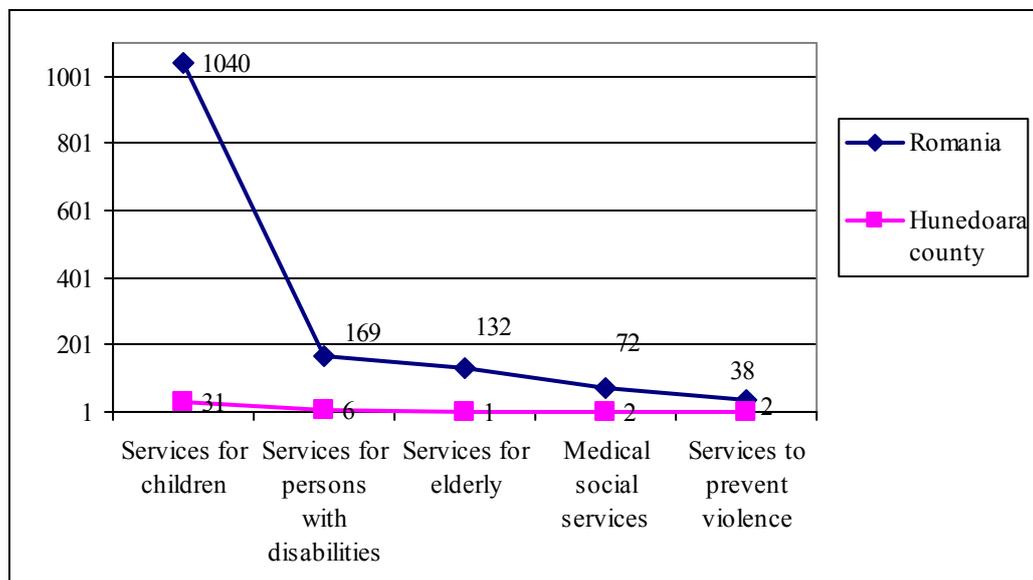
In the following we make a general view for social services provided by governmental and social institutions of NGOs in Romania in post-communist transition. In this analyze used the following research methods: analysis documents, statistical analysis and comparative analysis.

Concerning the development of social services in Romania with regard to indicators of analysis aimed at *existing social services number* and *category of beneficiaries served*, according to statistics of the Ministry of Labour, Social Solidarity and Family, in 2005 were highlighted in reports to the Ministry, a number of 1451 public welfare establishments of which 71.67% had social services for children, followed by social services for people with disabilities at a rate of 11.65%, or social services for older people at a rate of 9, 10%, or medical and social support services (4.96%), or violence prevention services (2.62%). Of the 1451 existing national social services, the same year, 2.89% were represented by social services functional in Hunedoara County.

From the perspective of the share of social services for children there is a balanced report on the national level (71.67%) and at the county level (73.81%), the share of services for people with disabilities are less differentiated at the national level

is lower (11.65%), compared with share of 14.29% at the county level, the comparative situation of social services at national and county level Hunedoara in the number of which are illustrated in Figure 1.

If 2005 were highlighted in 1451 social services throughout Romania, in 2006 their number increased by 76.22%, leading to the 2557 national social services. Compared with 2005, 2006 saw a significant increase in social services for children with 83.37% and with a fairly high percentage of 32.54% increased social services for people with special needs (Source: NIS 2006, ANPH 2007, ANPDC 2009, MMFPS 2008). Figure 2 shows the comparative dynamics of development of social services in Romania in 2005-2006.



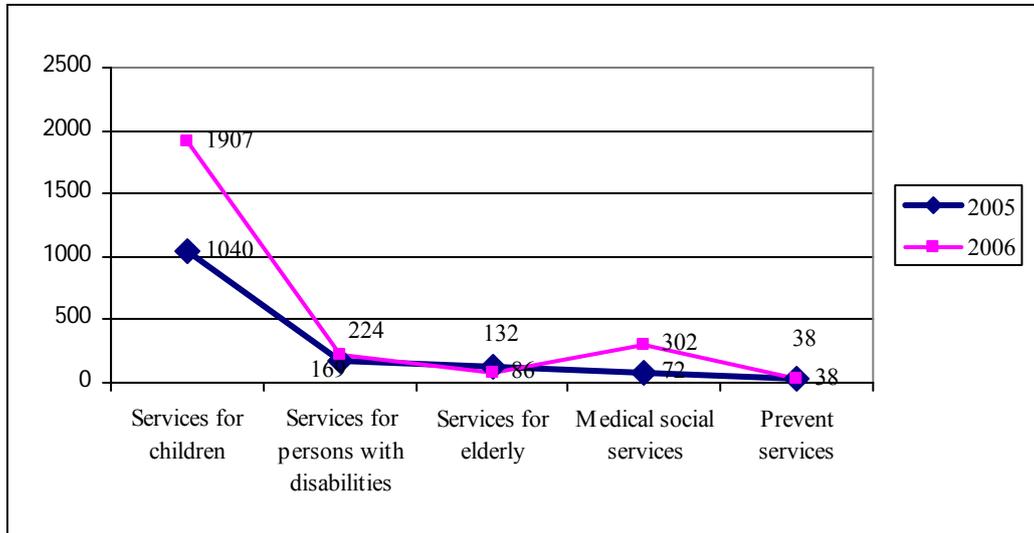
Source: MMSSF, 2005; FDSC, 2007; INS, 2006

**Figure 1. Comparative situation between the number of social services in Romania, and Hunedoara County, 2005**

Given the territorial distribution indicator of public and private providers of social services in Romania, all in the year 2006 in most counties of the country the number of accredited private providers (association or foundation), it exceeded that of the public, except few other counties: Braila, Caras Severin, Calarasi, Galati, Gorj, Mehedinti and Teleorman. In Hunedoara county - the level of 2006 - were identified 18 social service providers accredited non-government segment and 1 public provider.

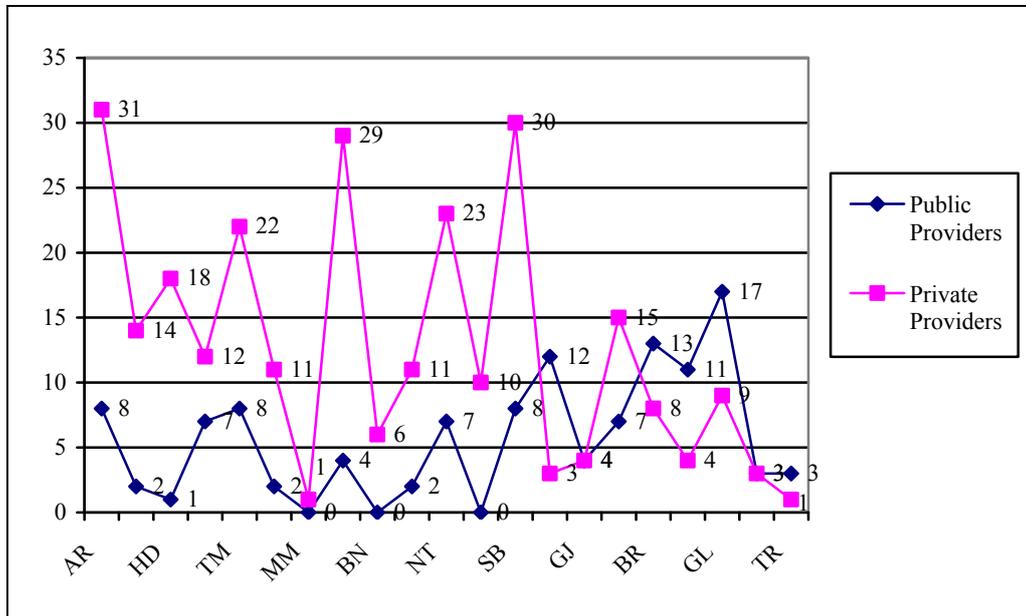
Figure 3 illustrates the variety of territorial distribution of public and private services in some of the counties in Romania. (Source FDSC, 2007). Regarding the analysis of social services in Romania in relation to the indicator category concerns existing *public and private social services*, the database of the National Authority for Protection of Child Rights, reveals that the number of public placement centres (family

apartments or family houses) increased gradually, registering a significant increase in this category of services with 211.31% higher in 2009 than in 2000.



Source: INS 2006, ANPH 2007, ANPDC 2009, MMFPS 2008)

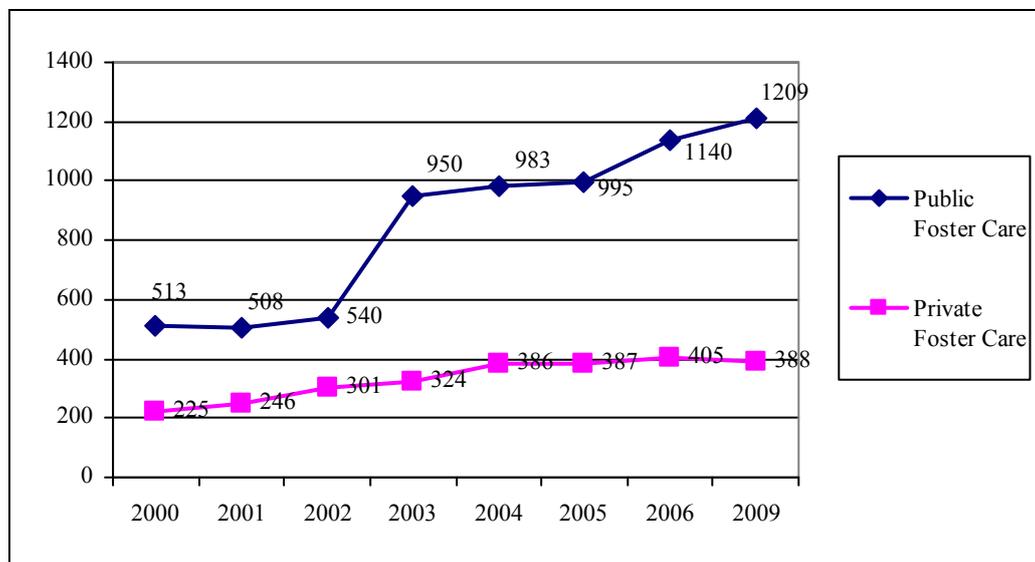
**Figure 2. Comparative dynamics of development of social services in Romania in 2005-2006 (number services)**



Source: FDSC, 2007

**Figure 3. Territorial distribution of public and private providers of social services in Romania in 2006 (number provided)**

Regarding the dynamic evolution of private placement centres (family apartments or family houses), in Romania recorded an upward dynamic to them in 2000-2006, the number of centres this time of increasing private centres by 80% in 2006 compared to 2005 and during the years 2006 to 2009 their dynamics was descendent, the number of this category of services falling by 4.19%, while during the same period (2006-2009) number of centres of public investment increased by 6.05%. At national level, on March 31, 2009, the number of public placement centres was 3.12 times higher than the number of private placement centres, increased compared to May 2006 when the share was 2.81 times higher compared private placement centres. This comparative situation, which reflects the evolution of social services by public or private category, is shown in Figure 4.



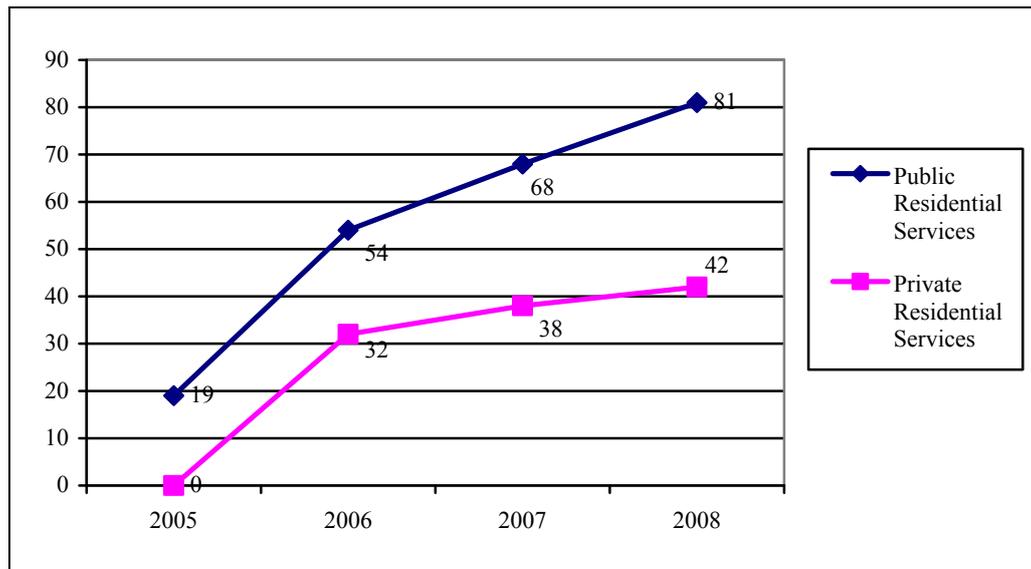
Source: ANPDC, 2000-2009

**Figure 4. Development public and private placement centres (family-style apartments and family houses) in Romania during 2000-2009 (number services)**

For the category of public and private social canteens in Romania, according to analysis of the database of the Ministry of Labour, Family and Social Protection in 2008, there were 177 functioning social service canteen that total 70.67% were public service canteen and 29.38% were private social canteen services, so in this case the percentage of public social canteens is much higher than the percentage of private social canteens.

On the dynamics of public and private residential services for older people in Romania there is an upward dynamic in both cases during 2005–2008, From the databases of the Ministry of Labour, Family and Equal Opportunities (2006) and the Ministry of Labour, Family and Social Protection (2008) shows a rise in the number of public residential services to a number of 19 public service in 2006 to a total of 81 public service in 2008, which means an increase of 4 times higher during this period of

time, but on the other hand, if we compare the number of residential services for older public with the number of public placement centres for children, the number of residential public services for the elderly is 21.11 times lower than the number of public placement centres. A similar situation is highlighted and private residential services in the period 2006-2008, their number increasing by 31.25%. Dynamics of residential services for the elderly is illustrated in Figure 5.



Source: MMFES, 2007; MMFPS, 2008

**Figure 5. The dynamic development of public and private residential services for older people in Romania, in 2005-2008 (number services)**

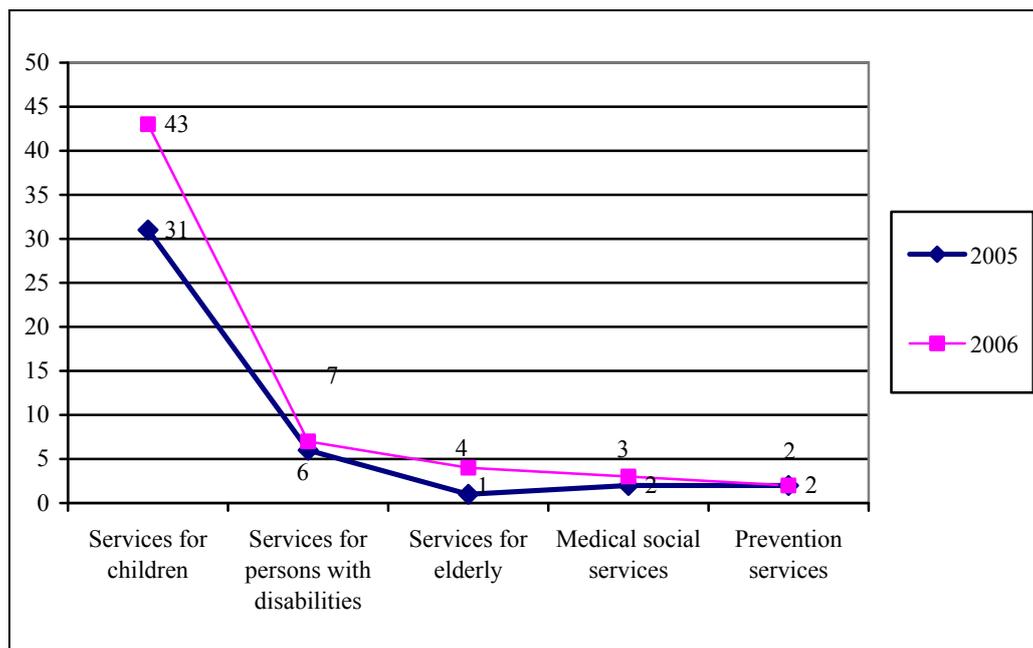
### 3. EVOLUTION OF SOCIAL SERVICES IN THE HUNEDOARA COUNTY

In the context of favourable development of social services at national level also is framed Hunedoara County (Western Region of Romania). According to the analysis of documents provided by social institutions ability in the social assistance field, in Hunedoara county social services have been developed and proposed to meet the diverse needs of the population.

Concerning the development of social services in Hunedoara, using the indicators aimed at analysis of *existing social services* and *category of beneficiaries* from the analysis of documents provided by governmental institutions (MMSSF 2006-2008, MMFPS 2008, DGASPC, Hunedoara County Council), shows that the total number of social services increased from 42 existing services in 2005 with 37.21% in 2006. If one takes into account that the total number of social services in Romania in 2006 was 2557 units it is found that Hunedoara County had a 2.31% share of total social services in Romania.

Regarding the indicators aimed *category of beneficiaries* served by social services in Hunedoara County, shows the existence of social services for children,

adults at risk, people with special needs and older people. The chart 6 is synthesized dynamic development Hunedoara county social services during 2005 to 2006 in relation to the category of beneficiaries served by those services, which can be seen particularly an increase in social services for children with 38.71% in 2006 compared to 2005, and also can see a dynamic upward social services for older people four times higher than in the general stagnation in 2005 and other services. (Source: DGASPC Hunedoara 2006 and MMSSF 2006).



Source: DGASPC Hunedoara 2006, MMSSF 2006

**Figure 6. Dynamics of social services in Hunedoara County in relation to the category of beneficiaries served, in 2005-2006 (number services)**

Reported the total number of children beneficiaries of special protection services in Romania of 71,274 children, it is found that the largest share of such services charge a family services serving 64,76% of all vulnerable children, followed by residential services (35.24%). Services serving the family of Hunedoara County represent 1.67% of all vulnerable children in Romania and residential social services providing special protection to 0.83% of all children at risk in Romania. Figure 7 illustrates the dynamics of the number of beneficiaries served than in services to prevent separation of children from parents, family services and residential services, in Hunedoara County in the period 2007-2009.

In social services designed to protect adults in difficulty or in situations of risk to the Hunedoara County there is not so active as a dynamic child protection. Thus, under the General Directorate of Social Assistance and Child Protection Hunedoara, in addition to adult social services departments: residential services, intervention in managing issues of adult special protection units for persons with disabilities, or anti-

poverty section, there are following types of social services for adult category: care centres and support centres, integration occupational therapy, housing protected and recovery centre.



Source: MMSSF 2008, MMFPS 2009; DGASPC Hunedoara 2009

**Figure 7. Dynamics of the number of beneficiaries served in services for children in Hunedoara County in the period 2007-2009**

#### 4. CONCLUSIONS

Under a common European social policy which recognizes the important role of social services as key actors in the partnership for the welfare population, in promoting equality and social inclusion of all citizens of European Member States, Romania, has been a visible development within public or private social services at national, regional or local level both pre-accession period and after accession to the European Union.

European Documentation operative (New Social Agenda) has left its mark on the legal situation in Romania, good time's development of quality social services. In this context it is registered an ascendant dynamic in the number of accredited public and private providers of social services, especially from 2005 until now, both at national level, at Hunedoara County.

In the context of the reform of social protection of children in Romania was faster than in other areas of social assistance targeted other population groups, at national level social protection services for children in difficulty are most spread in

comparison with other social services for persons with disabilities, elderly, vulnerable people at risk or crisis. A clear trend at national level have been social services for special protection to children who have grown twice more in 2009 compared with 2000, and social services to prevent the separation parents of children who had a fivefold increase since 2000. But the situation of national social services provided to other categories of adults, even though progress has been made in terms of diversifying the type of services offered or the number of units developed, situation of these services is undersized in relation to social services for child protection.

Synthesizing information analysis from this paper, shows that in the period 2002-2009 social services from Hunedoara county had an active dynamic development in the field of diversified social services for children, observing that there are following types of social services provided for vulnerable children: *family services* (placement at AMP - maternal professional placement, or at other persons or families), *residential services* (foster care, family-type apartments), *services to prevent the separation of parents* (daycares , maternal centres) and *other types of services*: reception centres for urgent situation, specialized centres for children with disabilities. Regarding *social services to protect adults in difficulty or in risk situation*, in Hunedoara County there is a dynamic not as active as in child protection.

In relation to diversity and complexity of social problems in the area, the social services in the Hunedoara County, as measures of social response to the needs of vulnerable groups, are not enough for all needs.

According to the public authorities' opinion, it is necessary in Romania and Hunedoara county - in addition to existing services - creating social structures for prevention and social protection: residential care centres for the elderly - having regard to population aging, home care services for elderly; services advice and support for women abused and mistreated, creating of social housing for disadvantaged groups, development of community services, development of specialized services in the protection of persons with disabilities and child protection.

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## **ECONOMIC AND SOCIAL PROBLEMS FROM THE JIU VALLEY AND THE NEED FOR DEVELOPMENT SUPPORT NETWORK FOR ELDERLY PEOPLE FROM PETROSANI**

**FELICIA ANDRIONI, MIHAELA CAMELIA SCHMIDT \***

**ABSTRACT:** *This paper explores a few aspects of social and economic problems in the Jiu Valley, issues that have led to a priority need for the development of the share of social support network in this area. The needs of the population generated by economic and social problems existing in the Jiu Valley has led the development of social services in response to these needs. Also the paper contents a case study about necessity development of social support network for elderly from Petrosani area.*

**KEY WORDS:** *socio-economic problematic; the Jiu Valley; network of social support; elderly.*

**JEL CLASSIFICATION:** *Z10.*

### **1. INTRODUCTION**

Years of transition - after the post-December 1990 - have been accompanied by an explosion of poverty in Romania. The Jiu Valley located in Hunedoara County was a hard tried. Various reforms after 1990, made the early years of transition, that socio-economic problems to register a real growth on affecting directly the population of the Jiu Valley and also elderly from this area. In what follows we will examine only some aspects of socio-economic problems in the Jiu Valley, aspects that have led to a priority need for the development of social support network segment in this area.

### **2. THE CONTEMPORARY SITUATION OF THE POPULATION JIU VALLEY. CONTEXT. PROBLEMATIC. NEEDS**

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The Jiu Valley located in Hunedoara County includes a series of cities Lonea, Petrița, Petroșani, Aninoasa, Vulcan, Lupeni, Uricani, all of which are mining centres. Jiu Valley is a monoindustrial specifically area. Jiu Valley demographic rate is fluctuating and difficult to follow because of the comings and goings percentage of population to suggest the image of transit zones, even if mining companies were closed, and a lack of other employment alternatives. Government Ordinances 9/1997 și 22/1997 led to massive layoffs in the mining industry. The impacts of these economic measures are currently being felt in full, amplified by the lack of alternatives for ensuring jobs for unemployed.

Successive stages of economic restructuring operated in the Hunedoara County and implicitly in the municipality Petrosani lack of alternative investments that have generated a continuous major negative impact among the population. Economic consequences have been reflected on the social, accentuation deficiencies damaging quality of life in the area. These accumulated negative aspects induce an economic and psychological discomfort to the individual, family and community level.

According to the statistical situation (Source Petrosani City Hall) made from the 2002 population census, the Jiu Valley population was 176086 inhabitants of the city population was 51,850 inhabitants Petrosani. Evolution of Petrosani city was influenced by the dynamics of economic activity in this area in 1998 recorded 53,195 inhabitants and in 2000 recorded 50,586 inhabitants and in 2006 (01 July) 44 658 inhabitants suggesting a decrease demographic processes as a result of restructuring industrial mining in the area.

In recent years following the closure of state institutions and massive personnel layoffs, Jiu Valley people are facing serious social problems: poverty, the number of families with many children who have a minimum source of subsistence, lack of employment alternatives, very low level of education and public information. (Source: SPLAS Petrosani). Directly affected by these problems are the people who live in the Jiu Valley. Poverty population, reduced costs for social protection and other issues mark on the population.

In post-revolutionary transitional period have increased some social phenomena with important events in the community, namely:: increase number of single parent families because of the family abandonment and divorce; lack of family planning activities leading among poor families to increase the number of children in these families; were developed forms of protest aggressive, brutal-strikes, which have conducted to obtain material aid from the Government ; among Jiu Valley poor families increased dependence on existing social services; elderly from Jiu Valley do not face the higher housing debt: water, sewer, electricity, heat (these people to cut off from the thermal network of the city because of the high costs)

### **3. THE NEED TO DEVELOP SOCIAL SUPPORT NETWORKS IN THE JIU VALLEY**

At present the mining sector continues to be in the process of restructuring, there is a big problem for fired staff because the staff no has viable alternatives fact which conducted at social pressures. As we said previously the biggest social problem in the Jiu Valley region is the lack of jobs, problem that generates a sequence of other

social problems of population in the region: increased number of people (families) receiving the guaranteed minimum income, increasing dependence on existing social services, leading to increasingly high costs from local budgets for social services.

Reported to the diversity and complexity of social problems in the area, social services are not enough face to magnitude to the social needs of disadvantaged population groups. Thus, according to the government of the city parts of the Jiu Valley is necessary - in addition to existing services - creating social structures for prevention and social protection: residential care centres for elderly persons - considering population aging; home care services for people of the Third Age, counselling and support services for abused and maltreated women; creation of social housing for disadvantaged groups, development of community development services; development services specializing in the protection of persons with disabilities and child protection.

In Jiu Valley, social work represents an activity area in continuous attention to local government. In Petrosani and Petrila operates local public social services through are provided social services with basic character: activity information, counselling, monitoring, social benefits, allowances, social assistance (VMG), maintenance allowances, salaries for personal assistants, aimed at reducing vulnerability or difficulty situations with risk of marginalization and social exclusion.

On the initiatives in social services field and social support networks during 2006-2009, has been taken into account to continue the attenuation social impact project has been developed the socio-economic regeneration project of mining areas, financed by the World Bank which included: projects for income and social services, municipal infrastructure projects, small grants for the disadvantaged: women, youth, elderly.

#### **4. SOCIAL SUPPORT NETWORK FOR THE ELDERLY OF ROMANIAN ORTHODOX PARISH LIVEZENI I PETROȘANI - CASE STUDY**

##### **4.1. Particularities socio-economic needs and problems of older people social assisted by the Romanian Orthodox Parish Livezeni I Petrosani**

In Jiu Valley and also in Petrosani ageing is a major problem for the future which must be taken into account today. Growth numbers of older people has increased the number of those requiring assistance and protection in specialized institutions, especially those structured on medical and social assistance. Demographic rate of our country shows the increased number of elderly people.

A statistical analysis conducted in Petrosani, showed us that from total city population, 14.9 % of population are represented by third age persons, the sex structure of this category is highlighted as follows: population between 55-59 years- 2592 persons, from which 1210 are men and 1382 are women; population between 60-64 years- 1945 persons from which 858 are men and 1087 are women; population between 65-69 years- 1888 persons from which 851 are men and 1037 are women. (Source: Petrosani Hall) So we can see that the number of women is higher than number of men.

Local Public Social Work Service Petroșani social supported in 2006 a significant number of disadvantaged older people. Thus, approximately 400 cases of families in need of Petrosani benefited by minimum income from which 55 cases belonged to the people of the Third age (over 55 years) which represented a rate of 13.75% from being eligible disadvantaged. Another number of 109 people aged over 55 were pensioners with low incomes who have requested support from the Social Assistance Public Service Petrosani the various social components. This fact was a warning, continuing concern for a policy social life.

Also, today, in Petrosani exists a large number of elderly people in need, alone, with an income less than the Minimum Income on economy and sick. These people often request support from local authorities, are currently the largest consumers of health and social services because they confront with complex social and medical needs. (Source: SPLAS Petroșani, 2011)

If for other disadvantaged social categories there were some social actions for the reduction of social problems, for elderly person (as a percentage of 14.39% of Petrosani population) number of social services for their needs is very small.

Until 2005, in Jiu Valley region there was only one Home for the Elderly has subordinated the General Directorate of Social Assistance and Child Protection Hunedoara, in city Petrița whose rate of occupation is always highest for the lack of other specialized services for the elderly in the Jiu Valley. Following this the Romanian Orthodox Parish Livezeni I Petrosani created a social support network at home that came to meet the needs of older people from Petroșani.

From the data analysis of Narița E. (2008) on socio-economic situation of older people socially assisted by social support network at home in Romanian Orthodox Parish Livezeni I Petrosani (PORA) resulted some issues relevant to describe the needs and problems they face. Thus in 2008 a total of 60 elderly people benefited from the services support network of Romanian Orthodox Parish Livezeni, from which 18% were aged 61-66 years, 52% were aged 66-75 years, 25% were aged 76-80 years and 5% were aged 81-90 years. From institutional document analysis resulted that the main problems facing the elderly beneficiaries are loneliness, lack of correlation between the biological or extended family, health issues, monthly housing expenses, administration costs of medical treatments, housing, carrying shopping, making housework, care plan personal.

From the persons beneficiaries 65% living alone being widow / widower, single people, divorcees and 35% live with husband or child or one with another partner. (Source: Romanian Orthodox Parish Livezeni I Petrosani, Internal social documents). "In general, these people feel the need to have long discussions, evokes memories of youth, they like to remember the successes of them. They believe they belong to a generation working, deserving, but the injustices of life and especially those who are young and strong now. Their family members, if any, live far away or even abroad. Others no longer had any close family members." (Narița, 2008, p.75).

Regarding health status 85% of the elderly have different cardiovascular, respiratory, psychiatric and other diseases conical, requiring medical care, prolonged or permanent treatment, recovery, periodic medical examinations or palliative care. (Source: Romanian Orthodox Parish Livezeni I Petrosani, Social documents).

Regarding to the needs which have the elderly assisted, 18% think that the priority need is the need for communication and 15% of elderly people assisted have identified the need for security / safety. The elderly want to be appreciated (16%), as they were during the active life. A third felt the need for affection, belonging, family and social. (Narița, 2008, p.79). Necessity this network of social support appeared as a result of needs identified.

Expenses are a problem for most of the community, especially elderly people. For these problems are more pressing, sometimes difficult to resolve. The main expenses identified at elderly assisted are housing expenses (39%). He paid maintenance on time (current water, gas) for fear of penalties. Another priority for 32% of the elderly is the expenditure on medication.

Regard to living conditions 32% of assisted elderly have major damage the installation sanitary, another problem is difficult for them is house painter, which in some cases was not resolved for many years; walls are damaged, the house is unkempt. 22% from elderly assisted are living without heat because of costs or installations inoperable and 6.56 % from them are living in spaces disconnected from electric lighting.

In connection with the shopping, payments and housekeeping, 70% of the assisted elderly make their own shopping. Regarding options for supporting older people in their situation when they are / will be unable to be cared, 70% would choose for home care, if only a few hours a day. They feel attached living space for a long time, things, furniture, even the view seen through the window and 25% of the elderly would choose hospitalization in a residential centre/ home and 5% would choose a different solution: to stay in a monastery or other person to care for them (Narița, 2008, p. 89).

Analyzing monthly income and source, for elderly assisted finds that more than half (53%) obtained a pension for the years work, 32% obtained survivor pension, 10% of them obtained illness or disability pension, 5% is represented by those who do not have secure income benefits, obtained guaranteed minimum income from the municipality, perform rare, occasional light work (Romanian Orthodox Parish Livezeni I Petrosani, social evaluations documents).

#### **4.2. Brief history of the social work actions from Romanian Orthodox Parish Livezeni I**

For the first time an Orthodox church in the Jiu Valley after the post-December period were initiated and developed social actions focused on community needs. Romanian Orthodox Parish Livezeni built between the years 1994 to 2000 a Church entitled M.Mc.Varvara a equipped with a partitioned basement for future complex social activities. The parish priest has purchased the necessary equipment and introduced utilities: electricity, gas, running water and he ensure that the hygiene conditions permitted obtaining functional authorisation (Romanian Orthodox Parish Livezeni I Petrosani, 2008).

Were made step by step minimally preliminary conditions strictly necessary for the preparation and implementation of social programs based on projects financed from

EU funds. “Initially, since 2000 have developed a counselling centre services with voluntary participation of lawyers, psychologists, physicians, having characteristics of centre charitable and a casual distribution of aid materials activity (clothing, non-perishable foods, hygiene products) provided by local sponsors or European associations and foundations. “Setting up services that led to the formation of the first volunteers (church dedicated people) and community needs were increasingly well known” (Priest Patrascu O.).

At the first time there was a first form of social radiography of the parish, shall be drawn first non-formal statistical records of individuals in need. Such evidence, improved later based on social evaluation and other documentary evidence of beneficiaries (identity card, proof of income, medical documents, etc.) then proved extremely useful to meet a wave of requests for welfare support from community members. In the same context is a contoured target group: elderly people with poor financial resources, children from families with higher socio-emotional and material problems, people mentally mark the successive restructurings industrial area, people in crisis situations.

The population most seriously affected social, identified by volunteer centre was the elderly population (elderly with low pensions, elderly with no income, poor health, elderly who had not family, elderly who could not householders, elderly with health problems). Based on the requirements and needs of elderly people has been formed the social support network at home for older people from Petrosani.

#### **4.3. Necessity social intervention in social support network for elderly**

From the analysis of documents Romanian Orthodox Parish Livezeni it is established that beneficiaries of social support network within the organization are elderly people from the “Airport” area, belongs the category of people affected by severe poverty, or social problems, or health problems and presents different degrees of dependence, or are affected by social exclusion, being deprived moral and material support from their family, or they are isolated in community, also includes beneficiaries and elderly homeless and people who live in improvised shelters.

The main problems which have the elderly are: social isolation, poor health, poor financial situation, impossibility to provide daily food, loneliness. The main requests for counselling and therapy, focused on overcoming difficult life situations: partner's death, chronic illness, relationship conflicts with family members, care partners immobilized, etc.. In terms of affective condition, the elderly had an average level of emotional stability, anxiety and depressive tendencies.

Selection of elderly beneficiaries is based on the following selection criteria: elderly have no family or member of family abandoned them; they are homeless or not able to secure living conditions on their own resources; elderly have poor financial resources (pension less than the salary minimum in the economy); have poor health status, can not households and require specialized care; they are unable to provide socio-medical needs, due to illness or physical or mental condition, etc. (Priest Patrascu O.).

The right to social assistance for the elderly is assessed by social evaluation will be developed based on following data: ability to administer and fulfil normal requirements of daily life, living conditions, medical situation, psychological situation, financial situation, familial situation.

From the analysis of documents Romanian Orthodox Parish Livezeni it is established that in realization individual socio-psychological support for elderly persons are traversed the six phases of social support network within Livezeni Romanian Orthodox Parish:

**1. Meeting phase.** Takes place first meeting with elder person who need help and request support from social network. This is the phase the registry of elderly.

**2. Psycho-social study Phase.** Through this phase, social worker of social network obtained preliminary information about elder to help him (for example family situation, material situation, bio-psyho-social factors, aspirations, significant elements of individual history, current problem identification and assessment of its causes).

**3. Evaluation of elder people situation.** It is the psycho-social diagnostic phase in which beneficiary must to answer a few questions: How do perceive this problematic situation?; What are the environmental conditions that gave birth the Problem, What are the goals and expectations regarding Elder solved? This phase has a dual perspective assess the elderly person's personality and his social environment and the problem faced by elderly people.

**4. Develop and implement action plan.** At this point the multidisciplinary team of social support network of the Romanian Orthodox Parish Livezeni sets objectives and ways of implementation and next steps to address elderly issues. Develop and implement the intervention plan involves three steps: a) Identifying problems and which level of intervention (individual, group, community restricted) b) determining the specific targets of intervention, in order of importance and / or in chronological order of implementation; c) the choice of strategies, methods and techniques for working with older people

**5. Evaluation results.** At this stage takes place measurement produced results The implementation of the intervention plan. Evaluation combines three perspectives to measure performance: his own assistant, the elderly and the perspective of the institution's own welfare.

**6. End of intervention.** This phase assessing elderly involved to see if objectives have been achieved or that, contrary, that social support network has failed. Regardless of finalization intervention whether is successful or failed it will not remain without consequences for the partners involved.

In the first case, the elderly person who has received welfare support, recover their functional normality, will find a new role, that of independent and responsible.

In the second case, the elderly person who has not which has failed to overcome the problem from the aid provided by social service, will seek another partner to support him or assistant recommendation will be taken over by another specialized service.

## 5. CONCLUSIONS

Social support network has grown visibly in the Jiu Valley after the post-December 1989. Social and economic issues caused the segmentation of social services in specialized areas: primary social services and specialization social services which currently meet the needs of the population of the Jiu Valley.

Data analysis showed that the Jiu Valley population was a difficult tried in post-communist transition period, especially that being a typical mono-industrial mining area has not held levers effective alternative development, following the reform of Romania's socio-economic development. A major problem for the Jiu Valley was poverty generated by the closure of unprofitable enterprises on the one hand, and on the other hand, the massive staff redundancies in the mining sector. During the transition took amplitude social phenomena with important events in the Jiu Valley community high unemployment due to industrial restructuring, accelerated growth in the number of persons assisted social, degradation of living standards, etc., phenomena which have generated the development of programs to increase employment of labour and default reduction of social problems existing in the area.

In Jiu Valley and also in Petrosani ageing is a major problem for the future which must be taken into account today. Growth numbers of older people has increased the number of those requiring assistance and protection in specialized institutions, especially those structured on medical and social assistance.

The need for social services in this area is determined both by elderly people's needs and requests for help from vulnerable persons.

It is obvious that the population needs generated from social and economic problems existing in the Jiu Valley has led the development of social support networks in response to these needs.

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## **THE IMPACT OF INFLATION ON THE SIZE OF THE DOMESTIC DEMAND FOR CONSUMER GOODS AND SERVICES**

**ANIELA BĂLĂCESCU, MARIAN ZAHARIA \***

**ABSTRACT:** *The impact of inflation on society has significant consequences. One of the major effects of inflation is the uncertainty generated when the inflation rate is volatile which can lower purchasing power of consumers, which means that it is thanks to the less if you do not increase and the revenue in the same rhythm. In this article we intend to analyze statistically the impact of inflation on the size of the domestic demand for consumer goods and services in the period 2000-2010.*

**KEYWORDS:** *rate of inflation; consumer price indices; demand; Romania.*

**JEL CLASSIFICATION:** *C44.*

### **1. INTRODUCTION**

Inflation is manifested as a general and sustainable growth of prices and tariffs. The increase shall be differentiated by category of economic goods. So, inflation changes the correlations between prices (Dobrotă, 1997). The most important change which should lead inflation is raising prices of consumer goods in line with wages, thereby recording profits and encouraging the resumption of production at the points where there are real resources, on the path to re-establishing a functional relationship between prices and costs.

The main manifestation of the inflation lies in the imbalance between aggregate demand and aggregate supply, both regarded as feeds, imbalance involving a higher nominal solvent, supported artificially, in comparison with the actual offer of goods in a given period (Ciumara & Ciutacu, 2003).

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The intensity with which propagates malignant effects of inflation on the real economy differ from one economy to another, depending on the degree of economic development, the maturity of the mechanisms of markets, the quality of management of the Government and even the ability of the population to report to the inflationary process. Historical experience demonstrates that there is a relationship between the extent of inflation of independence and sense of her fate and its malignant effects.

Population size and structure of consumption are affected on the one hand the level and structure of the consumption needs of the population (the request), and on the other hand the availability of goods and services of consumption (the offer). Therefore, the expression represents the consumption demand satisfied by goods and services of consumption.

Expenditure intended for the consumer needs include:

- a) **money expenditure** to purchase food products-food consumed, the goods and for payment of services, including the consideration of the benefits (goods and services) free or discounted price;

Decreasing the purchasing power of money income and inflation has a direct impact on the welfare of the population. If the pace of price increases is higher than income growth, then inflation actually suppress revenue growth, and usually leads to decrease of consumption. If the pace of price increase is less than revenue growth, the volume of consumption of the general population and wealth increase.

Inflation affects the amount of benefits (goods and services) free or discounted price increasing public expenditure, and in conditions of limited budgetary resources, this implies both restricting supply public goods and services and the increasing demand on the market in these goods and services.

- b) **equivalent value of the consumption of food and non-food products from own resources.**

The impact of inflation and the fall in purchasing power of money incomes has been manifested in the double sense of the volume of consumption of food and manufactured goods of own resources, as follows:

- own final consumption growth determination, in particular food in rural areas where "own resources" have constituted a way of offsetting the loss of revenue caused by unemployment, inflation and retirement;
- determination of reduction in consumption of durable goods and housing due to very high purchase prices.

Measuring the evolution of prices and tariffs for services which fall in the consumption of the population is done using the consumer price index (CPI).

The calculation of the CPI using a nomenclature of goods and services structured in 54 food stations, 112 posts of non-food products and 50 posts, significant for consumption.

## **2. THE EVOLUTION OF CONSUMER PRICE**

In the period 2000 to 2010 at the level of our country can ascertain a trend of stabilisation of growth of prices of goods and services of consumption - table 1 (National Institute of Statistics, 2011).

Inflation, measured by the average consumer price index, rose from the second half of 1999 and early 2000 (with a maximum of 57% in January 2000 to January 1999), as a result of external shocks generated by the increase in oil prices, depreciation of the euro against the dollar, the fiscal corrections and adjustments in regulated prices.

Starting with the second part of the year 2000, inflation was enrolled on a trend constantly descending, constituting a positive sign in the efforts to regain territorial confidence in national currency (rate of inflation in 2000 was 45.7% and 4.84 in 2007 year) . This process of disinflation was maintained until 2008 when he registered a slight increase in the CPI (7.85%).

**Table 1. The annual indices of consumer prices**

*The previous year = 100*

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Total</b>	145,70	134,50	122,50	115,30	111,90	109,00	106,56	104,84	107,85	105,59	106,09
<b>Food products</b>	143,70	135,70	118,30	114,70	109,50	106,10	103,84	103,89	109,22	103,25	102,33
<b>Non-food goods</b>	144,00	133,10	125,50	116,10	113,20	111,30	108,47	104,99	106,36	106,22	109,78
<b>Services</b>	153,90	135,40	126,80	114,80	114,70	110,50	108,20	106,63	108,57	108,97	104,78

Source: National Institute of Statistics

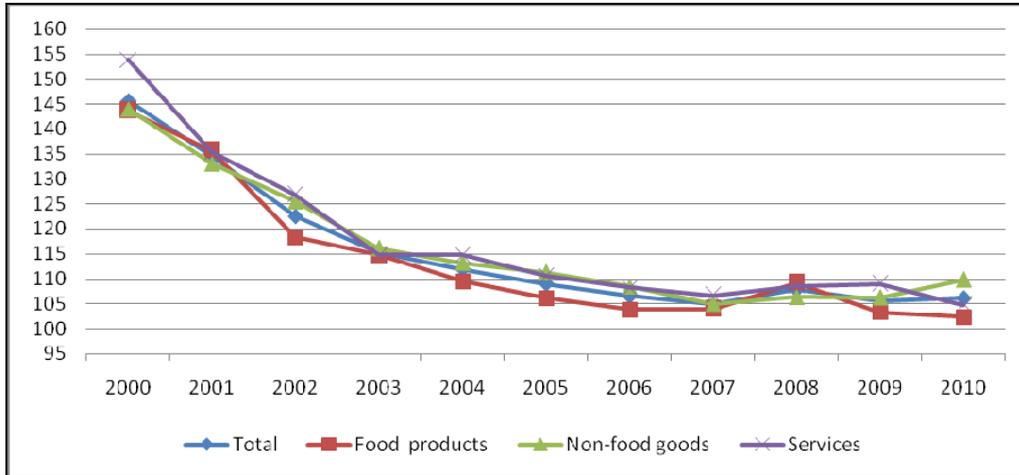
The dynamics of price indices for different groups of goods and services was different. If the CPI of food, goods are observed a reduction in the rate in the years 2004-2006. However, there has been a growth of this index in 2007-2008, mainly due to the effects of adverse weather conditions (drought and floods), but also increase the prices of imported goods supply, due to the strong depreciation of the exchange rate of the currency versus main foreign currencies low and competitive environment within the internal market. In May of 2009 to September the growth of food prices has decreased each month more sharply than the CPI (with an average difference of 1.5 points), helping to reduce inflation.

Economic crisis and its effects on the incomes of the population have affected quite a bit of food demand in Romania in 2009. The quantities of purchased foods fell in 2009 compared to 2008, but only to certain categories of products. The highest growth rate of prices was registered for the services rendered to the population (8.97%).

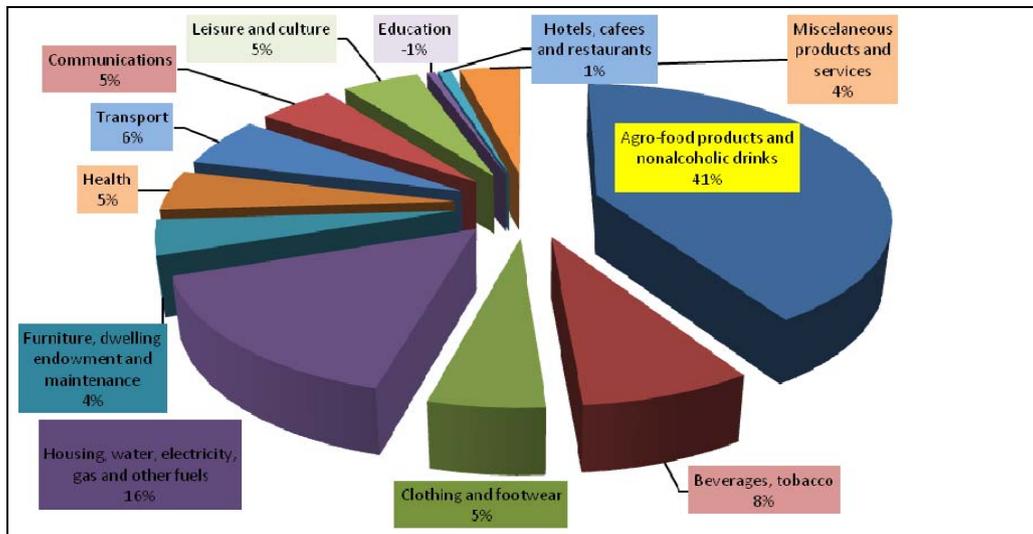
Annual growth dynamics of the prices of foodstuffs and fuels, reflecting mainly higher consistent raw materials on the international market, as well as to enhance growth in annual terms of administered prices, resulting in significant adjustment, including the effect of the increase in the share of VAT thermal energy, tariffs caused further accelerating inflation and 2010, respectively in the first part of the year 2011 (Bălăcescu & Ciurlău, 2011).

As regards the structure of the destinations of consumer spending in the third quarter of 2010, according to data of the National Institute of statistics of food and drinks were held, on average, 41.0% of household consumption, followed by housing costs (water, electricity and heat, natural gas, fuel, furniture, equipping and

maintenance of the housing) with 15.7% of the consumption of households - figure 2 (National Institute of Statistics, 2011).

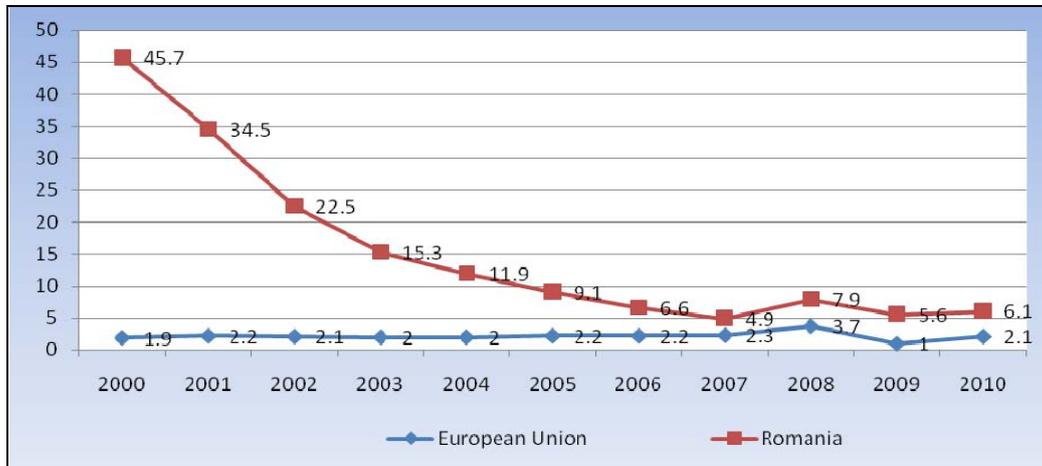


**Figure 1. The evolution of the annual indices of consumer prices by main categories of goods in the period 2000-2010**



**Figure 2. The total consumption expenditure structure on destinations, in the third quarter of 2010**

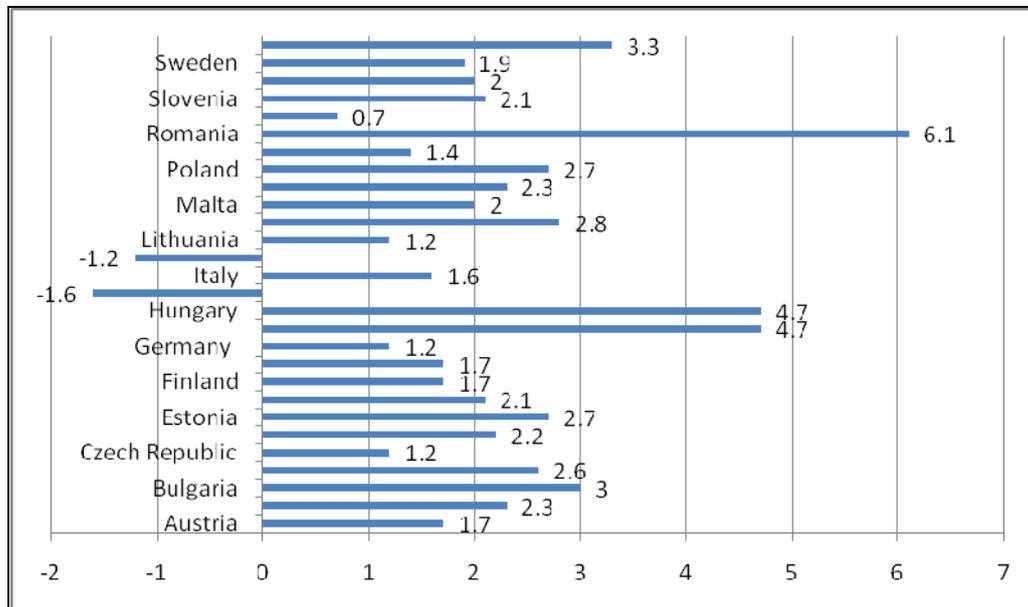
Compared with other countries in the European Union, Romania has had in the period under review, one of the highest levels of inflation (in Romania average inflation rate for the period 2000-2010 is 15% while the EU average is 2,15%).



Source: EUROSTAT, European Commission, [www.europa.int/eurostat](http://www.europa.int/eurostat)

**Figure 3. Annual average rate of the harmonised indices of consumer prices (IAPC)**

In 2010 Romania registered over other EU countries the highest inflation rate. (Chart no. 3). Currently, Romania remains the country with the highest level of price inflation with an increase of 8.0% in March 2011 compared with same month of 2010, according to Eurostat. High rates of inflation recorded in Estonia (5.1%), Bulgaria and Hungary (4.6% each) and lowest inflation rates were registered in Ireland (1.2%), Sweden (1.4%) and Czech Republic (1.9).



**Figure 4. Annual average rate of the harmonised indices of consumer prices (HICP) in 2010**

### 3. THE EVOLUTION OF DEMAND FOR CONSUMER GOODS AND SERVICES IN ROMANIA IN THE PERIOD 2000-2010

In the table no. 2 is also seen evolution of consumer spending money, by main categories of households in the period 2000-2010.

**Table 2. The evolution of consumer spending money, by main categories of households**

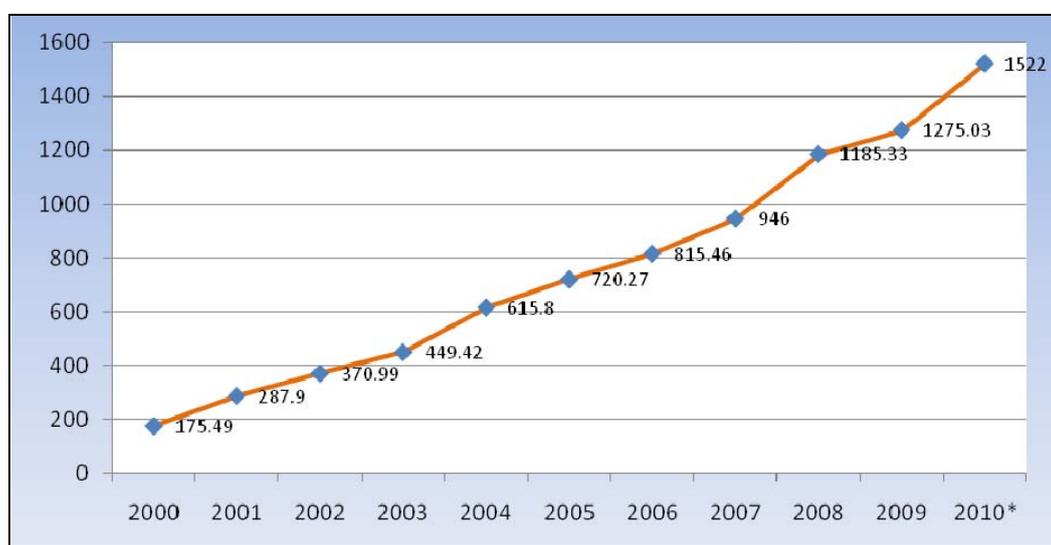
*lei monthly per household*

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010*
<b>Total</b>	175,49	287,90	370,99	449,42	615,80	720,27	815,46	946,00	1185,33	1275,03	1522
<b>Households of employees</b>	270,10	426,59	546,92	671,08	862,76	1010,30	1126,06	1318,78	1573,16	1670,16	-
<b>Households of peasants</b>	103,83	144,42	192,30	248,51	358,01	416,26	447,51	507,70	619,91	758,07	-
<b>Households by unemployed</b>	160,35	245,17	301,88	409,63	513,05	614,01	704,61	793,85	932,03	1085,74	-
<b>Households of pensioners</b>	136,60	221,71	283,77	335,25	474,83	555,04	633,25	725,15	958,52	1063,67	-

Source: National Institute of statistics – ABF

\* trim IV provisional data

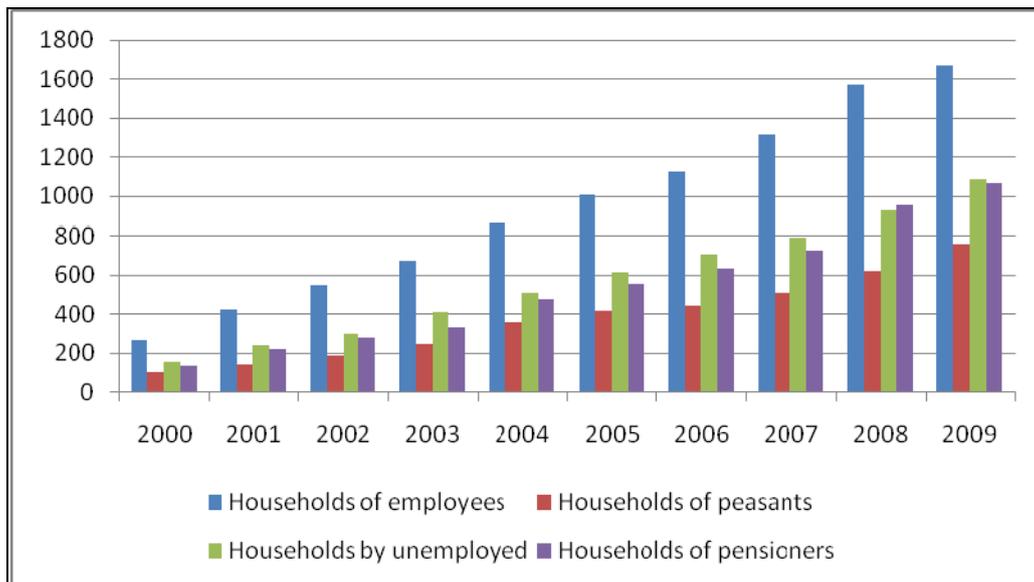
In the period 2000-2010 held a positive dynamics of consumption expenditure of households. Monetary consumption expenditure increased from 175.49 lei monthly on a household 2000 at 1522 lei monthly on a household by 2010, i.e. with 1346.51 lei monthly on a household.



**Figure 5. Dynamics of consumption expenditure of households**

Analysis of the structure of consumer expenditures of money, by main categories of households, highlights the fact that the share of consumer spending money is held by households of wage earners.

In the case of categories of peasants households consumption from own resources also occupies an important position in the case of consumer spending money. The share value of own final consumption within the total consumer expenditures of population in households of wage earners, peasants and retirees had an increasing trend in the period 2000-2010 (according to the family Budget Survey 2010).



**Figure 6. Evolution of self-consumption value in the total consumption expenditure of the population**

Since 2009 you can see a more moderate growth of spending money for consumption compared to previous years (106.17% in 2009 compared to 2008, 119.29% in 2008 compared to 2007).

Consumer demand dynamics of the population is also unfavourable influence exerted by "self-consumption and acquisitions in the farm" and "individual consumption expenditure by government and private development of these components are negatively correlated with the pace of agricultural production, respectively, with staff reductions made in a number of public areas (education, health, culture, social welfare, etc.).

For the next period, the available statistics indicate a downward trend to maintain the household consumer demand - one nine disposable income recorded contraction in annual terms, which was reflected in further restricting the volume of trade turnover and service.

#### 4. CONCLUSIONS

In the analysis period (2000-2010) the rate of inflation in Romania although it was classified on a downward trend, however recorded a high enough level. The dynamics of price indices for different groups of goods and services was different (for example in 2010 for non-food goods CPI was 109.78%, 102.3% for foods products and 104.78% for services).

Romania differs from the euro area and by the large share of food in the consumption basket which reflects the gap of development and standard of living. In 2010 compared with euro area countries, Romania has achieved the highest level of inflation (6.1%), followed by Estonia (5.1%), Bulgaria and Hungary (4.6% each) and lowest inflation rates were registered in Ireland (1.2%), Sweden (1.4%) and Czech Republic (1.9) .

Increasing annual rate of inflation in 2010 was mainly the consequence of higher VAT by 5 percent. One of the immediate effects of this increase was reflected in the price of heat and the food.

In our opinion, in the implementation of measures to reduce inflation, the authorities should take into account the purchasing power of employees to avoid a social crisis and the existing VAT in other EU economies that Romania is in direct competition. A high level of VAT rises and adversely affect the cost competitiveness of exporters and companies will be in the situation could not develop.

Because inflation in Romania closer to euro area inflation is imperative that the three policies (fiscal, monetary and wage) to support each other.

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## **ORGANIZATION OF MANAGEMENT ACCOUNTING AND COST CALCULATION OF MINING IN JIU VALLEY**

**ILEANA-SORINA BOCA (RAKOS) \***

**ABSTRACT:** *The scientific approach taken, due to the fact that a nationally more acute problem arises regarding mining restructuring, namely the closure of uneconomic mines, in this paper I want to report my finding on how management accounting is organized and which is the costing method currently applied by the seven mines in the Jiu Valley, which are currently functional, as well as to identify their limitations and advantages for improving them and identifying financial and economic solutions, demonstrating that in fact these are viable economic entities.*

**KEY WORDS:** *management accounting; costing; coal mining industry; mining; viable*

**JEL CLASIFICATION:** *M41*

### **1. INTRODUCTION**

As a result of complex studies carried out by different specialists, both in the country and in other countries on natural resources - coal, it was concluded that this mineral must be exploited and used increasingly less by the world's population and, implicitly by Romania, on the grounds of large quantities of carbon monoxide emanations and sustainable development. For example, as a consequence, France, located in Western Europe, which had an advanced technology in coal mining had dropped out of operation since 1960. On the other hand, however, the energy needs of the entire population is growing and existing coal reserves in the world is estimated to be sufficient for several hundred years from now, some countries being interested in buying this resource, and others in selling. According to forecasting studies, developed worldwide by the year 2030, all world markets expected a slightly upward trend in coal prices, with substantial increases in other energy resources (oil and natural gas). As oil

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and gas reserves are decreasing, the role of indigenous coal and, in particular, of lignite, should increase in the national energy balance. Our country has an estimated coal reserve of 755 million tons, of which exploitable in leased premises 105 million tones, enough for at least 35 years (data that can be seen in Table nr.1.1.). Therefore, considering our country's population situation and particularly of the approximately 150,000 people in the Jiu Valley - an area with a strong monoindustrial character being developed around the seven urban still active mines, I find it appropriate that these mines to be refurbished and to become profitable in order not to undergo the process of closing, as they were for example, the mines: EM Câmpu lui Neag, EM Valea de Brazi, EM Bărbăteni, EM Aninoasa, although they had untapped reserves of coal and even more so, the mine EM Valea de Brazi has undergone the closure and ecological process, after major investments have been made to itself and within its administrative headquarters which have been completely modernized in the early 2000s. I believe in Jiu Valley mining should continue in terms of sustainable development, since the vast majority of the population in the Jiu Valley is directly dependent on those working in this sector and not least because the country's energy need is growing.

**Table 1. Evolution of national primary energy resources**

Primary Energy Carrier Resources	MU	Reserves						Estimated Annual Production Mil tones	Provided Estimated Period			
		Reserves		Leased Exploitable		In New Perimeters			Geologic Reserves	Leased Exploitable Reserves	In New Perimeters	
			Mil tep		Mil tep		Mil tep		Year h	Year h	Year h	
1	2	3	4	5	6	7	8	9	10=3/7	11=3/7	12=3/7	
Charcoal - coal - lignite	Mil tones	755 1490	422 276	105 445	38,8 82,4	1045	133	3,3 32	229 47	32 14		33
Petroleum	mil t	74	72	-	-	-	-	5,2	14	-	-	-
Natural Gas	mil t	185	159	-	-	-	-	12,5	15	-	-	-

Source: Romanian Agency for Industrial Development of Mining Areas (ARDDZI)

The development of coal industry in the future is a necessity to be supported by increasing awareness of the reserves, by increasing existing production capacity and creating new ones, and especially by improving operational technologies. However, the Jiu Valley is an area with serious social problems, with the most dramatic forms of restructuring. A series of ordinances have been issued, such as Emergency Ordinance no. 30/16.07.1997 on autonomous reorganization, regarding the Program of Restructuring the Autonomous Sector of Hard Coal in Romania (RAH), which following negotiations in the tripartite commission government-union-employer in the coal sector was approved for implementation by Ministry of Industry and Trade no. 1602/21.08.1997. Later were issued other ordinances OG 22/1997 and OG 60/1997 according to which the flocks of the Autonomous Sector of Hard Coal Petrosani (RAH) fell by 18,107 people, and continuing decline in 2010 with a total of 1600 miners, personnel downsizing that can be classified as "severe" and with consequences on multiple plans. The mining problem of Jiu Valley was analyzed over time by various specialists, such as Ms. Ph.D. Professor *Mariana Man* in "*Management Accounting and Costing Calculation*", Scrisul Romanesc Publishing House, Craiova,

1997, Mircea Baron, “*Social Movements in the Romanian Mining in the First Half of the Twentieth Century*”, the article being presented and published in the *Annual Session of Scientific Communications of the Museum of Dacian and Roman Civilization in Deva, 26 to 28 June 2008, etc.* As a result of those presented, by this scientific approach I intend to relief that the Jiu Valley mining should not be closed, but should be part of an efficient management, to be based on sound management accounting and cost calculation, that are important information provider for decision-makers from the economic entities in the coal mining industry.

## **2. RESEARCH METHODOLOGY**

In my scientific research I approached methods of quantitative and qualitative type, meaning that in that study we conducted the analysis of documents from five of the seven existing mines, namely the EM Uricani, EM Lupeni, EM Vulcan, EM Paroşeni, EM Vulcan and EM Petrila, excluding EM Livezeni and E. M. Lonea. The qualitative methods used consisted of interviews and unstructured observation, after which we found that the information received on the costing method currently applied are fair and valid.

## **3. ORGANIZATION OF MANAGEMENT ACCOUNTING AND COST CALCULATION OF MINING IN JIU VALLEY**

Given that these economic entities of the National Hard Coal Company SA Petrosani extract a single product, coal, which is then subjected to preparation, the current system of accounting and costing has important objectives, namely to determine the actual cost of achieved production, while the organization of management accounting in these entities is likely centralized.

In economic entities of the coal mining industry we encounter two types of cost: budget or pre-calculated unit cost and the effective or postcalculated cost of coal production.

Calculation relationships can be expressed as follows:

$$cui = \frac{\sum_{j=1}^n Chpj}{Q_i} \quad (1)$$

where:

cui, the unit cost of coal;

Chp, production costs;

j, articles of calculation;

Q, the quantity of coal produced in the reporting period

Total production costs are broken down by types of expenditure and each output is then reported to the amount of coal produced in that reporting period, so that we can calculate the unit cost, by the relation:

$$cu = \frac{\sum_{j=1}^n Ch}{Q} = \frac{ch.matp + ch.m.vie + ch.utilitati + ch.salarii, asig, prot.soc.}{Q} \quad (2)$$

Substituting in the relations (1) and (2) of subsections 3.3. Costing method used in the coal mining industry economic entities, follows:

- Pre-calculated unit cost  $cui = \frac{9142 \text{ miilei}}{14300} = 639.30 \text{ lei / Gcal}$
- Respectively, the actual unit cost due to postcalculation  $cui = \frac{7959,07 \text{ miilei}}{10800} = 736.95 \text{ lei / Gcal}$

From calculations, it results a negative difference, meaning that production was obtained with an effective unit cost (post-calculate) over the estimated (pre-calculated) one, of 97.65 lei / Gcal.

**Table 2. The cost of coal product on primary elements of expenditure on August 31, 2010**

No.	Specification	Programmed		Accomplished	
		Thousands lei	Lei/t	Thousands lei	Lei/t
1	Physical production tons	14300	-	10800	-
2	Production of manufactured goods	3682	-	1262,68	-
3	<b>Total cost (row 9 + row 13), of which:</b>	<b>9142</b>	<b>639,3</b>	<b>7959,07</b>	<b>736,95</b>
4	Raw materials and materials for production, of which:	200	13,99	143,64	13,30
	Fuel	0,00	0,00	8,85	0,82
5	Energy and water out of production, of which:	675	47,20	650,69	60,25
	water	0,00	0,00	3,15	0,29
6	Depreciation	400	27,97	425,25	39,38
7	Works and services performed by third parties for manufacturing	40	2,80	907,97	84,07
8	Other materials for production costs	0,00	0,00	53,92	4,99
9	<b>Total expenditure on materials rd.4 rd.8</b>	<b>1315</b>	<b>91,96</b>	<b>2193,47</b>	<b>203,10</b>
10	Payroll staff, production	3411	238,53	2837,84	262,76
11	Insurance and social protection for production staff	1892	132,31	1073,32	99,38
12	Other living expenses for production work	2524	176,50	1854,43	171,71
13	<b>Total Expenditure on work life Rd. 10 rd. 12</b>	<b>7827</b>	<b>547,34</b>	<b>5765,59</b>	<b>533,85</b>

All these data have analysis value in respect of the management and the financial and accounting elements of mining, as a whole. Those to whom these are intended are very few, and the fact that the reports are made at the end of the reporting

period gives them a historical value and practically a character of "unnecessary" although they have a high degree of accounting precision.

**Table 3. Coal production cost per calculation item on August 31, 2010**

No.	Specification	Programmed		Accomplished	
		Thousands lei	Lei/t	Thousands lei	Lei/t
A	Physical production tons	14300	-	10800	-
B	Production of goods	3682	-	1262,68	-
1	Raw materials and auxiliary materials	180	12,59	111,03	10,28
2	Fuel	-	-	2,01	0,19
3	Energy	607	42,45	164,85	15,26
4	Water	-	-	3,15	0,29
5	Depreciation	240	16,78	60,86	5,64
6	Gross Wages	2558	178,88	2199,76	203,68
7	Insurance and social protection	979	68,46	838,04	77,60
8	Other direct costs	2415	168,88	1441,09	133,43
9	<b>Total Direct Costs</b>	<b>6979</b>	<b>488,04</b>	<b>4820,79</b>	<b>446,37</b>
10	Expenses for equipment maintenance and operation	125	8,74	58,16	5,39
11	General expenses of department	550	38,46	699,03	64,73
12	<b>Total cost of department</b>	<b>7654</b>	<b>535,24</b>	<b>5577,98</b>	<b>516,48</b>
13	General expenses of management	1488	104,06	2381,08	220,47
14	<b>Factory cost</b>	<b>9142</b>	<b>639,30</b>	<b>7959,07</b>	<b>736,95</b>
15	Retail Expenses	-	-	-	-
16	<b>Full cost</b>	<b>9142</b>	<b>639,3</b>	<b>7959,07</b>	<b>736,95</b>

Although at first glance, I inclined to believe that the single method of calculation used by these mining economic entities is the global method, because it is "manufactured" a single product - the coal, however, if we consider the phases of coal mining I actually found that in addition to this global method there are used two other methods of costing calculation that are used to calculate the actual cost of obtained coal production, meaning the phase method and the order method used in the auxiliary departments.

In so doing my research I found that, in fact, the Jiu Valley mining, for cost calculation it applies the method of comparisons of output and scheduled/ planned production and at the end of the month/ reporting period, or at some mines in the following month, the necessary corrections are made. If we consider the factors and principles influencing the organization of management accounting in the Jiu Valley mines I have found that also the method of phases calculation is used, whereas the costs are tracked on the production phases, namely: work preparation, stopes, backfilling, underground transport, underground maintenance, ventilation, and gassing etc., and s.o.

In Coroiesti Coal Processing we meet several technological steps, such as sorting, flotation, filtration, tailings disposal and water treatment. To be highlighted in managerial accounting, all of these technological stages are symbolized in accounting

and the symbols assigned to them are required to sign all documents concerning consumption and obtained production. Cost per product, according to this method of calculation "on stage" is determined at the end of each month, noting that the mining economic entities do not have semi-products and production in progress.

Managerial Accounting, at the level of mining currently involves recording, processing and analysis of costs. Bookkeeping is performed using accounts grader 9th of General Chart of Accounts, respectively class of management accounts, where accounts of group 92 "Calculation Accounts" develops on analytical accounts specific for the mining activity. Each economic entity within the National Coal Company SA Petrosani organize their own management accounting, with the synthetic accounts: 921 "Expenditure on the Core Activities for Mining Activities (Direct Costs)", 922 "Expenditure on Operating Activities for Ancillary Activities", 923 "Common Expenses for Operating Activities" and 924 "General Expenditure for Operating Activities" as well as their analytics 9211 "Preparatory Work", 9212 "Cutting", 9213 "Backfilling", 9214 "Underground Transport", 9215 "Underground Maintenance", 9216 "Aeration and Degassing" , 9217 "Other Works Underground" that thrive to under-analytic, depending on the complexity phase covered are symbolized as: 92121 "Room Stopes ", 92122 "Frontal Stopes", 921221 "Frontal Stopes - Thick Layer", 921222 "Front Cutting - Thin Layers", 921224 "Front Cutting Stopes with Mechanized Complex", 921225 "Front Cutting with Undermined Bench", noting that within the company, all seven branches have adopted the same symbolization and designation of accounts.

In the scientific approach taken, we found that only in the productive sectors can be identified indirect expenditure, but not regarding the real product, the coal. This expenditure is highlighted in each production sector, on calculation items, groups and types, and is accounted for using the account 923 "Common/Indirect Expenses for Operating Activities". Some common expenses of the production sectors are directly related to the extraction of coal, forming a separate calculation item "Expenditures for Maintenance and Operation of Equipment". These expenses are recorded in account 9231, "Expenditures of Maintenance and Operation of Surface Equipment", which in turn develops into the sub-analytic kind of expenses as follows: 92311 "Equipment Maintenance and Operation Expenditures Incurred by Own Forces", 92312 "Expenditures for Maintenance and Operation of Equipment by Third Parties", 92313 "Expenditure for Equipment and Vehicles Overhaul by Own Means", 92314 "Expenditure for Equipment and Vehicles Overhaul by Third Parties", 92315 "Depreciation of Equipment and Vehicles", 92316 " Depreciation, Repairs and Maintenance of SDV's and Inventory Items", 92317 "Energy, Fuel and Other Costs for Technical and Motility Purposes", etc.

Management and administration costs incurred by the production sector are also indirect costs, although not expressly made within the process of coal extraction, which are contained in two separate calculation items highlighted in the analytical accounts, as follows: 9232 "General Expenditure of the Industry Area", which grows as sub-analytic on types of expenses, as follows: 92321 "Salaries of TESA Management and Service Personnel, Health Insurance Contribution and Contribution to Unemployment Funds (TESA, sectors); 92322 "Depreciation of Buildings and Other

Fixed Assets of the Surface Sector" 92323 "Expenses for Testing, Experimentation Standards" (lab), 92324 "Expenditure on Labor Protection for Surface Activity", 92325 "Expenditure on Environmental Protection" and 9233 "Other Common Expenses of the Section", which develops analytical on kinds of expenses, as follows: 92331 "Expenditures on Telephone Exchange on Surface (Wages of Telephonists), Geo-Topographic Surface, PDS-Service Area, MEAT Office, Radio-Amplification Station, Dispatchers, Printed Materials (not stored), Canteen Marks etc.; 92332 "Additional Tax Expense According to Governmental Ordinance OG 13/1994"; 92333 "Transport of Materials by Third Parties", 92334 "Transport of People to and from Work Performed by Third Parties for Surface Staff", 92335 "Transport of People to and from Work Performed by Own Means for Surface Staff (costs with own buses)".

In relation to the nature or type of indirect production costs, these documents are recorded monthly, usually at the end, for example: depreciation of fixed assets, inventory items, CAS, salary costs, materials, but financial expenses are recorded in documents every day. During my research I found that in the Jiu Valley mining it is used the term "living labor costs" which in fact is an obsolete term, being used until the late '90s, when this term was replaced with another, for example: according to the authors *Oprea Calin and Caludiu Florin Calin* in the work "*Managerial Accounting*", published in 2007, this term is called "Wage Costs"; according to the authors *Dorina Budugan, Iuliana Georgescu, Ioan Berheci, Leontina Bețianu* in the paper entitled "*Management Accounting*", published in 2007, CECCAR Publishing House, Bucharest, the term has been replaced with the term "cost of staffs' salaries"; according to the authors *Oprea Calin, Mariana Man and Monica-Viorica Nedelcu*, in the work "*Managerial Accounting*", published in 2008, Didactic and Pedagogical Publishing House, RA, the term has been replaced with the term "salary costs", etc.

For the economic entities in the coal mining industry, the general expenditure are incurred by the management and administration of mining activities in their entirety, not being identified neither on sectors, nor on products. These costs are given in the accounts of these economic entities with account 924 "General Administration Expenses", which grow to sub-analytical, grouped into four groups in relation to their role and purpose, and the kinds of expenses, as follows: 9241 "General Interest Expenses", 9242 "General Expenses Regarding Gratuities, Social Activities etc.", 9243 "Domestic Administrative Expenses" and 9244 "Maintenance and Management Costs". Regarding the general interest expenses and administrative and housekeeping expenses one can say that they are generally similar to indirect production costs, additional costs arising as those of general interest: 92415 "Expenditure for Mechanized and Automated Data Processing (Computer )", 92417 "Land Taxes", while for the Administrative and Household Expenses there appear additionally: Type 92431 "Office Supplies", 92432 "Books, Magazines, Publications and Subscriptions", 92433 "Telephone, Telegraph, Radio, Post Expenses", 92435 "Travels, Seconds and Transfers". In the category of general expenses regarding gratuities are recorded as follows: 924201 "Coal Allowances for Surface Staff", 924202 "Rents for Surface Staff", 924203 "Differences in Electricity Price for the Surface Staff", 924204 "Expenditures on Heating Fees for Surface Staff", 924205 "Schooling of staff (school expenses, scholarships, lecturers, salary of secretary, courses, etc.), 924207

"Expenditures on Medical Dispensaries", etc. The analytical accounting of the general administration expenses is taken into groups and types of expenditure through collection situations of indirect costs, such as calculus and repartition situations, as well as those for supplies, wear of inventory items, wages, health insurance (CAS) etc.

In the economic entities in the coal mining industry another very important type of expenses is also that incurred by the business divisions, having the role to help with the basic production – coal extraction, expenses which are given in the management accounts with account 922 "Expenditure on Ancillary Activities for Mining Operations ", which grows on sub-analytical, as follows: 9221 "Expenditures on Mechanical Workshop", 9222 "Expenditures on Electrical Workshop ", 9223 "Expenditures on Carpentry Workshop", 9224 "Expenditures on Deposits", 9225 "Expenditures on Transportation of Materials Performed by Own Means", 9226 "Expenditures on Other Ancillary Activities", 9228 "Expenses of the Wagon Repairing Workshop".

For the auxiliary departments, the analytical accounting and costing calculation is organized according to the method of cost calculation "on order", getting analytical for each section/department, for each order in which is recorded during the month the direct expenditure on calculation items, and at the end of each months, also overheads shares. Indirect costs of production of each section is reflected during the month in separate analytics, within the same synthetic cost, the breakdown by groups and items of expenditure, similarly to the account of indirect production costs of production sectors. At the end of the month, these indirect costs are attributed to orders from the section, according to a conventional key distribution. In terms of costs collection from ancillary departments this is done through the preparation of primary and summary documents. Basically, the whole system of organizing the management accounting and cost calculation in the coal mining industry of Jiu Valley involves substantive steps, such as:

1. Collection, aggregation and correlation of financial / general accounting expenses with those of management accounting;
2. Preparation of summary statements on each calculation account, i.e.: 921 "Expenditure on the Core Activities for Mining Activities (Direct Costs)", 922 "Expenditure on Ancillary Activities for Mining Operations", 923 "Common Expenses for Operating Activities", 924 "General Expenditures on Mining Operations";
3. Calculating the production cost on primary elements of expenditure and calculation items.

In the investigated mines I noticed that the two accounts, financial management accounts blend, due to the fact that all expenses recorded according to their economic nature in the financial accounts are taken up and held by their use by management accounting. The undertaken study allowed me to see that over a period of management (current calendar month), there are various operations, from registration of costs and their accounting, to centralization of all costs, depending on their nature. For example, the consumption of materials are outlined in a summary document "Diary of material consumption and other materials used in August 2010", in which each type of used material appears in the Analytics account 301 "Consumables", written on the

vertical in the document, as well as the analytics of the calculation accounts of group 92, horizontal. After these operations, at the end of the calendar month shall be made up the accounting notes, the balance sheet and profit and loss account.

In the economic entities under investigation in the National Hard Coal Company SA Petrosani the stream of specific records of management accounting is identical for each of the seven existing mining currently consisting of:

1. Registration of expenditures on materials consumption, expenditures on wages according to the summary of wages, expenditure on social security and social protection, the depreciation of fixed assets;
2. Distribution of costs on ancillary activities, of indirect production costs and general administration costs of mining regarding the basic costs;
3. Record of the produced coal production, at the predetermined price (pre-calculated);
4. Reimbursement of the actually cost of the achieved coal production;
5. Registration of the price differences (favourable or unfavourable) for the production of coal;
6. Closing the account 931 "Cost of Achieved Production".

For each calculation account of group 92 it is drawn a summary statement based on the values in the analytics of the economic entity's expense accounts, those being actually the database needed to work out the situations regarding the cost of coal production, both on primary elements of expenditure, and on calculation items, statements to be submitted as annexes to the accounts report to be submitted to CNH SA Petrosani.

*The situation of product cost relating to the primary elements of expenses* in the current month, is used to determine both total mining cost and value of each item of expenditure involved in the overall cost structure, i.e. the weight that the material expenses and the expenditures on living labour have in the cost structure and the situation of the costs on calculation items is used to determine the amount by which each calculation item falls in the cost structure, that in determining the level of direct costs, the production costs, the general administrative expenses, the complete cost and the unit cost (Lei / tone of coal).

#### **4. ADVANTAGES AND LIMITATIONS OF THE CURRENT METHOD OF COSTS CALCULATION AT MINES IN JIU VALLEY**

*The advantage* of organizing the management and cost calculation accounting in a centralized shape, is that it provides to the economic entity's management at any time, an overview of all production costs and a more detailed accounting of these expenses would result in unduly increasing administrative and wasteful expenditure. However there is the generally accepted view that traditional costing methods have remained valid over time because of maintaining of their objective basis (technical structures, technologies, processes of production organization) which gave and assigned to them various basic methods.

The brief analysis of the calculation methods of costing used in the Jiu Valley mining revealed that the **main disadvantage** of their implementation is the lack of efficiency and forecasting.

This leads to the information about the process of production not to reach in time the management in order for the latter to take appropriate decisions, on the one hand, and on the other hand, not to have a prospect of future performance of the production process, and therefore, accounting not to fulfil its role as management accounting.

Thus, it is has, it is imperative to improve costing methods, as a consequence of the fact that under current conditions, when the sues that claim the rulers of the country on business management are increasingly numerous and complex, the efficiency of the production process depends, among other things, on the efficiency with which information reaches the management, on the skill with which the management capitalizes information in taking decisions, and on the operational controlling of the production process, from the perspective of the objectives set out in budgets. The efficient organization of the economic activity lays down the improvement of its management methods, which requires a reconsideration of methods of management accounting and costing, which must be capable of providing appropriate information according to the requirements of effective management of production, in terms of the economy market. An effective leadership is unthinkable without an appropriate information system in accordance with the prerequisite of modern production, enabling the adoption of decisions and operational measures, thoroughly grounded and timely. The main purpose of improving the method of cost calculation in the Jiu Valley mining is to make it more operational and efficient in providing the necessary information to the management for making decisions.

The current costing calculation method practiced at the Jiu Valley mines, meaning the general method combined with the orders and the phase method by which a historical cost is determined, a posteriori, used for the settlement and post factual justification of the costs of production, does not supply entirely the information needs of the management/leaders.

This derives from the fact that classical methods do not allow the operational determination of deviation of the incurred expenses from the preset (budgeted) ones in order to be able to intervene "on the fly" in correcting abnormalities that cause disturbances in the process of production and to bring it to the normal. Through it, there is carried out only a post operative determination of the deviation of incurred from the preset expenditure during the accounting settlement that is made at the end of the reporting period, when the anomalies that have caused disturbances either have gathered pace, or have meanwhile been rectified and therefore the time of fault is exceeded and the conclusions drawn on the analysis of deviations, many times, no longer find the need and opportunity.

Therefore, management accounting of organization in order to increase performance in the Jiu Valley mining activity regarding the improvement and diversification of methods of cost calculation must start from this real need of reconsidering current methods and assimilation of other improved methods, allowing commissioning of a genuine and appropriate information system necessary to the

management activity. Operability of information is a fundamental issue in taking a decision and consequently for the management activity.

Increasing the degree of responsibility of managers in obtaining operative information on the process of production and the revaluation in the decisions that are necessary for effective management of those units and the company as a whole is another question that is raised regarding the improvement of calculation method of costing in the mines from the Jiu Valley. Taking into account all these general requirements necessary for the management organization in order to increase the activity performance of these mining economic entities, can lead to a calculation method that will meet the challenges of efficient management of economic entities in market economy. Also, to increase efficiency of the costing method is of paramount importance also the selection of that information useful for the management business in certain circumstances, moments or periods of the mining activity in the Jiu Valley. Improving management accounting and costing calculation methods in the coal mining industry, thus requires the adoption of systems, methods and techniques of budgeting, collection and allocation of costs of production and costing.

The traditional calculation methods currently used, namely the general method combined with the order method, the phase method does not allow but a late determination of the cost per product, about in the middle of the next month for the preceding month, without providing adequate and operative information on material and living work consumption and, about how the internal activity is carried on, which actually plays a decisive role. But management accounting and costing by its means, must remove these shortcomings and to better reflect the internal activity of these mines in the Jiu Valley and to allow deviations from preset standards, results, causes and responsibilities for each sector. From the analysis in several economic entities in the coal mining from the coal basin located in Petrosani, Jiu Valley, showed that they use for their managerial accounting and cost calculation the general method, combined with the order method and the phase method. According to the methodological concept underlying these classical methods, as described in the literature, in the pre-calculation is determined the unitary production cost.

The lack of efficiency of this method is another limitation with major implications for the management process. Its application does not allow an effective and operational control over the use of material and living resources in the production process. Since the actual cost of the order is calculated only at the end of it, comparing this with the default cost for establishing deviations can be achieved only at this moment, which is late and practically information on such deviations, can not be used by the management in order to take decisions of eliminating adverse deviations and reduce costs.

In other words, there is in the methodological concept of this classical method no coherent system of tracking and operative reporting of deviations from the default costs on appropriate structures, on expenditure places as centres of responsibility and on causes. Therefore, the pace of providing information does not match with that required for decision-making. The level of actual costs at the end of each reporting period may not be known because an order can be maintained in manufacturing over several periods of management. However, even the actual cost determined with delay

can not be regarded as real and therefore even the calculated deviations based on it, can not be real, since for its calculation there are used many conventional criteria, such as for example, the allocation of indirect production costs and of general administration costs, etc. Another limitation of the overall method is also the fact, that being oriented towards full cost calculation unit, it focuses specifically on grouping the production and sales costs in direct and indirect ones, which does not allow their analysis in relation to the volume of production. It is known however that in economic terms the costs are examined in conjunction with the production volume, which requires using for their calculation the clustering of production and sales costs into fixed and variable, grouping that is used by all modern methods of management accounting and cost calculation.

Starting this year 2011, the Government intends to eliminate subsidizing coal mining, while the expenditure on raw materials and materials necessary for the production process have increased in recent years, so that for managers in the Jiu Valley mines, reducing production costs and improving the efficiency of extraction of coal with all that it implies have become primary targets.

Regarding these objectives, we can say that the current system of accounting, of costs calculation and their tracking does not meet the managers, some causes consisting for example of:

1. Calculating the actual cost of coal production, after it was extracted or even sold;
2. The calculation method used focuses primarily on grouping production costs into direct and indirect expenses, or all the expenses involved in the process of coal extraction should be done in conjunction with the volume of produced coal, some costs being fixed, and others having a variable character;
3. The calculation method currently used, does not provide specific and operational follow-up of production costs and it does not provide an immediate reporting of deviations from the budget;
4. The production costs do not reflect sufficiently the efficiency of the economic activity in the cost centres (sectors of production, investment sectors, sections, workshops, etc.) of the mines;
5. The way management accounting and costing is currently organized does not provide a separate record of unproductive expenditure;
6. Another drawback would be that between the auxiliary departments there are not highlighted the mutual accounting settlements, although it is known that these departments do works and services on a reciprocal basis.

Improving the costs calculation method, involves the study and analysis of needs and conditions, of the specific benefits offered by different methods and advanced techniques, taking into account the criterion of efficiency. This is enforced by the fact that one of the main shortcomings of the traditional calculation method used by mines in the Jiu Valley is that they fail to provide information necessary for a more detailed analysis, given by the complexity of manufacturing processes that take place within the mines.

## 5. CONCLUSIONS

As a consequence of the study, we found that a change is absolutely necessary in applying certain systems, methods and working techniques, depending on production needs and the company as a whole, in the Jiu Valley mining. These systems, methods and techniques of costing analysis must be the result of actual real situation with the prospect of future requirements relating to the objectives that are to be achieved, in order to improve the functional position that financial accounting and management accounting, and costing in particular, holds within the management activity of the Jiu Valley mining.

Based on a critical analysis of the situation, from which the positive items have to be kept, should promote new techniques to provide useful information for the management of the mining economic entities in taking decisions. In the region, at the National Coal Company SA Petrosani, the transition processes from a centralized economy to a market economy has put strong footprint, reducing the number of mines to seven today and continuing to reduce it to four in the near future. An important issue arising amid economic and social restructuring in the last 20 years is the cost reduction and growing the profitability of the mines in order to achieve performance, which is very difficult to meet, whereas in this field, the area faces an acute lack of information to allow optimal decisions for achieving the goals.

A first step in achieving these objectives, I believe that we could carry through the management accounting in the sense that the organization system of the management accounting of economic entities in the coal mining industry should be redesigned so as to enable:

1. Real and timely information of decision makers and particularly of the mining manager, on the cost of production;
2. Accurate and timely identification of activities taking place with higher costs than were originally planned;
3. Better decisions of the managers of mines in order to correct and analyze these occurring deviations for eliminating the possibility of repetition in the future;
4. Identification of all costs that contribute to achieving the production cost, to the smallest details in order to calculate it as accurate as possible.

Such a system of organization of management accounting, more appropriate for the activity of coal mining, we consider being that in which the cost calculation method applied is the standard cost method and modern techniques used should enable knowledge at any time of the true cost of production per ton of coal in its entirety.

*In conclusion*, for the Jiu Valley mining it is absolutely necessary the organization of management accounting in order to enhance their activity performance by introducing new methods of calculation of production costs, that should raise to top quality costs information, such for example, conventional methods, especially the standard method - cost and its specific accounting techniques.

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## **EXTERNAL FINANCING FOR CONSTRUCTION ENTITIES**

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**ABSTRACT:** *The external financing of the construction entities does not differ from the one of other entities within other activities, but the construction entities have also a financing source, represented by the funds for the site organization, funds which are analysed and accounted in the present paper.*

**KEY WORDS:** *financing; credits; funds for the site organization; leasing.*

**JEL CLASSIFICATION:** *M41.*

### **1. INTRODUCTION**

Like for the other companies from other economy branches, the companies from the construction field include in the category of long-term debts the long-term bank loans with afferent interests and other long-term debts, such as leasing. The structure of the sources of financing is different according to the type of the company.

In this crisis, where their funding sources are becoming increasingly limited, the main way companies are being borrowed sources.

Financing is the entities, in special the construction entities, option destined for obtaining funds (liquidities) in order to cover temporary needs generated by commercial or production activities, or for development the existent production capacity through unfolding investments projects (Nagy, et al., 2010).

The category of external financing sources includes also the bond credits, the medium and long loans, and other medium and long term debts. If we calculate the cost of these funding sources based on the preferences of economic entities, we see that the

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first places are occupied by bank loans and leasing, this because of the accessibility but also because of traditionalism.

## **2. BOND CREDITS**

These are based on a bond issue that is “a long-term debt created by the sale of debt securities traded by the public.” Sinecvanon conditions for a company to issue bonds are: the company should be a corporation; the shares should be listed on a stock exchange. In Romania, this type of credit is at its beginning, the law governing the bond credits being issued in 2002, i.e. Law 525/2002 regarding the securities and the stock exchanges.

The bond credit has the following characteristics (Law 525/2002 regarding the nominal values and the stock market, updated 2010):

- the loan amount cannot exceed  $\frac{3}{4}$  of the existing share capital according to the last approved balance sheet;
- the interest rate, the nominal value of a bond and the issue price have to be stated from the beginning;
- the value or the refund price must be at least equal to the nominal value, if not higher; the loan period should be more than one year;
- the value of the bonds must be fully deposited.

IAS 32 „Financial instruments: Presentation” does not use the term of bonds, but refers to them as being financial instruments and defines them as being „any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity”( IFRS. Official norms issued on 1st January 2009, IAS 32 „Financial instruments: Presentation”, p.1616) and the financial liability or the financial asset are recognized if the following conditions are met (IFRS. Official norms issued on 1st January 2009, IAS 32 „Financial instruments: Recognition and evaluation”, pp.2073-2074):

- the financial asset, i.e. the financial debt are held for trading, being acquired and incurred for sale and resale;
- at first glance, the asset, i.e. the financial debt is evaluated at their fair value through profit or loss.

The valid legislation in Romania (OMFP 3055/2009 for the approval of accounting norms corresponding to European directives, published in the Romanian Official Gazette, Part I, no. 766 from 10th November 2009) presents loans from bond issues in the category of long term loans, not using the term of bond credit, stating that the loans from the issues must be separated from the convertible bonds.

Although the empirical studies conducted in Caras-Severin didn't lead to the existence of this type of credit, we consider that the bond credit should be regarded with more confidence and should be used more often by the companies that have this option, because there is the possibility for the refund value to be equal to the issue value, which would lead to loan costs far lower than in the case of conventional lending by banks.

The accounting of bond credits is held with the help of the account 161 „Loans from bond issues”, and the afferent interests are marked out through the account 1681

„Interests afferent to the credits from bond issues”. Companies in the construction industry, just like any other economic entities which have contracted bond credits will use the two accounts.

### **3. LONG TERM BANK LOANS**

The long term bank loans are loans received from banks and other financial institutions, they have a chargeability of over one year and bear interests (Paraschivescu M.D., Radu F., 2008).

The main goal of the economic entities in the contracting of a long term loan is the credit cost, represented mainly by the interest afferent to the credit, but we also have to include the granting and management fees, some banks calculating the margin credit risk which increases the credit cost for the entities with a lower profitability level, i.e. a lower debt service (Dragotă V., Dragotă M. et.all., 2005).

The costs of long-term loans are regarded as the borrowing costs of international accounting standards, and are defined as “interest and other costs incurred by an entity for the borrowing of funds” (IFRS. Official norms issued on 1st January 2009, IAS 32 „Loan costs,” p.1446).

IAS 23 „ The borrowing costs” is the one that states that, when the loans are contracted for the acquisition, the construction and the production of an asset, all the costs afferent to borrowing will be recognized as costs afferent to the respective asset, their inclusion in the expenses being totally wrong, while the valid national legislation entitles our option, stating that „the borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset may be included in the cost of that asset.” (OMFP 3055/2009 for the approval of accounting norms corresponding to European directives, published in the Romanian Official Gazette, Part I, no. 766 from 10th November 2009).

We subscribe to the set of International Accounting Standard IAS 23 “Borrowing Costs”, and we believe that the costs of long-term loans obtained and used for acquisition, construction or production of a long-term asset, if attributed credibly to that asset, must be included in the cost of that asset, in order not to distort the financial result.

Regardless of the field in which they act, all economic entities keep records of long term loans with the account 162 “long-term bank loans”, and the records of these loans interests is made with the account 1682” Interest of long-term bank loans” .

### **4. LEASING CONTRACTS. OTHER LOANS AND PAYABLES**

Leasing is a medium or long term financing technique, as an alternative to debt, allowing a better exploitation of a good without having to resort to loans or equities. (Dragotă, et al., 2005)

The national legislation on leasing (O.G. nr. 51/1997 regarding the leasing operations and companies, updated 01.01.2010) speaks of two types of leasing contracts:

- Operational leasing supposes that the locator provides the user with the asset of the leasing contract, without taking it out of its accounting records leasing;
- Financial leasing is considered to be financial if the risks or benefits associated with the contractual goods pass on the user, or the use period of the asset in the leasing system covers at least 75% of the normal use period, or the parties have stipulated in the leasing contract that at the expiry date the lessee is to be made owner (Law 571/2003 corroborated with the Government Decision 44/2004 regarding the fiscal code with application methodological norms, update 2010).

As mentioned in the previous chapters, there are views (Feleagă N., Ionașcu I. , 1998) according to which the category of medium-or long-term loans should include only the finance lease contracts. In fact, if we look at the definition given above to leasing, which states that it is a financing technique but not a loan, then we must consider the perspective from which, however, the lease is registered as a medium or long term debt.

In order to affirm if the leasing contracts fall within the category of loans or not, and precisely because „the impact of the leasing operation on the accounting situations of the locating company is different, depending on the contracted leasing type”, we must analyse the problem from the point of view of the economic primacy over the legality or the legal primacy over economics (Ristea, et al., 2009):

- In the case of the former the solution is to account the good obtained after closing the leasing contract as an asset and the sum that will be paid as a debt;
- In the case of the latter, the good is not registered in the asset category but recorded in the order accounts, i.e. outside the balance sheet;

In order to determine which of the two contracts should be classified as medium-and long-term debt, we make reference to IAS 17 “Leases”, which states referring to finance leases that “at the commencement of the lease, the owners must recognize the financial leasing operations as assets and liabilities [...] transactions and other events are presented in accordance with their economic substance and financial reality, not just with their legal status” (IFRS. Official norms issued on 1st January 2009, IAS 32 „Leasing contracts”, p.1230). With respect to operating leases, the same IAS 17 “Leases” makes clear that payments for such contracts will be recognized as an expense, the owner has the obligation, among others, to present, in detail, the “basis for determining the quota rents”, i.e. the operating lease is a long term lease, by recognizing the rent (monthly payments) without the balance (contingent liabilities).

We align to the International Accounting Standards, considering that, in the category of medium and long-term debt we should include only financial leases because through the careful analysis we observe that they are almost entirely financial contracts (property rights are not directly transferred, but the rest of the bonds and rights go to the lessee), while operating leases should be recorded only off-balance sheet and not as it is the case of some companies, off-balance sheet and as a long-term debt. The off-balance sheet record of the operational leasing contracts is supported by the fact that for these contracts, the amortization of assets is registered to the lesser, the lessee registering only a rent expense until the end of the contract

## 5. PARTICULARITIES REGARDING THE EXTERNAL FINANCING OF THE CONSTRUCTION ENTITIES

The construction entities, just like any other economic entity, use the account 167 “other loans and payables” in order to highlight the leasing contracts, and in order to mark out their interests, we use the account 1687 „Interests of other loans and payables”.

*A specific source of construction works constitutes the site organization funds.*

The organization of a site requires the solving of a series of problems that refers to insuring the conditions for the development of the basic activity, headed especially towards the creation of places, utility networks, communication paths, as well as workshops, concrete plants.

As previously indicated, the site organization works suppose the total of arrangements, constructions, plants, objects and expenses necessary to the creation of the conditions for the efficient use of the investment funds, and for the successful development of the activity.

The site organization is the first stage that develops within a construction. After the extent of the site organization activity, we can say that it resembles to a construction activity in miniature. This stage supposes team work for the arrangement of the territory on which the effective construction will start; the arrangement supposes digging and land levelling, supplying the area with water, natural gas, electricity, organizing and even building storages for materials; it also supposes accommodation for workers, creation of access roads for equipments and machineries, etc. All these activities mean expenses for the entrepreneur, expenses that must be kept at a low limit. Usually, the part allotted to the site organization in the work estimate, is the part where we can negotiate the final price of the construction, the site organization with a rate between 15% and 20% of the total cost estimate.

Currently, the site organization is not accounted, the sums received as advances being accounted and discounted as in the case of advances received fro works, thus:

- encashment of advances for the site organization:

512	=	419
Bank accounts		Clients - creditors

- record of expenses made for the site organization:

%	=	%
60x		3xx
Expenses for materials		Stores
61x		4xx
Expenses for services executed by third parties		Third parties

62x Expenses for other services executed by third parties 64x Expenses for staff and social protection	5xx Liquidness
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- invoicing of the executed site organization works:

4111	=	%	
Clients			
			704
			Incomes from executed works
			4427
			Collected VAT

- advance discount:

419	=	4111
Clients - creditors		Clients

- encashment of the difference from the clients

512	=	4111
Bank accounts		Clients

We require separate accounting of the site organization as it is an important part of the final construction, a part which ensures the good development of the works, and if well executed, the site organization can lead to the completion within the estimated time. Unfortunately, the practice in accounting contradicts the theory, because there are only a few companies that hold the separate accounting record for the site organization.

We consider that the advances received for the site organization should be separately accounted, by constituting a fund that should encash from the client, and which after use, passes to incomes. We impose the creation of the following accounts:

- The account 1678 „Funds for the site organization”, which would have the accounting function of a passive, crediting with the encashed sums through the bank account and debiting by their passing to 7585 „Incomes of the site organization”;

- The account 7585 „Incomes of the site organization”, which would hold records of the incomes obtained from the site organization, helping to the discount of the works performed for the site organization, discounting at the end of the month by closing the result account;

- The account 6585 „expenses of the site organization”, an active account which helps to the discount of the expenses performed for the site organization, through the credit of the third parties accounts, stocks, liquidness, crediting at the end of the month by passing the sums on to the result account.

- encashment of the advance representing the fund for the site organization:

512	=	1678
Bank account		Fund for the site organization

- record of expenses made for the site organization:

6585	=	%
Expenses of the site organization		4xx
		Third parties
		3xx
		Stocks
		5xx
		Liquidness

- at the same time we register the discount of the fund from the site organization incomes:

1678	=	7585
Fund for the site organization		Incomes of the site organization

## 6. CONCLUSIONS

Like any other economic entity, the organizations in the field constructions may also choose between classic external financing forms (e.g. long-term) and modern ones (bond credit).

Although the bond credit exhibits a series of advantages compared to the long-term loan, the most important being related to the much lower credit costs, the economic entities prefer the long-term loan. We consider that this option is not derived from the complexity of the bond credit, but from traditionalism and fear from the unknown. However, we think that an enhanced promotion of the bond credit would have nothing but positive effects, encouraging the firms to contract such credits.

As shown above, we included in the category of external financing forms for construction firms the funds for the site organisation, as we think that these funds should be presented and accounted separately.

By creating the accounts of the site organization fund we ensure:

- the distinct highlight of the sums encashed from the site organization, being compared with the ones from the object estimate;
- comparison of costs and revenues from the site organization resulting the obtained profit / loss;
- measures to reduce the expenses with the site organization in order to increase the company's profit.

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## **THE MANIFESTATION OF THE ABUSE OF DOMINANT POSITION IN THE CURRENT ROMANIAN ECONOMY**

**MELINDA CENUȘE, ADRIAN DAVID\***

**ABSTRACT:** *The abuse use of a dominant position constitutes an important form of manifestation of anti-competitive practices. Almost all competition laws have some provisions on the abuse of dominant position. Most European laws, including the one of the European Union, contain an express provision prohibiting the abuse of dominant position. However, they rarely include a definition of what constitutes abuse of dominant position, but most of them pass in review examples of behaviors that may be considered illegal. In countries with a developed market economy, the legal provisions regarding abuse of dominant position were not so important and so widely used as the provisioning governing mergers and the cartel behavior. The explanation is that in a developed economy, the markets are larger, firms are more numerous, and the entry on the market is relatively easy. As a result, there are few markets where a firm with a dominant position can exercise its market influence for longer periods without new entries being attracted. For this study we decided to present the most famous cases involving the abuse of dominant position registered on Romanian market of mobile phones in 2011 and sanctioned by the Romanian Competition Council.*

**KEY WORDS:** *economy; market; the dominant position; the abuse of dominant power; monopoly; monopolistic firms; legislation; Competition Council.*

**JEL CLASIFICATION:** *F12*

### **1. GENERAL CONSIDERATION REGARDING THE ABUSE OF DOMINANT POSITION**

The dominant position can be played by an economic operator or more economic operators, and, when on the relevant market there are more economic operators, they may or may not be related one to another (Mihai, 2006, p.23).

The market, subject to domination, must be analyzed in its evolution, which means disposing of a series of technical, economic, commercial data, and information

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concerning the extent of the market and the “segments” in which it can be divided, according to users, products, and categories of buyers or marketing forms.

The dominant position is generally constant, when an economic operator occupies most of that particular market. This classical criterion of defining market dominance has been completed, since the ‘80s, with other criteria, to respond more properly to diversity, in terms of quality and market dominance.

These criteria are the following: analysis of economic power resulting from the use of illegal means of eliminating competitors; analysis of the natural superiority situation related to management; technical innovation or commercial action (including preferential access to certain sources of funding); the presence and position on the other markets; the importance and reputation of trademarks owned, which may constitute a barrier to entering on certain markets; conditions under which a trader implements its strategies towards competitors or other customers.

What is important is not the “dominant position” held by the company, but the “abuse” itself. Under most laws on competition, it is illegal for a company to hold a dominant position in the market or to be monopolistic.

The size of a monopoly does not imply the existence of immediate guilt; for it would have to exist attempts to eliminate competitors from the market, the growth to be “normal” or “natural,” respectively to be proven the existence of “real intentions” or some means designed and used in bad faith (Iancu, 2009, p.71).

Monopolistic firms, some of them can be found on this position, without having had any intention for this purpose, i.e. not having wanted to eliminate existent competition or prevent its occurrence, if it had not existed. For example, a market may be limited so that it is impossible to obtain a product or produce it at certain costs, if the factory is not large enough to cover the entire demand. However, changes may occur in consumers’ preferences or changes in the cost of obtaining products that can eliminate all sellers in the market, except one. This may be the survivor of a group of active competitors, who survived due to its superior qualification, caution, and hard work.

There are two types of behavior, which could be adopted by a firm, and that can be considered as abuse of dominant position. The first category includes behaviors through which a dominant firm exercises or uses its market power, such as the practice of monopoly prices or reducing output in order to create a shortage of goods. Such behavior is generally considered an “exploiting behavior” as the company exploits its power held on the market.

The second category includes behaviors through which a dominant firm creates or strengthens its power on the market by preventing other competitors to enter the market or to compete effectively. This behavior is called “excessive behavior” because it excludes competition or competitors.

In the legislation of European states, including the one of the European Union, such practices as well as exclusionary ones are usually prohibited. Unlike Europe, in the U.S. it is legal for a dominant firm to exploit its power on the market, practicing high prices and gaining large profits. In this respect, there are three reasons why the U.S. does not prohibit exploiting practices.

First, it is often difficult to determine whether a firm exercises its power on the market. When it does, it raises prices and reduces output to obtain monopolistic profits. However, it is difficult, even impossible, to determine whether the prices, profits, and output of a firm are monopolistic.

Secondly, it is considered that there must not be barriers against exploitation of power on the market, because companies manage to overcome them by using their dominant power. This is the natural effect of the existence of this power.

Price level, production, and normal profit in a particular branch cannot be determined, and when the price and volume decisions concerning production are taken by the government authorities instead of being governed by market, failures occur in their operation. On the other hand, if prices were set at a level too low, consumers would show a high demand, much greater than the one that could be satisfied at this price level, shortages of goods would appear on the market, and in order to survive firms would need state subsidies. The costs of under/over evaluating a competitive price are extremely high.

The third reason for which in the U.S behaviors of using power on the market are not prohibited, is that if they would be prohibited, in the long run, would appear a series of negative phenomena, more serious than the present use of power on the market.

It is well known that in a market economy prices play a crucial role, showing companies, which markets are not behaving competitive, and hence which markets offer the possibility to obtain profits above normal. Thus, it is considered that, if competition authorities intervene in price signals, limiting the prices a dominant firm can practice, they may actually discourage the entry of new firms, and thus perpetuate the dominant position of companies that practice them. At the same time, they can discourage entrepreneurs to invest in transition economies by increasing it.

The condemnation of dominant position is done only when it is used abusively “by turning to anti-competitive acts, which have as purpose or result in affecting commerce or harm consumers,” as stated in European regulations (Gheorghe, 2011, p.9).

Dominant position is a prerequisite for a trader to exercise abusive practices. Between the dominant position held by the economic operator/operators and abusive practices manifested in their behavior, there is a causal link. In any market there may be a dominant position, this being the result of the competition itself, which makes some stronger than others, which, over time, even disappear from the market. Mergers and concentrations influence the appearance of changes in the structure of the market.

Abusive practices that may be exercised by economic operator/operators under Law no. 21/1996 of Romania are: a. imposing directly or indirectly purchase or selling prices, tariffs or other unfair contract terms and the refuse to deal with certain suppliers or beneficiaries; b. limiting production, distribution or technical development to the detriment of users or consumers; c. applying dissimilar conditions at equivalent transactions to trading partners, thereby causing some of them, a competitive disadvantage; d. conditioning the conclusion of agreement contracts by partners, of some clauses stipulating additional benefits, which have no connection whatsoever with the subject of such contracts, either by their nature, nor according to commercial

usage; e. performing imports without competition of offers and usual technical-commercial negotiating for products and services that determine the general level of prices and tariffs in the economy; f. practicing excessive prices or predatory prices, below costs, in order to eliminate competitors, or selling for export trade at a price below the production costs, by covering differences through imposing increased prices to domestic consumer; g. exploiting the economic dependence estate in which a client or a supplier can be found towards such an operator or operators, and which does not have an alternative solution under equivalent conditions, as well as breaking contractual relations on the sole ground that the partner refuses to comply with certain unjustified trade conditions;

Abusive practices can sometimes be the result of arrangements between operators who hold together a dominant position on the market. An exclusionary behavior is the behavior of a dominant or monopolist firm, which creates or maintains its power on the market by eliminating competitors from a market or limit their ability to compete. The exclusionary behavior may be a unilateral behavior, which is practiced by a single dominant firm, or may involve arrangements between a dominant firm and suppliers, distributors, or customers. Unilateral behavior, which may be exclusionary, includes predatory pricing, refusal to deal or price discrimination.

Agreements, that may be exclusionary, include exclusive business agreements, business arrangement related and vertical restraints imposed by a manufacturer to its distributors, such as maintaining the resale price or exclusive territories.

## **2. CASE STUDY ON THE ABUSE OF DOMINANT POSITION OF THE VODAFONE AND ORANGE COMPANIES ON THE MOBILE SERVICES MARKET**

Abuse of dominant position is a type of competition rules' violation, which implies the existence of two cumulative conditions: the undertaking(s) concerned to hold a dominant position on the market where it manifests such a behavior and, of course to abuse of this advantageous position on the market, to the detriment of other market participants.

Dominant position on a market is not necessarily a result of the market share achieved, but crucial is the extent to which the undertaking or undertakings are able to act independently on the market towards their suppliers, customers and competitors.

However, the national competition law stipulates that until proven otherwise, one or more undertakings are not in a dominant position, provided that the share or shares cumulated on the relevant market do not exceed 40%.

Among the forms of dominant position abuse (regarding either the exclusion from the market of other undertakings, or their economic exploitation by the dominant undertaking) can be found: direct or indirect imposing of unfair sale or purchase price, refusal to deal with certain suppliers or beneficiaries, the practice of excessive pricing or predatory pricing, in order to eliminate competitors.

To illustrate such cases of abuse of dominant position on the current Romanian market, we referred in this case study at a very recent case and extensively propagated through the media - mobile network operators- Vodafone and Orange.

Competition Council decided on 14<sup>th</sup> of March 2011 to amend the operators on the mobile network market - Orange and Vodafone - with 63.1 million Euros for abuse of dominant position, after an investigation started in 2006 at the request of the alternative provider of fixed telephony Netmaster Communications. Orange and Vodafone were fined with 3% of turnover in 2010, i.e. 34.8 million Euros and 28.3 million Euros.

This case was given extent media coverage, because in a top of penalties for abuse of dominant position, performed by the Competition Council, Vodafone and Orange occupy the first position.

According to the Competition Council, fine was given in a context where both Orange and Vodafone were obliged to grant Netmaster access to their networks for call termination and to comply with regulations of the authority in the field, including the one concerning the maximum charge for those services (regardless of their initial place, outside or inside Romania). The analysis of Competition Council showed that, until January 1<sup>st</sup>, 2007, Vodafone and Orange have set higher tariffs for the service of call termination for calls performed internationally, without taking into account regulations in the field, which set a maximum tariff that should have been respected. According to the Council, if Vodafone and Orange would have granted Netmaster access to the maximum tariff regulated, as provided by the non-discrimination obligation, they should have applied the same tariff to all operators requesting this service, including to those with who they concluded contracts. At the same time, the two companies did not grant Netmaster access to their telephone networks for the termination of calls originated internationally and those originated in the networks of other providers in Romania, for a period of one year and a half in Vodafone network and two years and four months in Orange network. Furthermore, for a short period of time, the two companies have limited the termination of national calls coming from Netmaster network.

In 2006, Netmaster Communications Company filed a complaint with the Competition Council against Orange, Vodafone and Romtelecom operators, accusing them of anti-competitive practices in terms of interconnection obligations. Netmaster Communications accused the refusal of two operators - Vodafone and Orange to provide access to their networks.

In the period of 2004-2006, Orange and Vodafone have blocked the access to their networks for the alternative provider of fixed telephony Netmaster Communications. Practically, Netmaster Communications users' could not call the users of the two large operators. The investigation established that in this period, Orange and Vodafone have charged an interconnection tariff higher than the one regulated by the regulation authority in the field of communications.

Thus, in that period, the regulated tariff was 10 cents/minute, while Orange and Vodafone were practicing interconnection rates of 15-18 cents/minute. More specifically, it is about interconnection rates charged for international calls. On this issue, the two operators have litigated with the regulation authority in the field of communications, and at the end of 2006 – beginning of 2007, a Court decision ruled in the favor of this institution. As a result, the two operators have corrected their behavior on the market.

The complaint made by Netmaster Communications Ltd. in 2006 was pointing not only the behavior of Orange and Vodafone operators, but also a possible abuse of Romtelecom by refusing to grant access to its network for the complainant, the fix telephony operator. Consequently, the Competition Council opened three investigations.

This investigation was initiated following the complaint submitted by Netmaster Communications. However, the Competition Council decided to initiate the second legal proceedings *ex officio*, targeting possible anti-competitive practices of the major mobile operators in Romania - Orange, Vodafone and Cosmote. During these investigations, the Competition Council carried out unforeseen inspections at the premises of the three telephony operators and of some distributors of prepaid mobile products.

During the investigations started in 2006, and following some complaints made by SC Netmaster Communications Ltd., the competition authority found that the two telephony companies refused to grant Netmaster Company access to their telephony networks for international and national call termination routed by this operator. Netmaster requested interconnection at the tariff regulated by ANCOM, tariff lower than that practiced by Orange and Vodafone.

The interconnection of operators' networks and unassailably the purchase of call termination services give subscribers from different networks the opportunity to call each other. Thus, the implementation of these services involves answering calls coming from, or routed from/through the networks of other operators (Netmaster in this case) and their delivery to the final destination point (end-users of Orange and Vodafone networks). For alternative telephony operators (Netmaster type), these services are essential facilities, in order to enter and operate on the market.

Vodafone and Orange abuses occurred on the markets of call termination services in own telephony networks, markets on which each of these operators hold a monopoly position. Under competition law, in the absence of an objective justification, a refusal is an abuse of dominant position on access market. Orange and Vodafone were not only obliged to grant Netmaster access to their networks for call termination, but also to comply with the regulations of the regulation authority in the field, including that of practicing a maximum tariff for those services (regardless of their initiation point, outside or inside Romania).

The analysis of Competition Council showed that, until 1<sup>st</sup> of January 2007, Vodafone and Orange have set higher tariffs for the service of call termination, for calls performed internationally, without regard to regulations in the field, which set a maximum tariff that should have been respected.

If Vodafone and Orange would have granted Netmaster access to the maximum tariff regulated, as provided by the non-discrimination obligation, they should have applied the same tariff to all operators requesting this service, including to those with who they concluded contracts. The two companies did not grant Netmaster access to their telephone networks for the termination of calls originated internationally and those originated in the networks of other providers in Romania, for a period of one year and a half in Vodafone network and two years and four months in Orange network. Furthermore, for a short period of time, the two companies have limited the

termination of national calls coming from Netmaster network, according to the competition authority.

Additional revenues obtained by the two companies in this market represent, in fact, additional costs of operators who have terminated calls in Vodafone and Orange networks. This translates into paying higher prices by final consumers.

Therefore, after approximately 5 years of investigation, this year the Competition Council decided to fine the mobile network market - Orange and Vodafone - with 63.1 million Euros for abuse of dominant position, following an investigation started in 2006 at the request of the alternative provider of fixed telephony Netmaster Communications. Orange and Vodafone were fined with 3% of turnover in 2010, i.e. 34.8 million Euros and 28.3 million Euros.

Orange and Vodafone have expressed their surprise towards the decision of the Competition Council, and announced they would appeal the decision in Court.

Typically, over 95% of such decisions issued by the Competition Council are appealed in Court. Companies first appeal for the remission of the penalty and then follows the trial on the merits, i.e. appealing the decision of the Court.

According to the latest changes brought to competition law, decisions issued by the Competition Council can be brought before administrative Court at Bucharest Court of Appeal within 30 days of communication. The Court may order, upon request, the remission of the decision appealed. The remission will be ordered only upon payment of a bond in the amount of 30% of the fine set by the appealed decision. If the Court decides not to remit the fine, the company shall be obliged to pay the full fine and the trial continues. If the Court decides to remit the fines, Orange and Vodafone will be required to pay in advance 30% of their amount.

### **3. CONCLUSIONS**

One of the major economic concerns in EU countries is to ensure adequate competition, which contributes to improving the design and quality of products and services, to maintain fair prices and to secure purchase facilities, as well as the global development of commerce within the European single market. In the context of such a competitive pressure, companies must continually develop innovative strategies and a continuous diversification of activity deployed, products offered, prices and information necessary for the dialogue with consumers.

In the context of the Romanian economy integration into the European Union, Romania has applied methods and instruments, which should lead to the development of the Romanian economy, the strong recovery of production, stimulation of investment, increasing competitiveness, acceleration of the reform process, restructuring and privatization, modernization, to ensure a sustainable macro-stabilization and elimination of fundamental imbalances existing in the economy; at the same time, our country has adopted a series of legislative measures that reflect the principles of market economy, such as legal acts adopted in the field of consumer protection or imposing the conduct of commercial activities in the boundaries of fair competition.

Drastic changes imposed to competition law by Romania's accession to the EU have brought us a clearer definition of fair behavior rules and the defense modalities against anti-competitive practices. Unfortunately, countries even less developed than Romania, apparently have succeeded a more efficient implementation, say the report elaborated by the World Economic Forum in 2007.

By analyzing the example of abuse of dominant position, one of the most extensively propagated through the media and penalized cases in recent years, as well as international reports, we observe that the process of liberalization and normalization of behaviors in the Romanian economy is slow and anfractuoso.

Starting with the perception of the business environment on the flexibility and the efficiency of promoting real competition, the World Economic Forum places Romania on the 67<sup>th</sup> place in the world (of 139 countries, Global Competitiveness Report 2010). Despite our 15 years of experience in regulating anti-competitive practices, legislative reformulations at European standards, of a significant reduction of institutional weaknesses in the last five years, and even despite the positive economic dynamics in recent years, the efficiency of the implementation of competition law proves relatively low.

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## **OVERVIEW OF THE CAAMPL EARLY WARNING SYSTEM IN ROMANIAN BANKING**

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ILIE RĂSCOLEAN\***

**ABSTRACT:** *The uniform bank rating system is a specific instrument for the supervising activity and has its origins in the USA; it has later been borrowed by German, Italian, Great Britain authorities, which use influential components in their banking system; later on, their system was adopted by most central banks within the European Union. In Romania, the uniform bank rating system has been implemented by NBR (the National Bank of Romania) since 2000; the specific components are: the capital adequacy (C), the quality of assets (A), the quality of the stock holding (A), the management (M), profitability (P), liquidities (L) and sensitivity (S) starting from the year 2005. For short, this system is called CAAMPL. The evaluation of these specific elements represents an important criterion for establishing a compound rating, which means assigning scores to each bank. The compound rating for the banking system is established based on economic – financial indicators and prudence indicators.*

**KEY WORDS:** *internal audit; banking risk; uniform bank rating system; CAAMPL.*

**JEL CLASSIFICATION:** *G21; G24; G32.*

### **1. INTRODUCTION**

Banking sector plays an important role in the economic development of a country, a sound and efficient banking system is significant in achieving economic development. Bank failures are considered to have greater adverse effects on the economy than the failure of other types of business firms. Thus, bank failures are viewed to be more damaging than other failures because of a fear that they may spread in domino fashion throughout the banking system, felling solvent as well as insolvent

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banks. In order to prevent the systemic risk and provide stability and viability for the entire banking system, banking authorities developed certain systems of monitoring the activity and the results of banks.

Early warning models in economics and finance have always been of high interest especially after mid-1990s. Hence, the uniform bank rating system is a specific instrument for the supervising activity and has its origins in the USA (Roxin, 1997). Since 1979, banks have been rated using the Uniform Financial Institutions Ratings System (UFIRS), recommended by the Federal Reserve Bank. This system has later been borrowed by German, Italian, Great Britain authorities, which use influential components in their banking system; later on, their system was adopted by most central banks within the European Union. It has proved to be a useful system for countries that use it, being a mathematical model that works with balance sheets and periodic reports supplied by banking institutions to central banks. The only precarious component is the management, which is judged based on figures (Drigă & Dura, 2007).

In Romania, the uniform bank rating system has been implemented by NBR (the National Bank of Romania) since 2000; the specific components evaluated are: capital adequacy (C), quality of assets (A), quality of the stock holding (A), management (M), profitability (P), liquidities (L) and sensitivity to market risk (S) - starting from 2005. For short, this system is referred to with the following acronyms CAAMPL. The evaluation of these specific elements represents an important criterion for establishing a composite rating, which means assigning scores to each bank. The composite rating for the banking system is determined based on financial and prudential indicators. Each component is assigned scores between 1 and 5, where 1 stands for a sound bank in every respect while 5 indicates banks with extremely unsafe and unsound practices, bank failure being highly probable. Banks with a composite 1 rating generally have components rated 1 or 2. If the composite ratings for a bank are 3, 4 or 5, enforcement actions, enhanced monitoring and limitations on expansion are required.

## **2. BANK COMPOSITE RATINGS IN THE ROMANIAN BANKING SYSTEM**

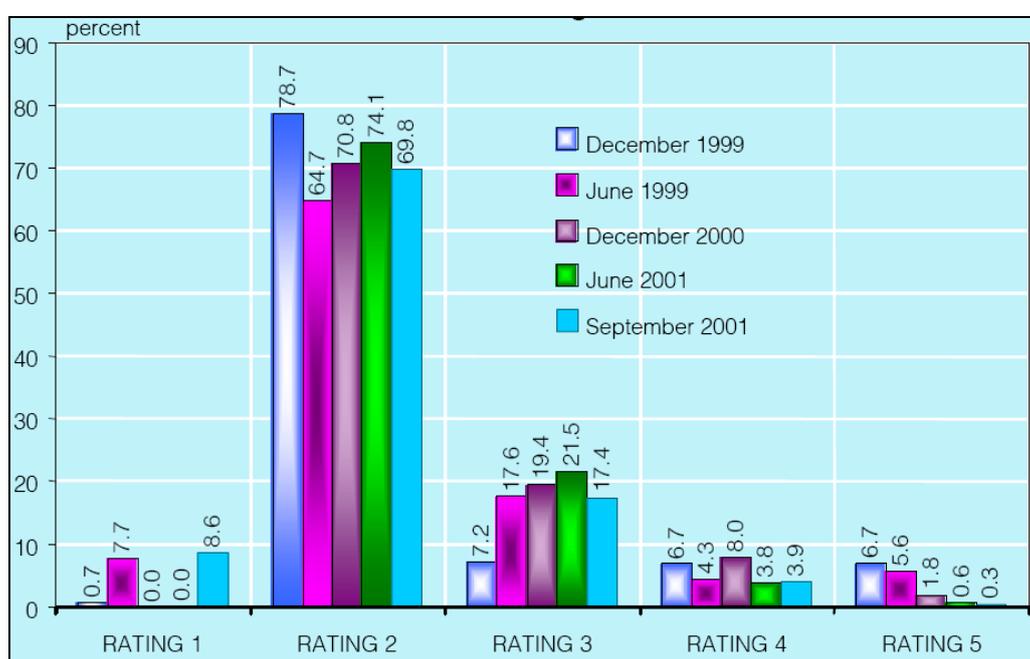
The Uniform Banking Rating System (CAAMPL) is based on the periodical reports sent by banks to the National Bank of Romania (NBR). The methodology used for assessment implies diagnose of banks by assigning certain ratings for every institution. The system allows the separation of the strong banks from those in difficulty, enabling increased attention to those areas that show the greatest vulnerabilities (Dardac & Georgescu, 2011). Thus, it is used as a supervisory tool to find out the overall position of an individual bank so that the NBR can take actions where and when it is necessary.

The NBR uses the Uniform Bank Rating System to rate banks on a scale from 1 to 5, rating 1 representing the best performing banks. The composite rating for a bank is established based on scores assigned to each component. The NBR does not make public the ratings given to every bank, however it presents from time to time the number of the banks which are included in every rating. The analysis takes into

consideration some specific components, such as: capital adequacy, shareholding quality, asset quality, management, profitability and liquidity.

The weight of banks classified by the five composite ratings in total banking assets, during 1999-2001 is presented in figure 1. It is obvious that starting with 1999, the year that marks the process of restructuring for the Romanian banking system, the banking system was polarized on the superior floor of the rating, containing banks rated 2 and 3 (Oprițescu & Iacobescu Manta, 2008).

At the end of December 2001, most banks were assigned rating 2, while the share of 1 and 2 rated banks rose by 12.1%, illustrating a further consolidation of the Romania banking system during 2001.



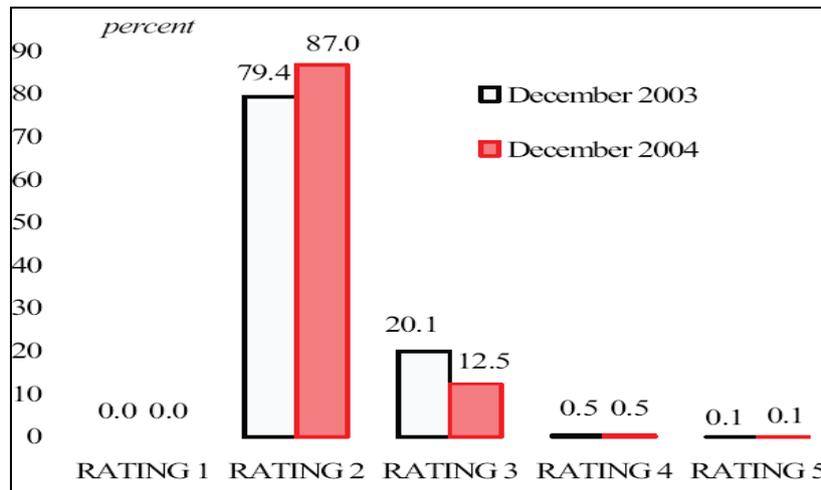
Source: NBR, Presentations and interviews, Recent economic developments, 3 December 2001

**Figure 1. The weight of banks classified by the five composite ratings in total banking assets, during 1999-2001**

In 2002, in accordance with the criteria set by the NBR within the uniform bank rating system, most entities were highly rated. However, the Bank Surveillance Department within the National Bank of Romania assigned rating 1 only to one bank. Although they formed the majority by the end of 2002, banks rated 2 diminished their share in total bank assets (from 76.4% in 2001 to 62.6% in 2002) in favour of banks rated 3 (from 16% to 19.2% during the same period of time) (NBR Annual Report, 2002).

In 2004, the Romanian banking system strengthened further. According to the uniform bank rating system, almost 90% of banks were able to record the composite 2 rating, but no institution met all requirements imposed by the maximum rating. In

comparison to 2003, major changes could be noticed under ratings 2 and 3, meaning that some banks passed from rating 3 to rating 2; the balance sheet of banks with rating 3 revealed a decrease by 7.7%, continuing to 12.4%, in favour of banks with rating 2 which increased their share to 87% (NBR Annual Report, 2004).



Source: NBR Monthly Bulletin, 1/2005

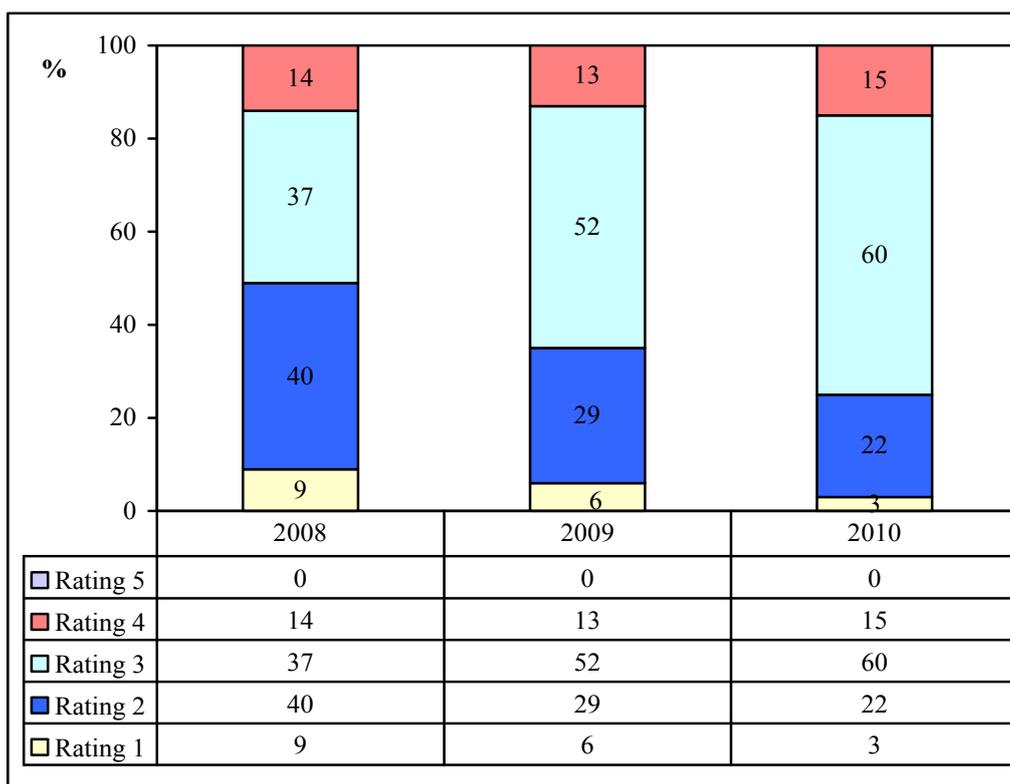
**Figure 2. The weight of banks classified by the five composite ratings in total banking assets, during 2003-2004**

By the end of 2005 there was a shift in the approach used to assess bank management (the M component in the uniform rating system) so that it allows the identification of its capacity to plan, monitor and control banking risks and assess the quality of corporate governance. Furthermore, a new bank rating indicator had been introduced in the uniform bank rating system, namely sensitivity to market risk (S), in accordance with Basel II regulations, represented an important stage in the development of the supervisory strategy. The need to add market risk assessment to the bank-rating system arose from the changes in the Romanian banking system and the supervisory authorities' orientation towards the most advanced world practices in the field (NBR Annual Report, 2005).

Sensitivity to market risk defines the nature of the surveillance activity and shows the bank's reactions towards various systems shocks. Sensitivity has joined the other operational components necessary in the analysis of a bank. In this respect, NBR has not demanded from the financial institutions to complete additional financial reports; the new indicator is used to evaluate, through econometric models, the possibility that a bank should register losses as a consequence of the variation of some shock factors brought about by the decrease of the interest, of the currency, by the liberalization of the stock account. The first step in this direction was taken in 2003, when the International Monetary Fund (IMF) created a soft, which would be used to evaluate the impact of some slight shocks upon the banking system: both the direct

effect and the indirect ones (which are felt by the economic agents, financed by the banking system).

In December 2005, not a single bank fulfilled the requirements imposed for the highest rating. Significant changes occurred under ratings 2 and 3. Thus, the share of assets of 3 rated banks extended by 8.8%, whereas that of assets of 2 rated banks narrowed by 8.6%. Thus, 14 financial institutions record the 3 composite rating, a medium rating level characteristic for 12.5% of bank assets. The last place in the top was held by a 4 rated bank, which held 0.5% of the bank assets, and was under the observation of the National Bank of Romania as far as the shareholding quality is concerned. The lowest composite rating, 5, was recorded by one financial institution representing 0.1% of the total bank assets (NBR Monthly Bulletin 1/2005). This bank had restrictions regarding credit granting and attracting deposits from population. In addition, according to NBR regulations, in case a 5 rated bank is unable to raise more capital, it is very likely to lose its licence. Under these circumstances, the bank should reduce costs, diversify services and widen the range of products. Further more, such an institution should not borrow money from the market and search for cheap alternatives of financial sources.



Source: based on data supplied by NBR

**Figure 3. The weight of Romanian banks classified by the five composite ratings in total banking assets, during 2008-2010**

In the following years, in year-on-year comparison, significant changes occurred concerning ratings 2 and 3. Thus, in 2006 the share of assets of 2-rated banks fell to 74.1% and the share of assets of 3-rated banks increased to 25.3%. In 2007 the shares of assets of 3-rated banks increased (by 11.5%) while the share of assets of 2-rated banks decreased by 11.9%. It should be pointed out that not a single bank was eligible for the top rating (NBR Monthly Bulletin 12/2006 and 12/2007).

Composite ratings for banks have deteriorated in 2009 and 2010, mainly due to lower profits recorded (the profitability of the Romanian banking system entered negative territory as of May 2010). Thus, at the end of 2010, 59% of the banks from the Romanian banking system were included in rating 3, indicating a “mediocre” situation in terms of prudence. In these last two years, a large transfer from rating 2 to rating 3 was registered (Chivu, 2011).

Banks downgrade was driven mainly by issues of profitability. From the 42 active institutions, 25 banks record the composite 3 rating. The share of 3 rated banks rose by 8%, from 52% at the end of 2009 and 37% in December 2008. At the same time, with rating 2 were assigned only 22% of banks (29% in December 2009, and 40% in 2008). As far as 1-rated banks are concerned, at the end of 2010 only 3% fulfilled the requirements imposed for the highest rating, compared to 6% in 2009 and 9% in 2008. In contrast, the share of banks with rating 4 rose last year by nearly three points, to 15%, whereas no bank received the rating 5.

### 3. CASE STUDY

Considering the bank rating and the early warning system elaborated by the Surveillance Department within NBR and the data from the balance sheet and the profit and loss account of a bank, we can characterize the quantifiable CAPL components which help determine the global risk position of the bank for year N and N+1.

#### 1. Capital adequacy (C):

- Solvency ratio

$$Rs_{2N} = \frac{C_p}{A_p} \cdot 100 = \frac{3289988300}{10588892200} \cdot 100 = 31.07\%$$

$$Rs_{2N+1} = \frac{F_p}{A_p} \cdot 100 = \frac{3743910700}{14647675000} \cdot 100 = 25.56\%$$

- Rate of capital

$$Ep_{N+1} = \frac{C_p}{TA} \cdot 100 = \frac{3289988300}{18472482000} \cdot 100 = 17.81\%$$

$$Ep_{N+1} = \frac{C_p}{TA} \cdot 100 = \frac{3743910700}{24489292300} \cdot 100 = 15.29\%$$

- *Capital and joint stock ratio*

$$Cp/Cs_N = \frac{C_p}{C_s} \cdot 100 = \frac{3289988300}{2119692500} \cdot 100 = 155.21\%$$

$$Cp/Cs_{N+1} = \frac{C_p}{C_s} \cdot 100 = \frac{3743910700}{2119692500} \cdot 100 = 176.63\%$$

- *Net patrimony*

$$Pn_N = TA - S_{ai} = 18472482000 - 15182493700 = 3289988300 \text{ RON}$$

$$Pn_{N+1} = TA - S_{ai} = 24489292300 - 20745381600 = 3743910700 \text{ RON}$$

## **2. Asset quality (A):**

- *Credits granted to clients in total assets*

$$Cr_{cl}/TA_N = \frac{Cr_{cl}}{TA} \cdot 100 = \frac{7882238300}{18472482000} \cdot 100 = 42.67\%$$

$$Cr_{cl}/TA_{N+1} = \frac{Cr_{cl}}{TA} \cdot 100 = \frac{10288778000}{24489292300} \cdot 100 = 42.01\%$$

- *Credits granted to clients in total attracted and borrowed sources*

$$Cr_{cl}/S_{aiN} = \frac{Cr_{cl}}{TP - C_p} \cdot 100 = \frac{7882238300}{18472482000 - 3289988300} \cdot 100 = 51.91\%$$

$$Cr_{cl}/S_{aiN+1} = \frac{Cr_{cl}}{TP - C_p} \cdot 100 = \frac{10288778000}{24489292300 - 3743910700} \cdot 100 = 49.60\%$$

- *Deposits and credits at other financial institutions in total assets*

$$Cr_{bc}/TA_N = \frac{Cr_{bc}}{TA} \cdot 100 = \frac{784532100}{18472482000} \cdot 100 = 4.25\%$$

$$Cr_{bc}/TA_{N+1} = \frac{Cr_{bc}}{TA} \cdot 100 = \frac{751640100}{24489292300} \cdot 100 = 3.07\%$$

## **3. Profitability (P):**

- *Return on assets (ROA)*

$$ROA_N = \frac{Pr_n}{TA} \cdot 100 = \frac{274233100}{18472482000} \cdot 100 = 1.48\%$$

$$ROA_{N+1} = \frac{Pr_n}{TA} \cdot 100 = \frac{631423400}{24489292300} \cdot 100 = 2.58\%$$

- *Return on equity (ROE)*

$$ROE_N = \frac{Pr_n}{C_p} \cdot 100 = \frac{274233100}{3289988300} \cdot 100 = 8.34\%$$

$$ROE_{N+1} = \frac{Pr_n}{C_p} \cdot 100 = \frac{631423400}{3743910700} \cdot 100 = 16.87\%$$

- *Rate of profitability of the basic activity*

$$Rrab_N = \frac{V_e - V_p}{Ch_e - Ch_p} \cdot 100 = \frac{1759914900}{1216383100} \cdot 100 = 144.68\%$$

$$Rrab_{N+1} = \frac{V_e - V_p}{Ch_e - Ch_p} \cdot 100 = \frac{2142894000}{1104952300} \cdot 100 = 193.94\%$$

- *Rate of profit*

$$Rpr_N = \frac{Pr_b}{VT} \cdot 100 = \frac{382280100}{1759914900} \cdot 100 = 21.72\%$$

$$Rpr_{N+1} = \frac{Pr_b}{VT} \cdot 100 = \frac{831533600}{2142894000} \cdot 100 = 37.80\%$$

- *Total debt ratio*

$$Ri_N = \frac{S_{ai}}{TP} \cdot 100 = \frac{15182493700}{18472482000} \cdot 100 = 82.19\%$$

$$Ri_{N+1} = \frac{S_{ai}}{TP} \cdot 100 = \frac{20745381600}{24489292300} \cdot 100 = 84.71\%$$

#### **4. Liquidity (L):**

- *Immediate liquidity*

$$Li_N = \frac{D_{bc} + T}{S_{ai}} \cdot 100 = \frac{7805882300}{15182493700} \cdot 100 = 51.41\%$$

$$Li_{N+1} = \frac{D_{bc} + T}{S_{ai}} \cdot 100 = \frac{11292001700}{20745381600} \cdot 100 = 54.43\%$$

- *Credits granted to clients / the clients' deposits*

$$Cr_{cl} / D_{clN} = \frac{Cr_{cl}}{D_{cl}} \cdot 100 = \frac{7882238300}{13953887900} \cdot 100 = 56.50\%$$

$$Cr_{cl} / D_{clN+1} = \frac{Cr_{cl}}{D_{cl}} \cdot 100 = \frac{10288778000}{17597087700} \cdot 100 = 58.50\%$$

**Table 1. Establishing the rating of a bank according to the analysis indicators of the four CAPL quantifiable criteria**

No.	Indicator	Level of indicator (%)		Rating	
		N	N+1	N	N+1
<b>I. Capital adequacy (C)</b>					
1.	Solvency ratio	31.07	25.56	1	1
2.	Rate of capital	17.81	15.29	1	1
3.	Capital and joint stock ratio	155.21	176.63	1	1
<b>II. Asset quality (A)</b>					
1.	Credits granted to clients in total assets	42.67	42.01	1	1
2.	Credits granted to clients in total attracted and borrowed sources	51.91	49.60	1	1
3.	Deposits and credits at other financial institutions in total assets	4.25	3.07	1	1
<b>III. Profitability (P)</b>					
1.	Return on assets	1.48	2.58	4	4
2.	Return on equity	8.34	16.87	2	1
3.	Rate of profit of the basic activity	144.68	193.94	2	1
4.	Rate of profit	21.72	37.8	2	2
<b>IV. Liquidity (L)</b>					
1.	Immediate liquidity ratio	51.41	54.43	1	1
2.	Credits granted to clients / the clients' deposits	56.50	58.50	1	1

*Source: own calculation*

#### 4. CONCLUSIONS

The analysis of the data presented in table 1 proves that, both in year N and N+1, all the quantifiable components of the Uniform Bank Rating System were assigned rating 1, except profitability; this also shows that the bank has a strong capital in comparison with its risk rate, the quality of assets and the credit administration policies are adequate, the identified deficiencies are minor and the exposure to risk regarding capital protection is modest.

Rating 1 for liquidity indicates the fact that the bank has strong liquidities and highly developed fund administration policies. This financial institution has ready access to the necessary sources in order to generate favourable funds for the present and anticipated liquidities.

Ranking 2 for profitability refers to satisfactory income that is considered enough to cover the cost of operations, to maintain the capital adequacy and the allocation levels necessary to ensure the quality of assets, their increase and other factors that affect the quality, the quantity and the trend of the income.

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## **ANALYSIS OF FOREIGN DIRECT INVESTMENTS ENGAGED BY JAPANESE MULTINATIONAL COMPANIES**

**CODRUȚA DURA, OANA DOBRE-BARON \***

**ABSTRACT:** *In recent years, the most visible feature of globalization was the new trend of the capital flow which moves from the stage of internalization to the stage of transnationalization. The decisive factor that led to this development was the transnationalization of production/distribution networks by multinational companies (MNCs). MNCs, which are also frequently referred to as transnational corporations (TNCs), are conglomerate organizations which carry out multiple and diverse economic activities and they consists of a parent company and a large number of subsidiaries operating in various countries of the world.*

*Japan has been worthy of note on the international business scene not only by the high competitiveness of its companies on the global markets, but especially through the transnationalization of the activities of these enterprises, a process which has resulted in the implementation, via Foreign Direct Investments (FDI) of Japanese production units abroad, with significant positive impact both on the global economy and on the domestic economy.*

*A great number of empirical studies since the mid-1990s, using firm-level data, have shown that multinational companies (MNCs) dominate today the Japanese business environment. The paper puts together the findings of some interesting working papers published by Japanese researchers in recent years, trying to provide a scientific answer to the following question: "In what way do FDI undertaken by MNCs influence the level of performances achieved by Japanese companies at home?" The conclusion is that FDI and the activity carried out by Japanese MNCs abroad have indubitable positive effects on both countries and firms involved - such as raises in production, employment and productivity at firms' level or increases in competition intensity among firms, improvements in real wage and welfare at macroeconomic level.*

**KEY WORDS:** *multinational companies (MNCs); foreign direct investments (FDI); inward and outward direct investments; multinational production or oversea production; exports; productivity.*

**JEL CLASSIFICATION:** *F21; F23*

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## **1. INTRODUCTION**

Outstanding economic performances achieved by Japan in the postwar period drew the attention of specialists on the characteristics of the management practiced in this country, but also in other countries of the Pacific Ocean Area which undergo a remarkable economic growth. Although Japan is currently considered to be the symbol of high economic efficiency, the 'locomotive' of the Asian economic system, the expansion of young economies of South Korea, Taiwan, Singapore, Hong Kong is far from passing unnoticed. The four 'dragons' are joined by another group of countries which meet the conditions of a spectacular economic growth: Malaysia, Thailand, China, Vietnam and the Philippines, even though the heterogeneity of national-cultural characteristics of these countries is very well-known.

The investigation of "the miracle of the Japanese economy" is oriented on the growth factors that have turned Japan from the ashes of the last war into the dominant economic power in the world. Of all the countries on the planet, Japan was the most close to annihilation, being the only nation that has ever suffered a nuclear attack. However, the success of the country is not due to circumstances, but especially to the strategies offered in response to these circumstances, strategies that are based on deeply rooted values and practices. If 50 years ago Japan was a country in ruins, and its economy represented 2% of the world economy, with a production inferior to that of Italy in 1980, nowadays Japan turns out 10% of the world production and it surpasses countries such as Germany or the United Kingdom.

Statistics published in late 2010 show that Japan is the third largest economic power in the world (after the United States and China), even if it holds only 0.3% of the land area of the Globe and 3% of the world population. Japan's gross domestic product was, in the year 2010, over 5000 billion dollars, growing about 4% as compared to 2009. Between 1970 and 2010, the value added generated in the economy raised by over 27 times if we take into account the evolution of current prices, and by 180% if we consider the rhythm of growth of the GDP in constant prices at the level of 2005. Moreover, the gross domestic product per capita has increased each year, by 21 times between 1970 and 2010 (from \$ 2,000 to \$ 42,000).

Japan has been worthy of note on the international business scene not only by the high competitiveness of its companies on the global market, but especially through the trans-nationalization of the activities of these enterprises, a process which has resulted in the implementation, via Foreign Direct Investments (FDI) of Japanese production units abroad, with significant positive impact both on the global economy and on the domestic economy. In East and South-East Asia, but also in Europe or the USA, Japan is at the same time, a leading provider of capital and high technology, a market and a model of development which may and must be borrowed by other regions of the world as well.

## **2. MULTINATIONAL COMPANIES FROM JAPAN**

The new economic order which is set at international level is based on the intensification of the activities of multinational companies on global markets.

Multinational corporations (MNCs), also frequently referred to as transnational corporations (TNCs), designate conglomerate organizations which carry out multiple and diverse economic activities and they consists of a parent company and a large number of subsidiaries operating in various countries of the world (Dura, 2007).

Statistical data released by UNCTAD is testimony to the crucial role multinational companies play in the world economy nowadays: in the early 1990s there were 37.000 multinational companies in the world that controlled about 170,000 foreign subsidiaries; the most recent figures show that today there are no more than 82,000 global corporations with 810.000 subsidiaries abroad which include 68 million employees (it represents twice the workforce employed in a country the size of Germany) (UNCTAD, 2009; UNCTAD, 2011). Among the top 100 economic powers of the world, almost 50 are no longer national economies, but MNCs. The top 100 multinational companies hold about 1/6 of the economic activity of the world, and the first 500 run over 2/3 of the world trade. (Sävoiu, et al., 2010).

The emergence of Japanese MNCs in the world economy scene cannot be precisely dated; however, statistics and recent economic developments lead to the conclusion that nowadays they are an unquestionable presence with an important role in the context of globalization of business processes.

Japan has become a global colossus in the **sector of automobile manufacturing**. Japanese cars are renowned for reliability, high quality of components, low purchasing price and low consumption of fuel. The most well-known MNCs who manufacture automobiles or who offer automotive parts and servicing are Toyota, Honda, Nissan, Mazda, Suzuki, Denso, Bridgestone and Aisin Seiki. The most significant Japanese carmaker is Toyota Motor Company. According to the top *Fortune Global 500*, conducted by the prestigious business magazine *Fortune*, for 2010, Toyota Motor Company, holds the 5<sup>th</sup> place in top biggest corporations of the world, with 320,590 employees and revenues of \$ millions 204,106 (eHow Money, 2011).

Japan is an impressive global player in the field of **consumer electronics**. The leading Japanese MNCs from this sector are Panasonic, Sony, Toshiba, Hitachi, Sanyo, Matsushita, Sharp, Mitsubishi and Sumitomo. Japan has also proven an immense capacity for innovation in the **field of computing and associated technologies**. Companies such as Canon, Sony, NEC, Ricoh and Fujitsu are leading brands throughout the world and make the Fortune 500 list of leading multinationals (eHow Money, 2011).

Following the demolition caused by World War Two, Japan underwent a large-scale reconstruction period during which many Japanese **engineering and construction** firms got international fame. The lack of natural resources in Japan and a relatively limited domestic market has determined Japanese companies in this field to enhance innovations and to expand worldwide. Takenaka, Shimizu, Kajima, Obeyashi, Komatsu, Taisei, Nippon Steel and Kobe Steel are among the leading Japanese MNCs in this area, which managed to implement successfully their internationalization strategies (eHow Money, 2011).

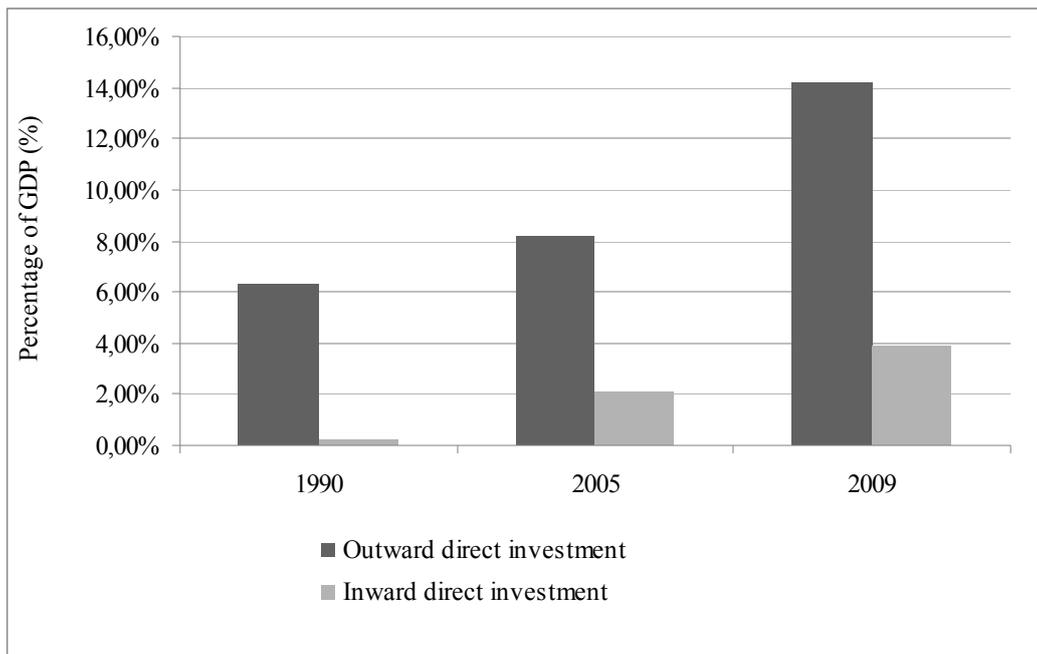
As we have seen, Japanese MNCs emerged in the early 20th century, in particular in the manufacturing field; subsequently they expanded their "tentacles" in

almost all spheres of contemporary economy - trade, services, the finance and banking sector, agriculture etc.

### 3. FOREIGN DIRECT INVESTMENTS BY JAPANESE MNCs

In recent years, emerging economies, including East European countries, are growing at a very fast pace, and Japanese MNCs seek for new markets among them. Between 2001 and 2008, the growing rate of foreign direct investments (FDI) exceeded the export growth. This evolution was in line with sales by Japanese foreign subsidiaries which substantially overtook the volume of Japanese exports. These trends are obvious among competitive sectors, such as electronics and transportation, and among less competitive sectors, such as clothing, food and agriculture (Koji, 2011).

In detail, an analysis of macroeconomic indicators of Japan in recent years shows a tendency to reduce exports, which is compensated by the preference of MNCs over the development of overseas activities by engaging in outward FDI. We can take notice of the transition from export to investments by analyzing figures 1 and 2.

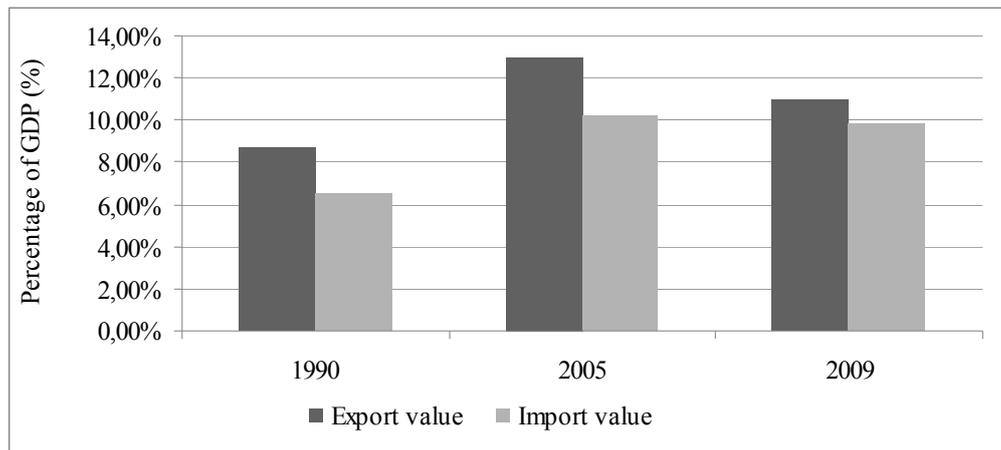


Source: Ministry of Economy, Trade and Industry - White Paper on International Economy and Trade - Summary, 2011

**Figure 1. Changes in inward/outward direct investment**

When comparing 1990 and 2009, inward/outward direct investment and imports/exports have expanded as a percentage of GDP, indicating that the Japanese economy has reinforced its connections with overseas economies both in terms of investment and trade (Ministry of Economy, Trade and Industry, 2011d).

According to the “*White Paper of International Economy and Trade*” by Ministry of Economy, Trade and Industry (METI), Japanese firms expanded their overseas production ratio (on the basis of all domestic companies in the manufacturing industry) from 3.1% in 1986 to 16.3% in 2005 and 17% in 2009.



(Source: Ministry of Economy, Trade and Industry - *White Paper on International Economy and Trade - Summary, 2011*)

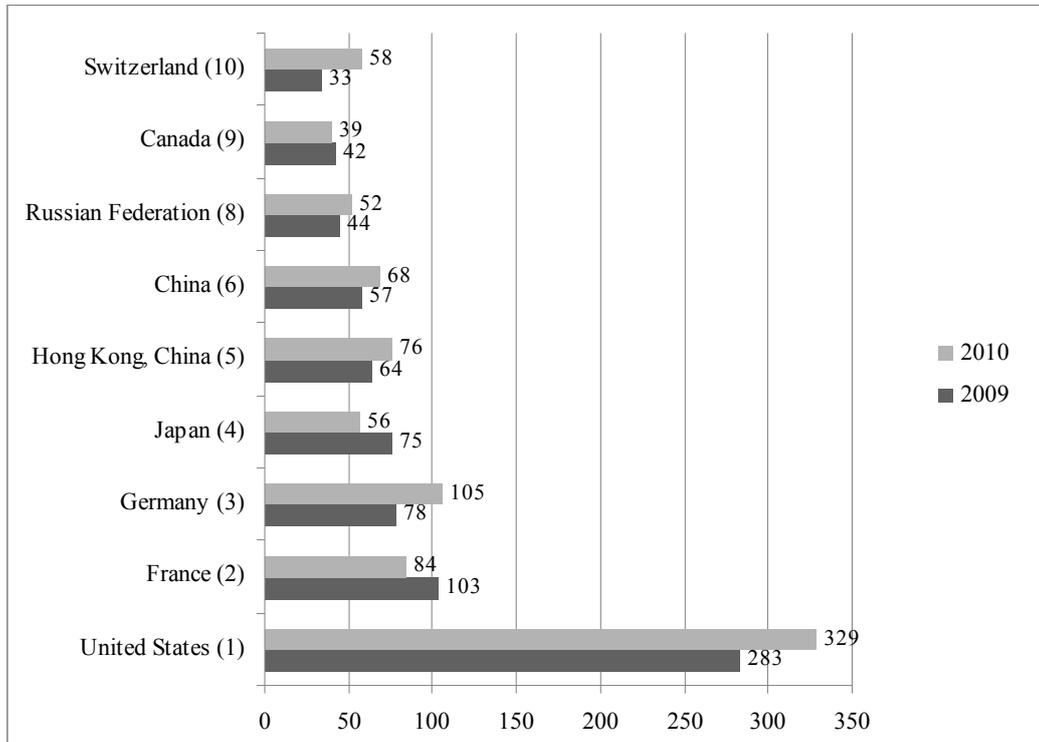
**Figure 2. Changes in imports/exports**

Japan's transition from a simple exporter of products to direct investor in the economies of other countries was due to the appreciation of yuen (which reduced the efficiency of exports and the acquisition of foreign assets became more attractive) and to the increase of wages of Japanese employees which led to reorientation of Japanese investors to countries with low-wage labour force (particularly ASEAN). High dependence on raw materials have prompted some analysts to draw the attention on the danger of de-locating investment, which would have transformed Japan into a very vulnerable country, together with the transfer of value added abroad. However, the restrictions of supplies and the pressures which acted towards increasing production costs made Japanese companies expand operations abroad.

Forecasts on the future development of MNCs in Japan are, of course, closely related to the trends presented at global and regional levels in terms of foreign direct investment flows. In 2010, Japan ranks 4th worldwide among the first 10 States generating FDI outflows, with a volume of investments, going down from \$ 75 billions in 2009 to \$ 56 billions in 2010 - figure 3.

Japanese MNCs have been increasing their foreign acquisitions, taking advantage of the price cuts of target firms caused by the global crisis and the economic slowdown. Between 2008 and 2009, the Japanese corporate sector was still in a relatively stable and robust position in terms of cash and a healthy debt-to-equity ratio. The value of cross-border M&As by Japanese companies in 2008 reached the record value of \$54 billion. These large cross-border investments have brought Japan into the group of countries with the largest outflows of FDI. Despite the devastating earthquake

which caused a negative economic growth ratio in 2011, many Japanese MNCs achieve profits and even in the aftermath of the cataclysm, they continue to invest abroad very large amounts of money (UNCTAD, 2009).



Source: UNCTAD, *World Investment Report, 2010*

**Figure 3. Global FDI outflows, Top 10 Economies, 2009 and 2010 (Billions of Dollars)**

An interesting avenue of research supplied by many recent articles from the specialized literature addresses the issue of FDI growing trend and its significant impact upon domestic performances achieved by Japanese firms. Given the substantial body of empirical work analyzing this subject, the next paragraph will take a closer look at the effects brought about by the strategy of Japanese MNCs' expansion overseas.

#### **4. THE EFFECTS OF MULTINATIONAL PRODUCTION ON DOMESTIC PERFORMANCE**

The issue of investigating the casual effects of multinational production abroad in the home country has received a great deal of concern in the literature on international business, but so far it has received limited attention in the context of multinationals (Hijzen, et al., 2007). However, the empirical studies on international

trade, carried out at the firm level, have substantiated that firms undertaking FDI or engaging in exports are generally larger and more productive than firms aiming to serve only the domestic market (Bernard, et al., 2003; Bernard, et al., 2007; Tomiura, 2007; Eaton, et al., 2008; Matsuura, et al., 2008; Inui, 2009; Koji, 2011 among many others). These results have confirmed the theoretical predictions based on heterogenous-firm trade models, especially those of Melitz (2003) and Helpman, Melitz and Yeaple (2004) according to which only productive companies can penetrate foreign markets, because this type of companies can bear high costs associated with export and FDI.

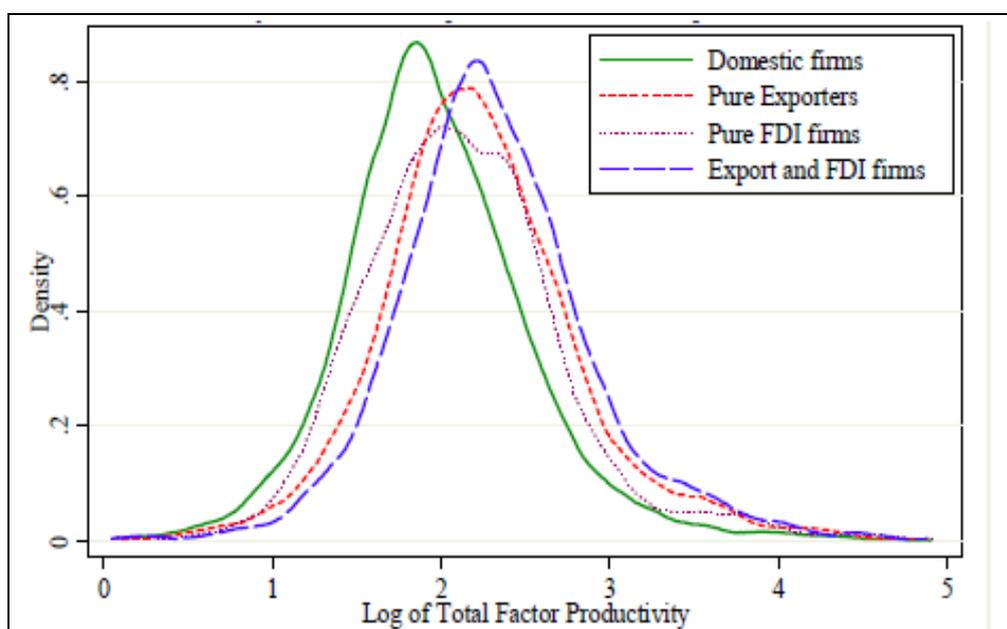
Empirical studies conducted in Japan regarding the impact of productivity upon the internalization of companies, led to the delimitation of four different categories of Japanese companies in relation to the distribution of the logarithm of total factor productivity (TFP): those serving only the domestic market ("domestic firms"), those engaging in exports, but not in FDI ("pure exporters"), those undertaking FDI but not exports ("pure FDI firms"), and those engaging in both ("export and FDI firms").

On average, firms that serve only the domestic market are less productive than exporters and FDI firms (see figure 4), but it has been demonstrated that the distribution of the four categories of firms overlaps which each other to a great extent (Todo, 2009). In other words, there is a series of highly productive Japanese companies which doesn't operate on foreign markets, but, at the same time there are unproductive companies which are engaged in exports and FDI abroad.

Similar conclusions have resulted after studies undertaken by Bernard, Eaton and Kortum, (2003), Mayer and Ottaviano respectively, regarding domestic firms and multinationals from USA and Belgium. According to Todo Yasuyuki, this evidence suggests that productivity plays a statistically significant but quantitatively limited role in determining firm's internationalization (Todo, 2009).

In the paper "*Quantitative Evaluation of Determinants of Export and FDI: Firm - level evidence from Japan*", the above mentioned author identifies a series of other factors which, besides productivity have a decisive impact upon the decision of conducting FDI or exports: the size of the firm, the information spillovers from experienced neighboring firms in the same industry, the status of the firm on internalization in the previous year and unobserved firm characteristics. According to Todo, from quantitative point of view, the relevant determinants of export and FDI decision are the last two factors mentioned above. The paper also puts forward the conclusion that entry costs to foreign markets play a decisive role in export and FDI decision and that those costs substantially vary in size across firms (Todo, 2009).

If studies carried out by researchers from Japan and not only, showed that productivity is one of the factors that make a company become a multinational corporation by undertaking FDI or by carrying out intense export activities on foreign markets, we can ask the question, as a matter of course, if the mutual relationship between the multinational production and productivity can be demonstrated. Therefore, the impact of FDI and multinational production upon national economies have received great concerns from of Japanese specialists (Hijzen, et al., 2007; Matsuura, et al., 2008; Inui, 2009).



Source: Wakasugi, R.; Sato, H.; Matsuura, T.; Tanaka, A.; Todo, Y.; Nishikoda, S., Ito, B., 2008, *The Internationalization of Japanese Firms: New Findings Based on Firm - Level Data*, RIETI Discussion Paper Series 08-E-036

**Figure 4. Productivity distribution of Japanese FDI firms and exporters (TFP), 2005**

Although there are no conclusive results showing that exports and foreign direct investment increase productivity, each of these studies were completed with the conclusion that overall overseas operation has a significant impact on productivity increasing trend of domestic companies. Thus, Matsuura, Motohashi and Hayakawa have analyzed the effects of FDI undertaken by the Japanese electric machine industry on the domestic productivity of the large companies which made those investments (Matsuura, et al., 2008). Being extremely interesting, the research undertaken by the three authors was based on the distinction which must be made between horizontal FDI and vertical FDI. According to the authors, HFDI represents the strategy that relocates the business activities form home country to the country of target market, in order to avoid trade barriers, such as transportation costs. On the other hand, VFDD designates the strategy that moves the industrial facilities to overseas in order to follow up competitive advantages such as low price production factors in the host country. The study was based on data released by the Japanese Ministry of Economy, Trade and Industry and by the Japanese Government and the authors have reached the conclusion that HFDI do not have significant influences on productivity of domestic companies, but VFDD had a significant positive effect on domestic productivity level, as well as on its growth rate.

In their paper *"The Effects of Multinational Production on Domestic Performance: Evidence from Japanese Firms"*, Alexandre Hijzen, Tomohiko Inui and Yasuyuki Todo examines the causal effect of becoming multinational on home

performance for a large panel of Japanese firms between 1995 and 2002. The authors employed matching techniques in combination with a difference-in-difference estimator in order to measure the causal effect of establishing a foreign affiliate on productivity, output and employment. The data employed within the paper were drawn from *The Basic Survey of Business Structure and Activities*, conducted by Ministry of Economy, Trade and Industry. It was found that Japanese outward FDI tends to reinforce the economic activities of Japanese MNCs at home in terms of both output and employment. However, authors cannot prove a significant impact on productivity, but they neither observe any negative effects as some specialists were concerned, due to the so-called "hollowing out" effect associated with the surge in outward FDI. This phenomenon designates the closing down of productive Japanese plants, followed by their relocation elsewhere on the Globe. On the basis of their research work, Hijzen, Inui and Todo stated that, on real markets, there was no such thing as the "hollowing out" effect, at least for the Japanese case.

Most studies from the field of international businesses conducted in Japan in the last twenty years have demonstrated, based on high-reliability and very rich firm-level datasets that are collected by the Japanese Ministry of Economy, Trade and Industry, and also on scientific mathematical and econometric models, that multinational production and the efficiency of domestic activities are strongly related, while the expansion of MNCs is, beyond the fears of some specialists, an advantageous phenomenon for the Japanese economy.

## **5. CONCLUSION**

The study of FDI and MNCs from globalization viewpoint is both challenging and fascinating. As we have already seen, a great number of empirical studies using firm-level data, brought about a substantial progress in the Japanese specialized literature in the past couple of decades, leading towards the development of a new trade theory. This new approach invests MNCs with great interests, as they are envisioned as vectors of outward FDI and accelerators of economic developments at the global level. According to the literature review presented within the paper, the most productive firms undertake FDI, the less productive firms engage in exports, while least productive firms serve only the domestic market. Acknowledging the fact that FDI have indubitable positive effects on both countries and firms involved - such as raises in production, employment and productivity at firms' level or increases in competition intensity among firms, improvements in real wage and welfare at macroeconomic level - it becomes clear that Japanese policymakers should improve opportunities for FDI.

## **6. ACKNOWLEDGEMENT**

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## **INTERACTIONS BETWEEN ORGANIZATIONAL SIZE AND SOME IT FACTORS IN THE CONTEXT OF ERP SUCCESS ASSESSMENT: AN EXPLORATORY INVESTIGATION**

**EDUARD EDELHAUSER, ANDREEA IONICĂ,  
LUCIAN LUPU DIMA \***

**ABSTRACT:** *The study set sights on Romanian organizations which implemented a SIVICO ERP and BI software. The methodology used is both quantitative and qualitative. The research results were obtained with the use of a questionnaire, and our purpose was to demonstrate some hypothesis concerning the size of the organisation, the management method and the IT&C based decision. The questionnaire was operated with SPSS 17, through a linear regression analysis. The research has revealed how the organizational size and the IT factors interaction in the 2010 Romanian organizations. The research has a high level of originality, such a study has been never conducted before for computer based advanced management methods implementation.*

**KEY WORDS:** *enterprise resource planning; business intelligence; industry studies via computer software; hypothesis testing; IT management.*

**JEL CLASSIFICATION:** *C12; M1; L86.*

### **1. SIVICO APPLICATIONS 2011 AN INNOVATIVE SOFTWARE PRODUCT FOR BUSINESS ADMINISTRATION**

The complex IT systems of SIVICO Romania connect companies to a set of resources ordered and related within a system, on several levels: operational, business, management etc. By accessing these tools, the business environment representatives have a global and comprehensive vision on the development of their companies, from general aspects up to the highest degree of customization for each type of company.

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SIVICO Romania solutions address both large companies and multi-national corporations as well as medium enterprises, from various sectors. Facilitating the beneficiaries a higher control of the business processes and relationships between them, these solutions offer economic agents the opportunity to effectively communicate between departments, but also when collaborating with partners, customers or third parties. Choosing to adopt the new IT model proposed by SIVICO Romania, companies from the main economic sectors can synchronize their financial- accounting and budgetary activities with the management of fixed assets and inventory objects, while maintaining also a rigorous control on the stocks and acquisitions and wisely managing human resources. The control and optimization of operational flows provided by the integrated package SIVICO Applications 2011 finally lead to an increase of efficiency and economic performances within the companies. Based on an in-depth analysis of all factors involved in the proper functioning of the economic units, SIVICO Applications 2011 radically changes the discipline of internal operation within the organizations.

SIVICO Applications 2011 runs, currently, at over 550 clients from all sectors of activity, including manufacturing, utilities, banking, transport, telecom, public administration etc. Respecting the requirements of the European IT industry, the ERP system developed by SIVICO Romania significantly contributes to increasing efficiency of business processes and activities, being the open, fully integrated and unitary system that improves the main aspects of resources organization and management - human, material and financial - from different economic structures.

## **2. SIVICO BUSINESS ANALYZER A HIGH PERFORMANCE INFORMATION MANAGEMENT SYSTEM**

Business Intelligence Solutions of SIVICO Romania monitors and correlates all the levels of company activities, positively influencing its performances. Through configuration and specific attributes, our Business Intelligence solutions provide you the ideal tool in drafting of analyses, statistics and reports, extremely useful for business decision making.

SIVICO Business Analyzer (SBA) is a high performance Information Management System, capable to be adapted and customized according to the business particularities of any company. Already a reference product on the Romanian market, SIVICO Business Analyzer has been successful implemented both in the private and public sector. SBA supports the decision making process during the activities of planning monitoring, control, forecast and prognosis, provides information support for the adoption of strategies for cost control and the identification of sources to increase profit, provides synthesis, coherent, consistent and real-time information, represents the requested analyses under the form of graphs and tables in an appealing manner, easy to manage and customize. The online real-time analytical processing technology (OLAP) is one of the newest and most performing technologies in the field of information processing as a support for analysis and economic decision in a competitive environment.

The second application in the field of BI is SIVECO Balanced ScoreCard (SBSC), a software solution for strategic management and a latest generation information product launched on the Romanian market, able to monitor, analyze and compare the organization's performance in order to improve it. Placing the strategy at the centre, the proposed solution provides the beneficiary with relevant information regarding the manner in which the organization is heading towards reaching its strategic objectives. SIVECO Balanced Scorecard is a strategic management software solution implemented with Oracle Express technology aimed at providing primary data and structured information to shareholders and top management, as a real support for the decision-making process within the company.

We exemplified four simulation analysis and models of SBA and SBSC that are useful in the management activity and in the researches very much used by the managers of Romanian enterprises that purchased this type of product. The analysis of the evolution of an indicator allows the representation of the values in the database under the form of diagrams or charts. "What if?" Analysis consists of the possibility to modify the entrance parameters of an indicator and to see how this indicator varies after this modification. One can easily imagine potential situations when this type of analysis would be useful. For example, what happens with costs and profit if there is a certain percentage increase of the salary or power costs? What happens if the number of employees decreases or increases? Or if the value of certain taxes is modified (VAT, income taxes). TOP/BOTTOM Analysis. This analysis enables one to select the most important types of incomes or the most important customers. The existence of this possibility is necessary especially in case the dimensions have many values that cannot be monitored each at large, but you want to monitor the extreme values: the highest ones and the lowest ones. Forecasting is a simulation process in which the forecast values are based on the existing data history and the richer this history is the higher the accuracy of the forecast. In selecting the forecasting method out of the preset one can take into account the linear, exponential or periodic evolution of the indicators. In order to augment its value, the forecast can be used together with "what if?" analysis.

### **3. RESEARCH OVER THE USE OF ERP AND BI SOFTWARE IN ROMANIAN ORGANIZATIONS**

In the virtue of the questionnaire we achieved the results and we were able to formulate and validate hypothesis. Thus we formulated a hypothesis that in the private domain there is a more efficient usage of money than in the public domain and we have reached the conclusion that providing with excessive hardware is not necessarily a useful thing to do, if that hardware is not correlated with the software applications.

Another objective of this study was to test die impacts of contingency factors, including size, on die one hand, and ERP systems success, on the other. We demonstrate that there would be a relationship between firm size and ERP success; the relationship between firm size and ERP success will be moderated by IT assets, such diat success will be higher in larger firms and that the relationship between firm size and ERP success will be moderated by IT resources, such that success will be higher in larger firms. We concentrated on public organizations because we believe the adoption

of ERP systems might be higher there than in private sector organizations. We analyzed our data using SPSS 17.0, and our respective response rates, excluding the unusable questionnaires received, was 14 organizations.

We also used statistical techniques in order to define the differences between the groups, using t test. In order to analyze the statistical connections we used correlation analysis for the intensity of the connections between the variables and regression analysis to estimate the value of a dependent variable (effect) taking into account the values of other independent variables (causes). We carried out a multiple regression analysis in order to identify the effect that the number of employees, the number of de computers as well as the number of computers interconnected in a network has upon the software devices materialized under the form of computers on which an ERP, BI or BSC application is running. Thus there was validated the hypothesis referring to the better efficiency of investing money in the private domain, and also a better correlation between the efficiency of the hardware and employee resources and the implementation of a ERP, BI and BSC in the private domain in comparison to the public one.

### 3.1. Methodology

**Questionnaire, the research instrument.** The study set sights on Romanian organizations which implemented a SIVICO ERP and BI software, and were collected in 2010 year. The instruments used for collecting data were a quantitative questionnaire, an qualitative one and an interview. The research based on the quantitative questionnaire was structured on 27 questions focused on hardware and software endowment (8 questions), implementation of the ERP business software for five business function such as manufacturing, SCM, financial, HRM and CRM (6 questions), other 6 questions were dedicated only to Human Resource Management function and the last 7 questions were dedicated to BI management methods.

**Table 1. ERP instruments implementation**

Organizatia	MP	MFC	MCG	MAD	MRU	MS	MIX_ERP
ANR Drobeta Turnu Severin	0	1	0	1	1	1	0,67
Aeropotul Timisoara	0	1	0	0	1	1	0,50
ANIF Dunare Olt	0	1	0	0	1	1	0,50
Hidroserv Hateg	0	1	1	1	1	1	0,83
Hidroserv Severin	0	1	1	1	1	1	0,83
SE Braila	0	1	1	1	0	1	0,67
SE Mures	0	1	1	1	1	1	0,83
CET Brasov	0	1	0	1	0	0	0,33
Apa Serv Valea Jiului	0	1	1	1	1	1	0,83
Aerostar Bacau	1	1	1	1	1	1	1,00
Meva Severin	1	1	1	1	1	1	1,00
Romvag Caracal	1	1	1	1	1	1	1,00
Cam Serv	0	1	0	1	0	1	0,50

**Respondents.** Even data were collected only from 14 organizations, these are representative for the 2010 Romanian economy, because in this economical moment Romania has only 5,000 companies that need an ERP and a BI software instrument as a advanced management method. So we have only 2,000 big companies having more than 250 employees which can afford to implement a SAP, Oracle or SIVICO ERP software. But these 2,000 companies generate incomes two times higher

than the other 10,000 SMB, and equal those of the 500,000 small Romanian companies, that have under 50 employees. From these 2,000 big organizations most of them are branches from transnational companies, and have mostly implemented ERP existing in their main organization, usually SAP or Oracle. So, are likely to be investigated public organizations and private Romanian capital organizations. These two categories have a hundred percent Romanian management, and had to optimize it. The data were collected during January and June 2010, with the help of Sorin Dimofte Implementing and Consultancy Manager of SIVECO Romania.

**Table 2. ERP & BI instruments implementation**

Organizatia	BI_SBA	BI_SBSC	BI_Query	BI_Rapoarte	BI_OLAP	BI_Excel	BI_Etc	MIX_ERP+BI
ANR Drobeta Turnu Severin	1	0	1	1	1	0	0	0,57
Aeropotul Timisoara	1	0	1	1	0	1	1	0,71
ANIF Dunare Olt	0	0	0	1	0	0	0	0,14
Hidroserv Hateg	1	1	1	1	1	1	1	1,00
Hidroserv Severin	1	0	1	1	0	1	0	0,57
SE Braila	1	0	1	1	0	1	0	0,57
CET Brasov	0	0	1	1	0	0	1	0,43
Apa Serv Valea Jiului	1	0	1	1	1	1	1	0,86
Aerostar Bacau	1	0	0	1	0	1	0	0,43
Meva Severin	1	0	0	1	0	0	0	0,29
Romvag Caracal	1	0	1	1	0	1	0	0,57

**Table 3. BI instruments implementation**

Organizatia	SBA_Scenarii	SBA_Previziune	SBA_What_If	SBA_Drill_Up	MIX_BI
ANR Drobeta Turnu Severin	0	0	0	0	0
Aeropotul Timisoara	0	1	0	0	0,25
ANIF Dunare Olt	1	1	1	0	0,75
Hidroserv Hateg	1	1	1	1	1
Hidroserv Severin	1	0	0	1	0,5
SE Braila	1	1	1	1	1
CET Brasov	0	0	0	0	0
Apa Serv Valea Jiului	1	0	0	0	0,25
Aerostar Bacau	0	0	0	1	0,25
Meva Severin	1	1	0	1	0,75
Romvag Caracal	1	1	0	1	0,75

**Table 4. Raw data collected through the questionnaire, used as variable for testing the hypothesis**

	organizatia	proprietate	personal	calculatoare	ERP_BI	BI	ERP
1	ANR Drobeta Turnu Severin	0	146	25	0,57	0,00	0,67
2	Aeropotul Timisoara	0	245	66	0,71	0,25	0,50
3	ANIF Dunare Olt	0	647	100	0,14	0,75	0,50
4	Hidroserv Hateg	0	185	74	1,00	1,00	0,83
5	Hidroserv Severin	0	520	117	0,57	0,50	0,83
6	SE Braila	0	350	77	0,57	1,00	0,67
7	SE Mures	0	370	90	0,00	0,00	0,83
8	CET Brasov	0	790	185	0,43	0,00	0,33
9	Apa Serv Valea Jiului	0	527	85	0,86	0,25	0,83
10	Aerostar Bacau	1	1679	400	0,43	0,25	1,00
11	Meva Severin	1	1071	121	0,29	0,75	1,00
12	Romvag Caracal	1	1754	110	0,57	0,75	1,00
13	Cam Serv	1	205	34	0,00	0,00	0,50

Table 5. t-test for Equality of Means

		Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper	
personal	Equal variances assumed	8,450	,014	-3,017	11	,012	-757,250	251,003	-1309,704	-204,796	
	Equal variances not assumed			-2,071	3,248	,123	-757,250	365,603	-1872,010	357,510	
calculatoare	Equal variances assumed	7,796	,018	-1,366	11	,199	-75,250	55,087	-196,495	45,995	
	Equal variances not assumed			-,922	3,197	,420	-75,250	81,577	-326,039	175,539	
ERP	Equal variances assumed	,377	,561	-1,699	11	,117	-,20944	,12330	-,48083	,06194	
	Equal variances not assumed			-1,502	4,548	,199	-,20944	,13947	-,57897	,16008	
BI	Equal variances assumed	,162	,695	-,086	11	,933	-,02083	,24288	-,56540	,51373	
	Equal variances not assumed			-,089	6,433	,931	-,02083	,23292	-,58161	,53995	
ERP_BI	Equal variances assumed	,242	,633	1,213	11	,250	,21825	,17990	-,17770	,61421	
	Equal variances not assumed			1,351	7,605	,215	,21825	,16153	-,15764	,59415	

### 3.2. Results

**Research Hypothesis. H01** The number of employees in an organization influences the role of the ERP applications within the respective organizations. The organization dimension is directly connected with the role of the ERP applications within the respective organization.

**Testing the Hypothesis.** We used regression analysis, as a statistical method to evaluate the relation between one independent variable (personal - size of organization) and another continuous dependent variable (ERP\_BI given to the ERP and BI level of implementation). With this analysis tool we have performed a linear regression analysis using the method of the least square in order to plot a line by a set of observations. Thus we have performed the analysis of the dependence and we have appreciated the extent to which the independent variable influences the dependent.

Table 6. Linear regression analysis between an independent variable called personal and a dependent variable called ERP\_BI for private cases (proprietate=1)

ANOVA <sup>a,c</sup>						Model Summary				
Model		Sum of Squares	df	Mean Square	F	Sig.	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	Regression	,172	1	,172	49,352	,020 <sup>a</sup>	,980 <sup>a</sup>	,961	,942	,05897
	Residual	,007	2	,003						
	Total	,179	3							

a. Predictors: (Constant), personal  
b. Dependent Variable: ERP\_BI  
c. Selecting only cases for which proprietate = 1

a. Predictors: (Constant), personal

With linear regression we output the regression coefficients necessary to predict one variable ERP\_BI from the other personal. The model has been confirmed to be valid because the F test value were 49.35, with significant sig. <0.05 (0.02). The regression coefficient R=0,980 shows a very strong link between the variable ERP\_BI given to the ERP and BI level of implementation and the independent variable personal showing the size of the organization, for the private sector. The model explains 96.1% from the total variation of the variable personal (R2 = 0.961). The rest of 3.9% is influenced by other residual factors not included in the model (Table 6). In conclusion, hypothesis H01 has been confirmed.

But in BI methods we found a weak link (R = 0.167) and also for the private sector we found R = 0.593 < 0.63. This regression coefficient R = 0.593 shows an intermediate link in these case (Table 7).

**Table 7. Linear regression analysis between an independent variable called personal and a dependent variable called BI for private cases (proprietate=1)**

ANOVA <sup>b,c</sup>						Model Summary					
Model		Sum of Squares	df	Mean Square	F	Sig.	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	Regression	,148	1	,148	1,086	,407 <sup>a</sup>	1	,593 <sup>a</sup>	,352	,028	,36973
	Residual	,273	2	,137							
	Total	,422	3								

a. Predictors: (Constant), personal  
 b. Dependent Variable: BI  
 c. Selecting only cases for which proprietate = 1

**Table 8. Linear regression analysis between an independent variable called personal and a dependent variable called ERP for private cases (proprietate=1)**

ANOVA <sup>b,c</sup>						Model Summary					
Model		Sum of Squares	df	Mean Square	F	Sig.	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	Regression	,153	1	,153	8,984	,096 <sup>a</sup>	1	,904 <sup>a</sup>	,818	,727	,13066
	Residual	,034	2	,017							
	Total	,188	3								

a. Predictors: (Constant), personal  
 b. Dependent Variable: ERP  
 c. Selecting only cases for which proprietate = 1

**Table 9. Linear regression analysis between an independent variable called personal and a dependent variable called ERP**

Model Summary					ANOVA <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Model	Sum of Squares	df	Mean Square	F	Sig.
1	,543 <sup>a</sup>	,295	,231	,19351	1	,173	1	,173	4,611	,055 <sup>a</sup>
						,412	11	,037		
						,585	12			

a. Predictors: (Constant), personal  
 b. Dependent Variable: ERP

**Table 10. Linear regression analysis between an independent variable called personal and a dependent variable called calculators**

Model Summary					ANOVA <sup>b</sup>						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Model	Sum of Squares	df	Mean Square	F	Sig.	
1	,718 <sup>a</sup>	,516	,472	68,979	1	Regression	55779,255	1	55779,255	11,723	,006 <sup>a</sup>
						Residual	52338,437	11	4758,040		
						Total	108117,692	12			

a. Predictors: (Constant), personal  
b. Dependent Variable: calculatoare

#### 4. CONCLUDING REMARKS

For hypothesis H01 we have found out that only the dimension off the organization and the number of installed computers are of equal average according to the type of property (independent samples t test); There is also a good link between the above mentioned characteristics. One the other hand concerning the role played by the ERP applications, in the private sector, considered by us more performing, their isn't a strong link between dimension and the role of the ERP applications, although the correlate coefficient is good. When using advanced methods, of BI type, and analyzing their effect on organizations management the situation is discouraging as there is no good connection even in the private sector, but on the other hand there is an strong link between dimension and the implementation of the ERP an BI mix in private organizations. Therefore the hypothesis is only partial confirmed.

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## INNOVATION PROCESS MODELLING

**JANUSZ K. GRABARA, ANETA PACHURA,  
VLADIMIR MODRAK, MIRCEA BUNACIU\***

**ABSTRACT:** *Modelling phenomena in accordance with the structural approach enables one to simplify the observed relations and to present the classification grounds. An example may be a model of organisational structure identifying the logical relations between particular units and presenting the division of authority, work.*

**KEY WORDS:** *innovation; modelling; economic development.*

**JEL CLASSIFICATION:** *O31; O33.*

### 1. INTRODUCTION

The competitive advantage is the result of full adaptation actions for the changing demands of external and internal environments. It may be assumed that the process of shaping the basic success factors is determined by corporate activity in research and development, production, distribution and customer service. Integration of these actions demands constant market analyses as well as flexibility and organisational efficiency.

The process of constant change is the success factor in reaching the desired speed of products, processes and organisations development and thus in improving corporate potential (technical, organizational, informational, economic and social). Modelling phenomena in accordance with the structural approach enables one to simplify the observed relations and to present the classification grounds. An example may be a model of organisational structure identifying the logical relations between particular units and presenting the division of authority, work, etc.

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Functional modelling is widely applied in organisation and management as it offers the possibility to present phenomena in a way facilitating their evaluation on the basis of the data introduced to the model.

## **2. INNOVATION PROCESS**

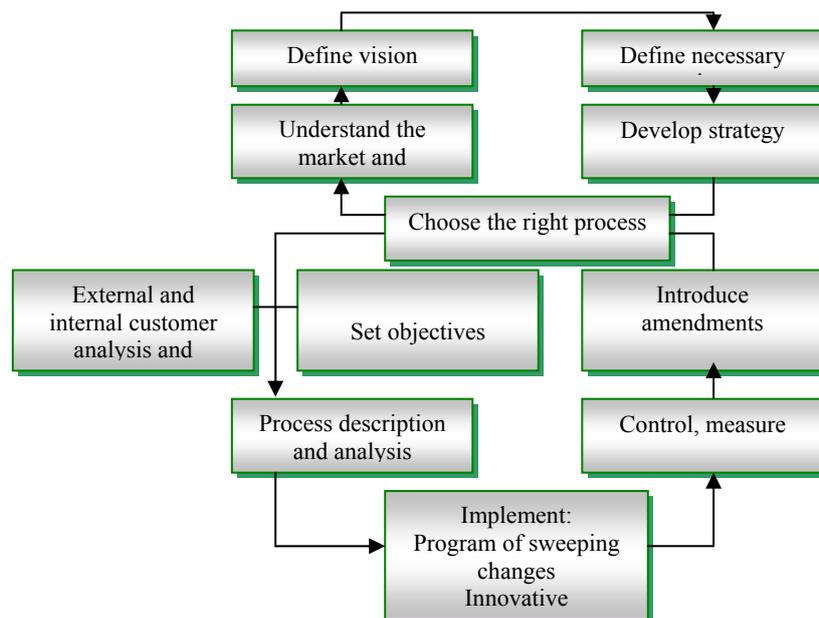
The problem of technological innovations has not been considered a priority by the classic theorists (Okoń-Horodyńska, 2002, pp.37-38). Due to the fact, no special importance is ascribed to the innovation development theory, in spite of the fact that Smith, Ricardo, Marks, Marshall, Keyns and Solow are almost unanimous, stating that long-term efficiency growth is inextricably related with introduction and diffusion of technological and organisational innovations. Joseph Schumpeter has stressed the role of innovation by pointing to the special interdependence between economic development and innovation development observed in the process of qualitative and quantitative application of innovations in business practice. However, the neoclassical theory does not identify any special role of innovation development, as it focuses on removing market imperfections and return of price and wage flexibility (Okoń-Horodyńska, 2002, p.39). Subsequent development of institutionalism has resulted in research on the existence, power and character of the correlation between economic development and innovation development. Interest in the process of learning in the light of economic results has changed the perception of the role of innovation. This approach has enabled deep understanding of the sources and determinants of technological changes, thus enriching the classical approach focused on the impact of technology on economy (Okoń-Horodyńska, 2002, p.41). Since that time, innovations have been considered to have major importance on socio – economic development. Researchers are now of the opinion that economy development does not depend on material, capital or human resources but mostly on modern technologies (Sollov, 1988, p.315).

Nowadays, research and development lay at the basis of economic power and social welfare (Mujżel, 1997, p.234). Innovative activity, especially in the field of goods and technology, may be considered a must in the global market conditions. Increased instability of the external environment influences the number and frequency of scientific and technical discoveries.

Moreover, innovation is considered a special business tool, applied in order to introduce new business solutions or new services (Durlík, 1998b, p.16).

Today, innovation is understood as: introduction of new products or improvement of the already offered ones; introduction of new implementation methods or improvement of business processes (primary, auxiliary and management); introduction or improvement of a production system, including the production and management subsystems; introduction of a new organisational structure or improvement of the already existing one, with special stress put on hierarchical relations and dependencies in the sphere of information, competence, responsibility and decisions; introduction of new organisational and management culture or improving the already existing one.

It is commonly believed that the character and intensity of the process of implementing innovations in the field of goods, processes or organisational structure depend on both corporate research and development initiatives and on transfer of technology and know-how from the external environment of the particular organisation. The complexity of business processes, focused primarily on managing knowledge, information, technology, staff, finance and marketing, results in the fact that contemporary companies notice the necessity to transform the present business priority sectors (Figure 1).



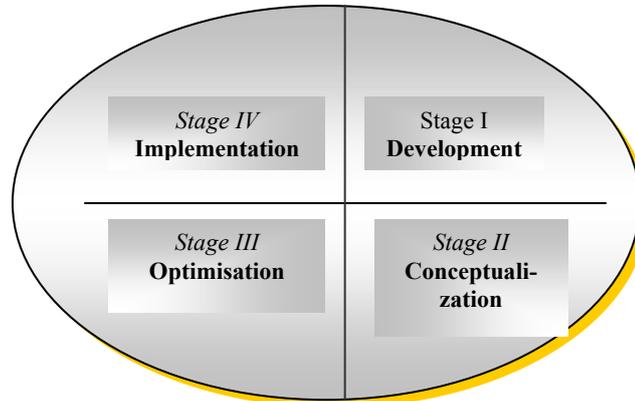
Source: Adair Ch.B., Murray B.A., *Breakthrough process redesign: new pathways to customer value*, Wydawnictwo Naukowe PWN, Warszawa 2002, p.40

**Figure 1. Process facilitation model**

One may thus state that management, including change management, applying the total organisational (social, material and financial) potential is the basic development paradigm. Customer value is conditioned by the synergy of process complexity and speed of innovative changes. Thorough reconstruction of processes aiming at restructuring an organisation may be achieved thanks to the application of the process approach and focus on continuous innovation introduction. One-time change aimed at the introduction of a new concept in the process of organisation management is frequently not sufficient to reach the desired objectives and implement strategic goals of a company of the future. Special importance is ascribed to the ability to identify the main processes - *megaprocesses*, taking into account resource limitations and reorganisation possibilities.

It is most frequently observed that changes aimed at development or innovation should prevail in a well-managed enterprise. Innovation introduction is

identified with the process of generating new solutions, conceptualization of projects, their optimisation and implementation (Figure 2). The basic objective of actions undertaken in this respect is better organisation and efficiency of an organisation, especially in the sphere of market service (Penc, 1999).



Source: Basadur M., *The Power of Innovation. How to Make Innovation a Way of Life and Put Creative Solutions to Work*, Pitman Publishing, 1995, p.34

**Figure 2. Stages of innovation development**

Complex approach to innovativeness enables one to compare innovative activity to the search for innovative ideas and solutions covering a complex process originating in research and finding its end in complete implementation of the particular innovation (Jasiński, 1992).

### 3. MODELLING OF INNOVATION PROCESS

Developmental cycle of an innovation, especially its scope, time and efficiency in reaching corporate goals influences directly not only the degree of innovativeness of the goods produced or services rendered but also of the whole company. Contemporary technological progress results in shortening development cycles and thus faster implementation of innovative solutions into business practice.

From the point of view of retrospective analysis, the character of innovation processes has changed considerably, starting from the linear model up to network integration approach. There are five basic generations of innovation process models (Table 1).

In case of the four generations, the innovation process took the form of subsequent linear stages (Generation I / II). In Generation III, interactive relations between different factors (including feedback) were identified. The fourth Generation of the innovation process is a parallel model, taking into account the importance of key suppliers, customers and numerous interdependencies. "For most of the 20<sup>th</sup> century, the 'closed innovation' model worked well – internal R&D focus, product innovation orientation, self-reliance, tight control and generation of own ideas to develop, manufacture, market, distribute and service new products (Davenport, et al., 2006,

p.131). Another, fifth generation of the innovation process is characterised by erosion of the “closed innovation” phenomenon. Networks are created, tests and experiments are very popular in the sphere of new technological and organisational solutions.

**Table 1. Five generation of innovation process models**

Generation		Key features
I / II	1960's +	simple linear models – need pull, technology push
III	1970's +	coupling model, recognizing interaction between different elements and feedback loops between them
IV	1990's +	parallel model, integration within the firm, upstream with key suppliers and downstream with demanding and active customers, emphasis on linkages and alliances
V	2000 +	systems integration and extensive networking, flexible and customized response, continuous experimentation and testing

Source: Davenport T.H., Leibold M., Voelpel S., *Strategic Management in the Innovation Economy. Strategy Approaches and Tools for Dynamic Innovation Capabilities*, WILEY, Germany 2006, p.131

A model is commonly defined as a graphical, mathematic or physical representation of a particular phenomenon or action. In case of organisation and management, a model is a logical construct playing an instrumental role in organisation theory and practice. There may be two approaches distinguished: a structural approach, in which a model is defined as a construct reflecting the real object with the use of abstraction and a functional approach, in which a model is a construct substituting the real, original object in cognitive and empirical operations (Jerzak, 1994, p.140).

Modelling phenomena in accordance with the structural approach enables one to simplify the observed relations and to present the classification grounds. An example may be a model of organisational structure identifying the logical relations between particular units and presenting the division of authority, work, etc.

Functional modelling is widely applied in organisation and management as it offers the possibility to present phenomena in a way facilitating their evaluation on the basis of the data introduced to the model.

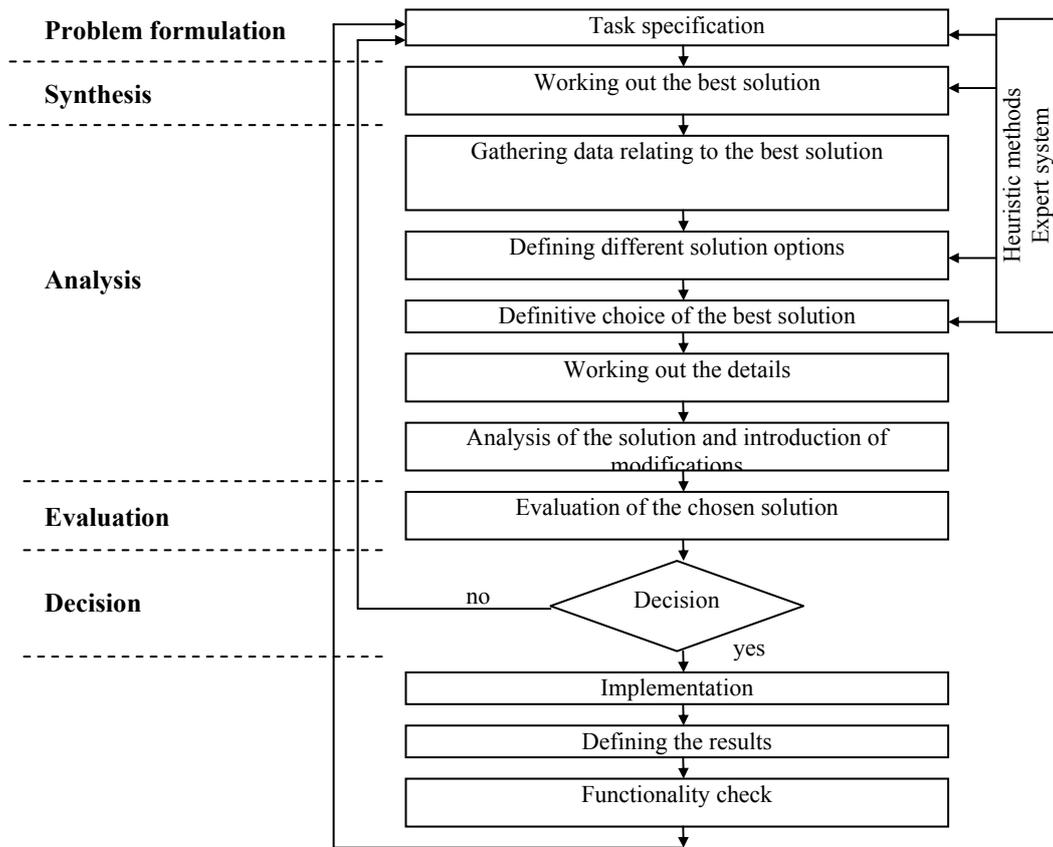
The degree of materialisation of the phenomena presented by a model, understood as a degree to which it reflects reality is most frequently dependent on the character and complexity of the described phenomenon and is a resultant of demands and competences of business entities.

In organisation and management processes, modelling often takes the form of a research procedure characterised by various types of methodology of study. The following models are frequently enumerated among the discussed approaches: G. Nadler's models (Fig. 3), models based on Altszuler's deduction and models developed on the basis of the D. Buschardt's block method.

G. Nadler's method of ideal concept, identical with the IDEALS (Ideal Design of Effective and Logical Systems) concept consists in (Jerzak, 1994, p.141): considering the designed (improved) object as a system whose constituents are: system functions: input and output, sequence of steps between input and output, system

environment, physical catalysts and human beings; application of a design procedure consisting in the search for the ideal solution and idea materialisation during the implementation stage; dependence of the design procedure on the people involved in the process.

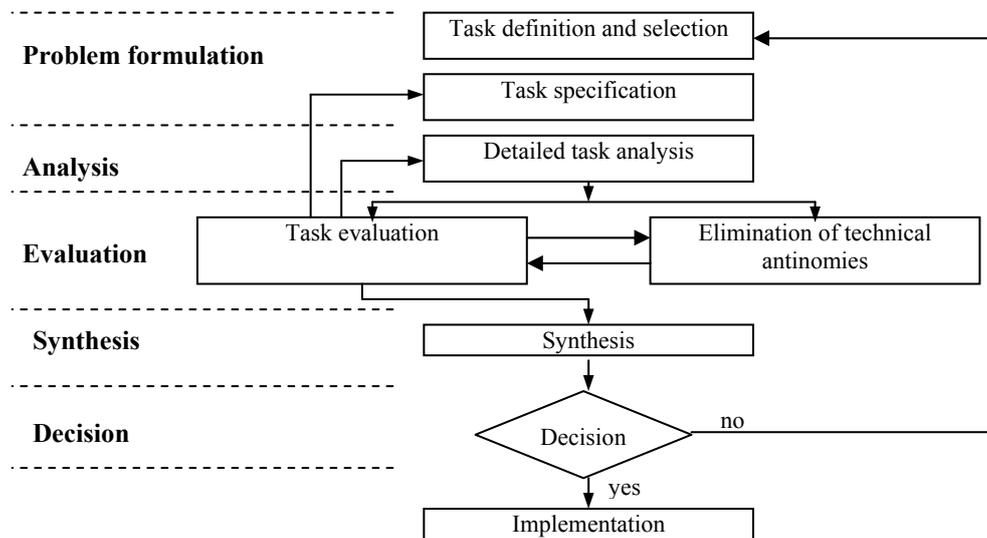
This approach necessitates the adoption of a prognostic strategy in the process of problem solving. The concept of search for the ideal is primarily focused on the synthesis of the best solution, working out the details of the one to be implemented and search for possible implementation problems (Figure 3).



Source: Durlik I., *Restructuring Business Processes. Reengineering, Theory and Practice*, Agencja Wydawnicza Placet, Warszawa 1998, p. 96.

**Figure 3. Nadler' algorithm (prognostic problem solving method)**

The process of modelling based on the Altszuler's concept approach identifies the necessity of problem definition. According to the above discussed procedure, a problem is identified and working hypotheses concerning its solution possibilities are tested. The Altszuler's implementation procedure covers the following stages (Fig. 4): problem formulation, search for potential solutions, evaluation of particular options, solution selection, and implementation decision.



Source: Durlik I., *Restructuring Business Processes. Reengineering, Theory and Practice*, Agencja Wydawnicza Placet, Warszawa 1998, p. 95.

**Figure 4. Altszuler's invention algorithm (diagnostic method of problem solving)**

D. Buschardt's organisation method consists in the following stages (Jerzak, 1994, pp.142-143): arbitrary isolation of model subsystems and definition of relations between them; definition of tasks performed by subsystems and their local objectives; definition of agendas responsible for the implementation of particular tasks; graphic design of the model achieved by drafting a scheme of the designed subsystem elements; verification of the model's internal compatibility with regard to e.g. occurrence of all necessary blocks, supplies and carriers of information, solution correctness, etc.; definition of the aspects differing the designed model from the present state; practical implementation and verification.

Complexity and variety of problems observed in enterprises, necessitate frequent application of prognostic methods of their solution. The demands of competitive markets and the possibilities offered by modern information technology necessitate transformations of the already existing structures and procedures. Due to the fact, one of the transformation option seems to be the application of methods consisting in creating ideal solutions.

#### 4. SUMMARY

Theoretical studies on innovations confirm the interest in the problem of innovative activity both among theorists and practitioners of organisation and management sciences. Comparative approach to the innovation theory in classicism, neoclassicism and institutionalism may be the basis for considerations on the importance of innovative activity in the contemporary global economy. Implementation of organisational innovations conditions better coordination of actions

undertaken by different elements of the organisational structure and is thus a factor facilitating efficient management. In contemporary business practice change is most frequently observed in the sphere of goods, processes, systems, organisational structures and recently in organisational culture and social capital. The question of innovation process modelling in practical business activities is important scientific challenge.

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## **ANALYSING AND EVALUATING THE DISTRIBUTION SYSTEM OF THE DELACO COMPANY**

**EVELINA GRĂDINARU \***

**ABSTRACT:** *This paper contains a theoretical analysis of the term „distribution”, indicating the area to which it belongs, the usability domain and the strategies of distribution used by the consumer goods manufacturers. It also provides specific information about the way in which is made the distribution of the products of the Delaco Company on the retail market of Brasov District. The practice part of the paper consists of a marketing research which studies the opinion and the behaviour of the Brasov population regarding the places where cheese products are commercialized and also the accessibility of the Delaco products.*

**KEY WORDS:** *distribution; concept; role; arguments.*

**JEL CLASSIFICATION:** *M1.*

### **1. THEORETICAL ISSUES REGARDING DISTRIBUTION IN THE CONSUMER GOODS INDUSTRY**

The space and time that separates the finished production from the actual consumption of goods and services is occupied by a set of operations and business processes, efficiently orientated, which sum up to form an important component of the marketing mix – the distribution policy.

The term Distribution comprises all the necessary means and operations that provide end users or consumers with goods and services resulting from producing companies. Or, in other words, the distribution is the process by which goods and services are made available to consumers - intermediate or final – giving them facilities in terms of place, time, size, quantity, quality and price, according to the requirements they manifest on the market. Distribution refers to the physical and economic flow of goods, the system of connections between the agents involved on the market, the activities of a large number of units that belong to an economic branch.

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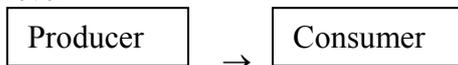
The field of action of the distribution activity is formed by a continuous flow of goods from producer to consumer. The movement of goods to final consumers is accompanied, preceded or followed by other important streams, linking the participants in the overall distribution. These are: the flow of negotiations - market transactions, the flow of property titles - information flow. These streams are accompanied, in both directions, by flows of finance and risk, and flows from consumers to producers of orders and payments.

The distribution has also the role of regulator of production to the extent that manufacturers take into account the sequence and size of customer orders and that they stock only the resources they need. The use of intermediaries is necessary due to the greater efficiency they provide in delivering the goods to target markets and lower delivery costs to consumers compared to the situation in which producers would sell themselves their own goods. The most important advantage that can benefit both producers and consumers, when between the two appear the intermediaries, is a strong reduction of the number of contacts between producers and buyers.

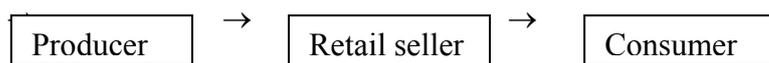
Once elected, intermediaries must continually be led and motivated to make the appropriate efforts. The company not only must sell through intermediaries, but it has to sell to and with them. Most companies consider intermediaries both customers and first line partners. They use a strong management of relations with partners to establish long term partnerships with channel members. This creates a marketing system that meets the needs of both company and partners.

The distribution issue, as a variable of the marketing mix, is large and heterogeneous, but is delimited in two key areas. The first area refers to the establishment and operation of distribution channels, with the following types:

- channel 1 – called a direct marketing channel, because doesn't have an intermediate level



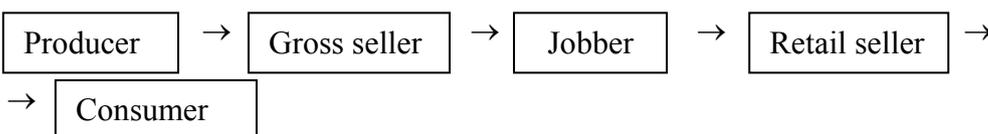
- channel 2 – part of the short channel group, with one intermediate



- channel 3 – comprises two intermediate levels: a gross seller and a retail seller;



- channel 4 – contains four intermediate levels, between the gross seller and the retail seller comes an intermediate of a smaller size, called a jobber. He buys from the gross seller and sells the products to the smaller retail sellers which are not usually supplied by the big gross sellers.



The second key area, which addresses this issue, comprises the physical distribution, and respectively, the operational processes through which goods pass

successively to reach consumers. The literature provides data which shows that physical distribution accounts, in most cases, for about one-fifth of the retail price and, in case of products from the food industry, this share reaches even one third. It is estimated, under these conditions, that the physical distribution becomes an effective tool for the company's marketing policy.

Most companies state that the main objective of physical distribution is to provide the right goods, in the right place, with minimum costs. A maximum level of customer services involves large stocks, high quality transport and numerous warehouses. All this means an increase in distribution costs. On the other hand, a minimum cost distribution involves cheap transport, low stocks and fewer deposits, but without a high level of quality. Having an important contribution to establishing market share and profitability of the company, logistics must evolve from a service function, as was traditionally considered, to a strategic resource, a mean of saving money, increase profits and market share, gain new markets and introduce new products.

In conclusion, decisions regarding the distribution policy are the most complex decisions a company must adopt in its business. Each distribution system generates income and also requires different costs. When a firm chooses its distribution channel, it is forced to operate it a long period of time. Decisions taken by employees who process orders, those who plan warehouses, managers responsible for stocks and transport, affect both costs and their ability to create demand. The physical distribution concept requires all such decisions to be treated in a unified framework in order to achieve the point of a minimum total cost for the level of service provided to the customer.

## **2. THE DELACO COMPANY - PROFILE**

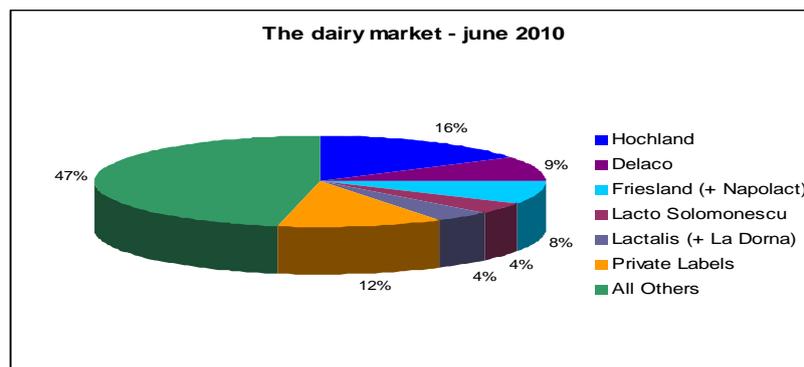
Delaco is a top player in the dairy market, being one of the leading supplier of dairy products for both supermarkets and traditional trade shops. The company is located in Codlea, a few km from Brasov, and it started as a family business in 1996 with three employees, with the production of fresh dairy products. Currently the company has 370 employees, with a portfolio that includes primarily cheese and specialities sold under the brands Delaco, Del and Apetito.

Since the year 2000 it has focused on the distribution of cheese and created a system that allowed it to grow without the limitations imposed by production. The company is certified ISO 22000 by a Swiss company. In 2007 Delaco became the exclusive distributor in Romania of Zott, one of the largest manufacturers in Germany. This partnership has helped to substantially enrich the range of dairy products distributed. On November 1, 2007 Delaco took over exclusive distribution for Bergader's special cheese products. Privatkaserei Bergader Society GmbH is one of the largest private producers in Germany, founded in 1902 and specializing in the production of cheese with noble mold. Also in the same period, it has signed up a partnership with Mona Delaco Naturprodukte GmbH, the Austrian manufacturer of soy products, becoming the sole distributor of Joya on the Romanian market.

Delaco Distribution signed an agreement in May 2008 with H & E Reinert SRL, a Romanian subsidiary of the homonymous sausage manufacturer in Germany, a company with over 75 years of experience in the preparation of sausages. This partnership has meant broadening the coverage of distribution services provided by Delaco, given that, until then, the company has collaborated only with producers of cheese and soy products on the international market. The partnership in 2010 with the French group Bongrain, a world leader in cheese specialties, a company which is listed on Euronext Paris stock exchange, represented the company's most important contract in the last two years. These two companies have combined resources and expertise to provide quality products to Romanian consumers.

The products distributed by Delaco come from leading manufacturers in Europe, which operate in countries such as Germany, Austria, France, the Netherlands - countries with tradition in producing cheese and fresh dairy. Some providers include also local producers meeting quality and food safety standards imposed by the European Union. The top suppliers of Delaco are represented by Zott, Bergader Bayerland but the most important percentage of their product portfolio is held by their own private brands, Del and Delaco.

The Delaco company has over 3.000 customers, to which offers products in different packaging: bulk, small packaging, but also in economic packages or multipacks type, with the offering of some of gratuities. The distribution network in all counties covers most of modern retail stores, shops from traditional trade, restaurants, fast-food units, hotels and airlines. The main competitors of Delaco on the cheese market are: Hochland, Friesland (+ Napolact) , Lacto Solomonescu, Lactalis (+ La Dorna). Among these names stands out Hochland, the company that holds the largest market share, being a leader both on the cheese market and in terms of brand image and advertising expenses.



Source: MEMRB, June 2010

**Figure 1. Delaco's competition**

Delaco delivers products throughout the country and has representatives in all counties. The company is focused on Cash & Carry stores (Selgros and Metro) and Key Accounts (hypermarkets and supermarkets), but is also present in traditional trade. The distribution channels used by the company are, in particular, those with a single

intermediate, products reaching consumers through stores like Carrefour, Selgros, Metro, Real, Kaufland, Billa, Plus, Spar, etc. The second distribution channel, with two intermediates, it is also used, mainly for small merchants which supply from the C&C type stores. Of particular interest is the fact that the range of products Apetito, brought on the Brasov market in July 2010, has a distribution focused only in the modern trade sector, traditional trade having currently only opportunities for expansion.

In addition to a strong retail market presence, the Delaco company has oriented itself towards the HoReCa distribution system. Maintaining a constant and correct quality/price ratio, continuity of stocks and a greater diversity of products are the main requirements of the HoReCa market for cheese products. Thanks to the partnership with the French group Bongrain, Delaco took a comprehensive range of cheese specialities, from the noble mold cheese from Brie, Camembert, Roquefort, under Reverend french brands, the Coeur de Lion, St. Albay, Caprice des Dieux, to the fine cream cheese made of goat and cow milk and cream cheese with noble mold.

The second essential component of the distribution system, the physical one, is represented, in the case of the Delaco company, by its own fleet of 60 vehicles for the sales team and 40 refrigerating vehicles with the capacity of 1.5 to 18 tons and a modern refrigerating warehouse, located in Codlea, with a storage capacity of 4000 pallets that meets the highest demands of the European Union and is certified ISO 22000 by a Swiss company. The company also has three logistics centres in the country, which run cross-docking operations: Bucharest, Bacău, Arad.

### **3. RESEARCH ON THE POPULATION OF BRASOV REGARDING IT'S ATTITUDE AND OPINION WHEN BUYING CHEESE**

#### **3.1 Research Methodology**

The marketing research being conducted had the main objective to identify the opinion and the behaviour of the population of Brasov regarding, primarily, the places where people shop, then the places from where people buy cheese, and not least their views on Delaco products and ease of purchasing these products.

To obtain valid results we have chosen the survey method and used a survey-based random sampling method. According to it, all the individuals that form an investigated population have the same probability to be included in the sample, a probability that can change as the selection of members is being made.

Since obtaining a list of all members of the population being studied, which can form the population providing the sample, is quite difficult, we chose to use step by step sampling. Of the total sample units we chose randomly two districts of Brasov, and built at this level a list of all existing buildings and households. The considered age segment is represented by adults over 18 years. Because its size was too large to be analyzed, we chose a representative sample, and then the data obtained was extrapolated to the entire population. In these conditions, the research was conducted on a sample of 101 people, assuming a maximum error of 9.80%.

The questionnaire contains 29 questions, of which 24 are questions relevant to the topic investigated, and the remaining 5 serve as identification. The questions are

structured according to the following scales: a binary scale, a nominal scale with multiple choices, a nominal scale with a unique choice, an ordinal scale and a semantic scale. In order to be representative, the sample used in the marketing research must comply with the requirements regarding the structure so that it reflects the multitude of behaviours and attitudes found in the studied population.

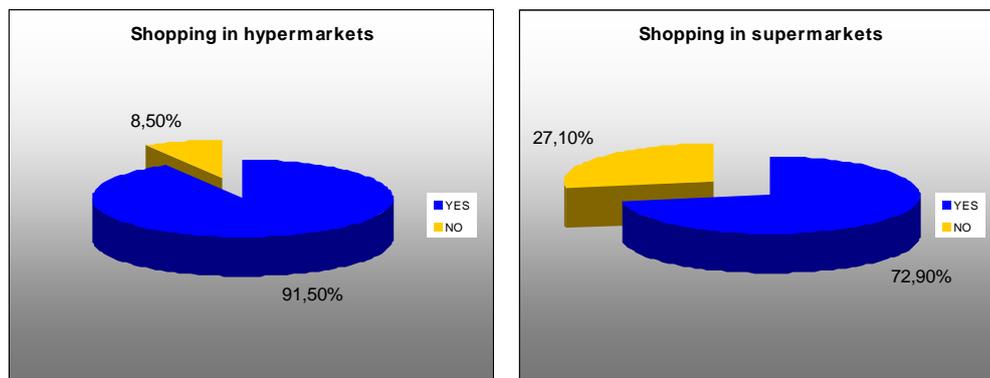
**Table 1. Validating the sample**

Gender	Count	% of the total population	Sample	% of the total sample
Female	145486	53 %	46,5%	46,5 %
Male	131428	47 %	53,5%	53,5 %
Total	276914	100%	100%	100%

The question is whether the difference between the percentage of women and men is statistically significant or not. The critical report ( $t_{obs} = 1.3$ ) is compared with the theoretical size ( $t_{\alpha,df} = 1.96$ ) and supports the hypothesis in accordance with the decision rule ( $t_{obs} = 1.3 < 1.96$ ). Therefore, we can guarantee with a probability of 95% that the difference between the two percentages is statistically insignificant, with no need for sample recovery.

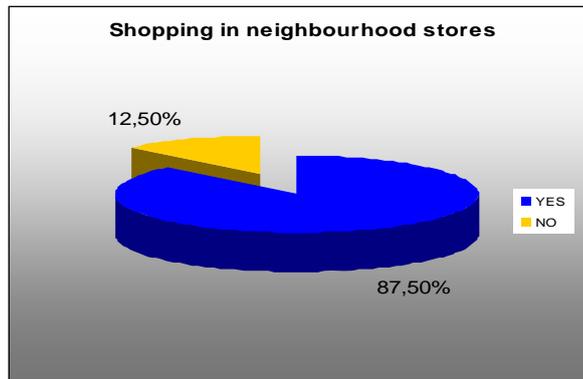
### 3.2. The results of the research

Following the research conducted on "Attitudes and opinions of the population of Brasov regarding the purchase of cheese" the expected answers were obtained to most questions. Of the 24 questions considered to be representative for the desired information 6 of them are detailed below. First it was considered determining the segment of consumers who shop in hypermarkets and supermarkets, respectively. It can be seen that the percentage of those who purchase products from these forms of trade is very high, 91.50% and 72.90%, results which favour Delaco because its products have a stronger presence in these types of stores.

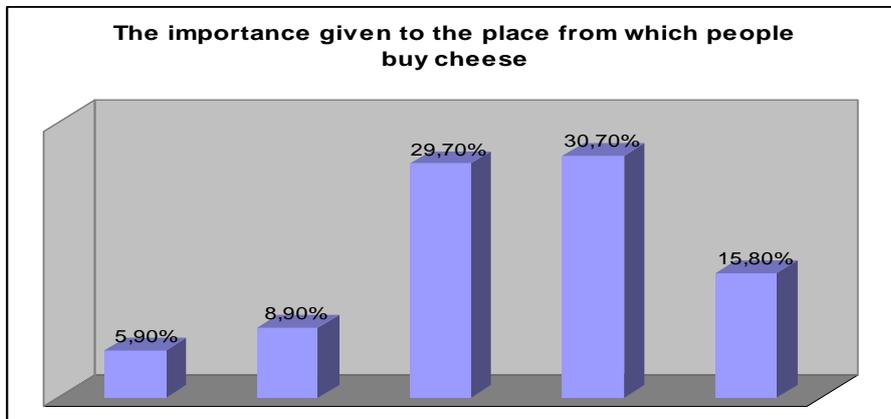


**Figure 2. Shopping in hypermarkets and supermarkets**

Of particular interest for the research was to know the percentage of those who shop in neighbourhood stores, as one of the weak points of Delaco is a poor presence in traditional trade stores. As said in the previous chapter, the small neighbourhood stores supply with Delaco products from Cash & Carry units. In addition, the *Apetito* product line, placed in the medium price segment, is missing from traditional trade. Thus, from the research conducted to determine those consumers who attend these stores, resulted that a very high percentage, 87.50%, purchase these products from neighbourhood stores.



**Figure 3. Shopping in neighbourhood stores**

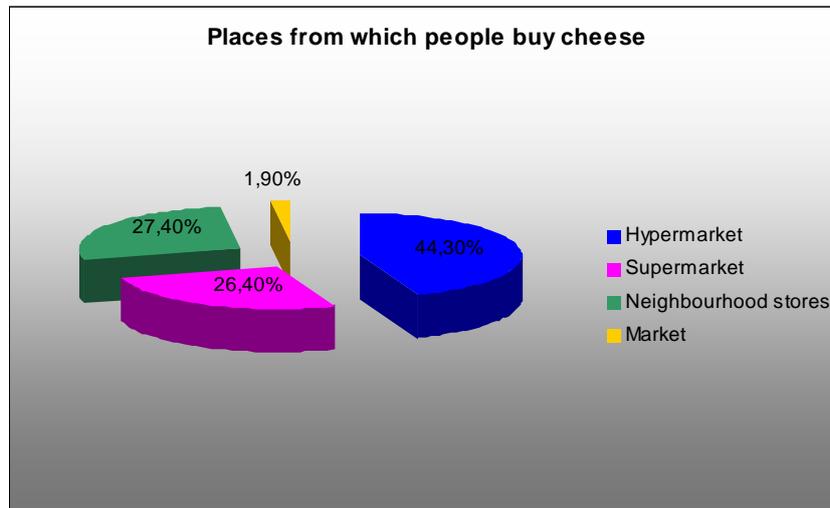


**Figure 4. The importance given to the place from which people buy cheese**

Analysing the results regarding the importance that the people of Brasov give to the place of purchase of cheese, it appears that 30.40% of the population interviewed assigned the value of 4, option 3 was chosen by 29.70% and only 15.80% assigned the value 5 - very high, so it can be said that the place of purchase of cheese is important.

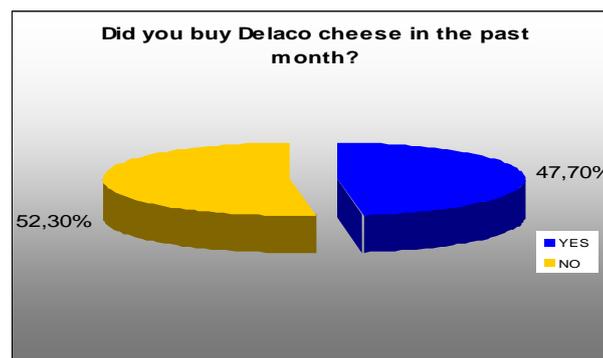
It was also considered determining the places from where people buy cheese in Brasov. After analyzing this question, the highest percent was held by hypermarkets and neighbourhood stores, with 44.30% and 27.40%. On third place, with only 1% less

than neighbourhood stores came supermarkets while only 1.90% of the respondents are buying such products from the market.



**Figure 5. Places from which people buy cheese**

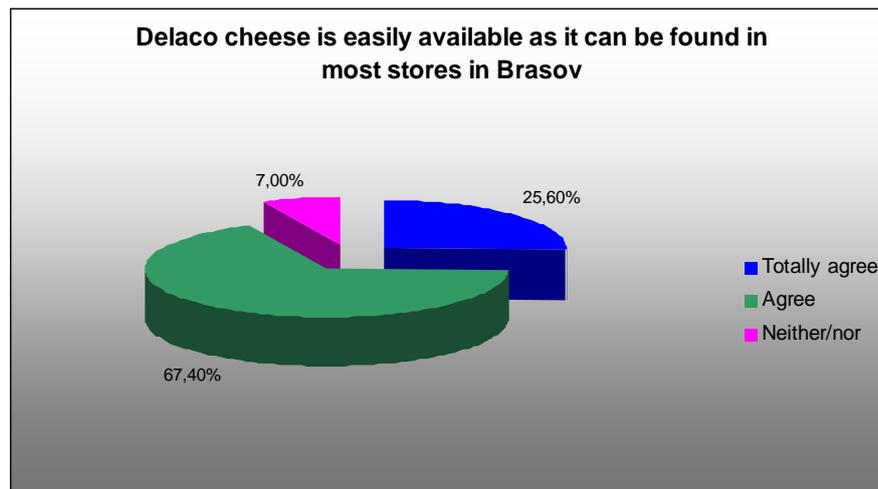
The second part which showed interest in order to achieve the goals of the research targeted Delaco's products, specifically how satisfied are their customers and how easily available are their products. The analysis of the responses obtained from the 101 respondents showed little difference between those who consume Delaco cheese (47.70%) and those who do not consume such products (52.30%). The percentage of those who do not consume the company's products is significant, which may be due to the reduced presence in traditional stores.



**Figure 6. Did you buy Delaco cheese in the past month?**

On the question regarding the ease of purchasing the Delaco brand products, of the 43 people who use these products and were asked this question, a significant percentage, of 67.40%, agrees with the statement that "Delaco cheese products are easily

purchased as found in most shops in Brasov". The small percentage of those who have entirely agreed with this statement, of 25.60%, reinforces the idea that the reduced presence of these products in neighbourhood stores is a great disadvantage for the company Delaco.



**Figure 7. The ease with which Delaco products can be bought**

The questions of characterization considered for the purpose of the research targeted the respondent's age, the socio-professional category they belong, income and not least, the number of family members. Thus: 1. The majority of the respondents from the sample are aged between 18-25 years (62.40%), followed by the 26-35 years range (27.70%), with a small share held by those aged over 36 years; 2. the highest percentage is held by students and those employees with higher education, 39.60% respectively; 3. the question about the monthly income was asked to all members of the sample, 101 people, 35 of which responded that they have an income below 700 RON, with an insignificant difference between those with an income between 701-1400, and respectively over 1400, of only 1%; 4. the highest percentage is represented by families composed of 3 persons or 37.60%, followed by families with 2 members with a rate of 22.80%, the lowest percentage (5%) was held by families with more than 5 members.

#### **4. CONCLUSIONS AND PROPOSALS**

Given the results, the fact that in addition to a distribution concentrated in Key Accounts type stores (Metro and Selgros), as well as supermarkets and hypermarkets, from which the population of Brasov can buy Delaco cheese products, consumers purchase their products from convenience stores also (27.40%), a sector where the company being studied does not have a striking presence.

In addition, the *Apetito* line of products, launched on the Romanian market for months, is not present in this sector. These products placed in the medium price segment, with a price tag 10% lower than cheese and cheese cream from the Hochland brand,

which is the market leader, is an opportunity for the development of the distribution of Delaco products in this segment.

As mentioned above, the small number of products present in this sector is due to small merchants who supply from C & C type stores, which means a higher price on the shelves. In this respect, I think that is economically justified a marketing plan to facilitate the penetration of these products in neighbourhood stores also. Using a distribution channel with a single intermediary in the case of traditional stores also, by concluding a cooperation agreement between the company and stores that prove to be profitable, could be an advantage for both parties. Thus the company Delaco would become known to the people who prefer to buy more frequently from these types of shops and small retailers can sell these products at a lower price by buying them directly from the supplier.

The intended operational marketing program is partially defined, because it considers only the distribution policy as a part of the marketing mix, and will be prepared on a short term basis to achieve the proposed goals, increase market share, sales growth and the entrance of the *Apetito* brand products into this area, products that have been distributed by the Delaco company on the Romanian market from the summer of 2010.

I believe that this plan requires a budget of around 50.000 Euros, which will be distributed according to the activities necessary to implement the marketing program. These activities will be planned in the most effective sequence in order to minimise the necessary time and financial resources and require identifying those areas that are cost-effective for distributing the products, signing contracts with small traders, establishing the products to be distributed, purchasing new vehicles for distribution purposes and conduct promotional campaigns to bring these products into the attention of those who buy from such stores.

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## **PARTICULARITIES OF BUDGETING OF INVESTMENTS YIELD**

**ANCA JARMILA GUȚĂ, MIRELA MONEA,  
CORINA GABRIELA SLUSARIUC \***

**ABSTRACT:** *The paper presents some particularities of the budget process of all the investments as a main aspect in taking the best decision according to the main use of all the firms' resources. As a measure method of the investments yield the main one is that which describes the relationship between the profit and the investment which improves the decisional process.*

**KEY WORDS:** *investments; investment yield; manager; decisional process; evaluation methods of investments yield; profit; profitability rate speed of rotation.*

**JEL CLASSIFICATION:** *M1.*

### **1. THE INVESTMENTS YIELD – IMPORTANCE, USAGE**

For the most of businesses, perhaps no other aspect of decision - making isn't so important to its success than the use and evaluation of resources. The management is constantly faced with the variety of alternatives concerning the institutional resources and is responsible for the funds which were given to its care. The selection of the most profitable alternative, the recognition of availability of funds and necessary resources to finance the investment can be considered as major functions of the management during the budget allocation process.

The main objective of a financial manager is to use the funds of the company within its managerial authority, so that at long-term the firm obtains the investments yield at least as high as that which could be achieved through alternative investments, with similar risks. The second important objective is to maximize the present value of investment resources to achieve the higher yield as possible, without existing the undue

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risk. For maximization of the earning capacity of the firm, the resources are allocated in such a way that the earning are allocated in such a way that the earning capacity is transformed into a high efficiency as possible for the company. For achieving these objectives the measurement methods are needed to evaluate the company performance. A basic measurement method is the return on investment (ROI), which describes the relationship between profit and investment.

It is assumed that the main objective of a business is to generate a satisfactory return for its owners. As we will discuss, it is necessary to reduce in a higher degree as possible the intuitive factors of decision-making in favor of a more systematic and mathematical approach.

However, it is important to recognize that this concept of return on investments will never replace the rational business judgment, but it helps to raise some questions such as the validity of these factors on business judgement. This indicator is a financial management instrument that defines the problem, assesses and weighs the possible alternatives of investments and brings in the center those qualitative factors affecting the decision and that that can't be expressed in quantitative terms.

The return on investment is important because it helps to maintain the firm growth by measuring the historical results and it contributes to the evaluation of short-term budgets and medium-term plans of the company. It is also important because this technique is acceptable for investors, business and financial communities, economists and many students in business theories. Of course, it is recognized by most countries, internally, as a budgetary and evaluation technique. Given this kind of recognition and that the ROI (return on investment) can provide a technique for assessing of alternatives of change in the relative attractiveness of a company in comparison with the concerned community, it is easy to understand why ROI is so important.

Nowadays, the complex business environment, technological, economic and submitted to the competitive pressures tends to complicate the adoption of management decisions. This management instrument represents for managership an easy way of evaluation and to accelerate the development of past performance and that future anticipated, in an attempt to increase the development growth and productivity. The following list highlights why ROI is recommended and shows how it can ameliorate this concept of decision-making process:

- Force planning. The management of the company must have a plan, indifferently if it is a matter of short or long term, in view of measurement of efficiency or settlement of objectives. This fact is realized during the process of drawing up of budgeting and the planning at the longer term;
- As a support for decision making. It translates some decisions from the area of intuition on the area of quantitative and support basis;
- In evaluating of investment opportunities. Here can be included not only initial capital investments, but also additional labor costs, the economic cycle of investment and its effect upon the profitability of company;
- It helps the management performance. This would include the responsibility performance and total performance of the company or predetermined objectives. It helps to eliminate the inequities that may occur between managers and executing units, caused by differences in size

and composition of operations, ie, strong capital intensified operations as against distributive operations that may have reduced capital investment. In addition, the performance measurement can be used by managers to evaluate the use of assets, cash flow, capital, equipment or other skills and also for the internal control;

- As answer to the market. It measures the answer of management to the market changes concerning the prices and requirements as well the profitability and cost reduction.

To understand the ROI, it is necessary to analyse the term itself. Sometimes there is great confusion regarding the term ROI. The efficiency refers to the additional amount of money expected from an investment over or near the initial investment. This efficiency can be before or after taxation. An investment can be defined as engagement of economic resources, such as years, technology and equipment, labor, etc., based on the anticipation of an income in the form of revenue, estimated value, greater efficiency or cost savings. This gain is measured over a period of time. For that reason the investments efficiency measures the gain of economic resources over a period of time, usually in the form of rate.

Management involvement is required during the process of establishing the budget because the justification for any investment opportunity is directly related to the participation of people who have technical knowledge and expertise capacity to recognize the link between input data. This is also part of the training and managers skills development. Management should be aware that the development of profitable investment opportunities often starts at lower managerial levels, with technical and non-technical staff. In addition, the management helps both in determining the areas of responsibility and authority level.

Taking into account that the list of uses and applications can be quite extensive, it is important to identify the major applications and to be noted that these applications and / or techniques can be used by a company in order to serve the best needs:

- External measurement. A technique used to compare the calculation of ROI with other companies and industries;
- Internal measurement. A technique for evaluation of internal segments of the company, reflected in increase of earnings by reducing of the costs and / or profit improvement;
- Improvement of assets utilization. Ways of improvement of utilization of money available funds, stocks, capital receivables and assets for greater profitability;
- Evaluation of capital expenses. The best known technique for providing the instruments with the view of efficient allocation of capital resources;
- Disinvestment. Used to reflect the impact of business disinvestments or of some segments for improvement of ROI;
- Profit objectives. By internal and external measurement can be determined the profit objectives of the company;

- Acquisitions. They measure the impact of acquisitions on company growth at short and long term;
- Management incentives. The technique of incentives approach based on measurement of efficiency ROI;
- Elimination or addition of production lines. The techniques that have pointed out the profitability or non-profitability which exist on the new production lines;
- Manufacturing or purchasing decisions. They measure the impact of ROI for manufacturing or purchasing of a product;
- Leasing or acquisitions decisions. Similar to the techniques of evaluation of capital expenses used in comparison of leasing decisions with those concerning acquisition in view of acquisition of capital assets;
- Evaluation of human resources. With the help of this concept can be determined the efficiency of human resources;
- Stocks control. It measures the changes in stocks and earnings growth as a result of additional investments ;
- Prices. They guide pricing a product using the required rate of return.

Technique of investments efficiency in internal and external performance evaluation as an instrument for management decisions should be used with caution. As with all methods of evaluation can appear improper interpretation by measuring different comparative data, relying too heavily on a single measurement method. The instrument of return on investment is vital one, but certain precautions must be recognized in its use.

Too often managers make decisions by comparing the absolute links between data sets, without paying attention to the intelligible relation data components. This outlook error can lead to bad decisions if there is no further interpretation, until the understanding of results. Therefore, the first caution in terms of ROI is not to provide exclusively absolute numerical results in the calculation of ROI rates, indifferently if are compared products, departments, divisions, companies or industries.

The nature of comparative products, product quality, the nature of sales, production costs and company structure are only a few aspects to be considered before arriving at any rational conclusion. The rule of consistency is perhaps one of the most important precautions that can be mentioned. We will continually refer to this rule, because it is the basis of the concept ROI: there must be consistency if we desire making the correct decisions.

Since ROI measures the comparative data for a period of time, it is important to be consistent in the measurement of such data. Once chosen a method of comparison, the basic rules should remain the same. For example, if some comparisons are made using certain allocations, these allocations must be used continuously in future comparisons to obtain valid conclusions. If the basic rules change, both the calculations of past and the future ones must be changed accordingly to develop a correct trend of operations. This rule shall be valid for all comparisons of data and is the most important in measuring ROI. ROI represents the only tool to support in reaching these decisions and not the final solution.

The failure of using other helping methods for measuring performance can lead to a focus exaggeratedly on ROI as a management tool. The other rational methods should be used for assessment to support the conclusions obtained by ROI calculations, such as growth rates and other techniques and processes that are found in the aspects of business planning and budget allocation in the short and long term. It is important to properly allocate net sales, net profits and segment investment for performance evaluation. These segments can be divisions, product lines, departments, centers, etc. market segments. The question is whether if all data should be allocated or only the data for which a manager has responsibility and authority?

If we accept the rule of consistency, no matter if the allocation is made as long as there is consistency in measurement, as data, from one period to another. Final yield rate can be adjusted upward if the lower investments are allocated and adjusted downward if the higher investments are allocated to the segment.

Therefore, the best method should be adopted to measure only the data for which a manager responsible, according to the authority which is given to a manager. It is recommended that only the data can be identified as being verifiable by a manager to be used. Other data that could be allocated and are not under the authority of the manager, could lead to erroneous decisions and the involvement of an operational segment in decisions to the prejudice of the operation, what happens if the prices increase for reaching of ROI objectives. Other unallocated data can be used to complete the entire operation of the company in setting overall goals.

It is suggested to use the profit before taxation on controllable components and net profit in the entire company. As the taxes on individual segments are difficult to be calculated, only the net profit should be used for overall assessment. In addition, it is recommended that for short evaluation period (for example less than a year), the end period balances must be used as a basis for investments.

For longer periods (eg a year or more) should be used the balances of the end of year as a basis for investments or a variation of the average of beginning and ending balances of the year, changing environments or any other variation. The conclusion will not change as long as there is consistency. Let's remember that absolute rates are not so important as profit changes that occur from one period to another. This fact indicates the performance trend and will action as an indicator of performance both past and future.

Net sales and net profits should be collected for each period from 3 months for a quarter, six months for a semester, etc. It is not necessary an average of balances for net sales and net profits, because they are not balanced at any time as in case of balance, but are needed performance data for each period of operations and can be collected for any desired period.

## **2. THE ELEMENTS OF RETURN ON INVESTMENT**

The return on investment uses the data from two most of most used financial statements, profit and loss account and balance. ROI don't represent nothing else than a series of rates in a logical succession, in an effort to develop management decisions based on past and anticipated profits and use of assets. With this in mind, ROI can be

divided into two basic components, using three sets of data from profit and loss account and balance. These components are profitability and speed of rotation.

### 2.1. Profitability rate

Profitability rate is calculated by dividing net profits by net sales. This rate shows how big are the profit generated by a dollar sales and it measure success concerning the control of costs. The rate is one common in majority of businesses and plays a major role in running the business. This rate has the greatest influence in generating higher profits for a company, because when sales fall, most businesses will face lower profits. To offset the lower sales, reduced, typically, expenses, profits expected to maintain certain. Therefore, immediate action can be taken to compensate for the temporary operation of a business failure.

### 2.2. Speed of rotation

Speed of rotational is calculated by dividing the investment by net sales and is expressed as a ratio. This rate of speed rotation reflects the rapidity with which the capital of an operation is used. The biggest problem of this rate is to determine what basis to use for investments, because the results will vary depending on the type of investment used. There may be many different types of investments. However this basis will suppose a certain type of ROI used. For example, using total assets, the ROI would be referred as being the return on total assets. Using capital employed, the ROI would be referred to as return on capital employed. Therefore the investment basis will determine the technique used, since ROI measures the performance of certain investments.

### 2.3. Relationship between profitability rate and speed of rotation

Taking into consideration the profitability rate of the speed of rotation it results:

Following the above components, we can notice that net sales can be canceled in both equations:

$$\frac{\text{Net profits}}{\text{Net sales}} \times \frac{\text{Net sales}}{\text{Investment}}$$

consequently

$$\frac{\text{Net profits}}{\text{Investment}}$$

As previously we have mentioned, the rate is divided into two parts, for analysis of the relationship between earnings and sales and the rapidity with which is effectively used the capital employed.

In addition, we can see that in order to improve ROI rate, a manager can increase profitability rate by increasing sales rate, reducing expenses or its combination. Also ROI rate can be increased by intensification of existing investments, in this way increasing the speed of rotation. It is assumed that all these factors are under the control of the manager, being measured. For example, we assume that the two managers are responsible for individual operations. For illustration the following data are presented:

**Table 1. Indicator for manager A and B**

Indicators	Manager A	Manager B
Net sales	1500000 lei	1500000 lei
Net earnings	90000	120000
Investment - Capital employed	700000	937500
Profitability rate	6%	8%
Speed of rotation	2.14	1.6
Return on investment	12.86	12.8%

It can be seen that both managers have the same sales and the same ROI rate. Which of these managers is more effective? Without a detailed analysis of each operation, the manager B can be considered better because he had a greater flexibility in controlling the profitability rate based on the data above. In any way caution is needed in the analysis of details that shows the results of manager B, both for financial data and for those non-financial.

Applying the profitability rate and speed rotation in case of manager A it results the following efficiency of capital:

$$\text{Profitability rate} = \text{Speed of rotation}$$

$$\text{Net profits} / \text{net sales} \times \text{Net sales} / \text{Capital employed}$$

or

$$\frac{90000 \text{ lei}}{1500000 \text{ lei}} \times \frac{1500000 \text{ lei}}{700000 \text{ lei}}$$

equals: 6% x 2.14, resulting: 12.86%

$$\frac{90000 \text{ lei}}{700000 \text{ lei}} \times 12.86\%$$

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## **COMPARATIVE ANALYSIS OF ROMANIAN AND GERMAN NEGOTIATION STYLE BASED ON CULTURAL DIFFERENCES**

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**ABSTRACT:** *As a result of intensified international business relations and a unified European space the cultural background of economic agents in the field of international business is getting an increasing importance and leaves to a certain extent its marks on business behaviour of these individuals. Thus from the sixties of the past century onwards the problem of cultural differences and their influence upon professional relations lie in the centre of attention of several researchers like E.T. Hall, Geert Hofstede and others. In business negotiations one may observe a double conditioning of people's negotiation style, at one hand it is the result of individual characteristics like personality, education, experience, personal charisma, but on the other hand there is a strong impact of collective factors, too such as the mental programming of each nation known under the name of culture. In the following study we undertake a comparative/contrastive analysis of German and Romanian – culturally conditioned – negotiation style hoping to avoid at the same time to fall into the trap of stereotypy.*

**KEY WORDS:** *cultural differences; cultural dimensions; mental programming; negotiation style; intercultural competence.*

**JEL CLASSIFICATION:** *F50; F51; M16.*

From the sixties of the past century onwards the problem of cultural differences and their influence upon professional relations between the representatives of various nations lie in the centre of attention of many researchers.

In this sense there are to be mentioned among others: the American anthropologist E.T. Hall, the Dutch researchers Geert Hofstede and his disciple, Fons Trompenaars, and the American Richard Gesteland, all of them interested in the problem of cultural dimensions in human interaction in general and in that one of professional relations in particular. The American anthropologist Edward T. Hall had

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classified world's cultures as far back as the sixties according to two classical cultural dimensions i.e. the way of communication and attitude towards time. In this respect one may distinguish between high and low context cultures according to the extent communication results depend on the context in which communication has taken place.

In low context cultures there are direct, explicit messages transmitting what the emitter really meant independently of context and circumstances. On the contrary in high context cultures people have a metaphorical way of speaking, messages are implicit, meaning is conveyed rather by the situations and contexts words were uttered in than by the words themselves.

Time represents beside space another important factor in international transactions. Depending on how it is perceived by community one may distinguish between monochronic (sequential) and polychronic (synchronic) cultures, meaning that representatives of the first type will tackle issues one by one and one after the other, while people coming from a polychronic culture will tend to solve more tasks at once handling time as a flexible entity.

Dealing with the issue of space in social relations Hall initiated a new branch of science, proxemics, studying the role of space in each culture. Thus, there are:

- “*contact cultures*” adopting a short interpersonal distance in relation with others (e.g. the Arabic world, Latin people in Europe and America);
- “*noncontact cultures*” with a far longer distance between individuals (North America and Northern Europe).

As a result of a study made at the subsidiaries of the IBM corporation in more than 50 countries upon 20 topics related to employees' values the Dutch researcher, Geert Hofstede, put up four dimensions of cultural differences among nations and categorized countries included in the research on a scale of values from 0 to about 100. Later influenced by a study made according to a questionnaire on oriental values (CVS – Chinese values study) Hofstede extended his dimensional structure with a fifth dimension derived from “Confucianist dynamism”.

The four dimensions put up by Hofstede deriving from occidental values are:

- *power distance* (individuals attitude to authority);
- *individualism versus collectivism* (individual in society);
- *masculinity versus femininity* and *uncertainty avoidance* (attitude to action and risk);
- while the fifth dimension found related to oriental values is *short or long term orientation*.

Power distance refers to people accepting authority derived from position in a group and not gained due to competence and personal achievements. Individual's image may vary in different cultures of the world, he/she may be considered independent, sovereign member of a society or part of a group defining his actions and attitudes. Thus, we can speak of individualistic cultures or cultures characterized by collectivism.

In latter one belonging to a group, the physical and spiritual support coming from the group gain special importance in individual's life. Individuals' tendency in a society mainly to masculine or feminine values leaves its marks on that culture and on

its attitude to surrounding world. Masculine societies are based on performance and profit, while feminine ones on human relations horizontally and vertically. The level of tolerance of unknown and of anxiety produced by it differs from culture to culture resulting different levels of uncertainty and risk avoidance. The priorities of business people from different cultures are also reflected in their attitudes to time and short or long term orientation.

Fons Trompenaars, another Dutch researcher, made in the eighties and nineties studies upon cultural differences following the same path as Hofstede but including in his research upon 46 countries 10 post-communist countries from the Eastern block as well. From the answers given by the over 10,000 employees he derived 7 cultural dimensions in a similar manner as Hofstede had done placing the countries on a scale between the following extreme poles:

universalism ↔ particularism; individualism ↔ collectivism;  
achievement (cultures of “merit”) ↔ ascription (cultures of “position”);  
sequential ↔ synchronic; internal control (individual respecting  
environment) ↔ external control (environment subdued to individual’s  
interests); specific (studying phenomena by parts) ↔ diffuse (integrating  
approach to phenomena) and neutral ↔ emotional.

In his work from 1997 (Gesteland, 1997) Richard Gesteland analyses cross-cultural business behaviour underlining the existence of 4 patterns of business behaviour based on different nation’s cultural background. Thus one may find deal-focus or on the contrary relationship-focus cultures which means people from the first category are interested in solving tasks, signing the contract while for their potential partners from the second category interpersonal relationship is more important.

Characteristic for deal-focus cultures is discussing after a few minutes of familiarization directly about the details of negotiation adopting a clear, direct communication style. For getting to negotiations and discussions upon business issues in relationship-focus cultures one must first gain the potential partner’s trust and friendship and for saving harmony the interlocutors adopt a subtle, veiled, even metaphorical communication.

The second pattern of behaviour refers to formality in relations, thus one can distinguish between formal respectively informal cultures. The former ones are based on hierarchy, authority and status while the latter ones plead for equality, a flat hierarchy in organizations.

Another factor in differentiating cultures seems to be one’s attitude to time. In rigid-time cultures emphasis is layed on punctuality, on a strictly followed schedule, on deadlines – according to Hall monochronic cultures – while in fluid-time cultures (polychronic cultures by Hall) everything seems to be fluid, no one sticks to dates and fix hours and there are simultaneous discussions upon different issues at business meetings.

According to nonverbal behaviour based on nonverbal communication (body language) respectively paraverbal behaviour (voice intensity, meaning of silence, etc.) Gesteland distinguishes between expressive cultures with intense gestures, showing feelings and reserved ones void of these manifestations.

After this synthesis of the research results in the domain of cultural differences one may put the question how and to what extent the presented differences influence human interaction in general and the course of business negotiations in particular. As beside this set of collective factors belonging to the culture of descent one's negotiation style is also defined to a great extent by a set of individual factors, like: temperament, personality, education, professionalism and experience gained during the years, one can neither exaggerate the effect of cultural determination without falling into the trap of stereotypy nor neglect the above presented points.

As all negotiators in the world Germans will bear beside their individual features also the marks of German culture with all its particularities. Characterized through Hofstede's cultural dimensions German business men although very formal will show little power distance i.e. they will accept the authority of a leader promoted on the base of his/her achievements and merits but not due to belonging to a certain group.

Concerning power distance Romania shows an evolving tendency from the acceptance of social inequality, of differentiating between „some“ and „others“ „more equal“ than the former ones, of power concentration in the hands of the attendants of the Communist Party and of oppression of masses during the communist regime – a perverted form of collectivism – unto the somehow failed attempt of rejecting it in the period after 1989.

What underlines this assertion is the present state of political class, entrusting leadership in some sectors and institutions to persons not on the base of competence and performance but according to party affiliation. Under such circumstances it is a must that position be completed by status and wealth obtained in different ways, honest or less honest ones. Financial state will be shown with predilection people giving up external signs of it neither in the political nor in the economic sector.

A high level of individualism being characteristic for German culture members of a German team will be selected due to particular technical competences. That's why a German negotiator will appreciate a similarly professional partner, a technocrat with the precision of an engineer, speaking in a high-flown, complex way as too great accessibility might be perceived by Germans as lack of professionalism. The team is formed out of a few people having not only the task of planning, designing but of implementing as well.

Despite of a quite stressed hierarchy and the respect shown to it – young people have a great regard for elder ones –, German management is consens-oriented, practicing a consultative leading style. Differences in opinion may be best solved through eye-to-eye discussions, not through a third party getting round the competence of somebody and seeking for solutions by persons higher in rank.

Concerning the level of individualism in case of Romanian culture one can detect a quite clear separation between public and private domain, the latter one coming more abreast of European and occidental norms. Cultural predisposition, the stereotype features we feel tempted to characterize Romanian people through leave their marks more upon state institutions, authorities and public field in general than upon economic agents whose activity is guided by the rules of market economy. In a

private company there is less probable for nepotism and clan spirit to dominate over competences and economic, financial interests.

Thus, according to Hofstede's cultural dimensions a Romanian negotiator will be characterized through moderate individualism, he/she will be tempted to appreciate business partners according to competences and not on the base of social belonging. But because of the importance ascribed to relations this business area will show aspects of collectivism as well as there exist some religious, ethnic subgroups where deals are made preferably intragroup putting barriers to non-members.

In the same way by conflict and problem solving Romanians will be tempted to appeal to acquaintances and their authority instead of getting to consense by one's own efforts and arguments. One should mind also that a "Romanian" negotiator could possibly be only Romanian citizen but belonging to another ethnic group resulting thus probably a double cultural conditioning, by the country's culture at one hand and the culture of the ethnic group of descent at the other. In this way one may find different levels of individualism among Romanian business people not only through a personal, but also a cultural determination, this phenomenon being valid for all dimensions and features handled in the following passages.

Germans are characterized both in their professional and personal relations by:

- punctuality – that's what they expect from their partners, too;
- rigorous planning of business meetings – 6 to 8 weeks before the meeting;
- discussions going on issue by issue according to a detailed schedule and passing on only after having clarified them one by one.

The stereotype of Germans having the obsession of punctuality is based on German culture being a rigid-time culture acribing great importance to punctuality, deadlines, schedules followed issue by issue.

In E. T. Hall's terminology German society would be categorized among monochronic cultures solving problems and tasks sequentially, one by one. Thus one cannot expect of a German business man/woman to tackle negotiation issues in a hollistic, global manner because this will make him/her feel odd and probably won't even lead to the expected results. Negotiating issue by issue, according to a stated schedule as well as respecting this detailed planning do all serve avoiding uncertainty experiencing a high level in German culture. Due to this wish to avoid unknown and uncertainty a German work team will excel in detailed planning of a project and realization on time and according to indications but will have poorer results in innovation and creativity.

Being also part of a monochronic culture Romanians will prefer at negotiations an established programme, an agenda as a key to discussions even if they don't take it very strictly. Issues will be rather discussed one by one than globally but the time frame of discussions will not be absolutely respected. As gathering information, building relationship, negotiations need a long time, – especially when in realization of the plan state authorities are implied as well considerably slowing down with their bureaucratic procedures the progress in work – negotiations in our country will be slow and decision taking process while passing many hierarchic levels quite the same.

Romanians are usually miser giving information supplementary to the presented ones, when they still drop this reticence, they do it for developing mutual trust. Before the economic crisis both the business and civil sphere showed a quite high disposition of taking credits even on a rather irrational base, – the Romanian state keeps being open to the idea of credit for consume even in present days. I rely on these aspects when I say Romanian society shows a medium level of uncertainty avoidance.

In case of product presentations, product subject to negotiations, Germans prefer technical details, logic arguments rather than emotional manifestations, the content of communication should get the upper hand of body language, all this according to German culture's reserved character (see behaviour patterns by Gesteland).

Thus, within formal presentations or discussions jokes should be avoided. German audience having the capacity to concentrate for a long time – upto one hour – won't interrupt speaker's discourse but at the end will ask detailed questions and will expect similar answers. It is also to be mentioned that German negotiators will appreciate "academic selling" presenting details and stressing upon benefits to get and won't feel comfortably with an aggressive selling style.

Regarding offers German negotiators similarly to the representatives of other Germanic people will show preference for a fair starting price in accordance with contract value and will dislike starting negotiations with an exaggerated price coming in the end to an acceptable one. Taking into consideration this aspect respectively Germans' little disposition to compromises once the offer is made there is no much space for bargain. Nevertheless they seek in discussions consense, reliable partners and long term profit.

In Romanian culture financial status gets a significant importance thus cars, trade mark of clothes, watch and cell phone type belong to one's definition. Making a fetish of wealth results with Romanian people the wish of fast enrichment, so Romanian negotiators when making a price offer will tend to exaggerate at the expense of a fair price and when buying will try to negotiate even a favourable price.

German negotiators' communication style is a direct one being marked by efficiency and their love for truth, as German people say what they think and think what they say. Due to this frankness and direct style representatives of a more complex and sophisticated culture may find Germans arrogant and rude. Their strong national pride and the innate sense of superiority they show generally instinctively without the intention of injury may consolidate this image in the eyes of a partner less familiar with German style.

Due to the direct, explicit communication style messages being rendered by verbal means German business people represent a low context culture, quite accessible for foreigners. They follow rules considered to be universally valid for all circumstances analyzing situations and phenomena by parts. These features are classified by Fons Trompenaars as showing universalism and specificity. Germans' little power distance is also reflected in their perception of equality. Being part of a culture based on achievement Germans know their promotion depends only on their personal performances and not on social or family background this giving them sufficient motivation to work hard.

Taking into consideration Trompenaars' cultural dimensions Romanians' predilection for particular solutions based on interpersonal relationship or social belonging could be the result of particularism characterizing Romanian culture. As in Romanian society persons are not always strictly ranked according to performances and merits, it can be classified rather a culture based on ascription however the economic and business sphere try to counterbalance this aspect.

Considering bribery and the system of looking for back doors in problem solving, communication is not very direct in Romanian business world, despite of it messages still preserve to a great extent their communicative value. Expressing disapproval happens without resorting to euphemism but asking for a favour usually assumes veiled forms.

In Germany there is a precise separation between public space designated to negotiations as well and the private sphere reserved only for the close ones, as they very smartly put it "Dienst ist Dienst und Schnaps ist Schnaps" (Tomalin, & Nicks, 2007, p.229) (task is task and spirits are spirits).

Thus, business contacts resume mainly to work hours, inviting partners to one's home is rare. Being a system-oriented culture negotiations take generally place within an official frame, in the negotiation room. When they are still run during a business dinner these events are formal taking place outside the personal home discussions upon business items being accepted before or after dinner, in no case during it.

In Germany in business world presents are almost unknown, when people still give/take little presents these are unwrapped flowers – in case they have no ornamental wrapping, just a simple brown wrapping paper –, chocolate or handmade souvenirs from visitor's home-country. Too personal presents as perfume, jewelry, flowers like chrysantemums, lillies are to be avoided as they are flowers specific for funerals. Be careful when giving wine as present, Germans are connoisseurs and even cultivators of noble wine.

On the contrary in a country where power distance has remained unaltered in the eyes of authorities, state institutions, business people have formed their own set of solutions keeping on resorting to the old system of "little presents". Being used to corruption and bribing they will be tempted to seek for the back door and less "catholic" solutions, so they won't shrink back from greasing somebody's palm when necessary and won't lay such a great emphasis on honesty and principles. As bribery isn't strange to Romanian business world business presents don't represent a delicate topic either. They are often offered without any hidden intention as part of traditional Romanian hospitality or led by the wish of making our country and its characteristics known among foreigners.

Although being a masculine culture oriented to profit, achievements and competition Germans would not exceed the limits of ethics giving great importance to honesty, respecting rules and reliability, qualities having a special place in their mental programming. Their orientation to masculine values doesn't exclude women's presence in business life, even more the representatives of the fair sex can delight in the same treatment as their male colleagues the only criteria for gaining prestige and status being

competence, education and performance. According to this type of culture Germans perceive life as a frame for work, in other words they “live to work”.

However, in Romania women are occupying even more and more high position jobs claiming a high level of education and society seems to accept their emancipation, taking into consideration the values both men and women adopt Romanian culture is still a masculine one.

Its values are:

- realization;
- earnings;
- competition;
- promotion.

Concerning female emancipation and equality of sexes in all domains there is following to be said: Romanian business people generally don't bother negotiating and making a deal with a woman, but the latter one should prove her competence and skills much more than the representative of the other sex would be expected to do, that means a female entrepreneur will have to work hard in order to be accepted as equal partner.

The professionalism she should show doesn't mean she should give up her female features but concerning clothes she is expected to adopt a conservative style, as well. Because of Romanian women and especially business women adopting masculine values one can point out even a masculine character of presents in professional relations. One can offer a Romanian business women flowers, but instead of chocolate a little present related to professional life such as an agenda, organizer and so on fits better.

Just as other Western cultures German society is also rather short term oriented even the more as it shows deal- and not relationship-focus (see Gesteland). Thus negotiations led by Germans will be relatively short issues being handled directly, ‘in medias res’ after a short introduction, all discussions converging to the final target, the realization of meeting's objective namely signing the contract. This latter one will be taken as law and consulted every time in case of misunderstandings.

However, it lays a quite great emphasis on interpersonal relationship giving thus proof of a medium term orientation, a Romanian negotiator will be essentially interested in task realization, i. e. the deal (deal-focus). Contracts in turn will be very long with detailed conditions and terms and according to Romanians' predilection to assume obligations rather at a declarative level they could suffer major changes until the final signature.

Referring furthermore to Gesteland's categories a German negotiator shows a very high level of formalism. His respect for hierarchy and his politeness will create in the eyes of less formal people the image of the distant and cold German. Foreigners in contact with Germans are advised to wait until Germans initiate socialization, no way to take themselves the initiative. In German society titles, position, good manners are very important, they are addressing each other preponderently in a formal way using the family name. This formalism will be preserved in all professional contacts both vertically and horizontally.

In German work teams team members often keep this formalism in contact with each other, very perplexing for negotiators coming from an informal culture. In order to avoid this situation German colleagues could adopt temporarily for the time of transactions a less formal style coming back to their former attitude back to home.

In accordance with this formalism is German negotiators' reserved behaviour. Germans prefer a larger personal space i.e. a larger distance zone in their interactions, they will listen to their interlocutor patiently without interrupting while in conversations silence breaks will play a welldefined role. Germans' reserved attitude is manifested both on the plane of verbal and para- respectively nonverbal communication in a moderate use of gestures, movements and body language.

Romanian society shows moderate formalism conveying importance to age, social belonging and titles, however concerning the latter one we can't make any certain affirmation. It is in fact a vicious circle: titles and diplomas being considered important, most people long for them resulting a real chase of diplomas.

On the other hand as there are already existing many possessors of such titles, they've lost some of their value and power to confer prestige. Good manners and politeness are also welcome among business people in our country however playing no absolute role in their relations.

A Romanian negotiator will make a moderate use of para- and nonverbal communication tools, his gestures, body and facial movements, voice variations being more intense than for instance in reserved cultures. Visual contact will be sought to the partner, if contrary, intentions are not honest, there is something to be hidden. At the same time Romanian business people will keep moderate distance in their professional relations without invading the counterpart's private space.

Men used to shake hands but huggings, taking somebody by the arm are no practice in our country – as well as there is no handshaking among women or between women and men –, thus we can assert Romanian culture is a “noncontact” one. In Romanian business sphere there's no taboo to show sentiments within the confines of rationality and decency. Of course nervous outbreaks, losing temper are not accepted in moderately affective cultures as the Romanian one either.

Concerning verbal communication and foreign language usage Romanians present both good quantitative and qualitative values derived from necessity and interest partially contradicting the rules of international transactions postulated by Gesteland according to which visitor should adapt to host culture and seller to buyer.

Regarding German culture aspects of internal or external control should also be taken into consideration. What Trompenaars deduces from manager's attitude to environment, – i.e. subjugating it by economy agent or subordination to it on behalf of the latter one – highlights a fundamental trait of German culture.

On the plane of ideas and sentiments German literature of the 18<sup>th</sup> century had been marked by internal orientation/control (*Innerlichkeit*), while in the socio-economic field one can assist to German society's intense concern about environment protection not considering nature subdued to human needs and goals but on the contrary dominating in human's relation to it. This environment-friendliness is completed by a strong civil consciousness and sense of duty.

Thus, German economy agents in evaluating a business opportunity will not only focus on the benefits and profit generated but on the consequences upon environment as well. On the contrary according to the masculine values adopted Romanian managers tend to believe that environment is subdued to their activities and plans and pay too little attention to protecting nature in the sense of a sustainable development. Thus they show an external control.

As all negotiations suppose beside the confrontation of arguments and counterarguments respectively objections, beside a battle of numbers a chapter of minimal socialization as well, in the following some topics of success with Germans are presented.

Interest for their culture and country, relating travel experiences – not to forget that Germans are passionate tourists –, sports in general and especially football are favorite small talk topics in Germany. But take care, undermined field is too familiar behaviour, questions about the business partner's private life, topics related to the second World War and the role Germans played in it respectively speaking about the defeats of the German football-team at worldcups.

Synthesizing particularities characteristic for German negotiation style one could make a "recipe" for success in business with Germans consisting of a few ingredients just as follows: proving efficiency and punctuality, sincerity, honesty and direct style, actions according to assertions, putting up rules and respecting them and last but not least respecting hierarchy. Knowing German language at least at basic level could be furthermore added to this list.

No matter how good they should speak English Germans would prefer if possible communication in their mother tongue especially in delicate or very important matters. In the same time negotiations run in English could come to an unexpected turning-point in favour of the business partner showing basic knowledge of German, a gesture very much appreciated by them.

Among Romanians' favorite discussion topics are to be found:

- sports, especially football;
- politics, in post-revolutionary Romanian society it has already become a tradition to express dissatisfaction about the system;
- family;
- properties.

Since the majority of Romanian population is religious there is somehow taboo to express lack of understanding or disaccord concerning orthodox rituals and dogmas. As Romanians – just like other people in Eastern Europe in general – are very hospital accepting professional and even personal invitations is recommended. In case of being invited to a Romanian's home flowers for the lady and a bottle of good beverage are always a good choice.

In completion to these descriptive passages a table of synthesis should stay here for the results and conclusions of former and present research work.

**Table 1. German and Romanian negotiation style influenced by cultural differences – synthesis**

German negotiation style	Romanian negotiation style
<ul style="list-style-type: none"> <li>- <b>little power distance</b> (see Hofstede), authority gained through competence and performance</li> <li>- importance of position in hierarchy (strictly according to merits)</li> </ul>	<ul style="list-style-type: none"> <li>- <b>greater power distance</b> (evolving tendency: communist period → postcommunist period), authority still gained mainly through belonging to a group and relations</li> <li>- importance of position in hierarchy, of status (financial aspects)</li> </ul>
<ul style="list-style-type: none"> <li>- <b>high level of individualism</b> (see Hofstede), promotion only on behalf of merits</li> <li>- appreciating a competent, technocratic partner with the preciseness of an engineer</li> <li>- high complexity - sign of professionalism</li> <li>- consense orientation, direct problem solving through the involved ones</li> </ul>	<ul style="list-style-type: none"> <li>- <b>medium level of individualism</b> – difference between private sphere and public sector</li> <li>- solutions found appealing to acquaintances</li> <li>- importance of relations, belonging to a certain group (collectivist aspects)</li> </ul>
<ul style="list-style-type: none"> <li>- negotiations item by item according to a stated work schedule</li> <li>- importance of deadlines, of punctuality → <b>monochronic culture</b> (see Hall)</li> <li>- thorough planning serving <b>uncertainty avoidance</b> (see Hofstede)</li> </ul>	<ul style="list-style-type: none"> <li>- negotiations item by item according to a work schedule but leaving space for flexibility as well</li> <li>- a bit more relaxed attitude to time, possible postponements, slow negotiation process, long decision taking process</li> <li>- essentially a <b>monochronic culture</b></li> <li>- disposition to take credits → <b>medium level of uncertainty avoidance</b></li> </ul>
<ul style="list-style-type: none"> <li>- preference for “academic selling“, presenting technical details and benefits</li> <li>- preference for a fair price, little disposition for compromises</li> </ul>	<ul style="list-style-type: none"> <li>- the wish of fast enrichment → often exaggerated initial price, bargaining upon favourable price as well</li> </ul>
<ul style="list-style-type: none"> <li>- <b>low context culture</b> (Hall), direct communication → it may be found arrogant and rude</li> </ul>	<ul style="list-style-type: none"> <li>- not very direct communication, asking for favours in a veiled form</li> </ul>
<ul style="list-style-type: none"> <li>- universally valid rules → <b>universalism</b> (see Trompenaars)</li> <li>- culture based on <b>achievement</b></li> </ul>	<ul style="list-style-type: none"> <li>- preference for particular solutions on the base of relations → <b>particularism</b></li> <li>- culture rather based on <b>ascription</b></li> </ul>
<ul style="list-style-type: none"> <li>- generally no presents in business life</li> </ul>	<ul style="list-style-type: none"> <li>- because of the system of “little presents” inherited from the communist period no delicate problem giving business presents (mainly given without hidden intentions)</li> </ul>
<ul style="list-style-type: none"> <li>- <b>masculine</b> values but actions within the limits of ethics</li> <li>- equal treatment for men and women, only criteria: performance</li> </ul>	<ul style="list-style-type: none"> <li>- <b>masculine</b> culture, women have to prove their skills more than men are expected to do</li> </ul>
<ul style="list-style-type: none"> <li>- <b>short term orientation</b> (Hofstede)</li> <li>- <b>deal-focus</b> (Gesteland), relatively short negotiations</li> </ul>	<ul style="list-style-type: none"> <li>- <b>medium term orientation</b> (importance of relationship building)</li> <li>- <b>mainly deal-focus</b> but long negotiating and decision taking process respectively contracts</li> </ul>

<ul style="list-style-type: none"> <li>- <b>high level of formalism</b>, importance of good manners, titles, position</li> <li>- larger interpersonal distance → <b>reserved culture</b> (Gesteland)</li> </ul>	<ul style="list-style-type: none"> <li>- <b>moderate formalism</b>, importance of age, prestige, titles (the latter one corrupted by the great number of holders of certain titles)</li> <li>- <b>moderately reserved culture</b>, concerning verbal communication: good command of foreign languages</li> </ul>
<ul style="list-style-type: none"> <li>- <b>internal control</b> → concern about environment</li> </ul>	<ul style="list-style-type: none"> <li>- <b>external control</b>, environment subdued to economic activity</li> </ul>
<ul style="list-style-type: none"> <li>- small talk topics: culture, travel experiences, sports</li> <li>- taboos: being too familiar, partners' private life, World War II., Germany's role in it, defeats of the German football team</li> </ul>	<ul style="list-style-type: none"> <li>- small talk topics: sports, politics (expression of discontent with political system), family, properties</li> <li>- taboos: lack of understanding for orthodox rituals, expression of disaccord with religious dogmas</li> </ul>

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## **FINITE PRODUCTS ADMINISTRATION WITH MS ACCESS**

**ILEANA HAUER, ANTOANETA BUTUZA,  
CORNELIA MUNTEAN \***

**ABSTRACT:** *As software applications become more and more complicated, it is essential to capture the requirements, model the system design in different phases, and communicate frequently among end users, business analysts and developers. Relational database management systems (RDBMS) are the dominant database technology and play an important role in enterprise software applications. We used MS Access to develop an application which underlines the finite products flux beginning with the execution stage to the sale stage.*

**KEY WORDS:** *software applications; database; relational database management systems.*

**JEL CLASSIFICATION:** *M15.*

### **1. INTRODUCTION**

It is important to have a properly designed database so that accurate information can be provided to an organization. It is much easier to create an effective design initially so that necessary modifications to the database are kept at a minimum. Discovering problems after a database has been put into operation can be detrimental to a business, institution or organization.

There is a three-phase process in developing a database (Benaroch & Kauffman, 2000):

- Logical design: defining tables, fields, Primary and Foreign keys, establishing table relationships and levels of data integrity.
- Implementation of the logical design: using a DBMS to create tables and their relationships, using the tools to implement levels of data integrity.

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- Development of end-user application.

Relational databases have a strong (mathematical) theoretical foundation (Codd, 1970; Chen, 1976), and a wide range of database software products available for implementing relational databases. Dr. E. F. Codd applied mathematical theories known as first order predicate logic and set theory to design relational databases. These theories are the foundation for the Relational Database Model (RDM). They are important because they makes the RDM predictable and reliable. It is not necessary to fully understand these theories to develop a sound database design.

But why we should use a relational database? The purpose of a database is to organize data so it can be easily selected, sorted, managed, and updated. By using a relational database, each piece of information only needs to be stored once. The benefit is that if a piece of data is updated it needs to be updated in only one place and the update will then be recognized throughout the database. Otherwise, several updates would need to be made in several different places, which can be cumbersome and lead to a messy situation if not done accurately.

Data is retrieved by specifying fields and tables using a standard query language known as Structured Query Language (SQL). Most DBMSs (Database Managements Systems) use SQL to build, modify, maintain and manipulate databases. Thorough knowledge of SQL isn't always necessary since most DMBSs use a graphical interface to generate SQL statements and retrieve data. It is good, however, to have basic knowledge of SQL. Large volumes of centrally located shared data have come about in recent history, creating the need for client/server software. Data security and integrity can be implemented through the database server.

## **2. MATERIAL AND METHOD**

### **2.1. Microsoft Office Access short history**

Microsoft Office Access, previously known as Microsoft Access, is a relational database management system from Microsoft that combines the relational Microsoft Jet Database Engine with a graphical user interface and software-development tools. It is a member of the Microsoft Office suite of applications, included in the Professional and higher editions or sold separately. In mid-May 2010, the current version of Microsoft Access 2010 was released by Microsoft in Office 2010; Microsoft Office Access 2007 was the prior version. Access stores data in its own format based on the Access Jet Database Engine. It can also import or link directly to data stored in other applications and databases.

Prior to the introduction of Access, Borland (with Paradox and dBase) and Fox (with FoxPro) dominated the desktop database market. Microsoft Access was the first mass-market database program for Windows. With Microsoft's purchase of FoxPro in 1992 and the incorporation of Fox's Rushmore query optimization routines into Access, Microsoft Access quickly became the dominant database for Windows - effectively eliminating the competition which failed to transition from the MS-DOS world. Access 2007 introduced a new database format: accdb. ACCDB supports complex data types such as multivalued and attachment fields. These new field types are

essentially recordsets in fields and allow the storage of multiple values in one field. With Access 2010, a new version of the ACCDB format supports hosting on a SharePoint 2010 server for exposure to the web.

## 2.2. Designing the database

Effective database designers will keep in mind the principles of normalization while they design a database. Normalization is a database design approach that seeks the following four objectives (Năstase, et al., 2001; Chen, 1976): minimization of data redundancy; minimization of data restructuring; minimization of I/O by reduction of transaction sizes, and enforcement of referential integrity. If the normalization goes to extremes it means that each piece of information may not appear more than once in a database (Muntean, 2003). Practically, however this is not always possible or desirable.

The following concepts and techniques are important to keep in mind when designing an effective database:

- a) An entity is a logical collection of things that are relevant to your database. The physical counterpart of an entity is a database table.
- b) An attribute is a descriptive or quantitative characteristic of an entity. The physical counterpart of an attribute is a database column (or field).
- c) A primary key is an attribute (or combination of attributes) that uniquely identify each instance of an entity. A primary key cannot be null and the value assigned to a primary key should not change over time. A primary key also needs to be efficient. For example, a primary key that is associated with an INTEGER data type will be more efficient than one that is associated with a CHAR data type. Primary keys should also be non-intelligent; that is, their values should be assigned arbitrarily without any hidden meaning. Sometimes none of the attributes of an entity are sufficient to meet the criteria of an effective primary key. In this case the database designer is best served by creating an "artificial" primary key.
- d) A relationship is a logical link between two entities. A relationship represents a business rule and can be expressed as a verb phrase. Most relationships between entities are of the "one-to-many" type in which one instance of the parent entity relates to many instances of the child entity.
- e) The second type of relationship is the "many-to-many" relationship. In a "many-to-many" relationship, many instances of one entity relate to many instances of the other entity. "Many-to-many" relationships need to be resolved in order to avoid data redundancy. "Many-to-many" relationships may be resolved by creating an intermediate entity known as a cross-reference (or XREF) entity. The XREF entity is made up of the primary keys from both of the two original entities. Both of the two original entities become parent entities of the XREF entity. Thus, the "many-to-many" relationship becomes resolved as two "one-to-many" relationships.
- f) A "foreign key" exists when the primary key of a parent entity exists in a child entity. A foreign key requires that values must be present in the parent entity before like values may be inserted in the child entity. The concept of maintaining foreign keys is known as "referential integrity".

- g) Relationships between two entities may be classified as being either "identifying" or "non-identifying". Identifying relationships exist when the primary key of the parent entity is included in the primary key of the child entity. On the other hand, a non-identifying relationship exists when the primary key of the parent entity is included in the child entity but not as part of the child entity's primary key. In addition, non-identifying relationships may be further classified as being either "mandatory" or "non-mandatory". A mandatory non-identifying relationship exists when the value in the child table cannot be null. On the other hand, a non-mandatory non-identifying relationship exists when the value in the child table can be null.
- h) Cardinality helps us further understand the nature of the relationship between the child entity and the parent entity. The cardinality of a relationship may be determined by asking the following question: "How many instances of the child entity relate to each instance of the parent entity?". There are four types of cardinality: (1.) One to zero or more (common cardinality), (2.) One to one or more (P cardinality), (3.) One to zero or one (Z cardinality), and (4.) One to exactly N (N cardinality).

### 3. RESULTS AND DISCUSSIONS

We used Microsoft Access to create a database with several tables (see figure 1). For each table we introduced the fields, the suitable attributes and the primary keys. The relationships between tables is one-to-many, it means that one record in a primary table is related to many records in a related table (figure 1).

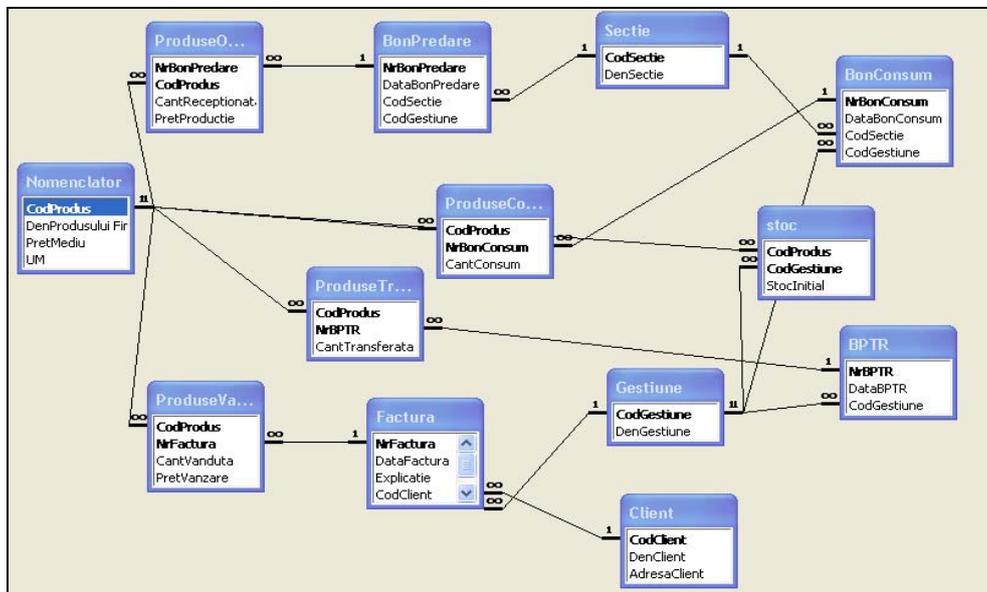


Figure 1. Table relationships

There is a menu form at beginning with several command buttons that allows a choice of different options. It contains the forms and reports which are presented using data and information regarding the Management of finite products. Forms shown in figure 2 are defined as templates that allow both data entry and data visualize.

**Figure 2. Menu form with command buttons**

If we want to introduce a new customer in the database the command button *Cienti* will be selected. This form allows us to view the form *Cienti* for entering data about new customer (figure 3). This form has *Cienti* table as a data source. Data entered in this form will be stored in a table named *Cienti*.

By activating command buttons: *Cienti*, *Facturi*, *Bon Consum*, *Bon Predare*, *Produce Finite*, *Produce Obtinute*, *Produce Transferate*, *Produce Vandute*, are displayed forms that provides a detailed picture of Customers, Invoices, Consumer bill, Delivery bill, Finite products, Products obtained, Transferred products and Products sold (figure 4).

Each of these forms have other command buttons that allow us to close, to add, and also to delete records. Each command button has an associated procedure in Visual Basic.

The command buttons *Rapoarte*, which are located on the right side of the form from figure 2, can display different end situations (figure 5). The information processing is reflected in several reports. One of them, the report 'Situatia produselor stocate' provides information about storage of products: product code, name, code, quantity stored.

**Client**

**CLIENTI**

Cauta Client: S.C Sigma S.R.L.

Codul: 100

Denumire: S.C Sigma S.R.I

Adresa: B\_dul Marasti,nr.

Record: 1 of 10

Figure 3. Form Clienti for entering new data about customers

**Client**

**Situatie Facturi**

DenClient: S.C Sigma S.R.L.

AdresaClient: B\_dul Marasti,nr.7,Bucurest.

NrFactura	DataFactura	Explicatie	CodClient	CodGestiune
101	11/13/2006	vanzarea produselor finite	100	g1
102	11/19/2006	vanzarea produselor finite	100	g2
*	0		100	

Record: 1 of 2

Figure 4. Detailed image for a customer's invoices

<i>Situatia produselor stocate</i>			
<i>CodProdus</i>	<i>DenProdusului Finit</i>	<i>CodGestiune</i>	<i>StocInitial</i>
10	bovor	g2	32
<i>Summary for 'CodProdus' = 10 (1 detail record)</i>			
	<b>Sum</b>		32
	<b>Avg</b>		32
<i>Summary for 'CodProdus' = 10 (1 detail record)</i>			
	<b>Sum</b>		32
	<b>Avg</b>		32
11	macheta	g1	20
<i>Summary for 'CodProdus' = 11 (1 detail record)</i>			
	<b>Sum</b>		20
	<b>Avg</b>		20
<i>Summary for 'CodProdus' = 11 (1 detail record)</i>			
	<b>Sum</b>		20
	<b>Avg</b>		20

Figure 5. Different end situations displayed with a report

#### 4. CONCLUSIONS

A database management system such as Access, provides us with the software tools we need to organize that data in a flexible manner. It includes facilities to add, modify or delete data from the database, queries about the data stored in the database and produce reports summarizing selected contents.

In enterprise environment, Microsoft Access is particularly appropriate for meeting end-user database needs and for rapid application development. Microsoft Access is easy enough for end users to create their own queries, forms and reports, laying out fields and groupings, setting formats, etc. This capability allows professional developers, as well as end users, to develop a wide range of applications to fulfill the needs of an organization or commercial purpose.

In conclusion, effective database design can help the development team reduce overall development time and costs. Undertaking the process of database design and creating a data model helps the team better understand the user's requirements and thus enables them to build a system that is more reflective of the user's requirements and business rules. The act of performing database design is platform-independent so persons who use database systems other than SQL Server should also be able to benefit from these concepts.

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## **USING THE DATABASE MANAGEMENT SYSTEM OF THE FINANCIAL STATEMENTS SUBMISSION**

**ALIN ISAC, CLAUDIA ISAC,  
ANCA JARMILA GUȚĂ \***

**ABSTRACT:** *In administration, information technology represents a field with major implications in its functioning and the re-configuration of the computer infrastructure is responsible for a series of efficient changes concerning the development of the administrative process. Thus, our paper tries to determine the importance of Business to Government relation in increasing the flexibility of IT solutions used at the level of companies and especially in the financial accounting activity, starting from the necessity to implement the e-Government system in Romania. While revealing the company's IT system and the financial accounting subsystem we also pointed out the stages of the accounting activities regarding the filling out of statistical reports such as fiscal declarations and annual financial statements.*

**KEY WORDS:** *e-Finance; secure transactions; financial statements; PHP; MySQL.*

**JEL CLASSIFICATION:** *M 48; C81.*

### **1. INTRODUCTION**

Electronic communication services go beyond the personal and the business side of communication and they represent an important tool for supplying all types of information, goods and services to the public both by the government (social services, education or health) and by the private sector. Those without access to electronic communication services are likely to be outcast from the 21st century society. All over the world there is an increasing interest in new information technologies and particularly in electronic applications over the Internet. These instruments have gradually become effective tools to improve services for individuals and businesses, so that Romania currently benefits by various electronic services used in administration

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such as: sites for the presidency, senate, parliament, ministries, prefectures, municipalities, public institutions and portals: e-government, e-democracy, pay points, e-auction etc.

Thus, portals have replaced and completed the sites due to the increased volume of information required to be published, to its dynamics and to the ease with which it can be processed automatically by internal applications. Governmental or administrative portals are the most visited of many portals and they provide “the ease of communication among different departments and citizens”.

## **2. METHODOLOGY. CHOOSING THE DATABASE MANAGEMENT SYSTEM**

The process of choosing a database management system (DBMS) includes the following phases:

- determining the criteria required by the user of the system and their analysis in terms of: types of data structures, response time; methods of access, privacy issues, application type, etc..
- existing DBMS inventory and establishing the correspondence between the user’s demands and the characteristics of systems in order to be able to meet the defined requirements;
- choosing a DBMS based on predetermined criteria.

Given these steps, the criteria taken into consideration when choosing a type of DBMS are:

- portability of DBMS's, namely the possibility of using a DBMS from a computer to another allowing for the actual software portability and data portability.
- the cost of the system that takes into account elements regarding the employment time of CPU; system maintenance and development costs; necessary hardware resources; documentation costs; adaptation costs and costs with the transition to a new computer system;
- the implementation facilities, the maintenance and operation of database are reflected by: how data is described, data organization techniques, techniques for easy access to any information, reduced time for updating information and responding to information requests; the possibility to add applications, data validation programs, updating programs, etc.;
- management of complex data structures (eg. the tree or network type).
- choosing access methods based on application characteristics, queries or updates etc.;
- basic data protection and security;
- utility of the application according to the field of activity (eg production scheduling, purchasing, sales, etc.);
- training of DBMS operators;
- maintainability of the system and quality of documentation.

The possibility of free use as well as meeting the criteria set out above by made me choose MySQL as a database management system for the e-Finance



This data base consists of 24 tables:

- Company\_pl;
- Company\_submission;
- data\_100;
- data\_101;
- data\_102;
- data\_300;
- data\_annually;
- data\_semester;
- reminder\_send;
- site\_config;
- site\_content;
- site\_counterdata;
- site\_countermaxdata;
- site\_counteronlinedata;
- site\_countries\_romania;
- site\_downloads;
- site\_downloads\_categories;
- site\_languages;
- site\_loginconfig;
- site\_personal\_messages;
- site\_themes;
- site\_translate;
- site\_users;
- site\_users\_admin;

### 3. ACCESS TO MYSQL DATABASE ON THE WEB THROUGH PHP

Starting from the general criteria for choosing a database management system, the benefits of using PHP scripting language instead of ASP technology in order to implement a virtual business, a virtual shop respectively, one can identify:

- *The price* as PHP is cheaper to implement than ASP;
- *Additional advantages* offered by PHP as compared to ASP;
- PHP is an *open source* programming system. The software in this category are the result of a collective effort made by a community of volunteer programmers worldwide who are passionate about science. These communities include people of different specialties and experience in different sectors working together to solve problems in new ways, thus resulting better software. Open-source software is free of charge, free to copy and modify, which means an advantageous choice for customers.
- PHP is a *highly flexible language*, it can be extended and customized according to customers' requirements. Programmers who are beginning to develop a project, are offered great support since there is a huge amount of software written in PHP and its source code is available free of charge. Whenever possible, programmers can reuse the code written by them, and when facing a new type of application they can

browse what they have already developed, they may add new functions to it and customize it. This would not be possible if the software would be the property of a person, company, etc.

PHP is the most popular web programming language in the world today. This language is more popular than ASP, Cold Fusion, Perl or any other web programming language. Using PHP does not involve commercial license or payments for repeated upgrades. For example, uploading and downloading files via HTTP or FTP, encryption, sending emails from a web page, require the purchase of auxiliary software in the case of ASP. With PHP, all these are free.

PHP is independent from the bundle: it can run equally well on operating systems such as: Linux, Solaris, Windows and others. ASP runs only on Web servers with Microsoft Windows systems. In this case it will be difficult to the web hosting provider with a better one, in case the latter uses Linux. PHP is much faster than ASP. ASP supports multiple programming languages and this architecture is inherently slower and more memory intensive than the PHP model because each ASP compiler runs in its own process. Thus, when ASP detects an ASP tag will produce a change in the context of an HTML parser. PHP is secure. IIS Server is well known for its security holes. From our point of view programming in PHP is better than ASP because the same functionality can be written with fewer codes than ASP. This is possible because HTTP GET and POST variables are created automatically by PHP as global variables, so it eliminates the stage of extracting them by using the ASP Request object. HTTP header manipulation is made easier with PHP than ASP. It is considered that the ASP is a good and useful technology but in the long run, PHP will prove superior both in terms of technology and its popularity. This statement is based on a number of reasons drawn from specialized literature.

In PHP there are functions for all operations performed on MySQL database. The idea underlying the interaction PHP - MySQL and generally, the interaction between PHP and a database is that it allows all the data that the programmer wishes to post on the site to be present in the database. Thus, information can easily be updated and presented in a 'dynamic' form on the site. MySQL management can be done using the command line or the browser and accessing an application called PHPMysqlAdmin written in PHP.

In order to manage MySQL databases one can use the command line mode or by downloading a graphical interface from the Internet: MySQL Administrator and MySQL Query Browser.

The operation of the Web database architecture involves the following steps:

- the Web browser sends a HTTP request to a specific web page. The page with the results of the search is called results.php;
- the Web server receives the request for results.php, retrieves the file and transfers it to the PHP engine for processing;
- PHP engine starts exploring the script. Within the script there is a command in order to connect to the database and perform an inquiry. PHP opens a connection to MySQL server and sends the query in question;
- MySQL server receives a database query which needs to be processed and then it sends the results back to the PHP engine;

- PHP engine ends the script, which usually involves formatting the results of the inquiry in HTML code. Then, the resulting HTML code is returned to the Web server;
- The Web Server transfers the HTML code back to the browser, where users can view the results of the search.

PHP supports libraries for connecting to a large number of databases including Oracle, Microsoft SQL Server and PostgreSQL. The principles of connecting to and searching these databases are generally the same. Function names may vary, and some databases have slightly different features, but if you can connect to MySQL it should be able to easily adapt the information to any of the other databases.

The main areas where PHP scripts can be used are:

- *server-side scripting language*, which is the core of PHP and requires the existence of three elements, such as PHP parser (CGI or server module), a web server and a web browser;
- *command line scripting* which allows a PHP script to run without a server and a web browser and it is ideal for scripts regularly executed using cron (on \* nix or Linux) or Task Scheduler (on Windows);
- *writing desktop applications* allows you to write applications that will run on multiple platforms. PHP-GTK is an extension of PHP, which is not available in the main distribution.

#### 4. IMPLEMENTATION OF SECURE TRANSACTIONS WITH PHP AND MYSQL

Providing secure transactions using the Internet is a matter of examining the information flow and the certainty that user's information is secure in all locations.

Based on network security, I consider that no system is impenetrable because of information flows. The user's information flow in a typical application, written using PHP and MySQL, is shown in Figure 2.

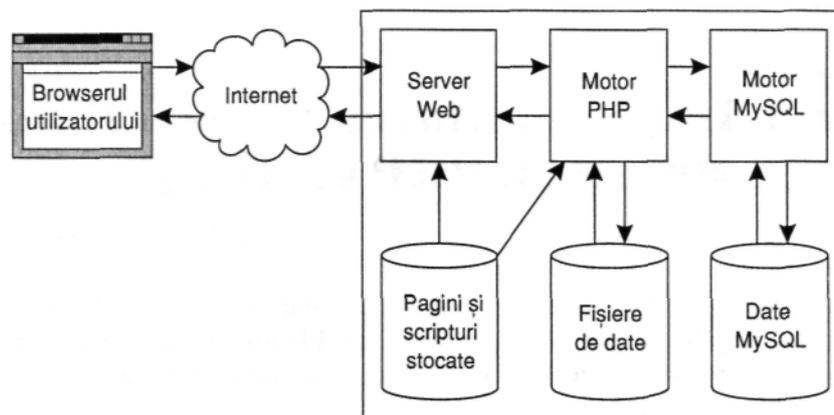


Figure 2. The user's information flow

The details of each transaction that appears in the user's system will differ, depending on the design of the system, on the information and the actions that triggered the transaction.

All these can be analyzed almost the same way. Each transaction between a user and a Web application begins by sending a request by the user's browser through the Internet, to the Web server.

If the page is a PHP script, the web server will delegate the processing of the page to the PHP engine. This script can read or write data to disk, it can use other PHP or HTML files, it can send SQL queries to MySQL daemon and it can receive answers.

MySQL engine is responsible for reading and writing data to disk and it includes some main parts: the user's system; the Internet network; the beneficiary.

The user's system runs a Web browser and the information is stored or processed according to the elements of a Web application. Due to the fact that different browsers are available, one may take into account only the most recent versions of the two most popular browsers.

Even if most of the differences between versions will affect only the processing method and the display of HTML code, there are security features or functionality elements that need to be taken into consideration when designing complex applications.

The functionality of the application offered by PHP can be compatible with the user's browser since the final result is an HTML page.

However, in terms of safety, there are reasons to keep as little information as possible on the user's system, even if most information that is stored should be on the Web server. There is the possibility to not have control over data stored outside the web server, over their safety and the user cannot be stopped from modifying this information.

The Internet, in addition to the many useful features, is an insecure network because when transmitting new information each user can see or modify the data transmitted. In order to eliminate these disadvantages, the following stages should be completed:

- Transparent transfer of information, knowing that it is possible to modify it during transmission, thus it is not confidential;
- Digital signature or encrypting the information before sending it in order to prevent forgery;
- Selecting the information that is too important to risk interception and finding another means of sending it.

Actually, in order to secure information entering and leaving the Web server through the Internet one can use the following technologies: SSL (Secure Sockets Layer); S-HTTP (Secure Hypertext Transfer Protocol).

## **5. CONCLUSIONS**

Both of the technologies offer confidential messages and authentication and they are resistant to corruption, however SSL is already available and widely used, while S-HTTP is attempting to recover lost ground. When implementing the e-Finance

application we used the SSL technology. The user's access is based on the tax identification code and the password chosen at the registration of the company in the database. It also uses protection against the introduction of source codes in the login fields.

As far as the storing of passwords is concerned, we used MD5 encryption algorithm (Message Digest Algorithm 5) which is a one-way hash cryptographic function that yields a fixed value result of 128 bytes in length. The MD5 function was developed by Ronald L. Rivest in 1991, published in 1992 by RFC 1321 and it is used as a component of some electronic signature schemes.

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**THE ROLE OF DEFENCE EXPENDITURE IN THE  
GREEK CRISIS**

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*Paper withdrawn by author*

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## **THE PROFIT AND LOSS ACCOUNT THROUGH THE ROMANIAN ACCOUNTING REGULATIONS. FROM EUROPEAN TO INTERNATIONAL**

**MARIANA MAN, LIANA GĂDĂU \***

**ABSTRACT:** *The paper analyses the profit and loss account from the Romanian accounting regulations' perspective in terms of format, structure, content, which is subject to the approval of OMPF no.3055/2009 harmonized with the European accounting directives. Even if from the name it appears the compliance with the European accounting directives, the Romanian profit and loss account brings elements from the international standard IAS1. Moreover, if we compare the structure of profit and loss account chosen by the Romanian policy makers with the structure proposed by the IV Directive, the list model, with the classification of operating expenses by nature, we conclude that they are similar, with small features found in the present order, an order which was also analyzed in the paper.*

*We tried to explain and argue the preference of Romanian policy makers for the list model of profit and loss account, with the classification of expenses by nature, but also the necessity to present, in the explicative notes, the classification of expenses by purpose, which is actually a combination of regulations between the IV Directive and the IAS1 standard.*

*In the second part of the paper we considered interesting to analyze the content of certain elements related to the profit and loss account, namely: the extraordinary elements, the cost of sold goods and services of the Analysis of operating result to capture both Romanian specific features, as well as the elements of IAS1 standard, the net turnover indicator, the items of gain and loss, the stocks variation element and the element Result on action.*

**KEY WORDS:** *the profit and loss account - financial statements; the format and structure of the profit and loss account; the content of profit and loss account; performance indicators*

**JEL CLASSIFICATION:** *M40; M41.*

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## 1. INTRODUCTION

The Romanian profit and loss account follows the format and structure presented by the IV Directive, but also brings elements from IAS1 norm: "The presentation of financial statements", and specific Romanian elements. We focused the research around these issues, in an attempt to explain the choice made by the Romanian policy makers.

The paper analyzes the profit and loss account taking into account the Romanian accounting regulations in terms of format, structure and content.

In order to analyze these issues and to capture relevant features related to them, we extended the study of research, by analyzing through comparison the profit and loss account from the two accounting referential the IV Directive and the international accounting standard, IAS 1 "The presentation of the financial statements".

We tried to emphasize the similarities, but also the differences, advantages, but also the limitations of the analyzed problems, to formulate conclusions, but also personal opinions and proposals.

## 2. THE FORMAT AND STRUCTURE OF THE PROFIT AND LOSS ACCOUNT

In Romania, the profit and loss account is regulated from the content, format and structure points of view through OMFP no. 3055/2009 regarding the accounting regulations harmonized with the European accounting directives.

From the scheme versions proposed by the IV Directive for profit and loss account, *the Romanian policy-makers chose and impose the list-scheme, with the classification of the exploitation expenses after nature.*

*If we compare the profit and loss account structure chosen by the Romanian policy-makers, with the structure proposed by the IV Directive, for the list model, with the classification of the exploitation expenses after nature, these are similar, with small features found in the present order.*

Thus, the scheme list of profit and loss account proposed by the IV Directive allows the separate presentation, through different positions, of both the amount of profit tax from the current result, and the extraordinary result of the activity. As derogation from these provisions, the Directive allows the presentation also of the cumulative total amount of taxes on the two activities, current and extraordinary, in one position. If you choose the second variant of the presentation, the Directive requires companies to disclose in the notes to financial statements, the extent to which income tax affects both the result of ordinary activities and the result of extraordinary activities.

For Romanian regulations, the particularity regarding the structure of the profit and loss account is that Romanian policy-makers chose the second option (which is more than a derogation from the first version - the class), with the presentation of the profit tax and the cumulative explanations in the notes (Pântea, et al., 2006).

We consider the first option proposed by the IV Directive, with the separate disclosure of the profit tax for two types of activities, current and extraordinary, a

variant which allows the presentation of the element "*The net result from ordinary activities*", more efficient, which helps in analysis, especially where extraordinary items would produce more and their value would be more significant.

Returning to the comparison of the profit and loss account structure, between the model proposed by the IV Directive and that required by the national regulations, we note that another feature is that the Romanian model category includes operating revenues, a distinct position from the structures presented by the IV Directive, namely, "The production realized and capitalized by the entity for its own purpose" (which emphasizes the incomes from the fixed assets production).

As we mention before, the Romanian policy-makers chose the list scheme of the profit and loss account, with the operating expenses classified by nature.

However, in the annual notes to the financial statements it is presented a model that emphasize the "analysis of the operating result", in which the operating expenses are classified by their destination (OMFP no. 3055/2009, art.335 ). **The conclusion** we draw is that *the Romanian accounting rules require the classification of the expenses after their nature in the profit and loss account, a model taken from the IV Directive, but also require the presentation in the explicative notes of an analysis of the operating result with the classification of the operating expenses after their destination.*

We will try to explain the choice made by the Romanians policy-makers, the two poles of references being found in the IV Directive's regulations and IAS1 standard.

Thus, if the IV Directive leaves a wider freedom to organizations in choosing the scheme for the profit and loss account, the list or account format with the classification of expenses by nature or destination, the IAS1 even if does not provide a scheme for the presentation for this financial statement, it restrict at two the number of options, by choosing between the methods of classification of expenses by nature or the method of classification of expenses by destination.

The Romanian policy-makers have reviewed all the options and found that the version which is most relevant and reliable for the enterprise's performance, useful in estimating future cash flows is shown above (the main form list of the classification of expenses by nature, but also the presentation in the explicative notes of the classification of expenditures by destination), which is actually *a combination of regulations between the regulations of IAS1 and the IV Directive regarding the format of profit and loss account.* In this way, the compliance with the accounting regulations of Directives and the international norm IAS1 regarding the format of the profit and loss account was meet (Berheci, 2010).

If the Romanian policy-makers would have chosen the list format of the profit and loss account, with the classification of the operating expenses by destination, only the compliance with the IV Directive, would have been realized, being harmonized with the purpose of the OMFP no.3055/2009 order for the "approval of the accounting regulations conformed to the European Directives". In order to respond to the IAS 1 requirements, it should present supplementary information regarding the nature of the operating expenses in the explicative notes (condition imposed by IAS 1).

Another explanation of the chose made by the Romanian policy-makers can be found in the significance of the indicators that the two scheme of the profit and loss account focus on.

Therefore, *the scheme list with the classification of the expenses by nature* – emphasizes indicators such as: turnover, the exercise production etc, which provides useful information to financial analysts, and in general to factors involved in creating and distributing of wealth (investors, creditors, employees, etc.), *a more open model to estimate future cash flows*. (Măcriș, 2011)

The other model, *with the classification of expenditure by destination* – through the following indicators: the expenses of core activity, of production, indirect expenses of manufacturing, general expenses of administration, is more useful to the management by reporting the different costs to the sold production, *generating information that regard the efficiency of the production activity, necessary especially in the firm management*.

We summarized in the below table the advantages and limitations of using the method of classification of expenses by their nature, respectively by their functions.

**Table 1. The advantages and limitations of using the method of classification of expenses by nature, respectively by their functions**

<b>The method of classification of expenses by their nature</b>	<b>The method of classification of expenses by their functions</b>
<p><b>The advantages:</b></p> <ul style="list-style-type: none"> <li>- Allows the use of profit and loss account in the calculation of intermediate balances, allows macroeconomic aggregate calculations;</li> <li>- The information from the classification of expenses by nature is useful in the estimation of the future cash flows for the enterprise;</li> <li>- This method is easy to apply because it does not require the allocation of operating expenses on functional classification. This model is suitable to the needs of small and medium-sized enterprises or to the large ones that do not exceed certain thresholds of indicators used in European boundaries: the turnover, the total assets and the number of employees. However, the Romanian specialist generalized the structure by nature to all the enterprises, regardless of their size;</li> <li>- This method provides more objective and verifiable information;</li> <li>- Facilitates the cash flow projections</li> </ul> <p><b>The disadvantages (limits) of this method:</b></p>	<p><b>The advantages:</b></p> <ul style="list-style-type: none"> <li>- This presentation often provides more relevant information to users than the classification of expenses by nature, but the allocation of costs by functions can be often arbitrary and involves considerable professional reasoning;</li> <li>- This model of analysis offers information on performance management regarding the business, the distribution and administration functions, so it is more relevant in the analysis of the financial performance than the other models which says almost nothing about the performance of enterprise;</li> <li>- The presentation of expenses by function permits the determination of the gross margin, as a difference between the turnover and the cost of sold goods or provided services. These indicators provide important information used in the comparison of the enterprise efficiency.</li> </ul> <p><b>The limits of the method:</b></p> <ul style="list-style-type: none"> <li>- This model, even more relevant in the analysis of the financial performance, is less reliable, because the allocation of costs depends on how the enterprise management defines its function. Moreover, if managers make organizational changes and adjust the functions, then the</li> </ul>

- This model does not say anything about the performance of the management in achieving the enterprise functions.	information can not be compared over time; - Does not allow the forecast for the future cash flows. Therefore IAS 1 requires to companies to present the additional information on the nature of expenses, including the expenses with depreciation and personnel.
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Source: Man, M.; Gădău, L. (2010) *The profit and loss account in different approaches. Advantages and disadvantages, Annals, Economic Series, Univ. "1 Decembrie 1918", Alba Iulia*

In conclusion, the model for profit and loss account chosen by the Romanian policy-makers contribute to playing a more complete picture of enterprise's performance, show greater openness to financial analysis, in estimating the forecast, and meets the information needs of a wide range users.

### 3. SOME ISSUES OF INTEREST ON CERTAIN ELEMENTS RELATED TO THE CONTENT OF PROFIT AND LOSS ACCOUNT

#### 3.1. The extraordinary items

We consider necessary to see how extraordinary items are addressed by the three accounting referential: the IV Directive, IAS 1 standard and the Romanian accounting standards and regulations through OMFP no.3055/2009, observing from here also the importance of these elements given by these accounting referential.

*The IV Directive considers the extraordinary incomes and expenses* those categories of items that are generated differently than in the ordinary activities of the society. The drawback is that it does not come with other explanations or examples for such items. Even in such circumstances, the Directive considers important these elements, by allocating own structures in the profit and loss account (extraordinary revenues and expenses, the result of extraordinary activities), more in the notes to financial statements should be presented explanations on the nature and size of these elements when they have a significant value and the evaluation of the results ( The IV Directive, Article 29).

*The national regulations* define these elements as revenues and expenses arising from events totally different from ordinary activities, so with accidental character (not expected to recur frequently or regularly). To determine whether an event is clearly delimited by the current activities of the organization, is determined the nature of the element or the transaction corresponding to the activity undertaken by the company in general, rather than the expected frequency of these events that take place. Therefore, an event or transaction may be extraordinary for one entity, but not for another, due to the differences between the current activities of those entities (OMPF 3055/2009, art. 34 and 251). The Order no. 3055/2009 presents examples of this type of items: expropriation, natural disasters, and income subsidies for extraordinary events.

The Romanian accounting regulations also require the separate disclosure, by distinct structures in the scheme of profit and loss account of these types of items.

Another conception of the presentation of extraordinary incomes and expenses is found in the international accounting standards. Thus, since 2005, they have eliminated the extraordinary items category, because the IASB has concluded that in order for some elements to be treated as extraordinary elements, they have to result from the normal risk that the entities are facing, and this should not guarantee their presentation in a separate section of the profit and loss account (Roberts, C., et al., 2006).

We maintain our view that this type of element, as the tax on the extraordinary result must be presented separately from the other elements that contribute to the business results.

### 3.2. The item Cost of goods sold and services rendered

Another remark refer to the item "*cost of goods sold and services rendered*" from the format of the results' analysis, from the explanatory notes, element whose structure is classified as: basic expenses, costs of complementary and indirect production costs, which is affected by the Romanian accounting peculiarity in the sense that this breakdown is not found either in the accounting Directives, no in the IAS1 norm (Ristea, 2006).

We presented at the same time the Analysis of operating result, according to the Romanian accounting regulations and the Statement of the result by classifying operating expenses by destinations (functions), according to the requirements of the international standard IAS1 in order to capture the particularities mentioned above:

**Table 2. The content of Analysis of operating situation according to the Romanian regulations, comparison to the result with the classification of operating expenses by their destinations as required by the IAS1**

The analysis of operating result	The classification of operating expenses by their destination (situation which can be detailed)
1. <i>The net turnover</i> 2. <i>The cost of sold goods and provided services</i> 3. The expenses of basic activity 4. The expenses of auxiliary activities 5. The indirect expenses of production 6. <i>The gross result of net turnover</i> 7. Distribution expenses 8. General administrative expenses 9. Other operating incomes 10. The operating result	1. Incomes 2. The sale costs 3. Gross profit 4. Other incomes 5. Distribution expenses 6. Administrative expenses 7. Other expenses 8. The result before taxation

Source: Order OMFP no. 3055/2009 and IAS1 revised, 2007

If the structure of profit and loss account under the provisions of IAS1 is compared with the structure imposed by the Romanian perspective, regarding the modality of presentation of revenues, it is found that in IAS1 the presentation in a

single line element of *revenues from current activity* is sufficient, while the Romanian regulations classifies and details the Revenues from the current activity by takeover in the Directive:(the net turnover, incomes regarding the running costs, production performed by the entity for their own purposes and capitalized, incomes from investments, interest income, etc), thus achieving a distinction between operating and financial activities, delimitation that helps in analyzing, something that is not listed in the scheme of profit and loss account under IAS1.

### **3.3. The item net turnover**

Also, if we compare the definition of net turnover under the provisions of IV Directive and regulations found in Romanian (OMFP no.3055/2009), we find that the range of its coverage is much broader, (the interest due to finance leases under certain conditions, including other operating incomes). Related to this indicator we cannot find no notes in the IAS1 norm.

### **3.4. The elements of gains and losses**

Another important observation *is that even if the gains and losses are not considered separate elements* (such as assets, liabilities), which are included in the category of incomes or expenditures, *however, the Romanian regulations have reviewed the importance of the Romanian regulations elements thus bringing them additional clarification of the preceding OMPF 1752 / 2005*, namely the distinct positioning of these elements in the profit and loss account's structure, namely the items "Other operating incomes "and "Other operating expenses"(more precise brought OMFP no. 3055/2009 compared to the previous order OMFP 1752/2005 with the same name, on the elements of gains and losses, art.252, 262).

### **3.5. The element "Stocks variation"**

A more delicate issue that has generated controversial debates concerning the positioning of the elements of revenue in the profit and loss account scheme it is the element "*Change in inventories items*".

We presented the simplified scheme of profit and loss account, aspect related to the operating activity, according to the Romanian accounting regulations and the proposed standard for classification of expenses according to IAS1 to see where is positioned the element "Stocks variation" and to have a base for discussion of the remarks made on this element.

According to the IV Directive and regulations of the OMPF no.3055/2009 harmonized with European Directives, this element is positioned among the items of incomes, namely, in the category of operating incomes.

According to the IAS1 regulations, specifically, in the model proposed by the standard with the classification of expenses by their nature, the item "Variation of the finished products and production in progress" is positioned immediately after the

incomes, so it's debatable whether such a presentation should suggest if it is income or not (Malciu & Feleagă, 2005).

**Table 3. The simplified scheme of profit and loss account, according to the Romanian accounting regulations, along with the profit or loss account of the year with the classification of expenses by nature, according to IAS1**

<b>The simplified profit and loss account, according to the Romanian accounting regulations</b>	<b>The profit or loss account with the classification of expenses by nature</b>
1. The net turnover 2. The stocks variation of the finite products and the ongoing execution of products 3. The production realized by the entity for personal purpose 4. Other operating incomes 5 Expenses with brut materials and consumables 6. The employees expenses 7. The adjustments of value regarding the tangible and intangible immobilizations 8. The adjustments of value regarding the current assets, if these excess the adjustments of value which are normal for the respective entity 9. Other operating expenses	Incomes Other incomes The stocks variation of the finite products and the ongoing execution of products Expenses with used brut materials and consumables Expenses with the employees benefits Expenses with depreciation Other expenses Total expenses Profit before taxation

Source: Order OMFP no. 3055/2009 and IAS1 revised, 2007

Therefore, we consider that a number of additional clarifications were needed on this particular element, especially from the IAS 1's perspective, IAS1 not make any statement to that effect.

In our opinion, it is important to mention (a fact that is presented in the Romanian accounting regulations, OMFP no. 3055/2009, an observations which is not presented by neither IAS 1, nor the IV Directive) that the element "The variation of the finished products and production in progress" is, during the period, a correction of the production expenses, in order to reflect the fact that either the production increased the inventory levels of stocks or the additional sales have reduced the inventory levels (OMFP nr.3055/2009, art.256).

Thus, the "Stocks variation" should be considered more that *an element of cost* of the obtained production, because practically reflects the production cost, as an expression of some consumed benefits and not obtained benefits.

### 3.6. The element "Result per share"

A final note that we do is related to the element "Result per share". This item is not reflected in the profit and loss account format proposed by the IV Directive therefore Romanian regulations in order to comply with the Directive did not provided this indicator in the profit and loss account format that must be prepared by the Romanian companies.

Given the importance of this indicator, particularly for financial analysts, and evolution towards the normalization of financial statements in Romania, according to a growing international accounting standards, we support the need to introduce this measure, as the last item in the format of the Romanian profit and loss account format through future changes to be made to the current national accounting rules, as it is stipulated by the IAS1.

#### **4. CONCLUSIONS**

From the schemes proposed by the IV Directive for the profit and loss account, *the Romanian policy-makers have chosen and imposed the list scheme with the classification of the operating expenses by nature.*

The paper highlighted the fact that the variant proposed by the IV Directive, with the separately presentation of the income tax of the two types of activities, current and extraordinary, was more rational to be chosen, a scheme that helps in various analysis, allows also the presentation of the item "the net result from ordinary activities".

Given that there are different views between the accounting referential regarding the presentation of extraordinary items in the profit and loss account's structure, we made a comparative analysis regarding the definition and description of these elements in the structure of profit and loss account, based on the regulations of the IV Directive, IAS1, OMPF 3055/2009. Regarding these elements, we maintain our opinion that is necessary a separate presentation in the profit and loss account structure from the other elements that contribute to the outcome.

The Romanian accounting rules require for profit and loss classification scheme the list of expenses by nature, taken from the IV Directive model (with some features found in the Romanian model), but require the presentation in the explanatory notes of an analysis of operating results with the classification of expenses by destination.

This choice made by the Romanian policy-makers for the profit and loss account makes us conclude that its presentation format is actually a combination of directives and regulations between the IV Directive and IAS1. In this way we aimed to achieve compliance with accounting regulations in the two referential, an aspect that we emphasize in this paper.

We focused also in the comparative analysis of the structure of profit and loss account of the three referential views: IV Directive, IAS1, and OMFP no. 3055/2009 on the following issues:

- how the incomes are presented: we found that according to IAS 1 is sufficient the presentation in a single line element of incomes from current activities, while Romanian regulations classify these revenues and detail them, achieving a distinction between operating and financial activities, separation which helps in making financial analysis;
- the definition of turnover: we found that the spectrum of coverage of the turnover had a greater acceptance according to the Romanian definitions of this indicator

- harmonized with the IV Directive. IAS1 standard makes no remark on this indicator;
- the stock variation element: This element is considered under IV Directive and the Romanian regulations, an income element, while IAS1 places it immediately after, so it is questionable whether the international standard for such an item falls into the category of revenue or not. We have issued our own opinion regarding this item, namely, considering it as an element of obtained production cost that reflects the cost of production, as an expression of consumed benefits and not obtained benefits;
  - the earnings per share: We consider necessary that this element to be included in the profit and loss account structure according to the Romanian regulations.

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## **CONSIDERATIONS REGARDING REMUNERATION OF THE FACTOR OF PRODUCTION “ORE” - THE MINING RENT SYSTEM IN ROMANIA**

**SORIN-IULIU MANGU, PETRU HODOR,  
GABRIEL GHEORGHE DOLEA, CARMEN DANIELA MANGU \***

**ABSTRACT:** *The setting mechanism of the remuneration proper to the factors of production is not different from the merchandise price determination, in this case the type of the market pattern being. When the price of the production factors is determined it must be considered both the type of the market where the goods are sold (as output of the manufacture process) and the type of the market where the production factors are provided (engaged). Among the incomes determined by using the production factors mix, the rent represents a very important one. Due to its long term existence, the revenue of rent is one of the economical notion, which has the largest application and the most different signification. For a long time, the rent was attached to the use of the natural resources, especially to those of the earth. Nowadays the application area of this notion has been extended over some other factors of production. In Romania, on the ground of the mining branch development, there were not too many reason of the economic efficiency and the theoretical developments with reference to the costs generated by using the factors of production were ignored. The correct substantiation of the decisions with reference to the application of the national mineral potential can't ignore the costs generated by the remuneration of the production factor in the mining revenue system.*

**KEY WORDS:** *factor of production; mining industry; deposit of useful minerals; mining rent; economical rent; differential rent; absolute rent; monopoly rent; exhaustibility rent.*

**JEL CLASSIFICATION:** D33.

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## **1. THE SYSTEM OF MINING RENTS**

The deposits of useful mineral substances display singular features, not possessed by any other factor of production. The engineering dimension of their commissioning is unprecedented and the economic issue generated is highly complex. The mining rents system reveals a microeconomic dimension of the process and it represents the object of regulations at a macroeconomic level. Knowledge on the aspects related to their manifestation and determination forms is essential in the approach of a correct setting out the costs influencing the decisions on the factors of production deposit and capital.

### **1.1. THE ECONOMICAL RENT**

The classic economic theory shows that when establishing the price of variable factors of production, on the basis is their marginal product. However, the fixed factors of production do not have a marginal product. In consequence, their prices should be explained and determined in some other ways. The theory of setting out the production factors with a fixed offer is based on the concept of economic rent. The economic rent represents that what is to pay additionally to a production factor, related to the requested remuneration in order to sustain it in its current use. In other words, “the economic rent represents the amount paid to a factor of production, above its opportunity cost” (Simionescu & Mangu, 1999). If a factor of production does not have an alternate use, that means it is characterized by an opportunity cost equal to zero, i.e. its whole remuneration is economical rent.

### **1.2. THE DIFFERENTIAL RENT**

David Ricardo had developed a vast analysis concerning the formation of differential rents in agriculture and taking possession of them by the landholders. With small alterations, the conclusions he reached to are applicable in the case of useful mineral substances exploitation as well. However, the landholder will be replaced, at least in case of Romania, by the state, in its quality of proprietor of all mineral reserves in the soil. Taking possession of the differential rent by the enterprises in the extracting branch of industry is done in the same manner as in the case of agriculture. If the deposit is identified and attracted into the economic circuit by the state and if there is no competition in the mining industry (if similar deposits are not leased to private economic agents), the differential rent will fully revert to the state. Though, the deposits of useful mineral substances cannot be a priori wholly known and by this they cannot be adequately assessed both from the point of view of the volume of reserves and the opening and exploitation expenses. However, unlike agriculture, in the mining industry taking possession of differential rent is not a simple division but depends upon whether deposit proprietors exist or not, upon the applied strategies and upon the relations existing between the mining units. In practice, the newly discovered deposits are characterized by lower contents in useful elements and/or more difficult

exploitation conditions, these natural factors determine higher exploitation costs and implicitly the mode of getting differential rent from these new deposits.

### **1.3. THE ABSOLUTE RENT AND THE MONOPOLY RENT**

The absolute rent is represented by “the income received by all deposit proprietors regardless of their quality and it results as a difference between the selling price of the resulted mining products and the production costs involved” (Răducanu, 2000). The monopoly rent represents “the supraprofit obtained by the proprietor of a deposit having special features, that produces and offers in small amounts, mineral products with special qualities” (Răducanu, 2000). This type of rent is not based on the “natural” property over the deposit but on the ability of those who exploit it to control the offer. The absolute rent's maximum is determined by the market price of that useful mineral substance's substitute.

### **1.4. THE EXHAUSTIBILITY RENT**

In case of exploitation of useful mineral substances deposits, in the attempts of giving an answer to the issues regarding the way of determining the absolute rent and the monopoly rent, Harold Hotelling identified a new type of rent, the exhaustibility rent, as an answer to the question: “what is the minimum amount below which a proprietor would never consent to lease a deposit for mining purposes?” (Hotelling, 1931). The depletable character of the useful mineral substances deposits rises though another legitimate question: “what amount should the proprietor be given for his property rights over the deposit, right that would be transferred to the one who is exploiting the deposit, since by leasing he loses definitively any possibility of future profit?” (Răducanu, 2000). The exhaustibility rent represents, in case of a perfect competition between the deposit owners, absolute rent's ceiling.

## **2. DIVIDING THE RENT AMONG PROPRIETORS AND THE ONES LEASING DEPOSITS FOR MINING**

Within the mining branch, the way of obtaining a rent differs from the one in agriculture, due to the fact that there is a clear distinction between the rents obtained through own efforts and the ones created “by the market” as object of challenge among competitors.

In the first case we talk about the absolute rent, created and obtained as effect of fiscal measures imposed by the state owning the useful mineral substances deposits.

In the second case differential rents can be found, as well as the so-called “temporal rents”, obtained only in certain short periods of time. In both cases, for economical reasons more or less known, the high variations of prices for raw mineral materials and energy are disregarded. In fact, the temporal or conjectural rents are included in the absolute rent's category because they are obtained by all proprietors of deposits in exploitation and they occur for as long as the prices for raw mineral materials are high. When the prices decrease, the marginal mines start to work in

losses, so that the ones who exploit deposits having better geological-mining conditions get the differential rent, obtaining profit as well. Thus, the previously shown rents may be considered as “structural”, since they are obtained above the conjectural rents levels - which are as higher as the variation in the exchange rates on the currency market is higher.

The principle of sharing the conjectural rents is simple enough because, without great difficulty, all participants and each of those obtain big profits in case of a favorable exchange rate, profits that could help in compensating the losses within the decline period of time. The fiscal policies of the state, that ensures this way of dividing the rents, can lead to difficulties in applying them without solving the essence of the problem in possession of the absolute rent.

The biggest difficulties occur regarding taking possession of the differential rents, considered “a nature's gift”, so incomes that cannot be automatically allotted to one or another of the participants. In this case, the arguments that both parties could have is the issue in question.

In case when the state is the owner of the mineral resource reserves that are in exploitation, this one assesses the deposits thus also the differential rent that it could obtain in relation to other competitors. If there is a competition between the state and the capital owners, the state has the power of taking possession of all the differential rent. Moreover, its sovereignty over the marginal mines leads to not exploiting them, if the state cannot obtain a minimum profit to cover its expenses in these mines. In other words, when the problem of reconstruction is posed, at least theoretically, of the marginal mines, those deposits that can get a differential rent and a minimum of absolute rent are considered.

In case when the mining companies have as a fundamental long term objective to recover the invested capital, the problems showed below occur.

From an entrepreneur's point of view, it's normal that the biggest part of the rent to belong to him in order to cover at least the technological research expenses made and the infrastructure built, as well as the so-called risk bonus justifies by the exploratory activity that is much more risky than any other type of industrial activity. So, the profit rate took from the activity of discovering of new reserves to be higher than the one took from exploitation process itself would be the problem posed. Such an outlook is based on the fact that the investor has the credit, at least partially, of discovering a deposit of mineral resources without state's money, this deposit being previously unknown. If the investing companies impose this point of view, there is a danger, at least at a local level, in order to have successful exploration operations, a high rate of profit to be needed. In this manner, the mean rate of profit per branch would be superior to the others in other branches of industry, with little risks, without the market price to surpass the production cost in marginal mines. Otherwise, it means that the hope for profit, mathematically speaking, is no higher in the extractive branch than in other branches showing lower risks, fact that could determine the investors to change their decision regarding exploration of new perimeters. There are opinions defending the idea that this part of the rent should be rightfully granted as mining rent to those who actually exploit the deposit in cause, motivated by the fact that this activity has a high degree of risk.

From a point of view of the state, it seems legitimate the claim from companies for a medium (normal) return of the capital directly invested in the state's deposits, but it's disputable that these companies claim a part of the rent which is determined by the deposit's quality, the natural capital quality, part that represents, as a matter of fact, a risk bonus, difficult to assess but which is used in practice for exploring the whole land.

The state has full justification to adopt such an attitude, rather than wait for the moment when the deposit will be exploited by a national public company that would take possession over the whole differential rent. These two positions are contradictory, fact that imposes finding a compromise for dividing the differential rent: how much has to be allotted for the company that invested in deposit exploration and assessment and how much allotted for the state. In practice, this compromise is materialized in different fiscal dispositions, as the commissions for deposits reconstruction, that authorize companies to provide certain deductible sums from the dutiable income, in conditions if these amounts would be reinvested locally. This type of compromise will not completely regulate the conflict. In reality, the part due to investor companies and the part due to the state depend upon the ratio of the two parties forces, as well as upon the multitude of factors as each one's ability to surpass the other or to place him at an inferior level in the competition fight on the market. These factors are influenced by the political and geopolitical environment, and most of all by the manner the foreign capital can be attracted for investment in the mining branch of industry.

The consequences of rent dividing differ from one country to another and from one deposit to another. Generally, the companies are not interested in the level of exploitation costs themselves for a certain deposit, but in that what is due after selling the mining products, respectively after payment of fiscal duties. Thus, if the manufacturing countries possess deposits in the best geo-mining conditions, they will obtain different forms of rents, and exploitation would be performed by private companies or public companies. In case when the governs of those countries wish to make the capital invested efficient, the companies would direct towards the zones with low fiscality, even if the production costs are higher and the risks involved in exploiting these deposits are also higher. In this zone the state retains most of the rent because it assumes the risk of geological researches, and their intensity depends upon its own long term development strategies and politics. In these conditions, it can be assessed that the manner of dividing the rent on geographical areas explains extendedly the exploiting methods for the useful mineral reserves that, at their turn, will have an influence over the future offer structure.

Therefore, if the producing states hold a big part of the rent without reinvesting it in exploration, thus without design it for covering the underground research expenses and the risks assumed by the companies specialized in geological research, then the extractive branch of industry is unable to self-finance. Without a capital infusion from outside this branch or from govern authorities, thus without an exterior risk assumed by these, the exploration activity will be insufficiently financed from inside the branch due to the lack of capital, and the volume of the discovered reserves will progressively decrease, fact that will lead to a pronounced shortage in raw materials and energy, implicitly leading to occurrence and/or stressing the economical imbalances.

In order to eliminate these imbalances, the countries with reserves of mineral resources practice a price named “for the exploitation rights” that, theoretically, is equal to “the present value of the future incomes foreseeable to be granted to the investors, thus equal to the updated value of the rent” (Răducanu, 2000).

But the value of these rents is impossible to be accurately foreseen; the effective cost of exploiting a deposit reflects in reality the participant's prognosis regarding the price evolution for the useful mineral substances extracted, as well as the evolutions of fiscal policies and any other factor that could influence the size of the rent in the future.

In conclusion, the differential rents will always exist, but the manner of sharing and taking possession of, according to the microeconomic logics, is influenced by political and geopolitical factors, as well as by the competition level among the processing branches and among the proprietors of deposits of useful mineral substances.

Geographically, rents division is influenced also by the specialty companies according to their exploratory objectives, thus to offer alteration in a certain time horizon, that at its turn depends upon the outcome of the marginal mines, upon the importance and location placing.

### **3. THE MINING RENTS AND THE FISCAL LEGISLATION IN ROMANIA**

If at a microeconomic level the issue of the mining rents is solved from a theoretical point of view, we cannot say that things are the same at a macroeconomic level.

In Romania, according to the Constitution, the mineral wealth underground cannot become the subject of private property, but only of public property. Bringing them into use can be though carried out by enterprises with private capital. In other words, the legal framework was created to regulate the private capital participation both in prospecting and exploring mining activities and in the development and exploitation activities. In fact, at present, authorized voices suggest that the Romanian mining surviving itself is connected to the way it will be able to attract private capitals.

Through the present Law of Mines, a taxation system was established for the mining activities. This system doesn't take into account the source of capital in the mining operators and shows two fundamental components: one that encompass the form of taxes as lump sums and another one in form of the due.

The amount of taxes accompanying mining activities was established as below, the following levels: for the prospecting activity, 250 lei/km<sup>2</sup>; for the exploration activity, 1.000 lei/km<sup>2</sup> (the values increase twofold after 2 years and become 5 times higher after 4 years); for the exploitation activity, 25.000 lei/km<sup>2</sup>.

The mining due was settled out as a percentage of the mining production amount, differentiated on categories of useful mineral substances, as the following: coal, ferrous ores, non-ferrous ores, aluminum ore and aluminous rocks, noble metals ores, radioactive metals ores, rare and dispersed metal ores, mine waste by-products, bituminous rocks, 4%; non-metallic minerals, 10%; ornamental rocks and precious and semi-precious gemstones, 15%; haloids salts, 10%.

From a fiscal point of view, the mining enterprise don't benefit of any special treatment. Additionally to the current fiscal tasks, these companies are subject to the previously presented taxation system. In relation to this, at least two aspects can be called upon: lack of a rigorous scientific base of establishing the amount of these fees, respectively the manner these are spent by the collectors (The National Agency of Mineral Resources, respectively the State Budget).

#### **4. CONCLUSIONS**

The theory of income distribution shows that the process of establishing the prices for the factors of production isn't different in any way, as concept and methodology, from the process of establishing the prices for the merchandises, the determining factor is still the type of market structures. Moreover, the Euler and Clark-Wicksteed-Walras theorems (named the theorems of "product's exhaustion") show that a factor of production remuneration will never be performed in the prejudice of others.

As factor of production, the deposit shows a special feature: the fixed offer (perfectly inelastic or very less elastic). This particularity imposes taking into account, in the process of price defining, the cost concepts for economical opportunity and rent. As the offer is less elastic, the economical rent of the production factor is higher. When the offer is completely inelastic, the whole remuneration of the factor of production is rent.

Having as a marker the agriculture, David Ricardo approached the issue of ground rent developing the concept of differential rent. The conclusions Ricardo reached to, and the concept itself, are applicable in the case of exploiting useful mineral substances too (where the diversity of conditions and features is highly amplified in report to the categories of agricultural terrains).

In the past 50 years, worldwide, the increasing importance of the mining branch of industry led to growing concerns relates to the rents issue. The theoretical basis was developed and its field of applicability was extended. The concepts of monopoly, absolute and depletion rent became common in the works within the mining branch economy. Unfortunately we cannot say the same about Romania.

Issues of the above mentioned nature can be solved only if started from the form of property over the mineral resources in Romania and if taken into consideration the experience of the states rich in mineral deposits of public property (as for example is Russian Federation). Having this in view, a model for identification and defining the size of rent components should be created. In consent with the worldwide unanimously accepted opinions, exploitation of useful mineral deposits which are public property must ensure compensations for:

- the land withdrawn from economic circuit as consequence of mining activities (at the level of the profit that would be brought by the best use of the land, in the conditions of a medium value of agricultural or forest production), thus a rent for the land;
- the damages inflicted to the terrain as consequence of mining activities (affecting especially the water supplies and vegetation), at the level of the additional

expenses involved by an identical utilization of the land with the previous one, thus a "loser's rent", a rent of the one supporting the damages;

- the whole people as proprietor of reserves (at a level left open for discussions), thus a civil rent;
- reserve depletion, considering their non-regenerating character (that what already was mined cannot be restored in historic times), thus a rent of depletable resources;
- the capital proprietor invests it in the mining branch, this way avoiding other uses, thus a mining rent.

Even if at the base of the present taxation system for the mining activities in Romania lay maybe, considerations similar to the previous ones, the lack of accurate provisions regarding the destination of financial resources accumulated at the level of the state departments having responsibilities in this field, results in a non-efficient system in its present form. In the countries with a developed mining, such a system was conceived in favor of this branch, but in Romania this goal is far from being attained.

Considering the above presented, a few conclusions can be drawn:

- the mathematical model of rent calculation should be based upon consolidated macroeconomic indicators, that could reflect the overall efficiency of the national mining branch;
- the mechanism of rent establishing and collecting is not possible to efficiently operate if it is isolated from the mechanism of rent distribution at national level;
- each citizen is co-proprietor of the national mineral wealth and is authorized to obtain (in form of public interests works and actions initiated by the central authority) his adequate share from the mining rents;
- the rent issue connected to deposit exploitation is a complicated one and it must be looked upon in the light of the new relationships at international level, between the resource owners and the ones which exploits them;
- a special training in the field of the mining rents is necessary, but Romania, to the best of our knowledge, didn't take any action in this direction.

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## **THE NEW ECONOMY AND THE ECONOMY OF TOURISM**

**MIRELA MAZILU, ROXANA ISPAS \***

**ABSTRACT:** *Together with the Internet, e-business and the new economy era, in general, fundamental transformation of the social and economic structure take place. In parallel, the assaults on the standard economic science amplify, in the sense of some conceptual reformulations and of some reinterpretations of the economic phenomena and laws. Besides the classical factors of production, work and capital, information is added, either as a distinct factor or as a detached one of the two mentioned. Also, the empiric findings regarding the so-called tertiarisation of the economy or the increase of the share of the services sector in the total of the national economy, as well as the so-called intangible investments in the total of the investment funds, have lead to numerous attempts of redefining what we call today a "modern economy". Other factors with major influence, regarding the adjustment of the economic science to the new trends from the real economy, refer to the following: the liberalisation of the international exchanges and the globalisation; the growth of the importance of the so-called free time (including here the household activities and the ones unfolded in the interest of the community, entertainment, but also the time destined to the development of the degree of culture and education on one's own) and the fluidisation of the limits of differentiation between this and the work activity in the formal sector as well as the informal one; the more rapid dynamic of the financial and banking markets than the so-called classic productive sector of the economy; the extension of the use of computers and of the means and techniques of communication, in the activity of the companies as well as in the households, and the impact on the structure of the time and the financial budget of the population etc. All these have an impact on the tourism unfolding.*

**KEY WORDS:** *tourism; sustainable development; new economy; trend.*

**JEL CLASSIFICATION:** *L83.*

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## 1. INTRODUCTION

*The success of the states in the new economy shall be more and more determined by the manner in which they shall manage to push forward the technological innovation, the entrepreneurial relations, the education, the specialised qualification and the transition of all the organisations, public and private, towards the new and the competence ...* Within the amount of transformations produced in the social and economic life, the introduction of automation, the use of cybernetics and of the computing technique in various sectors of activity, the industrialisation of agriculture, the shaping of the science as a branch of production, the modernisation of the means of transport, - the human society, regardless of the form of production relations, of the existing social and political system, has industrialised at a world scale.

The industrialised societies, more or less developed, have as defining feature an important focus of the population in urban centres, with agglomerations of people for education and work, in the means of transport, or of the families in blocks of flats, on small surfaces. The industrialised society offers, through the scientific organisation of the production and of work, through the modern technology and the focus of the productive companies, unlimited possibilities of growth of the work productivity, with multiple positive effects on the members of the society, among which: the increase of incomes and of the purchase power; the increase of the free time, through the reduction of the work day and week, through the increase of leaves; the increase of the lifespan; the development and the modernisation of the informational means

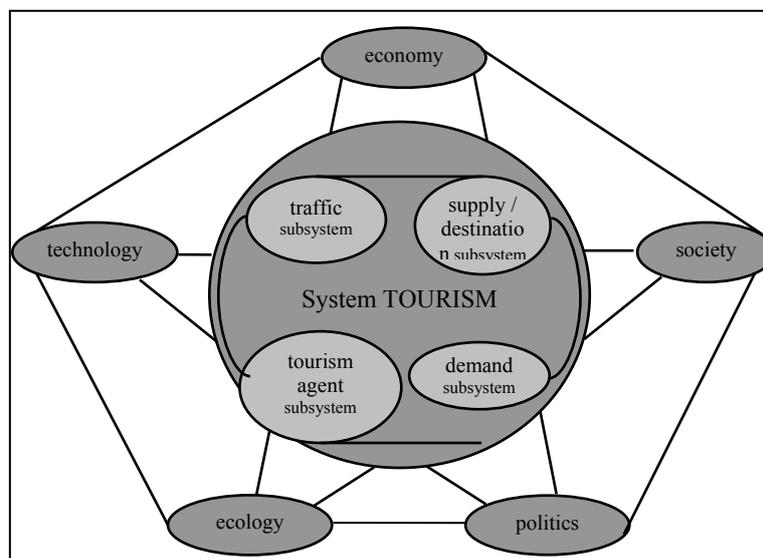
Also, at the same time, the industrialised society has negative effects on its members, these manifesting under the form of biological aggressiveness (pollution, lack of movement), as well as the ones of the nervous type (psychic stress, constraints of the social and professional life). Hence, the desire and the tendency of the contemporary society people to spend their free time travelling, seeking or dreaming of quiet corners of nature, visiting cities and villages to meet people and places, or to take care of their health. And as the number of the population has considerably grown in the majority of the countries, and the influence of the distance and time factors has been reduced through the modernisation of the means of transport, tourism - as a manner of usefully and pleasantly spending the free time - has known an unprecedented explosion, constituting one of the most remarkable features of the contemporary times. Tourism represents a specific economic and social phenomenon of the modern civilisation, strongly anchored in the life of the society, and, thus, influenced by its evolution. Through its size and complex content, tourism engages a vast natural, material and human potential having profound implications on the dynamic of the economy and society, on the international relationships.

## 2. THE ROLE OF TOURISM - TOURISM - SUBSYSTEM OF THE NATIONAL ECONOMY

Tourism presents the features of a distinct field of activity constituting itself, according to some of the authors in the field: 1. in a branch of the national economy, which, through its specific, integrates in the tertiary sector; referring to the role of

tourism within the national economy, the literature emphasises the fact that it has a considerable impact on the economies, the societies and the cultures of different countries of reference; 2. tourism plays an important role in the economic and social life, acts as a dynamic element of the global economic system - picture 1 - as a manner of diversification of the economic structure, as a lever of attenuation of the interregional unbalances or as an active manner of education, of elevating the level of training, culture and civilisation of the people.

Tourism represents a complexity in continuous growth, on an economic level, it synthesises the results of a large number of activities, on a psycho-social level, it is constituted as a superior manner of organising the free time.



**Figure 1. Tourism - subsystem of the national economy (Mazilu, 2010)**

The social importance of tourism may be emphasised through the following aspects: tourism contributes to the maintenance of the biologic and the physiological balance of the contemporary man, for which tourism offers solutions to the constraints to which one is exposed; tourism and travels, seen as an intensely technological industry, can help Romania obtain and apply the technological systems of information and telecommunication at a competitive level; a larger part of the operations in tourism and travels - as well as all the virtual operations of sales and distributions - communicate through the telecommunication systems; e-marketing - on a competitive global and more and more developed market nowadays, there is a great need for a powerful national branding of tourism management which could optimize the resources, could concentrate within a nucleus the interests - the public and private sector, the national, local and regional sector - and capture the tourists' attention (Van der Merwe & Bekker, 2003).

This will need a certain type of interest for a coordinated approach on marketing and distribution through the internet in order to optimize the vision on

Romania, as competitive tourist destination. Of course, the development of such a facility must develop in parallel with the development of the internet and of the telecommunications at the level of the whole country. The recommendation of the World Tourism and Travels Council (WTTC) is that the Government of Romania to keep on following the policy of an open market of telecommunications, which shall generate low costs and better quality services for tourists and tourism companies.

**Table 1. Fundamental elements: the old and the new economy**

<b>The general features of economy</b>	<b>The old economy</b>	<b>The new economy</b>
The markets	Stable	Dynamic
The sphere of competition	National	Global
The form of organisation	Hierarchic, bureaucratic	Relational, entrepreneurial
The geographical potential and the mobility of the business	Reduced	High
The competition between the regions	Low	High
<b>The industry</b>		
The organisation of production	The mass production	The flexible production
The key factor of production	Capital / work	Innovation / knowledge
The leading technology	Mechanisation	Digitalisation
The source of the competitive advantage	The cost reduction through the scale economy	Innovation, quality, regulation on the market, cost
The importance of research / Innovation	Moderate	High
The connection with other companies	Directly established	Alliances and collaboration
<b>The labour force</b>		
The main purpose of the policy	Full employment	High salaries and incomes
Qualification	Specific qualification	Wide qualification, multiple training
Necessary education	A qualification	Continuous learning
Work relations / Management	Adverse	Collaborative
The nature of the employment	Stable	Risk and opportunity
<b>Government</b>		
The business - government relations	Imposed requirements	The companies' support for innovations / growth
Regulations, norms	Command and control	Market instruments, flexibility

Seen in correlation with the ensemble of the national economy, tourism acts as a dynamic element of the global system. The unfolding of tourism means a specific request of goods and services, request that engages an increase in their production sphere. The main arguments which determine the necessity of tourism development are the following: 1. the tourist resources being practically inexhaustible, tourism represents one of the economic sectors with real perspectives of long term development; 2. the complex exploitation and revaluation of the tourist resources accompanied by an efficient promotion on the external market, may constitute a source to increase the currency revenues of the state, thus contributing to the balance of the external payments; 3. Tourism represents a safe market of the work force and of the

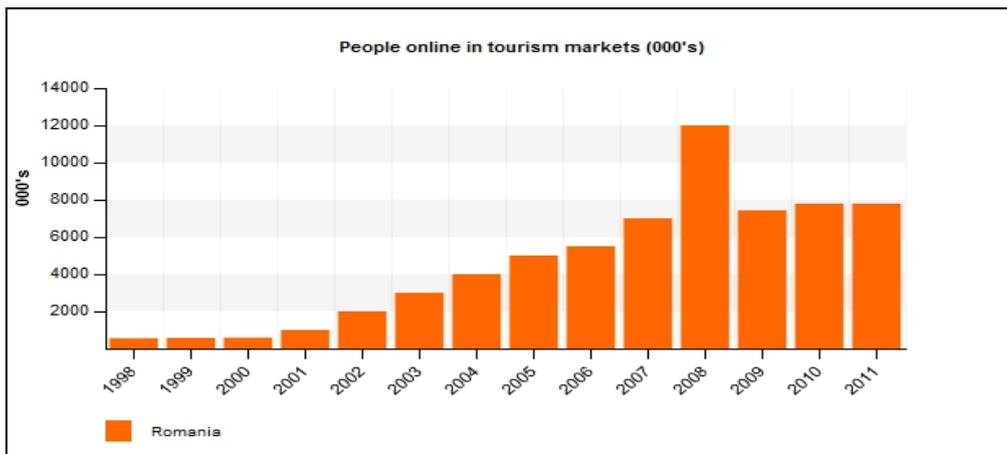
redistribution of the unemployed work force from other structured economic sectors; tourism, through its multiplicative effect, acts as a dynamic element of the global economic system, generating a specific demand of goods and services which engage an increase in the production sphere, contributing thus to the diversification of the national economy sector structure.

Regarding the guiding lines which should be taken into account by the governments in order to obtain a progressive public policy oriented towards innovation, in order to stimulate the success in the new economy, we mention the following give key strategies: the co-investment in the qualification of the work force; the co-investment in the infrastructure for innovation; the promotion of the governmental actions of support for innovation and clients; the stimulation of the transition to the digital economy; the support for the civic collaboration.

The states that shall focus their policies in these fields shall be better positions, fact that shall allow them to obtain a strong economic increase, especially of the incomes of the citizens belonging to all the social and economic classes. This should represent in fact the real objective.

**2.1. The new economy era**

The development of a new prosperous economy is not a purpose in itself. This represents only a means to advance on the path in order to achieve wider more progressive purposes: new economic opportunities and a higher standard of life, more individual initiative and freedom, more dignity and autonomy for the workers, more powerful communities and a more extended participation of the citizens in the public life. The economists have thought that the new era that would come, would bring the supreme productivity. But, as a paradox, the growth of technology has not lead to an explosive and measurable at the same time increase in productivity. Is it a consequence of our measurement methodology? This indeed continues to be based on the old conception about the classic type of economy, as well.



**Figure 2. No. of users in the online tourism market in Romania**

Together with the Internet, e-business and the new economy era, in general, fundamental transformation of the social and economic structure take place. According to the New media Trendwatch website the level of users in the online tourism markets has registered an imposing growth from 1998 until 2007, and then reached its peak in 2008, recording a growth of 22.5% (5 million people) compared with one year before. But the impressive increase met its downside just the next year, in 2009, when the percentage lowered to 33.4% (a little over 7 million people), probably because of the strike of the economic crisis in September 2008.

As we have concluded from the figures presented previously, the E-tourism industry in Romania is in an early stage, although, the interest of people for e-tourism is steadily increasing.

**Table 2. Threats caused by the Internet**

The threat of new entrants	T <sub>1</sub> : “Lowered consumer search costs and decreased switching cost open a market for potential new entrants; this reduces the entry barriers for new companies by opening the distribution channels (Reintermediation) and capital requirements.” T <sub>2</sub> : “The Internet is a possible instrument to bypass wholesale or retail channels (disintermediation), this can also reduce entry barriers.”
Rivalry among existing firms within an industry	T <sub>3</sub> : “The Internet brings many more companies into competition with one another by expanding geographic markets and reduced entry barriers, it can raise the rivalry within the industry and increase the pressure for price discounting.” T <sub>4</sub> : “The Internet offers new possibilities and instruments to meet customer needs and offers new products and services, thus the rivalry among existing companies within an industry can increase.”
Threat of substitute products/services	T <sub>5</sub> : “The Internet offers new possibilities and instruments to meet customer needs by offering new products and services, which could substitute existing ones.”
Power of suppliers	T <sub>6</sub> : “By reduced entry barriers and the increasing number of competitors the power of the suppliers will increase”
Power of buyers	T <sub>7</sub> : “The reduced switching costs of buyers increase also the power of the buyers.” T <sub>8</sub> : “The customer can easily compare different prices and gain knowledge about products, thus the price becomes the most important decision criterion.”

*Source: adapted from Markus GRATZER & Werner Winiwarte, A Framework for Competitive Advantage in eTourism, 2010, www.citeseerx.ist.psu.edu)*

To overcome these threats, companies have to employ appropriate pricing strategies for selling products via the Internet. Value can be created and extracted by enhancing value to customers, reducing distribution costs, and improving the match between consumer preferences and products. In parallel, the assaults on the standard economic science amplify, in the sense of some conceptual reformulations and of some reinterpretations of the economic phenomena and laws. Besides the classical factors of production, work and capital, information is added, either as a distinct factor or as a detached one of the two mentioned. Also, the empiric findings regarding the so-called

tertiarisation of the economy or the increase of the share of the services sector in the total of the national economy, as well as the so-called intangible investments in the total of the investment funds, have lead to numerous attempts of redefining what we call today a "modern economy".

Other factors with major influence, regarding the adjustment of the economic science to the new trends from the real economy, refer to the following: the liberalisation of the international exchanges and the globalisation; the growth of the importance of the so-called free time (including here the household activities and the ones unfolded in the interest of the community, entertainment, but also the time destined to the development of the degree of culture and education on one's own) and the fluidisation of the limits of differentiation between this and the work activity in the formal sector as well as the informal one; the more rapid dynamic of the financial and banking markets than the so-called classic productive sector of the economy; the extension of the use of computers and of the means and techniques of communication, in the activity of the companies as well as in the households, and the impact on the structure of the time and the financial budget of the population etc.

It is well known that tourism implies commercial trading, commitments, development and cultural sustainability, (Mazilu, 2011, p.281) for the tranquillity and the satisfaction of people's aspirations. The world crisis means a moment of incertitude, but also opens immense possibilities. It is true that we confront with one of the highest economic deficits of the last half of the century, with an economic disorder, with the increase of unemployment and with the reduction of the trust in the market, all these generating a recession whose end is not entirely known. The fact that this crisis overlaps the problems caused by the climate changes, determines the big difficulties in the creation of new work places, in the imperious attempt to reduce poverty. These crisis places, at the same time, a constant pressure on the tourists, but also on the employees of the tourism field, threatening the policies and the current practices.

### **3. CONCLUSIONS**

It is true that, for several decades, the tourist activity sector has known numerous come backs, confronting with serious crises because of natural causes or as a result of human activity. But, like Phoenix which revives from its own ashes, tourism has always proven a remarkable capacity to revive even stronger, demonstrating that it is a perfectly viable sector.

The re-launch is synonymous with this sector of activity. This economic crisis does not have very clear terms, but in tourism it is certain that a new state of mind is necessary. History shows us that the most difficult periods were also the ones that offered major opportunities. The leaders of the world, who have had divergences over a number of problems, are now engaged together in the battle against the crisis and work in harmony, unimaginable a while ago. They collaborate in the economic field, looking for solutions for the reduction of the effect of the climate changes with unwanted effects on the unfolding of a quality tourist phenomenon, all in favour of the global, sustainable development (Mazilu & Marinescu, 2008).

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## **REVOLUTIONS FROM NORTHERN AFRICA: A GRAND QUESTION FOR MANKIND?**

**CIPRIAN NIMARĂ, GRIGORE BUIA \***

**ABSTRACT:** *The spring of the indignations against the presidents of the North African states and in the Middle East has aroused worldwide interest, not only in terms of their political effects in those states, but rather in terms of how these events have been suppressed by authoritarian regimes and the effects on the global economy and geopolitics.*

**KEYWORDS:** *revolution; Northern Africa; geopolitics; economic instability.*

**JEL CLASSIFICATION:** *R11*

### **1. NORTHERN AFRICA: INSURGENCE OR REVOLUTION?**

Assuming that any nation which doesn't know its past is doomed to live the same mistakes in future, this paper aims to present in an objective way the global economic and geopolitical issues posed by the popular uprisings in the countries from the North African continent, members of the Arab Maghreb Union.

Maghreb (al-Maghrib) is the North African region, between the Mediterranean Sea, the Sahara and the Atlantic Ocean. In terms of geography, this region includes three states: Algeria, Morocco and Tunisia. In terms of geopolitics, Libya and Mauritania joined those states to form the Grand Maghreb (Figure 1).

Established on 17 February 1989, the Arab Maghreb Union (AMU) aimed the economical cooperation, political and cultural development, both internally and externally, and maintaining moral values of Islam which is reflected in the preservation of Arab identity.

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**Figure 1. The states of Arab Maghreb Union**

Even if they wanted an economic union, in practical terms, this has not happened and is reflected in low trading interest (Algeria - 1.5% with UMA, Tunisia - 6%) and customs union.

Regarding the Arab Maghreb Union's objectives there is a fast need to implement the agreements and cooperation agreements with the EU and addressing the statutory and a peacefully climate issue in the Middle East.

The cooperation actions between North African region and the European Community has been made in recent decades through extensive negotiations, according to national characteristics, economic and social, political and diplomatic options outlined in the regional and global scale.

Financial assistance by the European Union offered to Maghrebian countries is done through the European Investment Bank (EIB) and European Development Fund (EDF) - the financial body that aims to support the development of countries in their efforts related to EU development trade relations and cooperation.

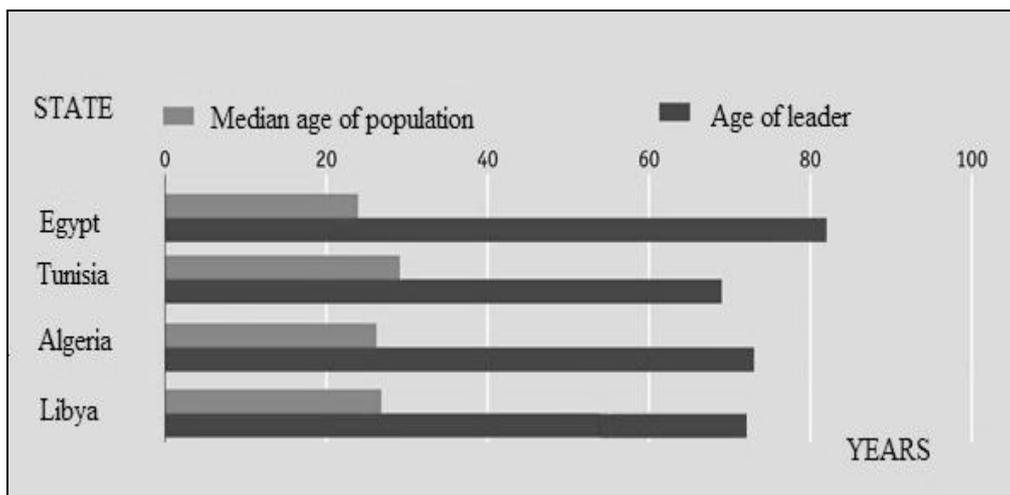
Political and economical instability in the five countries from Northern Africa: Tunisia, Algeria, Morocco, Egypt and Libya is blamed on the devastating effects of totalitarian regimes in these countries: a one-party political dictatorship, no freedom of expression, miserable conditions of living, higher unemployment rate among young people (70% in Tunisia, 43% university graduates), discrimination against ethnic minorities (Ex. Hamayuni decree, Egypt), government intervention in local elections, etc., but this instability can be seen as a consequence of global economic crisis began in 2007, time when the American investors lost confidence in the secured mortgage, this has led to a liquidity crisis, causing a substantial injection of capital in financial

markets from the U.S. Federal Reserve, Bank of England and European Central Bank. TED index, reaching a maximum of 4.65% on 10 of October, 2008 (L. Elliott, 2008).

This assertion is supported by the idea that any uncontrolled food price rises caused by increases in raw material prices on international stock markets will lead to riots, demonstrations and why not, to changes in political regimes in developing states, which can be seen quite clearly today and for these countries in the Arabian world.

If we were to seek some common ground for these states, we can say that:

- are countries with totalitarian regimes supported by the Western powers (U.S., France);
- are heavily militarized inside, but not so well prepared in military terms, to become themselves a military power;
- are polarized states where are only two social classes, a very rich and the others which lives in poverty;
- the average age of the majority is 23 years compared with the older age of the president; this fact shall create discrepancies in attitude and ideology: Egypt - 22 years Algeria - 23 years, Tunisia - 24 years, Libya - 23 years (Figure 2).



**Figure 2. The median age of population according to the age of president (The Economist, 2011)**

## **2. FIRST SIGNS OF INSTABILITY: TUNISIA, ALGERIA AND MOROCCO**

If we do a brief geographical and political presentation, we can say that Tunisia is the most northern country of the African continent, having as neighbors in west Algeria and Libya in the east, being a member of the Maghreb, but with a low commercial orientation toward, only 6% (75% EU).

In 1956 Tunisia achieved its independence, and Habib Bourguiba became the first president of the country in 1959, with a life tenure. In 1987 the regime was overthrown and the place was taken by President Zine El Abidine Ben Ali, who was overthrown by a popular revolt in January 2011 after a 23-year of dictatorship. Spark

of events occurred in the town of Sidi Bouzid, and street indignation against the totalitarian regime has been gradually extended to the capital Tunis.

The events were followed shortly after the visit of Jose W. Fernandez, Secretary of State for Economic, Energy and Foreign Affairs of the United States. The purpose of this visit was the participation in the conference titled "The United States and entrepreneurs from Maghreb", in Algeria, during the period 29.11.2010 to 03.12.2010. The speech announced a new strategy imposed by U.S. to the states from North Africa, with two major points, namely:

- economic assistance to small and medium enterprises (approx. 5 billion \$);
- social and economical support of young people (approx. 8 billion \$);

Tunisia is a country with a healthy economy that has grown rapidly by light industries, agriculture and tourism sector (an influx of approx. 6 million tourists per year), but the oligarchies press the small companies, and the government is unable to give jobs to young people.

Bourgeois class in Tunisia has proved to be too corrupt to lead a struggle against dictatorship, to fight for the rights of citizens and give them a better life, but neither supported economic programs imposed by France and the U.S. through the IMF over time.

Even if President Zine al-Abidine Ben Ali was ousted after he ruled the country for 23 years and a new interim government was created, the protests continued, demanding the removal from power of any political relic that was linked to the old leadership.

At the beginning of the uprising in Tunisia was circulated the following idea: "Revolution in Tunisia, or will be hampered by a corrupt government or exceed the state's borders and will spread throughout the Arab world, and which has materialized.

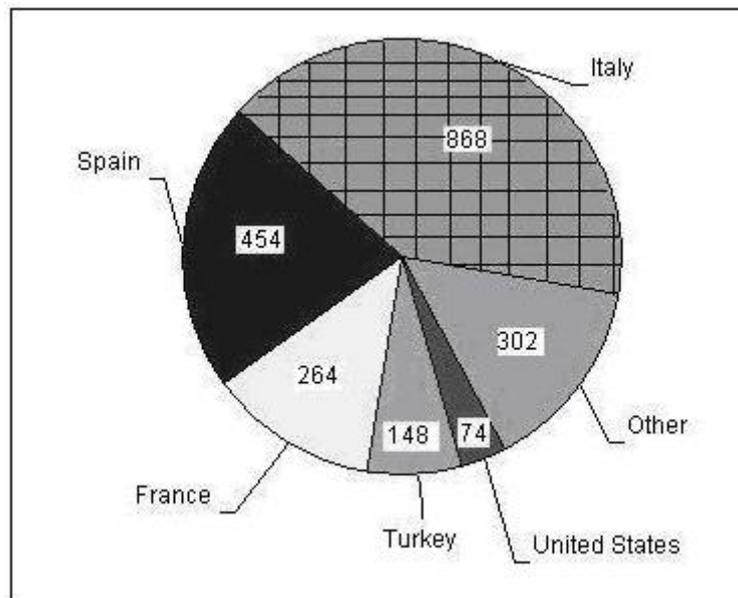
*Algeria* is situated in the North of African continent to the Mediterranean Sea, having as neighbors: Tunisia in the North-East, Libya in the East, Niger in South-East, Mali and Mauritania in South-West and Morocco in the West.

Economic indicators have improved since 1990 largely due to reform policies of the IMF and debt reduction in 2000-2001, due to government fiscal policy and by the increase of oil prices.

Algeria's economy was a centralized economy with socialist orientation, passing through a transition. Privatization is one of the key elements of development. About 70% of enterprises are under state control and are largely ineffective.

With a contribution of over 60% in the national budget, the sector of hydrocarbons, gives Algeria ranks 14 in terms of world oil reserves (3rd place in Africa after Libya and Nigeria) and 5th place for natural gas reserves, being an important exporter for some E.U. countries (Oil and Gas Journal, 2009, Figure 3).

In 1996 it was completed the work on two of the largest methane gas pipeline from the Maghreb area (Maghreb-Europe pipeline, or GME), intended for supplying the states: Spain, Portugal and Morocco. However, trans-Mediterranean pipeline (TME) which supplies Italy, via Sicily, has been upgraded.



**Figure 3. Importers of Algerian natural gas – billion cubic feet (International Energy Agency, 2007)**

The most important oil field of the country is Hassi Messaoud owned by the Sonatrach company. It is noted that Algeria has nationalized the entire mining industry after a series of presidential orders and decrees, passed in possession of Sonatrach company in the mid of 1970's, the state owned the company (JP Entelis, 2000).

Rebellion in Algeria began on 28.12.2010 and was inspired by the rebellion from Tunisia, by the same problems caused by: higher unemployment, low living conditions, lack of housing, food price increases, inflation, corruption and restrictions on freedom of expression.

How will resolve these issues will have an effect on the global economy, given the fact that Algeria is one of the most important "players" of the energy resources market (oil and natural gas), over 95% of the exports of the country are made by fossil fuels (85% of the oil is exported to Western Europe and approximately 5% to the U.S.).

**Kingdom of Morocco** is located in the North-West of the African continent and has a maritime border with Spain in the North, in the East is bordered by Algeria and Mauritania in the South. Morocco's economy is considered to be one governed by the law of supply and demand, registering a consistent growth of 4.9% per annum, having two industrial poles: Casablanca and Tangier.

Economic treaties and agreements signed in April 1976 between the EEC and Morocco (and Tunisia), led to the development of important industries in these countries, given that, they were allowed free access to the market of the Economic Community for industrial products (except textiles).

Although the accession of Spain and Portugal to the European Union area, EEC has progressively restricted the concessions for Morocco and Tunisia, because a number of agricultural products (citrus, vegetables) compete directly with products

from the European market, considered to be sensitive, the cooperative relations continued. Example can be given by the signed agreement with the EEC, according to this, Spanish and Portuguese fishing boats were allowed to continue operating in Moroccan waters (rich in fish).

Like Tunisia, Morocco has faced economic difficulties in recent years, a high unemployment rate and political unrest, coming mainly from the educated youth. Relative freedom of the press (only limited possibility of expression offered by the Internet), as the specter of Islamist terrorism and the example of Algeria, have reduced the radicalization of young people.

Excessive involvement in the economy of the royal family and the expensive life were premises for uprising. The rebellion began in Rabat and Casablanca, and protesters have demanded political reform and limiting the power of King Mohammed VI, who leads the country from 1999. Moroccan King belongs to Alaouites Dynasty who led the country in the last 350 years and is considered to be a direct relative to the Prophet Mohammed.

Today, Morocco is preparing for a major program of reforms, especially the Constitution. King Mohammed VI announced the establishment of a committee which will include political parties, trade unions and civil society. Also, the independence of justice will be strengthened, as well as the role of Parliament and the country would fare a process of decentralization.

### 3. THE DOMINO EFFECT: EGYPT AND LIBYA

*Egypt*, the most important country in terms of economic and strategy from Northern Africa is limited to the North by the Mediterranean Sea, by Libya in West, Gaza Strip in east, Israel, Gulf of Aqaba (through which he has contact with Jordan and Saudi Arabia ) and Sudan in South.

As a form of government, Egypt becomes a republic in 1953 and Hosni Mubarak becomes president of the republic in 1981, with five consecutive terms. After the reforms of 2005, presents a multiparty presidential system where executive power is divided between the president and prime minister. Like all the Arab states, the political regime is a dictatorship of one party.

From an economic perspective, the state is dependent on oil exports, tourism (more than 8 billion \$ / year), agriculture, Suez Channel toll of merchant shipping (about 2 billion \$ / year) and financial aid offered by the United States following the Camp David agreement from 1978 (over 2 billion \$ / year) for accepting the peace with Israel.

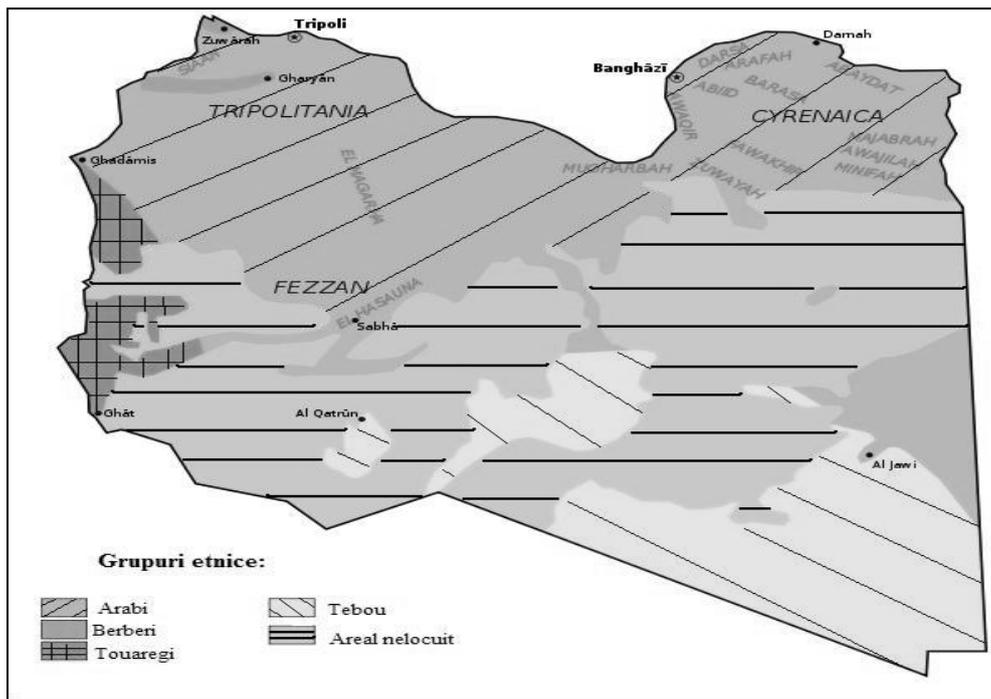
The key point of street demonstration in Egypt, was the Suez town, which in recent years has supplied the Cairo government with billions of dollars, but like the rest of the country, this prosperity was not shared, considering that, from 80 million inhabitants of Egypt, over 40% live under the poverty line, with only 2 \$ per day.

Egyptian revolution was beginning on 25.01.2011 due to economic conditions and lack of freedom under the leadership of Hosni Mubarak. The protests spread to the capital, Cairo, where it was a national demonstration.

The group which was behind these protests "April 6 Movement", have been inspired by the Tunisian revolt, where communication via the Internet had an important role (from Cairo revolt, Yahoo's social network site has been blocked). This group was supported by the "Muslim Brotherhood" and opposition leader Mohamed ElBaradei (President of the International Atomic Energy Agency - IAEA during 1997-2009), the largest protest movement after 1977.

**Libya** (official name: Great Socialist People's Libyan Arab Jamahiriya) is located in Northern Africa, faces the Mediterranean Sea in North, Tunisia and Algeria in the West, Niger to the South-West, Chad to the South and South-Eastern Egypt and Sudan. It was the first African colony that gained independence in 1951, the state leadership was offered to King Idris I until 1969 when it ousted by the revolution led by Muanmar al-Gaddafi.

Libyan state is not proclaimed republic (Jumhuriya) like other Arab states, but "state of the masses" (Jamahiriya), having an Arab socialist system of government, inspired by pan-Arab and Islamic ideology, is actually a system of personal dictatorship of colonel Muanmar al-Gaddafi.



**Figure 4. The Libyan tribal groups (Stratfor, 2011)**

By 1969, Libya could hardly be considered a unitary state because it was divided into three separate provinces, each with specific tribes. In Libya there are over 140 tribes and clans, native Libyans are: Berber, Tuareg, Bedouins and Turks, tribal groups Hausa and Tebu (Figure 4).

The question that has raised since the beginning of the conflict in Libya, was "fighting for Libya is a clash between a brutal dictator and democratic opposition, or is fundamentally a civil war" (New York Times, 2011).

The rebellion could actually be a tribal conflict between Eastern Libya and Western Libya, knowing that the eastern region, around Benghazi, has always been a "hotbed" of opposition, enjoying in the past the king's favoritism, which ended with his removal from power. After 1969, Muammar al-Gaddafi supported the tribes from central and west side of the country.

The war began on 21.03.2011 with the intervention of the armed forces of NATO member states (U.S., France and UK) and may take longer than might be expected these countries when the operations started. The answer is given by the gold held by the Central Bank of Libya: 143.8 tons of gold reserves, the data being provided by International Monetary Fund.

Many states have gold reserves in the banks of other countries: United Kingdom (London), USA (New York) or Switzerland, but Libya has kept the reserves in the country, that's why we can say that the war will continue more than would be expected at first, because the tribes that back up Muammar al-Gaddafi are supplied with weapons from this reserves (Stratfor, 2011). Until the revolution started, this reserve was held in Tripoli, and then was moved to the city Sebha (to the border with Chad and Niger).

The economic power of this country should not be ignore, taking into account that Libya is the 12th largest producer of oil and holds the position 25 between world states in terms of national gold reserves.

In the early 1980s, Libya was ranked as one of the most prosperous countries (Philip's Modern School Atlas 1987), with a GDP per capita higher than countries like Italy, Spain, Singapore, South Korea and New Zealand.

The Libyan war will have repercussions on the oil market in particular. The companies which have invested in this sector would have significant losses if events would take an undesired turn.

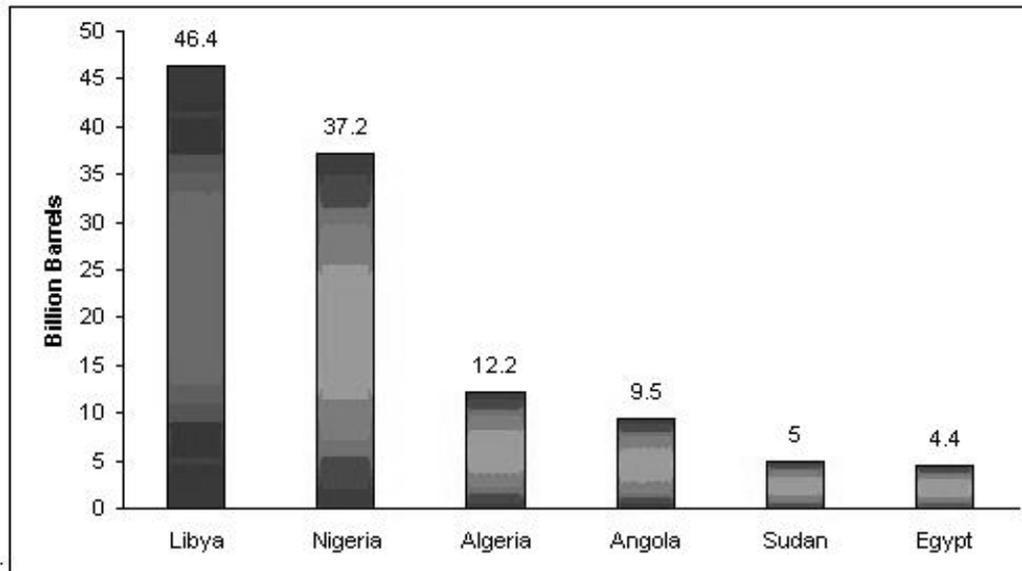
In 2007, following the exchange of assets with the company BASF, Gazprom received 49% in petroleum concessions C96 and C 97. In April 2008, Gazprom signed a memorandum of collaboration with Libyan national corporation NOC, which allowed it to participate in tenders for exploitation of mineral deposits.

As a result of the attacks of international military forces (France, UK and USA), Libyan officials have declared that in the future they will conclude contracts only with countries that have not taken part into these attacks.

The latest research shows that Libya has a reserve of 60 billion barrels of oil, taking the first place in Africa (Figure 5) and 1500 billion cubic meters of gas. National Oil Corporation (NOC) is ranked 25 in top 100 worldwide oil production companies.

Libyan invasion by the U.S. and EU in terms of humanitarian aid serves the same interest group as well as the events from Iraq since 2003. The hidden objectives of this mission in Libya are in fact getting the control of oil field or the possibly of destabilizing NOC oil industry by privatization, or getting the control over the uranium resources from the southern part of the country (Fayah Arjou country). Libya is also a

strategic gateway to Central Africa through borders with states under French influence: Algeria, Tunisia, Chad and Niger.



**Figure 5. The African countries with the most important oil reserves (Oil and Gas Journal 2009)**

Chad is a country with high economic potential due to oil resources and also a link to the Darfur region of Sudan, in terms of strategic oil resources.

China is interested in maintaining the control over resources in Chad and Sudan, so the military operation from Libya can satisfy the desire of the United States to exclude China from the North African oil market (the largest Chinese oil company is CNPC - China National Petroleum Corp).

After excluding China, the giant Anglo-American companies will benefit. Among oil companies operating in the Libyan territory are: Total (French company), ENI (Italian company), CNPC (Chinese company), British Petroleum, Repsol (Spanish consortium), ExxonMobil, Chevron, Occidental Petroleum, Hess and Conoco Phillips.

So the Southern Libya is a strategic region and presents an increased interest for the United States which wishes to extend their sphere of interest over the states dominated by the French and Belgian influence (M. Chossudovsky, 2011).

#### **4. ECONOMIC AND GEOPOLITICAL CONSEQUENCES**

Social unrest from the North African countries and from the Middle East based on authoritarian regimes, but basically due to poverty, lack of jobs, economic insecurity of the citizen and less about democratic image and freedom of press, freedom of expression, that equal rights between the sexes, should be a first warning regarding the consequences of chain reaction of global economic crisis.

The possible economical effects are:

- Egypt has lost over 3.1 billion dollars because this political crisis, the average is about \$ 310 million per day;
- as economic forecasts for 2011 the Egypt's GDP growth will be 3.7% compared with 5.3%, the originally planned value;
- disruption of maritime transport on the Suez Channel (traveled about 35,000 ships annually, of which 2 700 are oil tankers) can be an effect for the alarming increase in oil prices. The previous is given by the two periods when the channel was closed: 1956 (nationalization of the Suez Channel by President Gamal Abdel Nasser) and 1967-1975 (period coincides with the "oil crisis" in which Arab states imposed an embargo to the United States as an answer to the support given to Israel - October 1973);
- next government which will lead Egypt will have to confront a number of issues such as budgetary deficit, credibility, image reconstruction of the country, etc.;
- the London Stock Exchange quotations for the oil extracted from North Sea, the price was \$ 99.74 and the stock market in Riyadh (the largest in the Arab world) has lost 6.43%;
- oil prices rose 4%, could reach the level of September 2008 (147 \$ / barrel) when the crisis on Wall Street was at its height;
- addition to oil prices, the price of cereals could increase , especially maize and wheat, being possible due to weather hazards worldwide and strong demand from China;
- by 2013-2014 there will be a decrease in additional capacity of oil production to an uncomfortable level, probably below the one from 2008;
- Insurance companies will be affected by the huge wave of claims for properties and businesses damaged during the protests;
- FDI fell by 17% (6.7 billion \$);
- among international companies that will suffer losses from this economic and political instability are: Barclays, HSBC Bank Egypt, ENI, France Telecom, Vodafone, Carrefour, Nestlé;
- traveling destination changed for European tourists (especially Great Britain, Germany, France) who preferred Tunisia and Egypt during the winter. More than 500,000 travelers choose Spain as their destination, especially the Canary Islands, approx. 70,000 visitors in January ("El pais");
- travel tour operator companies have delayed flights to Tunis and Cairo;
- economic losses for airlines companies as: British Airlines, Lufthansa and Emirates Airlines, the last one decreased the number of weekly flights to Egypt in half;
- war in Libya could delay the projects started by Russian oil companies: Tatneft and Gazprom in this country, a trend that can be compared with Lukoil problem related to the war in Iraq;
- gold price increased by 1,444.40 \$ / ounce and silver price is 36.52 \$/ounce, the highest price recorded on the market since 1980, and prices could continue to increase;

It seems that mankind has entered into a new era that is revolutionary one, called "the era of political awakening of nations." This is manifested in different aspects in several regions of the world being influenced by the globalization. U.S. global dominance might be approaching to a critical point. Revolutions of the North African countries and the Middle East will print a change to the political and economical scene worldwide, change that might not be entirely favorable to Western powers and to the multinational companies and international institutions that support and profit from the totalitarian systems in these countries. To stop this threat, Western powers operating through "democratization", urging non-governmental organizations focused on civil society in the region of conflict, trying to establish a contact or a close relationship with it. The strategy's goals are to support by any means (financial, military, political, etc.) the civil society in the region, to create a democratic system like the western system, thereby maintaining order in the world hierarchy.

Building a democratic state in Northern Africa, by the western image, will be made by democratic elections in which several political parties will participate, will focus on the involvement of civil society, the press free expression, but to keep economic control imposed by the World Bank International Monetary Fund as well (Marshall AG).

In countries such as Egypt and Tunisia is likely coming to power of an extremist neo-liberal political parties, that if we had to relate to the incidents in the years 1980-1990 in countries with authoritarian rule in Central and Eastern Europe, South Africa respectively in South America (Argentina and Uruguay).

Specific for countries under an authoritarian regime are the few reforms and low activity of trade unions, most often being repressed by the brutal dictators. When these forces are weak progressive, capitalist forces are ready and try to take the lead. We could say that this will happen in Egypt and Tunisia, where the strategic development plan is already outlined by the world economic powers: U.S., EU and China. The strategic plan will be implemented by the new created government, even interim, by the decisions imposed by the IMF for the economic reconstruction of these countries.

The received aid from the IMF will be a neo-liberal conditionality package including: new regulations on access to employment, privatization of state enterprises.

The possible geopolitical effects are:

- if the United States will be able to control Libya by installing some government regimes with a western ideology, or will have control over the south of the country than U.S. will manage a division of the African continent, so it will weaken the formal power of the former colonizing countries of Northern Africa: France and Italy;
- the possibility of disintegration of the Arab countries and the establishment of a religious fanaticism which will seek to expand the Islamic extremism, leading to decades of war;
- destabilization of the peace treaty between Egypt and Israel (February 22, 2011, two Iranian warships entering the Suez Channel to carry out a military exercise in Syria, the first trip from the Islamic Revolution in Iran, 1979);

- Turkey and Iran, the most important Islamic powers in the area will try to extend their local influence;
- if the revolution in Libya will be completed with the abdication of president Muanmar Gaddafi, the U.S. and British military bases will be reopened;
- illegal immigration through Libya to the European Union (eg.: the bilateral agreement between Italy and Tunisia on illegal immigration has not been applied);
- increasing the number of refugees in former colonizing countries (over 4,000 refugees from Tunisia have landed in southern Italy, at Lampedusa in February 2011);
- increasing the number of refugees in countries of transit, more than their financial support capacity (over 30,000 Libyan citizens took refuge in Tunisia after the beginning of the war);
- a new wave of revolts in countries such as Yemen, Oman, Zimbabwe, Bahrain, Saudi Arabia, Syria, Iran;

## 5. CONCLUSIONS

The new world order must be for a world that has already passed through a global crisis and it must lay the foundations for a future world, possible only after a period of time, recovery and reconstruction (Alice Bailey).

Revolutions of North African countries are not purely coincidental. The overthrown regimes are former regimes, which until yesterday were clients of the Russian Federation, in relation to the acquisition of arms, given that, they are countries with low arming budget, with social system and centralized development, where the state was the main actor in the development process and then in the name of security to control the expansion of Islam, they came under U.S. protection thus protecting its main ally: Israel.

Strengthened economic relations based on economic partnership treaty between the EU and countries from Northern Africa (Morocco, Tunisia, Algeria) and presumably not just an economic change but also the cooperation in the following areas: technical and financial assistance, social problems and labor use, will continue to take place within the limits imposed by the powers regardless of the new leadership that will rotate from the current conflict.

Generally, the developing countries considered at this stage of their economic development, that the economic cooperation and integration can help them to better mobilize the resources (financial, material and human) to better organize the internal market and the increasing intensification of foreign economic relations, all of which contribute to accelerate their economic and social progress.

The large number of street demonstrations that degenerated, giving rise to revolutions in North African countries, namely in the Arab world, expressed their fundamental nature: the struggle for national independence, control over foreign trade, control over national resources, lack of jobs, low wages for workers, violation of citizens rights (similar to the situation during the neo-colonial domination and imperialism), all these problems can be solved by the emergence of a party whose

power derives from the party among the working class. Without the rapid creation of a workers party whose ideology reflects the social and economic needs of the population, able to lead in a democratic way, the fight to eliminate the above problems will be stopped by the bourgeois class, and everything would be in vain.

If you were to look at the problem in terms of age, then we should think that the higher education system includes a global number of 80 - 130 million students. The vast majority comes from developing countries or countries from the "third world", but they study in the developing countries (Marshall, AG). They come from middle class society, characterized in particular by an uncertain social environment being caught in the demographic and economic expansion with self-assertion into the society, that many times is suppressed by the political and economic system which stopping their development, rise, hope...

All these students are "stand-by revolutionaries" mobilized in associations and interest groups, interconnected via the Internet and social network sites, prepared to express their frustration and emotional deprivation. They are a kind of "political bomb" triggered by the hate against the system, a cause or a hope. Examples can be given by the events from Mexico, China and recently in Egypt, Algeria, Yemen.

Globally, unemployment will not be able to reach the level existing before the economic crisis. It will reach to that level only in 2015, and that will be possible only if the governments continue with the austerity measures, but in this way, causing major social tensions (ILO - International Labour Organization).

Approximately 35 million people have lost their jobs since the beginning of the economic crisis, and the total number of unemployed, worldwide, reached this year to 213 million people, representing an unemployment rate of 6.5%. Under these conditions, where most of the unemployed have no work, and governments are forced to apply austerity measures, projections show that, the social tensions could escalate into riots and street fighting, as happened recently in Spain, Belgium, Italy Greece and Britain, but may continue in France and Romania.

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## **THE CONCEPT OF IC IN REGIONAL AND URBAN SYSTEMS**

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PIOTR PACHURA, IOAN VOICU \***

**ABSTRACT:** *The human capital and structural capital constitute the primary assets of every organisation and more and more every territory: on urban, local, regional, national and global levels. Business practice confirms the need of developing basic organisational features that would result in creating a unique corporate image. It turns out that an individual character of a company facilitates its winning competitive advantage.*

**KEY WORDS:** *human capital; structural capital; intellectual capital.*

**JEL CLASSIFICATION:** *J24; O15.*

### **1. INTRODUCTION**

The human capital and structural capital constitute the primary assets of every organisation and more and more every territory: on urban, local, regional, national and global levels. Restructuring technique, technology, organisation of production and work (means of production, subjects of work, power factors and economic factors) necessitates great knowledge, competence and skills, as well as the right organisational culture and philosophy. These factors constitute the basic elements of human capital. Mutual dependency of these factors results in the need of proper management of planning, organisation and motivation as well as of controlling human capital.

Business practice confirms the need of developing basic organisational features that would result in creating a unique corporate image. It turns out that an individual character of a company facilitates its winning competitive advantage. Shaping the basic

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variables in corporate resources enables one to identify technical, organisational, economic and social features. Creating an individual character of a company on the basis of primary material resources rarely brings the desired effect.

The material character of technical, organisational and economic resources is a feature that may be easily copied by competitors. Among the distinguished features, only human capital may thus decide on the individual character of a company.

## **2. THE CONCEPT OF HUMAN CAPITAL**

The concept of human capital may be considered as capital itself. According to a dictionary definition, capital is every value that brings added value (Skrzywan, 1961, p.78). There is no clear definition of human capital in the literature. Some experts dealing with the problem of corporate capital stress the role of tangible and financial assets, devoting less attention to human capital. A number of authors identify human capital with the knowledge and skills of managers only. The definition is often limited to social factors describing human capital.

Recently, human capital is most frequently defined as knowledge and skills acquired in the process of learning and professional training as well as health and vitality (...) that cannot be the subject of market turnover and cannot change its owner as it is an individual feature of this owner (Kozuch, 2001, p.5). In relation to business activity, human capital may be described as a combination of the following factors (Fitzenz, 2001, p.9):

- human features: intelligence, energy, positive attitude, reliability and involvement,
- ability of a person to learn: receptivity, imagination, creativity and sound reason,
- motivating employees to share information and knowledge: team spirit and objective-orientation.

The existence of numerous factors characterising human capital is confirmed by the cycle of human capital development and by the fact that knowledge management has been accepted as the basis of human capital management. According to J. Naisbitt and P. Aburdene, the traditional understanding of strategic resources concerned mostly material assets that are traditional production factors, whereas the contemporary definition of these resources stresses the importance of three elements: information, knowledge and creativity (Naisbitt & Aburdene, 1985, p.52).

In present economic reality, knowledge constitutes one of the most important factors determining competitiveness of economic organizations and in spatial context like urban and regional competitiveness. The above statement finds its application not only in case of various categories of economic entities but also on the level of regional and national economies. Condition for economy based on knowledge requires precise strategies to be implemented by local authorities. Those strategies have to take into account a particular role of intellectual resources while winning competitive advantage on a market. Top priority of knowledge in modern economy was noted among others by P. Drucker who at the same time determines traditional means of production as

being of secondary importance. Knowledge is understood as utility and means to achieve social and economic results. It is a basic asset applied to introduce innovations systematically (Drucker, 1999, pp.40-41). L. Edvinsson, one of pioneers of the intellectual capital concept, stresses that in a situation of economy of knowledge, value of countries, regions, organizations and individual units is directly connected with their knowledge and intellectual capital (Edvinsson & Bounfour, 2004, p.55).

A concept of intellectual capital that goes back to the beginnings of the 90's of the 20<sup>th</sup> century became an interesting notion to investigate for practitioners and researchers from various scientific disciplines. Different conceptual approaches accepted by the scientific milieu and a constant development of theories in this field have not resulted so far in creation of a standard and widely accepted definition of the intellectual capital. Multitude of definitions and conceptual approaches may result from a broad and interdisciplinary character of the intellectual capital as well as from different approaches presented by researchers working in economic and social fields.

The second half of the 20<sup>th</sup> century constitutes the beginning of a new stage of development of social and economic relations. The shift concerns abandoning production of material goods and concentrating on production, organization, transfer and exchange of knowledge (Delanty, 2001). The mentioned shift caused conceptualization and perception of modern phenomena as the knowledge society (Giddens, 1991).

The authorship of this notion is attributed to Daniel Bell, the author of *The Coming of Post-Industrial Society: A Venture in Social Forecasting* issued in 1973 (Bell, 1973). In his work, Bell points at decline of knowledge as well as society of practical knowledge (technical, professional) and the beginning of theoretical knowledge domination. This includes development of technologies based on advanced research and theoretical works "*a new intellectual technology*". Simultaneously, it is recognized that the beginning of the "*knowledge society*" era, is accompanied by growth of importance of education, particularly on higher education level.

### **3. THE INTELLECTUAL CAPITAL**

The intellectual capital became a subject of investigations for economists, sociologists, specialists in management and accounting. According to literature studies presenting different scientific approaches it may be concluded that the main source of intellectual capital is knowledge understood as a factor of primary importance for any organization's value. While attempting to define the notion of the intellectual capital for the needs of the present paper it can be assumed that its main source is knowledge understood as a factor of primary importance for economic value. Understanding knowledge as a source of value was confirmed by Wriston who claims that "*the new source of value is not material, it is information, knowledge used for creating value*" (Wriston, 1992, p.10). The literature on the subject most commonly defines the intellectual capital as "*knowledge that can be transformed into value or profit*" (Edvinsson & Sullivan, 1996, p.357; Stewart, 1997; Sullivan & Harrison, 2000). The intellectual capital approached at an enterprise level is understood as "*intellectual*

*subject which has been formalized, seized and used to create assets of high value*" (Edvinsson & Sullivan, 1996, p. 357).

According to a present stream of evolution of intellectual capital theory certain attempts have been made to transfer and apply this concept on national, regional and urban systems. The above approach fits into innovative policy foundations which aim at constructing economy of knowledge. Intellectual assets localized in regions become determinant for their future development. They also constitute a certain base for creation of regional and urban innovations systems and winning competitive advantage. Edvinsson in his discussion over one of the first complex works concerning intellectual capital in regional and urban context (Bounfour A., Edvinsson L., eds., *"Intellectual Capital for Communities, Nations, Regions and Cities"*) points out that intellectual capital considered in this sense can be seen as capacities to achieve regional and urban competitive advantage in the future in the following contexts: human, infrastructural and in relations between single units. According to the author, intellectual capital of a region is a capacity to generate constant wealth for its dwellers in the future<sup>1</sup>.

Bontis on the other hand, while conducting research on measuring the intellectual capital of countries, defined it as hidden values of units, enterprises, institutions, communities and regions that constitute present as well as potential sources of wealth creation (Bontis, 2004, p.14). Authors of another research project concerning investigation of the intellectual capital of one of Polish regions propose to define intellectual capital as *"region's ability to a qualitatively new approach towards joining capacities that the region already possesses in order to create new values"*<sup>2</sup>. All the definitions proposed let us understand the intellectual capital of a region as common knowledge of single regional entities. This knowledge constitutes a base for realization of specific strategies and taking effective measures in order to assure constant socio-economic development. The above ability and effectiveness in use of common resources of knowledge is determined by collective actions that aim at preservation of the effect of intellectual synergy. In order to transform individual knowledge of single actors of the socio-economic sphere into a common value, it is crucial to engage specific stimuli i.e. social capital as a factor favouring knowledge processes.

A modern paradigm becomes the fact that IC defines organization's competitiveness, also in global conditions. However, IC is not a static phenomenon and its level is changing, thus competitive capacities of the organization change as well. IC should be perceived through a dynamic systems based on system approach.

The concept of intellectual capital in regional and urban system context is also frequently associated with investing in knowledge, in other words called non-material investments. On the one hand such approach may be considered as fully justified since to achieve a high value of intellectual capital it is necessary to engage certain

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<sup>1</sup> Edvinsson L., discussion on an internet forum: <http://www.knowledgeboard.com>, 27.01.2005.

<sup>2</sup> Projekt „Kapitał Intelektualny Lubelszczyzny. Badania potencjału regionu” (*The Intellectual Capital of the Lubelszczyzna region. Research on the potential of the region*) project), [www.kapitalintelektualny.pl](http://www.kapitalintelektualny.pl)

expenditures which in turn generate specific intellectual assets. Investments in knowledge coming from public and private sources determine future development and growth of the intellectual capital of a region.

The above category of investments is defined as expenditures aiming at reinforcing the existing knowledge, acquiring new knowledge and favouring the circulation of knowledge. The result of investments in knowledge is generation or diffusion of knowledge. According to the approach presented above, expenditures on education, research and development, trainings, innovations and software are perceived as main categories of investments in knowledge (Khan, 2005, pp.39-40). This approach, among others, goes together with the approach accepted by the OECD in reports published on the economy of knowledge of different countries. The enumerated above categories of investments are often identified with development of an economy based on knowledge.

On the other hand however, identifying knowledge-absorbing investments with the level or sometimes even value of the intellectual capital seems to be, to say the least, superficial. It lacks deeper analysis of processes of creation and use of knowledge resources in creating value. Despite the existence of an obvious correlation between investments in research and development as well as in education and the level of innovativeness, on this basis it is hard to conclude clear-cut about regional or national creativeness. An important element that has to be completed seems to be the effectiveness in use of investments made to create economic value.

#### **4. CLOSING REMARKS**

It has to be stressed that the future of scientific thought as well as that of tools for practical application in the process of urban and regional development is more and more frequently associated with concepts of knowledge creation, management and benchmarking of intellectual capital. The concept of IC could be regarded as a sign of system thinking and “*a holistic vision*”. The notion of IC constitutes a certain form of “complement” to the previously presented vision of the economic reality.

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## **ASPECTS OF EDUCATION AND PEACE IN THE WORLD OF 2011**

**LOREDANA-IOANA PRIBAC** \*

**ABSTRACT:** *This paper aims to present the relationship between education and peace, and how they influence each other. These issues are discussed at the global level of 2011, statistical data is provided by the global reports made by UNESCO. The main conclusions reached are as follows: education and school can incite to violence or to help peace, everything depends on the laws and governments, but what is desired is that the school to be the place to go and start to achieve peace. The existence of peace leading to an environment conducive to education achieved for all citizens of a country, regardless of social class of origin.*

**KEY WORDS:** *education; training; school; peace; violence.*

**JEL CLASSIFICATION:** *I24; I28.*

### **1. MAKING SCHOOLS NON-VIOLENT ENVIRONMENTS**

Schools in the twenty-first century need above all to teach children what is arguably the single most vital skill for a flourishing multi-cultural society – the skill of living peacefully with other people. Awareness of religious, ethnic, linguistic and racial diversity should not be banished from the classroom. On the contrary, diversity should be recognized and celebrated.

No country can hope to establish lasting foundations for peace unless it finds ways of building mutual trust between its citizens – and the place to start is in the classroom.

National governments and aid donors need to realize that, whatever their intent, education policy reforms will be rolled out in a political environment shaped by the legacy of conflict.

Donors can contribute to conflict-sensitive education planning. The first principle of engagement is ‘do no harm’. That is why any education policy should be

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subject to a rigorous assessment of potential impacts taking into account not only technical data, but also public perceptions and long-standing grievances. This is an area in which UNESCO and UNICEF need to play a far more central role – and both agencies should participate more actively in the United Nations Peacebuilding Commission.

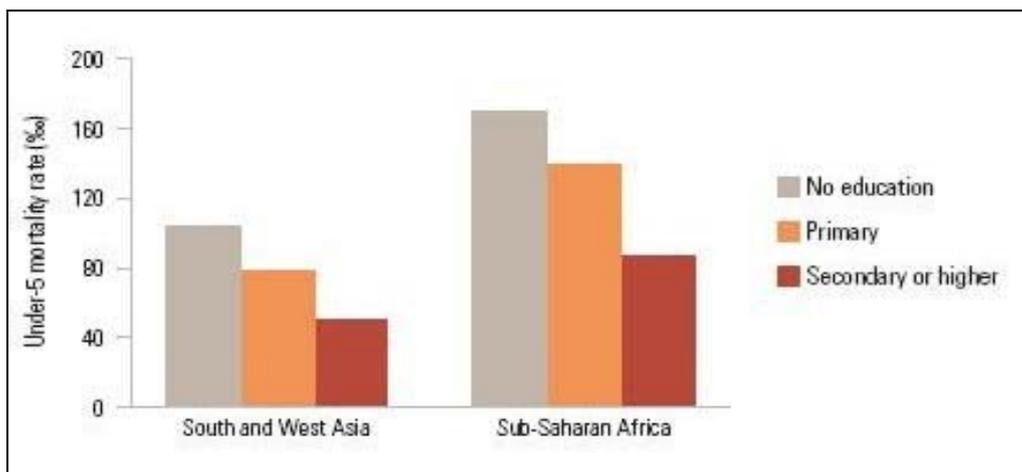
All the goals set in Dakar in 2000 will be missed unless governments acknowledge the magnitude of the challenge and act, with a renewed sense of urgency, to keep their promises.

Goal 1: Early childhood care and education – *“Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.”* (EFA Global Monitoring Report 2011, p. 43)

The linguistic, cognitive and social skills they develop in early childhood are the foundations for lifelong learning. If children fail to develop these foundations because of poor nutrition, a lack of stimulation, emotional stress or other factors, there are significant costs for both individuals and societies, and the effectiveness and equity of education systems are undermined.

There is no substitute for health and nutrition in the early years of life. Yet ill-health and hunger rob millions of children of the opportunity to develop healthy bodies and minds.

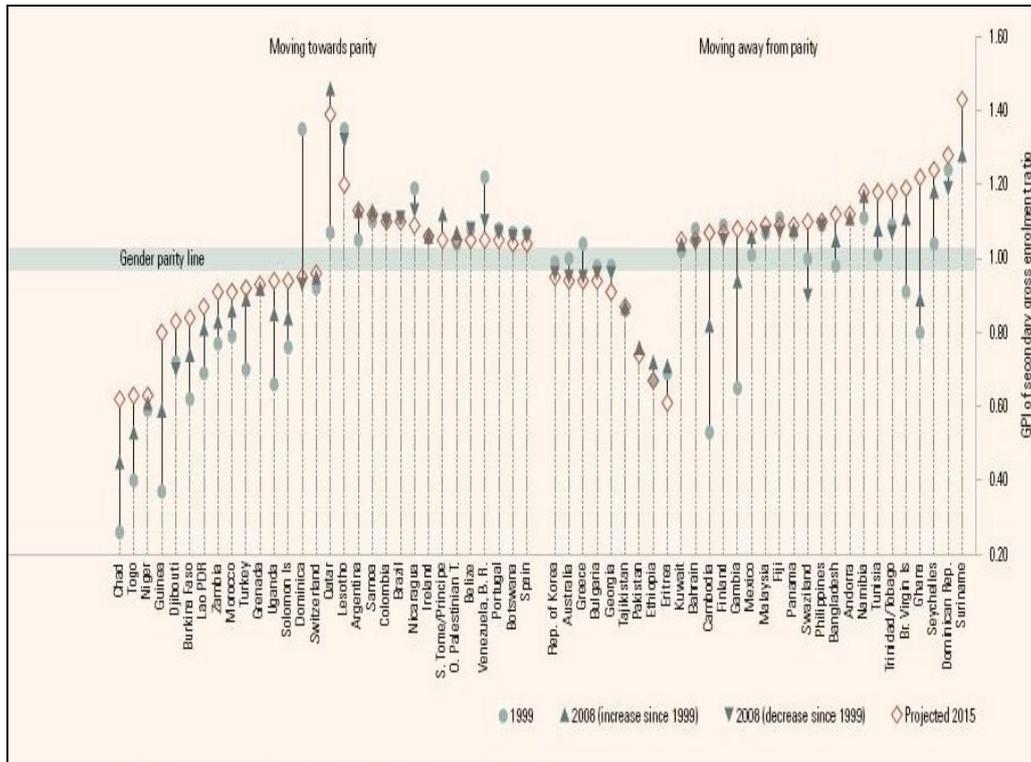
Children born to more educated mothers are more likely to survive and less likely to experience malnutrition. Universal secondary education for girls in sub-Saharan Africa could save as many as 1.8 million lives annually. Malnutrition is a human tragedy on a global scale. Every year, it is directly implicated in the deaths of over 3 million children and more than 100,000 mothers. It follows that economic growth is not a guaranteed route to accelerated improvement in nutritional status. (EFA Global Monitoring Report 2011, p. 45).



Source: [www.unesco.org](http://www.unesco.org) accessed on 16.04.2011

**Figure 1. Education saves lives – mortality rates fall with maternal schooling (2004-2009)**

Goal 2: Universal primary education – “Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete, free and compulsory primary education of good quality” (EFA Global Monitoring Report 2011, p. 54).



Source: [www.unesco.org](http://www.unesco.org) accessed on 16.04.2011

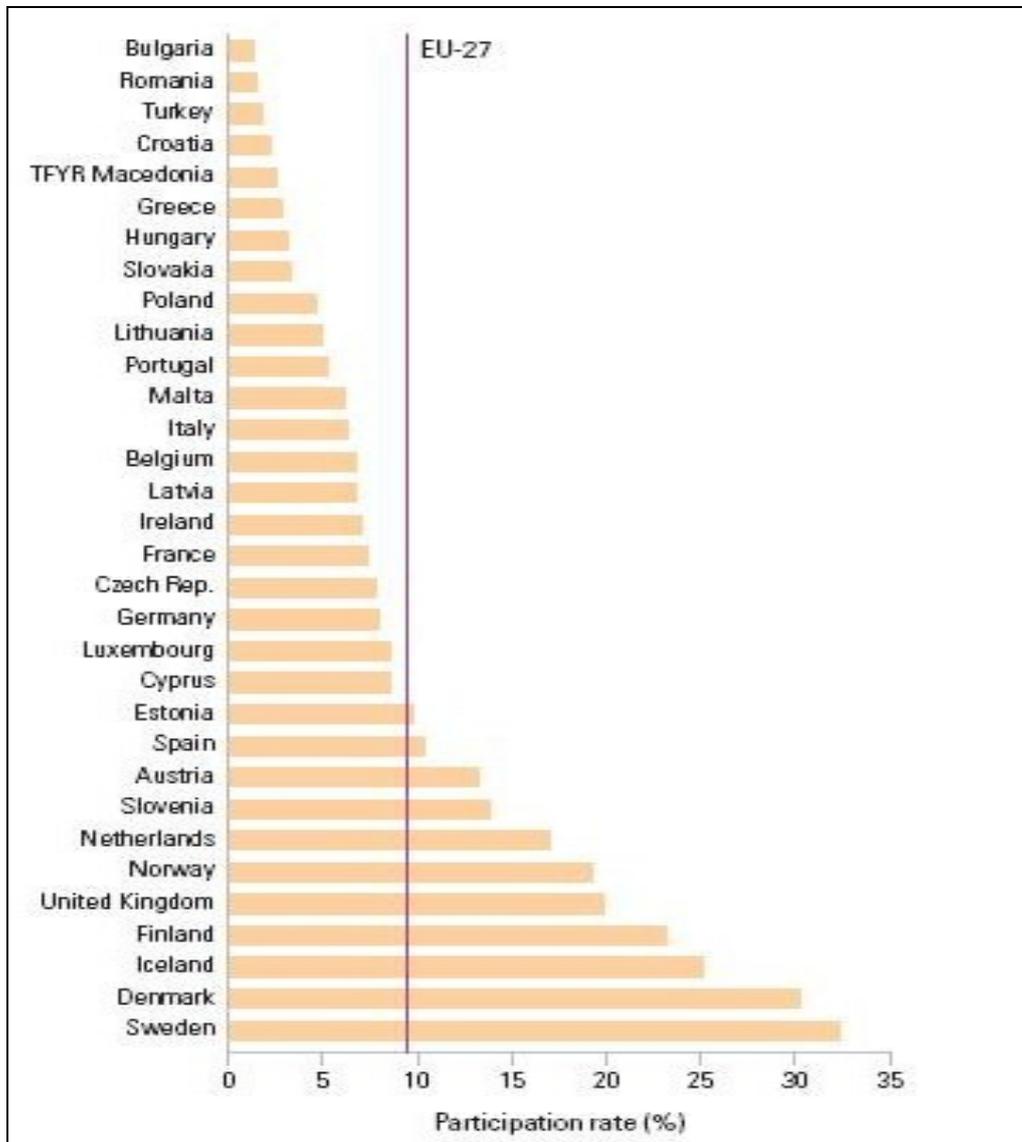
Figure 2. Education by 2015

The past decade has been one of rapid progress towards the goal of universal primary education (UPE). Many of the world's poorest countries have registered extraordinary advances.

Goal 3: Youth and adult learning needs – “Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes” (EFA Global Monitoring Report 2011, p. 68).

The commitment made in 2000 in Dakar, Senegal, to address the learning needs of all young people and adults combined a high level of ambition with a low level of detail. The skills developed through education are vital not just for the well-being of young people and adults, but for employment and economic prosperity.

Formal education during the adolescent years is the most effective base for developing learning and life skills. In many wealthy countries, entering the labour market with low levels of skills results in a lifetime of insecure employment and low wages. (Măcriș A. & Măcriș M., 2010)



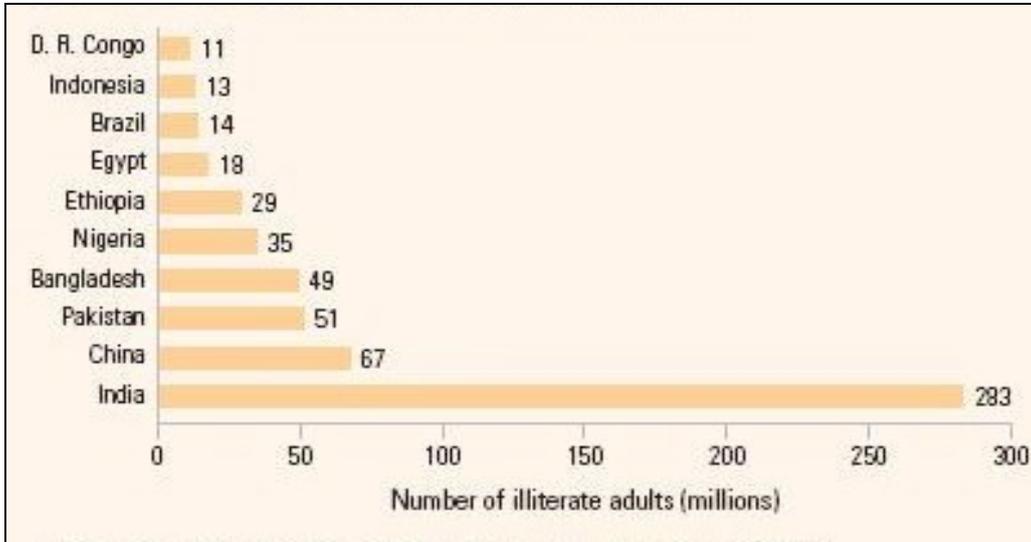
Source: [www.unesco.org](http://www.unesco.org) accessed on 16.04.2011

**Figure 3. Access to continuing education and training is inadequate in many European countries (people aged 25 to 64) - 2008**

Goal 4: Improving levels of adult literacy – “Achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults” (EFA Global Monitoring Report 2011, p. 79).

For children, having parents who are literate confers enormous advantages for access to education and learning achievement levels. By contrast, illiteracy traps

people in poverty and lives of diminished opportunity – and it undermines national prosperity.



Source: [www.unesco.org](http://www.unesco.org) accessed on 16.04.2011

**Figure 4. The majority of illiterate adults live in ten countries**

In 2008, there were just fewer than 796 million illiterate adults, around 17% of the world's adult population. Women make up nearly two-thirds of the total. Sub-Saharan Africa and South and West Asia account for 73% of the global adult literacy deficit, though the Arab States also register high levels of adult illiteracy. (EFA Global Monitoring Report 2011, p. 80)

Large numbers of adults have lived in illiteracy for many years because they faced restricted opportunities for education during their childhood.

Meanwhile, new generations of children are entering adulthood without basic literacy and numeracy skills, either because they dropped out of school or because they received a poor-quality education.

Goal 5: Assessing gender parity and equality in education – “*Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality*” (EFA Global Monitoring Report 2011, p. 87).

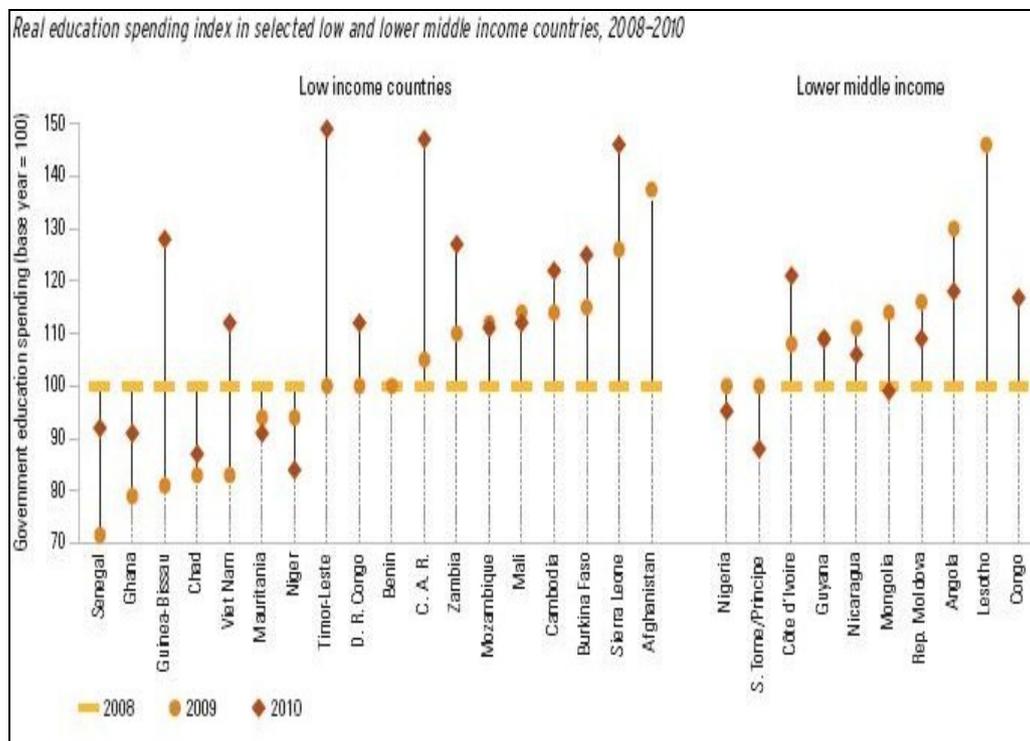
Gender parity in education is a fundamental human right, a foundation for equal opportunity and a source of economic growth, employment and innovation.

Goal 6: The quality of education – “*Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills*” (EFA Global Monitoring Report 2011, p. 97).

Getting children into school is a necessary but insufficient condition for achieving the Education for All goals. The experience of school, what children learn in the classroom and the skills that they emerge with are what ultimately count. This section looks at some of the key indicators of the quality of education and learning achievement.

Sustained progress in education quality depends on making sure that all schools have sufficient teachers, that the teachers are properly trained and supported, and that they are motivated.

The financial crisis and rising food prices: impact on education That's why we must focus our efforts on giving these children an education. Not only does it prevent conflict *before* it occurs, it also rebuilds countries *after* it ends.



Source: [www.unesco.org](http://www.unesco.org) accessed on 16.04.2011

### Figure 5. The impact of the financial crisis on education spending

Across many of the world's poorest countries, armed conflict is destroying not just school infrastructure, but also the hopes and ambitions of a whole generation of children.

*"The only thing we could bring with us is what we have in our heads, what we have been taught – our education. Education is the only thing that cannot be taken from us"* (Martone, 2007, p. 3).

## **2. EDUCATION AS A PARTH TO PEACE**

José Ramos-Horta said if you want peace and justice, if you want jobs and prosperity, and if you want a people to be fair and tolerant towards one another, there is just one place to start — and that place is school. We needed new institutions, new investment and new laws — but we know that reconstruction had to start in our schools. We understand that education is not just about getting children into school, it is about equipping them with the skills they need for a better future.

But education is about more than skills and jobs. It is also a vehicle for transmitting those intangible but powerful forces that bind societies together — forces like respect, tolerance and shared values.

One of the key messages in UNESCO's *Education for All Global Monitoring Report* is that education can be a force for preventing conflict, reconstructing countries after conflict, and building peace.

In today's world, where so many people are divided by faith, identity or language, education can unite us in shared respect and tolerance.

Education does not cause wars, nor does it end them. Reconstructing education after violent conflict confronts governments with daunting challenges. For parents who have seen the education of their children compromised by war, education is likely to be seen as an important part — even the most important part — of the initial peace premium.

Education is a public service that touches the life of virtually every citizen. It is only a slight exaggeration to say that a country's future will be as peaceful, prosperous and cohesive as its education system allows.

Given that education is central to people's lives, provides a link between state and citizens and is a potential source of conflict, to neglect its importance is to risk a return to violence.

There is a Persian proverb which says: "There are two worlds: the world within us and the outside world". Inner peace is what ultimately engenders external peace. And it's through education that we learn to unite the two worlds and live in harmony with ourselves and with others. Every child needs to learn, in their earliest school years, to respect the rights of others. Learning to refrain from even the simplest forms of violence and to recognize peace as a jewel of life is one of the most important of all lessons. When children are deprived of that lesson, no amount of decrees and official instructions will make them respect the rights of others.

Schools can be a powerful force for peace if they teach children everyday what is at the heart of the Persian proverb — our shared humanity and common destiny.

## **3. CONCLUSIONS**

Enhance the role of UNESCO and UNICEF in peace building initiatives. Education brings hope to millions of children who have never known peace. It brings opportunity to countries that are desperate for growth and prosperity. In short, education is our saving grace, our best chance, and our one shot to bring security *and* development to all humanity.

#### 4. ACKNOWLEDGEMENTS

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## **THE EFFECTS OF PARENTS' WORK MIGRATION OVER THE SCHOOL RESULTS OF HIGH SCHOOL PUPILS**

**ROBERT PRODANCIUC \***

**ABSTRACT:** *In the present study I start from considering the family and school as social systems and the pupil from a four-dimensional perspective. The influence of the relations inside the family is realized according to the symmetrical relations pointed out by Cattell and the relating triangles shown by Benedek. The relations at school through which the pupil is gaining academic and social skills have been represented according to Păun. Adolescence is a period of personality reorganization for every individual. The work hypothesis of this study is: if the adolescent pupil's parents (mother, father or both) migrate, then modifications will occur at several levels. As a conclusion we can draw the need for the establishment of assistance centers for the pupils, parents, teachers and authorities.*

**KEY WORDS:** *lay offs; work migration; parent; adolescent; school results; social worker; professional counseling.*

**JEL CLASSIFICATION:** *J12.*

Just as it is necessary to have two people to  
conceive a child, it is equally important  
to have two people to raise a child  
Paul Osterrieth (1973, p. 180)

### **1. ARGUMENT**

The dialogue between the sociologist and the social worker, sociology and social work, is a necessity that comes out of the position of these two terms. Both of these terms represent social sciences that approach reality in complementary ways.

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Sociology is focusing on the social ensemble, while social work focuses on the social reality. The two perspectives offer each other elements for a more complete and a more accurate comprehension over a reality that only theoretically can be separated in whole and part.

In the social reality the human behavior has a capability to act and work that can take a normal aspect that ensures the balance of the community or a deviating aspect of inadaptability that through the deviation from the normality is jeopardizing that balance. It is obvious that we are not interested in those deviations that promote the progress, but only in those behaviors that lead to having difficulties in assuming the appropriate roles for every person's status or to the failure to fulfill the personal social tasks. As social sciences, both sociology and social work refer to both aspects but in different ways. Sociology determines the causes, the proportions, the reports, the conditions in which it manifests and the effects, while social work, as Cristian Bocancea (1999) said, assesses the deviation degree and the personal and social peril posed by the deviating behavior and helps with the reconstruction of the adapting ability and social integration of the concerned people.

The problems posed by work migration correspond to the national and local preoccupations. Thus, „Tribuna Învățământului. Revistă națională de informație și atitudine” a national magazine addressed to the teachers is publishing in several issues articles about aspects of the migration of Romanian population to places that offer better perspectives from a financial point of view (Cojocaru I., 2007; Nușfelean O., 2007; Dobrescu M., 2007). Also, the local press is pointing out worrying aspects of the migration of Romanians abroad (Mitrache D., 2006). All these articles are suggestive through their titles. They draw everyone's attention and nobody can remain indifferent even if they are not professionally involved in the Romanian education system. Being a sociologist, I have been attracted even more to such a thematic.

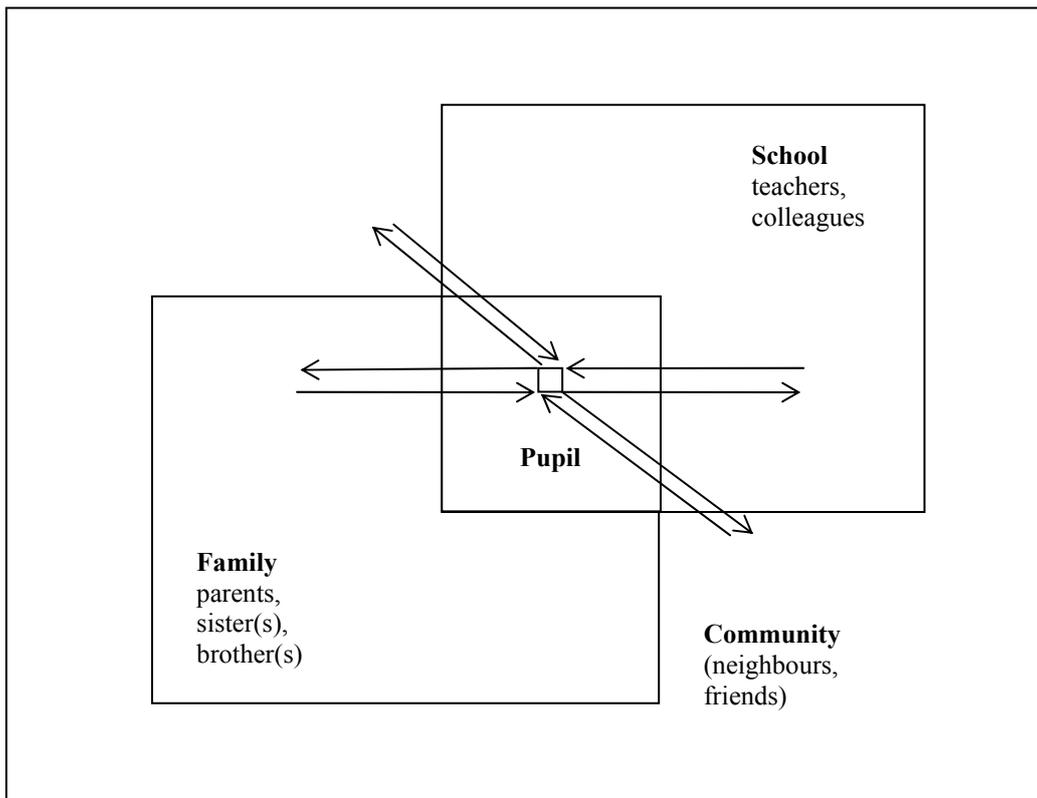
## 2. CONCEPTUAL ANALYSIS

The study is based on the systemic paradigm. This means that I will consider the family and the school as being open, dynamic and adaptable social systems whose elements, the pupils, have complex structural relations, communicate at high levels and interact in multiple ways. In turn, the pupils are being considered from a four-dimensional perspective – bio-psycho-socio-cultural. On each dimension is pursued the preparation of the child for the adaptation and integration into the life of his community. This preparation has two axes the individualization and the socialization. Constantin Maximilian (1980) talking about the genesis of the individuality at biological level, shows that each individual is unique and “explores and exploits the environment in a different way” because each of us are genetically different and unequal. This difference and inequality is demanding equal opportunities in order for everybody to be able to develop. Even at a biological level the author is showing that social life is indispensable for the individual development. It will favor the reach of the maximum levels conditioned by heredity.

The psychical development also has a solid support. As Paul Osterrieth (1973) considers it is represented by the feeling of safety that sets in when the child is being

accepted by the family in general and the mother in particular. This feeling is required since birth and up to maturity.

From the perspective of the social dimension, what interests the most is socialization process. It is chronologically and qualitatively of two kinds: the primary socialization – accomplished inside the family and the secondary socialization – accomplished in school. These environments are included in the local community (see Figure 1).

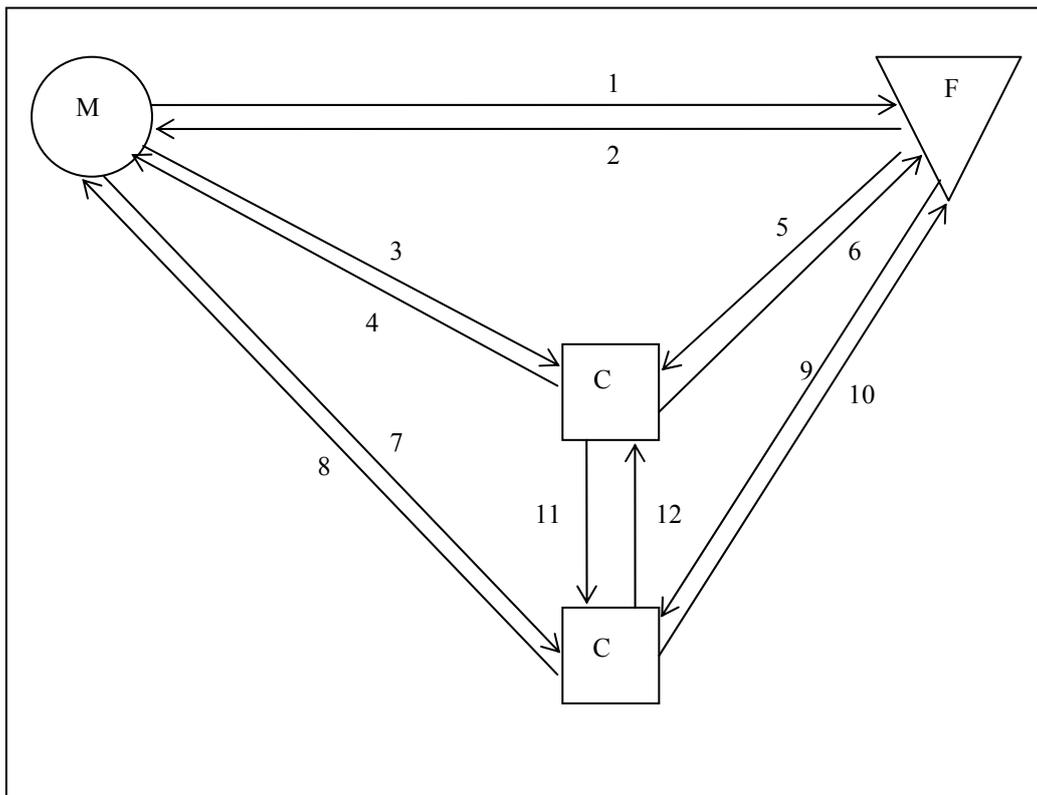


**Figure 1. The Influence Environments of the Pupil**

In order to define the **family** we consider Natalia Damian's (1972, p. 58) formulation to be useful "a group of relatives by marriage, blood or adoption, that live together, carry on a common economic-household activity, are bound by certain spiritual relations, and under the conditions of the existence of the state and the law also by certain judicial relations". In this study I focused on the majority of Romanian families, that is the **nuclear** or **conjugal** family.

The nuclear family is constituted by marriage and makes up its own life style, which is different to the ones of the origin families. By life style I understand like Ioana Smirnov and Georgeta Margherescu (1989, p. 70) the result of the interiorized life style as a means of satisfying the necessities and the self-determination of the family. The life style is usually, at least generally, constituted in the period between

marriage and the birth of a child. Being dynamic and adaptable, the life style will restructure when the new family member appears as well as any time it will be necessary. The life style of the family also consists of the integration of the relating modalities of the people that make it up. Combining the relations inside the family found by R. B. Cattell (according to Paul Osterrieth [1973]) and the relations triangles inside the family pointed out by Th. Benedek (according to Cornelia Dimitriu [1973]) we attain Figure 2.



**Figure 2. The Relations inside the Family**

From this figure it is possible to point out the fact that the family is made up of a constellation of symmetrical relations in between people with symmetrical status-roles, for example the relation mother-father or parent-child. I'd rather consider the father to be the authority decisional center, alleviated by the co-participation of the mother and the mother as being the cohesion centre in co-participation with the father in this way the parents relate complementarily. The children, reported to the parents, represent the social promotion component and at the same time the solidarity and competition component. In the figure we represented there are only two children because only the first and the last have the most sensitive positions. Also we did not specify the gender of the children because that would lead to specific differences in the

relations with the parents. We preferred the representation of the family with two children because it is the most frequent in Romania.

What is important in the parents-children relations starts from what are the first. Thus we take into consideration the following parent types. The types of mothers are the ones established by M. J. Rosenthal and collaborators (by Cornelia Dimitriu [1973]), and those are: the controlling rigid mother, the infantile protector mother, the excessively ambitious mother, the punishing mother, the denigrating mother, the unfair mother, the weak and indifferent mother, the overindulgent mother and the psychically sane and instructive adequate mother. The mother will fulfill her main role towards the children according to her characteristic type; she will initiate and maintain socialization and individualization mechanisms even during adolescence.

The role of the father is secondary, indifferent and diffuse. But on the other hand he decisively contributes to the shaping and the stability of the family environment according to his typology. Rose Vincent (1972) considers the following father types: the dominating father, the tyrant father, the "friend" father, the "candy" father and the resigning father.

We have seen that genetically each child is different and adapts and integrates differently in his relation environment even if it is somewhat common to the children of the same family.

In adolescence, that is the period corresponding to the high school pupils who were studied, each pupil is finalizing his personality, which foundations have been set during childhood, through a riotous reorganization but without any radical changes. This means passing through some important stages like the uprising or the development of the self awareness, the scandal or the self assertion, the conscience exam and exaltation and finally the assertion or social integration. (Jean Rousselet [1969] and Șt. Zisulescu [1968]). Both the family and the school must take into consideration the individual and age particularities of the adolescent pupil according to their own specific.

The school behavior is primarily based on the enrichment of the cognitive area. Based on this, his conduct should be characterized by constancy, diligence, performance and inclusion area. It must not be neglected that each high school pupil is attending a certain high school specialization following a **distribution** based on personal achievements shown by his school marks and as well as a competition with a lot of other candidates. After high school graduation, they will continue their studies at a certain university based on a more or less resembling procedure. The context in which the high school pupil is studying at present is a changing social environment with uncertain educative strategies and with the accumulation of ignorance according as he advances in his schooling process. The Romanian education system is having a paradox. The more it tries to approach the efficiency of the west European education system, the more it shows its inefficiency. According to Emil Păun (1999, p. 105) the pupil acquires in school academic skills as well as social skills. The academic skills are attained from the relation with the teacher in the area of the taught subject matters. In class, the teacher is communicating the knowledge to the pupil, then the pupil assimilates it at home, and afterwards at class the pupil has to demonstrate his ability to operate with it (see Figure 3). The social skills of the pupil consist of discovering and

respecting the norms as well as their reinterpretation and valorization in all the pupil's actions. The norms valorization reported to the teachers take the forms of negotiation, complicity and/or denial according to his attitude and the results previously attained and reported to the expected ones.

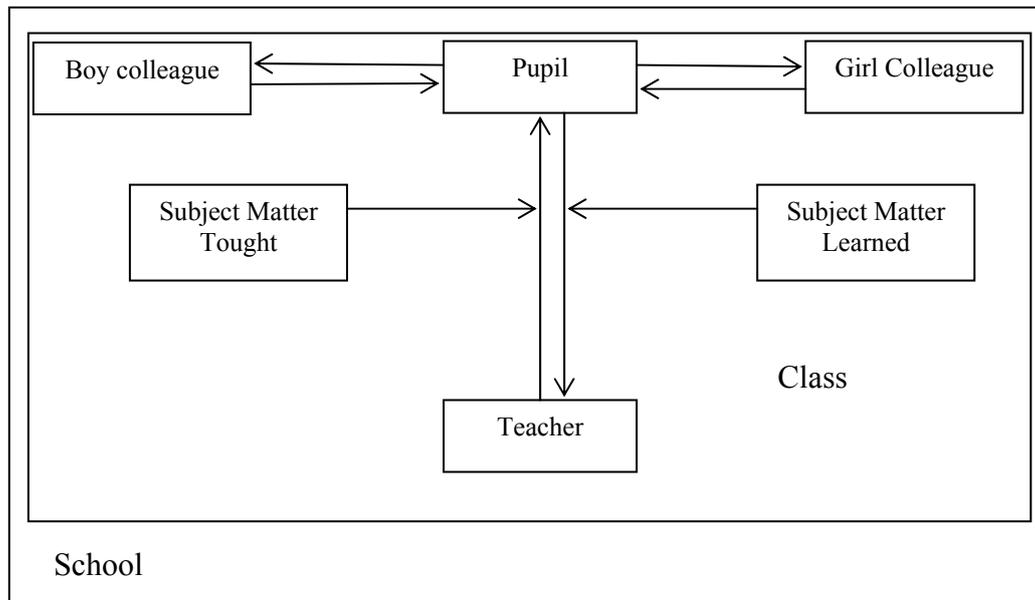


Figure 3. The Relations in School

### 3. THE RESEARCH METHODOLOGY

The prolonged transition of the Romanian society from totalitarianism to democracy brings about chances that are felt from the macro social level and up to the micro social level and even the individual one. The possibility of sincere and open self expression weakens the self censor ability and sometimes behavioral manifestations often cross beyond the rules and limits of the common sense. Thus, Maria Ciobanu Băcanu (1994, pp. 460-461) observes that youngsters don't listen to their educators (parents and teachers) any more and the significant influences are the horizontal ones, estranging from the traditional values, the deepening of the communication crisis in between the generations. Also, an ambiguous and contradictory model of person and life style imposes itself. This model is based on „to have” as much and extravagant as possible obtained as easy as possible in order „to be” as visible as possible. This also includes the carrier for which the youth want a covering with diplomas without even possessing the necessary minimum of professional knowledge.

For the present research we orientated ourselves towards a hypothesis that can be formulated as follows: if the pupil's parents (mother, father or both) migrate, modifications will occur at individual level (child), micro social level (family) and community level (school and locality) meaning the change of conduct, values and

relations with consequences in the less justified growth of the tolerance and the drop of the quality of training for the life of the youth (both for professional and family life).

In order to prove the hypothesis we selected from the available methodological ensemble only the methods that allow us to collect relevant data from the field. These methods are:

- **the study of school documents** especially the register from where we extracted the annual average, the number of absences and the eventual sanctions or prizes etc;
- **the questionnaire** addressed to the pupils, with it we collected data referring to the destination of the parents' departure, the people who look after them, the content of the attendance and the suffered consequences;
- **the interview** addressed to the people that attend the pupils that pursued the agreement between the parents that have left and the respective person, the content of the attendance, the ways in which it is being offered, the pupils monitoring and the consequences felt by the pupils perceived by these persons.

For the statistical data processing we considered as independent variables: 1) the pupil's gender, 2) the class he is in instead of the age because all the pupils of the same class must cope with the same tasks and the age difference under one year is irrelevant and 3) the parent that has left in the order father, mother or both. As dependent variables we considered the person that is attending the pupil, the content of the attendance, the consequences of the pupil's situation, the school situation (marks and absences), the contact with the left parent(s) etc.

#### **4. THE FINDINGS PRESENTATION**

The transition of the Romanian economy from a planned economy to a market economy meant especially abandoning the megalomaniac ambitions in favor of the reinstatement of the equilibrium in between the resources and the possibilities as well as the resetting of the production onto the economic efficiency principles. The direct consequence of this reorientation was the reduction and even the disappearance of some industrial plants and personnel lay offs.

For the Jiu Valley which is a mining area with only one industrial branch developed in coal mining, mining reorganization meant the shut down of the unprofitable mines and the massive lay offs of the work force that became in excess, especially of the masculine part but also the feminine one. This measure made it for some people very difficult to subsist because few of them found new jobs and these new jobs were uncertain and poorly paid. Some of the people that did not find new jobs left the area heading for their places of origin or they emigrated. A professional conversion of the excess work force was tried but no significant results were attained when trying to rehire them because most of the unemployed that came from the mining sector were poorly trained both professionally and generally that further kept them in the situation of being poorly skilled workers.

The jobs offer from the area being poor, little and uncertain made a lot of the people migrate. Some migrated inside the country to their places of origin if they had what to return to. Others headed towards places with economic growth. Another

significant part of the unemployed migrated abroad. Usually, the partner in the family that left was the one that had the best chances of being hired: men for hard work in construction or agriculture and women in agriculture at harvesting or domestic work. Under the conditions of migration a double gain seems to result both for the emigrant and the host country. But the reality is that usually the emigrant has earnings that are inferior to the ones of the natives and cannot integrate in the society in which he arrives. The emigrant is forced to adapt and to integrate in the social subsystem represented by the immigrants even if he is now a European with all rights as shown by Monica Săvulescu-Voudouris (1996). Under these conditions the ones that are leaving, will settle in the country where they migrated only if they have the strength to pass over all the setbacks that they encounter. Most often after they save some money considered to ensure a decent living in our country, they return. Ruxandra O. Ciobanu (2004) shows what happens with the migrants that return home. Their situation is not the object of this study. We chose to study the situation of the adolescent children that are high school pupils that are left at home to continue their studies.

For the fulfillment of our study, we focused our attention on a lot of 55 pupils from the “Hermes” Economic High School from Petroșani which have parents that have emigrated. We chose this high school because its profile is an attraction point for the pupils from all over the Jiu Valley even if in the localities where they are from there is usually at least one high school. The gender structure of the lot is in accordance to the structure of the pupils from this high school and of the structure of pupils that have emigrant parents even if it isn’t representative for the structure of the grades.

**Table 1. The Repartition of Pupils by gender and residence**

	<b>Masculine</b>	<b>Feminine</b>	<b>TOTAL</b>
Petroșani	4	19	23
Petrila	5	12	17
Aninoasa	0	2	2
Vulcan	1	4	5
Lupeni	2	3	5
Uricani	1	2	3
<b>TOTAL</b>	<b>13</b>	<b>42</b>	<b>55</b>

First of all let’s see what countries their parents are leaving for to work leaving their children at home in order for them to continue their studies. According to the answers from the questionnaires addressed to the pupils they indicate that on the first two positions are countries in which the language is of Latin origin – Italy 33 and Spain 15. The other countries with languages of the same origin – France and Portugal – have each attracted 2 parents. The first two countries are preferred because they are more permissive and also because the language is easier to learn. Also in these two countries there are a lot of Romanians emigrated that can help the newcomers immediately after their arrival. Other countries that are a target for the emigration are UK 3, Germany 3, Greece 3, Holland 2, Hungary 1, Turkey 1 and USA 1. Summing up the numbers referring to the parents that have left shows that there are families in which both parents have left and sometimes in different countries. This leads to the

weakening of the family cohesion and the deepening of the scission from the children's souls.

The second analysis that is important is the one of the parent that is leaving. The lay offs from the mining sector aimed first at the masculine work force and only afterwards the feminine work force was affected. Also, most of the women that were hired were working in the services sector, in other industrial segments or they were housewives. The statistics after the processing of the questionnaires show that migration has a special aspect: both parents have emigrated from 12 families, only the fathers have emigrated from 13 families and the mothers have emigrated from 30 families. This means that 42 pupils can't find their mothers when they need her to be close to them and 25 pupils can't find their fathers. Taking into account the parental particular roles, the lack of their parents exactly at the moment when their adolescent personalities are reorganizing and they are starting to undertake their adult conditions, the consequences for them can be not only frustrating for the moment but also on long term they can accumulate some distortions.

The substitution of the parent that has left is usually assumed by the parent that has remained and this happens in 35 cases. In 8 cases the situation is that the parent who has remained doesn't assume the responsibility instead it is passed on to other persons as in the case of the 12 pupils that have both parents left. The other people that assume the responsibility of attending the children are in 8 cases the grandparents, collateral relatives (uncles, aunts) in 3 cases and older brothers or sisters in 5 cases. Also one pupil is left in the care of his neighbors and in 3 cases the pupils take care of themselves.

The content of the attendance hasn't been agreed upon with the people in whose care the children were left before the parents' departure and the ones that assumed this responsibility are more or less motivated to do it. Only 18 children and their replacement parents assert that it is everything they need. It is obvious that among them there are also adolescents with one natural parent left. In all the other cases the attendance is nuanced by reducing it to food, money, cleaning sweeping up, washing, supervising (in 7 cases), moral support (in 6 cases) and affection (in only one case). This is where we can fully feel the conception according to which if you assure a child with shelter, food, clothing and some spending money then it is all that is necessary. It is very bad that the pupils also agree to such a conception.

Searching for the consequences of the absence of one or both of the parents for the pupils we can obtain the reverse of the situation created by the offered and received attendance. Each pupil and surrogate parent could give multiple explanations. Thus in 19 cases it was asserted that there could be felt an amelioration of the financial situation, but in 10 cases the conclusion was that there was no change. Where other changes besides the financial situation are felt, they are both positive and negative. The most interesting one is the lesson of life admitted in 4 cases. Also as a positive change it was admitted that the situation at school was maintained (in 5 cases) or even better it improved (in 4 cases) that were explained through the departure of the stressing parent. Among the negative changes that were felt we recorded the burdening with household attributions (11 cases), the decline of the school situation (6 cases) and inadequate alimentation (in one case). One pupil asserts that she finally gained total freedom,

which means the possibility to do whatever she wants; especially what she wasn't allowed before. By far the most painful consequences are found in 31 cases that assert that they have been emotionally affected and in 4 cases the family went through a divorce. Only now the price paid for the parent departure is visible and also who pays it. Weighing the financial gain and the different sorts of losses we believe that the results are not worth the effort.

Finally we will tackle the school situation of the pupils that have parents who emigrated. We will only consider the absenteeism and the learning performance revealed by the yearly average.

For the processing of the data referring to the absenteeism we grouped the cumulated number of absences over the last year into three groups: 1) up to 40 absences, because that would be the limit where the pupil would be expelled if the absences were not motivated, 2) from 41 to 120 because the maximum limit was the maximum number of motivated absences with which it was possible to be promoted to the next grade; 3) 121 and over, interval in which now pupils can have motivated absences and still be promoted to the next grade. The record is 289 absences with the consequence of being expelled because 164 of them have not been motivated. Also, a pupil with 273 absences was not promoted. The pupil situated on the third position with 196 absences was promoted. Related to these situations we must underline the tolerance of the new school regulations that we consider to be exaggerated and guilty complicity of the class masters. Also a great contribution to the rising of the motivated absences has the family doctor who is always jointly-interested.

The statistical analysis shows that approximately a quarter of the boys and girls make absences when the father has departed, the others make absences when the mother or both of the parents have left. The relatively low percentage of pupils that make absences when the father is migrated is due to the fact that traditionally he is not the one that oversees the school evolution of the child; mothers usually do it and it can also be seen on the absences levels. The analysis of the number of absences by grades and genders shows the same thing. When only the father is gone 13 of the 55 cases make absences but not in the final year. When the mother has left, indifferent whether the father has also left or not, the girls make more absences in the first and last high school year. As the number of absences made, the majority is on the second level (41-120) 8 out of 13 boys and 23 out of 42 girls. Also it is easy to see that the boys are to be found on the second and third level while the girls are on all levels.

We left the analysis of the learning situation of the pupils with emigrated parents for last because the marks should synthetically reflect their whole school behavior. It must also be mentioned that here is where most of the teachers' tolerance is manifesting because they consider that in this way they help the pupils continue their studies at better universities. In spite of all these things 5 pupils of the lot have registered total failures: one pupil was expelled, one pupil was not promoted (both of them had both of their parents emigrated) and 3 pupils have to come in the autumn for second examinations (one of them has both parents emigrated and 2 of them have their mothers emigrated). Another pupil was also not taken into consideration because coming from another high school by transfer and we couldn't find his admittance mark. For the other pupils we calculated the deference in between the admittance mark and

the average of the last year. Our statistics shows that 7 boys regressed 5 of them in the 9-th grade and 2 in the 10-th grade. One of them has both parents emigrated, 5 of them have their mothers emigrated and only one of them has his father emigrated. 2 boys recorded an increase in their learning situation and both have their mothers emigrated. For the girls the situation is as follows 14 girls have regressed 9 of them are in the 9-th grade, one of them is in the 10-th grade, 3 of them are in the 11-th grade and one of them is in the 12-th grade. 5 of them have their father migrated, 7 of them have their mother migrated and 2 of them have both their parents migrated. For the girls it seems that the importance of the father's role is increasing, he represents the authority, and the mothers could not substitute for his absence. The 25 girls that have recorded progresses are 2 from the 9-th grade, 10 from the 10-th grade, 4 from the 11-th grade and 9 from the 12-th grade. The parents that have left these high school girls are the fathers in 5 cases, the mothers in 16 cases and both the parents in 4 cases. From here we can notice the fact that the girls appear to be more stimulated to learn better when the mother or both parents have left. From the explanations received it results that without a competitor from the family environment, the girls assume their main task more maturely and that is to learn. The teachers' tolerance and complicity must also not be neglected.

## **5. CONCLUSIONS AND PROPOSALS**

From the results that have just been presented it results that the hypothesis is verified entirely. The parents' departure abroad to work in order to insure a decent life style brings about contradictory and mostly negative results. The ones that assume the fulfillment of the parental tasks instead of the parent(s) that has/have left do so only partially. Among the deficiencies we can mention the cases that declared that they are emotionally affected and the lack of proper monitoring of their behavior in school. The strongest absence felt by the pupils is the one of the mother.

Regarding the behavior in school we must point out an alarming increase of the absenteeism from school and a drop of the effort to gain new knowledge for boys, while the girls even if they make more absences have superior performances. It would seem that because of their earlier maturing and a more subtle way of relating with the teachers, most of them being women, gain superior knowledge.

These conclusions must not be overlooked by both the parents and the teachers. The parents must be taught to behave like parents even when they are separated from their children by considerable distances. Communication may bring them closer together. The results of learning might be seen in the pupils' behavior. The mission of teaching the parents cannot be assumed by any of the teachers even if we are talking about the class master out of two reasons. First of all the teacher cannot be burdened with more tasks that are not directly linked to the practice of his profession. Secondly the teacher is not qualified for such an activity. This situation creates the need for the foundation of psycho-socio-pedagogic assistance centers of the pupils and teachers. Hiring a single psychologist is not enough. It is also necessary to have at the same time sociologists, social workers and pedagogues. This center should focus its activity on to the pupils and their problems. Also, now that there are legal regulations

that confer the local authorities some responsibilities regarding the children with emigrated parents it is important for them to be properly informed and start to take some real actions together with the social workers of these centers. Last but not least they must keep the contact in between the school and the emigrated parent as a direct link in which the social workers from the country where the parent migrated to work could intervene.

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## **FDIs IN SPAIN AFTER ITS EU ACCESSION. SPANISH INVESTMENTS IN ROMANIA AND HOW CAN BE USED SPANISH EXPERIENCE FOR ROMANIA'S DEVELOPMENT**

**MAGDALENA RADULESCU, ELENA JIANU \***

**ABSTRACT:** *It is an open question to what extent the accession countries will be able to benefit from an increase in the quality of FDI that they receive due to EU membership. The point here is that the benefits that accrued from EU membership to the countries that joined earlier are substantially attenuated for later entrants to the EU because of globalization. This paper will discuss the similarities between the economic structures of those two countries, the Spanish investments in Romania and how the Spanish experience after its EU accession could be used for Romania after 2007 when it acceded to EU, too.*

**KEY WORDS:** *FDI; EU accession; Spain; Romania; investment policy.*

**JEL CLASSIFICATION:** *F21, F23, G01, G24, G38.*

### **1. INTRODUCTION. LITERATURE REVIEW ABOUT EU ENLARGEMENT ANF FDIs.**

It is an open question to what extent the accession countries will be able to benefit from an increase in the quality of FDI that they receive due to EU membership. TNCs may divest their operations in response to better location advantages elsewhere in the EU (as Spain and Portugal are experiencing as their low-cost advantages are eroded), or reduce the intensity of operations by lowering the level of competence and/or scope of their subsidiary, and shifting from truncated replicas to single activity affiliates. There may also be a redistribution effect. That is to say, sectors that were dominated by domestic capital are transferred to foreign ownership, particularly where

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domestic capitalists have failed to improve their competitive advantages to compete effectively with foreign firms. Indeed, in many of the CEE countries, the share of foreign ownership in total capital stock is already typically much higher than in older EU member states, although with considerable variation across sectors.

Many of the less economically developed, more “peripheral” economies of the EU-15, such as Greece, Ireland, Portugal and Spain (referred to here as the ‘cohesion’ countries) followed this approach, and, partly as a result of their success, these policies have been pursued much more explicitly by the new member states (NMS) and those wishing to join, a large number of both groups being located in central and eastern Europe (CEE). However, our aim is to discuss the broader aspects of the role of FDI in economic development for Romania, using the experience of a European developed country, namely Spain. This paper will discuss the similarities between the economic structures and experiences of those two countries, the Spanish investments in Romania and how the Spanish experience after its EU accession could be used for Romania after 2007 when it acceded to EU, too.

Membership of the EU has two important implications with regard to FDI. First, it allows countries that have small domestic markets to expand their de facto market size. Firms located in the EU have access to the entire EU. However, as the number of countries in the EU increases, this advantage is currently shared by 27 member countries and even more if one includes countries that have preferential access to the single market through various lesser forms of trade agreement. Thus, this advantage has considerably less value to the accession countries than it had for the cohesion countries, and this is exacerbated by the fact that domestic firms in many of the CEE countries have little experience in dealing with competition in a market economy which further attenuates the benefits that derive from the competition effect. Second, membership suggests political, economic and legal stability. Although the absence of efficient institutions can retard the efficient accumulation and transfer of knowledge, EU accession countries are not competing with the least developed countries for FDI (Ioneci, Mandreci, 2010).

As such, EU membership per se does not necessarily lead to an increase in the quality or the quantity of FDI that a country receives, and this is best illustrated by the case of Greece. In 1980, inward FDI stock per capita was \$470 (all figures in current prices) compared with \$315 and \$137 for Portugal and Spain respectively. By 2007, FDI stock per capita in Greece had grown to only \$4,740, compared with \$10,750 and \$12,138 for Portugal and Spain respectively. To take just one example from the NMS for comparison, Hungary’s FDI per capita in 2007 was already more than double that of Greece (\$9,711). A substantial part of these flows took place before Hungary became an EU member in 2004.

The point here is that the benefits that accrued from EU membership to the countries that joined earlier are substantially attenuated for later entrants to the EU because of globalization. First, because global financial, political and economic liberalization, which forms a large part of the globalization process, has “levelled the playing field” in lowering the risk associated with trade and investment in most parts of the world (Narula, 2009). With growing technological convergence, increasing homogeneity of consumption patterns and improved communication and transportation

facilities, these factors have reduced the costs associated with supplying EU markets from East Asia or the Americas. As such, many of the new entrants to the EU are faced with increased competition for FDI not just from other European countries but also from other parts of the world, most notably Asia. The total flows of FDI are not fixed, and thus, in principle, countries need not compete for FDI.

The empirical evidence on the effects of EU membership and the shift from the cohesion countries to the NMS by and large confirms our skeptical view of FDI flows to the cohesion and accession countries. Ex ante studies on the effects of EU membership on the shift of FDI, not unexpectedly, have found a wide range of effects. These studies are mainly simulations based on theoretical models: As early as the mid-1990s, Pfaffermayr et al. (2001) and Galego et al. (2004) examined various aspects of the shift of FDI from the periphery to the CEE countries. Other papers (Gorg and Greenaway, 2002) examined the FDI potential of the CEE countries upon accession. Altomonte and Guagliano (2003) go beyond the cohesion countries and examine the potential of the CEE countries compared to the Mediterranean region, which can be considered as a competitor location. Clausing and Dorobantu (2005) found significant effects of key European Union announcements regarding the accession process. Garmel et al. (2008), in a growth model, predict that three quarters of capital in the NMS will ultimately be acquired by investors from the “core” member states in the long run. Ex post studies have generally found some, but no dramatic shift of FDI.

This increased competition for FDI challenges both the cohesion countries and the CEE countries. Many (but not all) of these countries have tried to compete globally on the basis of two primary location advantages: low labour costs and EU membership. As we have discussed above, EU membership is not as much of an advantage in a liberalized, stable and shrinking world where distance does not form as much of a barrier to trade and investment as it once did. For similar reasons, the cost advantage of these countries has also been dissipated in many cases, particularly where productivity gains in China and other Asian economies have grown (Kalotay, 2004) partly as a result of their superior technological infrastructure. Spain and Portugal have experienced some displacement of FDI or lost sequential FDI because they have not been able to develop location advantages in knowledge- and capital-intensive activities to compensate for the rising labour costs that have eroded their industrial base in low-value-adding activities, a development that also has been observed in CEE countries, where already some production activities have been shifted “further east”.

In the light of the evidence discussed in this section, in the case of Ireland, Portugal and Spain, we expect to see some level of displacement to the new members in industries where: 1) low-cost labour remains the primary reason for location and where the TNC subsidiary has not expanded its original low value-adding activities towards knowledge-intensive areas in which the domestic economy has a competitive advantage; 2) the TNC subsidiary is not embedded through important linkages to other firms in the host economy; 3) the sunk costs of an FDI in the host economy are low; 4) productivity gains have overcome disadvantages associated with rising labour costs; 5) skill levels are not particularly high and thus employees are easy to substitute, since in these cases (tacit) know-how hardly limits the slicing of the value-chain.

In other words, the most obvious long-term solution for cohesion countries is to improve their location advantages in other areas, towards more science-based technological sectors. Ireland has succeeded in doing so with its focus on the ICT sectors, although Portugal and Spain have so far failed to make significant moves towards more science-based sectors. Disinvestments in the cohesion countries are, of course, not happening suddenly, because although they do rely on cheap factor inputs, they are also capital-intensive.

It is not immediately obvious that when TNCs begin to disinvest from the cohesion countries, thus will automatically result in increased investments in the accession countries in the same industries. In the automobile industry, for instance, the efficiency of a new Greenfield plant tends to require a relatively large minimum efficiency scale. TNCs are therefore reluctant to start out in greenfield sites, which is a further deterrent to setting up new investments in the CEE countries. Except where strong domestic sectors and specialized knowledge-based clusters exist - whether public or private - the CEE countries are unlikely to receive major inflows of FDI that are intended to supply the EU as a single market.

The lesson here for most peripheral countries is very much the same as one that development policy experts have been arguing for the developing countries: dependence on static and generic location advantages - whether drawing from the development of institutions, infrastructure, stability, or low-cost labour - is necessarily short-term and short-sighted.

The last two decades of increasing liberalization, falling transportation and communication costs, and investment in knowledge-based activities in East Asia has meant that the peripheral EU countries are no longer as attractive (although it should be noted that the lack of strong IPR enforcement in some Asian countries does provide a small opportunity). The comparative advantage of these countries needs to shift away from low value-adding activities to higher value-adding activities, which are necessarily science-based.

Section 2 focuses on Spanish investment climate to attract FDIs for development and section 3 looks on the Spanish FDIs in Romania and realize a comparison between Spain and Romania regarding FDIs. Section 4 concludes the paper.

## **2. INVESTMENT CLIMATE AND FOREIGN DIRECT INVESTMENTS DETERMINANTS IN SPAIN**

Since emerging from its relative international isolation during the Franco era, Spain has steadily become a more active and important player in international affairs. In recent years, the Spanish Government has pursued policies aimed at making Spain more attractive to investors, creating a welcoming environment for foreign investment. It has low labour and transport costs and the introduction of the single market has eliminated exchange rate fluctuations and reduced overall transaction costs.

The Spanish economy benefited considerably from Spain's accession to the European Union, and has since undergone a remarkable transformation from a

relatively poor, agrarian economy to the eighth largest industrialised economy of the OECD.

Over the past five years the Spanish economy has experienced one of the strongest rates of GDP growth in the European Union, averaging around four per cent per annum, driven by strong domestic demand and productive changes. However, in 2001-2002 the economy experienced a period of slower growth as a result of the general economic slowdown in Europe and the United States, and weaker domestic demand. Still the growth was the fastest in the EU. Since the 1980s, inflation has fallen fairly steadily. One of Spain's main economic challenges has been high unemployment. In 1996, the unemployment rate was around 24 per cent. A steady reduction since that time has been attributed to labour market reform. The rate of unemployment for 2002, at 11.3 per cent, represents a small increase from 2001, attributed to the general economic slow-down.

In 1999, the Spanish Government undertook to reduce the budget deficit and deliver balanced budget. With program of privatisation and a reduction in public expenditure, this target was achieved in 2001 the first time in 25 years. However, this positive state of affairs was diminished by the general economic slow-down in the following year, with a negative impact on the Government's 2002 fiscal position. That said, the deterioration was modest in comparison to other EU countries.

Since its election in 1996, the Popular Party Government has focused on making the Spanish economy more internationally competitive through a series of financial incentives and legal reforms. Key elements have included cutbacks in government expenditure, income tax cuts, labour market reforms, liberalisation of the telecommunications sector, and large-scale privatisation of state enterprises. The privatisation program, begun in 1985, has significantly reduced state ownership of Spanish industry, public services, utilities, and transport. The program is nearly complete, with only few smaller companies remaining to be privatised. Recent reforms have concentrated on the privatisation of the telecommunications company (Telefonica), energy groups (Endesa and Repsol), and the Iberia airline.

Flowing from the legislative steps taken in 1994, 1997 and 2001, the labour market has become more flexible. The labour contract system has been simplified and more flexible forms of hiring have been introduced.

Once heavily reliant on agriculture, the Spanish economy is now dominated by services, which account for between 60-65 per cent of all employment and total GDP. Tourism is particularly important, as Spain is the world's second largest tourist destination after France, with approximately 50 million tourists and another 20 million people on business, family and other visits per annum. Spain's second most important sector (in terms of GDP and employment) is the industrial and manufacturing sector, at around 20 per cent. The agricultural sector, once an integral part of the Spanish economy, now accounts for only about 3 per cent of GDP and 6.5 per cent of employment. Fishing remains a major primary industry, and Spain has one of the world's largest fishing fleets. Spain is also relatively rich in mineral deposits, but coal reserves are of poor quality, and almost all domestic oil demand is met by imports.

Spain has undergone a process of rapid modernisation over the last ten years, investing in an extensive renewal of its transport, telecommunications and banking

infrastructure. All main economic centres now have good transport links. In the last 20 years, the highway network has greatly expanded and is now extensive. Recent liberalisation has brought the quality and density of Spanish telecommunications infrastructure in line with that of the European Union. The banking sector is strong with two banks, Banco Santander Central Hispano (BSCH) and Banco Bilbao Vizcaya Argentaria (BBVA), dominating the finance sector. Despite the high level of concentration, well-developed network of regional, mutual savings banks ensures that the retail banking sector remains competitive. Spain's international economic profile has grown appreciably in recent years, becoming the world's 16th largest exporter. Reflecting Spain's geographic and economic position in Europe and its historic and cultural ties with Latin America, Spain's principle trading partners during this period were the European Union (in particular France, Germany, Italy and the United Kingdom), the major Latin American countries, and the United States. Nearly 40 per cent of Spanish exports are high value-added industrial products.

Spain exports among other products automobiles, tourism, power generation equipment, fruits, foodstuffs, minerals, metals, electrical machinery, petroleum and chemical products, clothing, footwear, textiles, which are approximately 20% of GDP. Its major markets are France, Germany, Italy, United Kingdom, United States, Portugal. Spain exports are one of the big foundations of its economy and the government knows it, mostly because Spain has a trade deficit and without these exports the economy would be weaker. In order to promote exports earnings Spain has within its Ministerio de Economía, Economy Ministry, the ICEX, which is the Spanish Institute of Exterior Commerce. This institute offers its assistance to Spanish enterprises in order to promote their exports and their implantations in foreign countries. In order to do so, the Institute designs and put into work programs of promotion and investment and spread information about the current Spanish supply and the foreign markets demand. Spain exported to major markets such as other countries of the EU (70.63%) and U.S. (4.4%). The imports were in petroleum, oilseeds, aircraft, grains, chemicals, machinery, transportation equipment, fish among others.

There are several aspects that promote a favorable climate for business. These are, among others, education, employment, investment, and economic and business expansion. The average in number of years that a student would take to graduate from an undergraduate program in Spain is high, mainly because students have had the tendency to think they won't find a job due to the high rates of unemployment. To start fixing this issue the Government changed the educational system and decided to offer more specialized programs in any different area. However, most institutions, mainly public, offer a lot of theory but few practices in their academic programs, which makes education less efficient. Only people who attend private institutions are more likely to find a well-paid job after they finish their studies, mainly because these institutions include professional internships as a part of their programs. However, in Spain local business development agencies have increased in number, where they help and assist you if you want to start your own business. Also Spanish economy and companies are expanding both nationally and overseas. Banks are enlarging their variety of loans and

credits so entrepreneurs have more choices and opportunities to start their own business.

Spain began to open its economy with a privatization program that significantly reduced the size of the government. This would dramatically reduce Spain's public sector borrowing requirement and help trim inflation. This trend was continued throughout the 1990s with liberalization of the banking (such as the case of Argentaria), energy, and telecommunications sectors and deregulation of the labor market. However, there are several controversies with this impulse of privatizing because it may benefit the Spanish' economy nowadays but it can cause a large deficit in the public sector in the next future since the profits of the privatizations are not spent on supporting the public sector as it was done at the beginning of the privatization program. It could bring the end of the public health care system among others public services, which would end up being sold to private institutions as well.

Non-residents operating in Spain through permanent establishments must comply with tax procedures normally applicable to Spanish CT payers, except in respect of transfers of profits made to head offices that are subject to the branch profits tax of 25%. All businesses are also subject to VAT (value added tax). VAT taxable operations include the supply of goods, the provision of services and imports.

Spain is seeking to attract new FDI to modernise its economy. In the 1990's it introduced new legislation to make the country more attractive to foreign investors. The main features of the FDI regime include the following:

- *Entry and establishment:* Spain has been gradually liberalising previous restrictions on FDI and, after Decree 664/1999, most FDI is allowed freely into the country and subject only to ex-post notification. However, investments from tax havens or directly related to national security require prior notification. There are also industry specific restrictions on FDI in air transport, radio and television, gambling, mining, hydrocarbons, pharmaceuticals, telecommunications and private security. The law allows the government to suspend the liberalisation rules for certain investments for reasons of public order, security or public health.
- *Ownership and control:* Restrictions on acquisitions of local companies have been liberalised. National stock market regulations require investors to make a formal take-over bid to acquire more than 50 per cent in a Spanish firm. The government sometimes keeps -- and uses -- a golden share in companies after privatisation.
- *Operational conditions:* Performance requirements are not used as a condition for eligibility of incentives. In general, public and private firms are given equal treatment with respect to local access to markets, credit, licenses and supplies.
- *Exchange controls:* Since 1992, Spain has eliminated remaining foreign exchange and capital controls. Remittances of profits, debt service, capital gains, royalties from intellectual property and capital repatriation are allowed freely at market rates.
- *Incentives:* A range of incentives are provided at the central, regional and municipal levels for a variety of purposes, including environmental protection, research and development programmes, quality management programmes, job

creation and cultural activities. They are provided to Spanish and foreign firms, without discrimination. The types of incentives available include financial subsidies, exemption from certain taxes, preferential access to official credit, customs exemptions, real state grants, credit guarantees, infrastructure facilities and professional training and qualification.

Spain also signs many multilateral, regional and bilateral treaties with many countries around the world in order to promote its trade and investments. During 2010, five bilateral investment treaties were concluded, out of which one was a re-negotiation (the BIT between Albania and the Czech Republic). Besides the Czech Republic, Spain was the other member country of the European Union (EU) that signed a BIT during the reporting period with Mozambique. Twelve DTTs (that avoid double taxation) involved an EU member State (Austria, Cyprus, Denmark, France, Ireland, the Netherlands, Portugal, Slovenia, Spain- Income Tax Treaty between Panama and Spain).

Overall, Spain is a net exporter of foreign direct investment (FDI). During the late 1990s, international cross-border investment experienced a period of significant growth. Spanish FDI was no exception. By 2000, it had reached a high of US\$ 53.7 billion, placing Spain as the world's sixth largest capital exporting country. However, recent international crisis have led to a massive decline in foreign investment worldwide. Spain reduces its ranking as cross-border investor to ninth worldwide. But the decrease of FDI in Spain was smaller than the EU average. Much of the growth in Spanish investment abroad over the past decade has been directed to Latin America. Spanish FDI in the region has largely been concentrated in the financial services, telecommunications and energy sectors. Today, Spanish companies are amongst the leaders in these sectors in Latin America. As Spanish investors look to reduce their exposure in Latin America, the majority of new investment is occurring in other EU countries and, to a lesser extent, in North Africa. Interest in investing in the Asia Pacific region is emerging although this amounts to only few per cent of total Spanish foreign investment.

Spain's accession to the European Community in 1986 and the Government's ambitious program to transfer the assets of state-owned enterprises to the private sector has stimulated large inflow of FDI into Spain. Foreign multinationals quickly took advantage of the lower-cost environment, buying into and re-structuring many Spanish industries, including in the chemicals, pharmaceuticals and food and beverage sectors. The motor vehicle manufacturing industry, now almost entirely foreign owned, presents a particularly good case, with Spain now the sixth largest car producer in the world.

The European Union (in particular, the Netherlands, Germany, France and the United Kingdom) was the principal investor in Spain, accounting for 69 per cent of all FDI up to 2000. The United States, followed by Japan, was the single largest investor, providing one third of investment in Spain. More recently, the services sector has been the main target of investment, in particular the transport, communications and financial sub-sectors, receiving a total of 82 per cent of total FDI up to 2000. Around 23 per cent of FDI was directed to the industrial sector, more specifically the automotive, chemical, food and beverages, electronics and pharmaceutical sub-sectors.

Despite a downturn in foreign investment in Spain in recent years, Spain continues to present welcoming environment for foreign investment over all. The EIU assessed Spain's business environment as 17th out of 60 countries worldwide, based on government policies to encourage investment, increasing economic openness, and reforms of technological and transport infrastructure, the energy sector and the labour market that have improved Spain's economic efficiency. The relatively stable macroeconomic climate over the past decade, enhancing the capacity of firms to effectively plan long-term investments, contributed to the improved ranking.

In the beginning of this decade, the Government has pursued a number of policies aimed at making Spain more attractive to investors. Under recent reforms, full foreign ownership of equity is now permitted and capital movements have been completely liberalised. A wide range of economic incentives is offered, both by the central government and the autonomous communities, for companies that set up operations in Spain. Incentives include financial subsidies, preferential access to official credit, bonuses for the acquisition of certain material, real estate grants, incentives for research and development, tax deductions and exemptions, guarantee of dividends, bonuses and incentives for hiring and training workers and low interest loans. Any firm with foreign capital has the same access to these incentive schemes as Spanish firms.

Spain is also ranked by the EIU as the least expensive of the EU countries studied for doing business. In particular, Spain has low cost labor and transport, and the introduction of the single European market and currency has eliminated exchange rate fluctuations and reduced overall transaction costs. It should be noted that Spain's present comparative cost advantage still has been diminished with the accession to the European Union of new members, particularly the lower-cost Eastern European countries. However, the structural reforms implemented over the last decade should mean that Spain continues to offer a competitive, yet more secure, stable and reliable environment in which to conduct business. Spain is the eighth largest industrialised economy in the OECD. For the past five years, the Spanish economy has experienced one of the strongest rates of GDP growth in the European Union.

The data analysed for Spain in 2011 show a strong recovery in foreign investment in 2010 compared to 2009, when the fall force of the crisis was being felt. Over the course of 2010, Spain received a total of 23,415 million euros worth of foreign direct investment, which was 41.5% more than in 2009, and confirms a trend towards the recovery of foreign investment in Spain.

And disinvestment went down by 7.6% compared to 2009. As a result of these figures, net investment grew more than gross investment, which was 53% higher last year than in 2009 and worth 20,481 million. By investment origin, the Netherlands was the largest investor, followed by France and the United Kingdom. These three countries accounted for 56% of total flows received by Spain in 2010, and are followed by Italy, Luxembourg and the United States.

The main sectors receiving foreign investment flows during 2010 were Transport and Storage (17%), Real Estate Activities (17%), Manufacturing Industry (14.8%), Financial Activities and Insurance (12.9%) and Electrical Energy Supply

(11.9%). These major sectors are also those that have historically been of most interest to foreign investors.

The Spanish government seems willing to encourage foreign investment in R&D. It would not be a bad strategy since the R&D expenditures of Spanish companies is quite low, but experts say Spain must undertake major reforms to attract foreign investment.

The presence of multinational companies in Spain took an unexpected turn with the country's entry into the European Union. Many companies then saw an opportunity to reduce their production costs by opening plants in Spanish territory. Catalonia, in the mid-1980s, developed particularly well in this sense with tax policies that encouraged the arrival of foreign capital that, in turn, created jobs. Most companies, however, opted for the establishment of subsidiaries associated with production and assembly with little capacity to influence decisions in the parent company. Still, over the years, a considerable part of companies chose to seek new locations, particularly in Eastern Europe. In Spain, those companies which require a highly skilled workforce have stayed and opened doors to collaboration in R&D objectives predetermined by the parent company but that are developed in communities such as Catalonia, Madrid and the Basque Country. So, this was one of the Spanish ways to fight against losing FDIs.

It is well known that large corporations can act as an engine of economic growth. Given the potential benefits of attracting and, especially, retaining the R&D activities of multinational companies in the form of technology transfer and its influence on the surrounding communities (from academic institutions to local suppliers), Spain identified the key factors behind the attraction and retention of foreign R&D investment with the aim of contributing to improving the design of future policy in this area. Companies in this foundation are: Alstom, Arcelor-Mittal, Ericsson, Hero, Hewlett-Packard, Sony and ThyssenKrupp Elevator. All of them operate in Spain and have R&D departments in their Spanish subsidiaries. Overall, about 40% of these companies' investment budgets goes toward R&D. While Spanish companies have reduced by 7.72% their average expenditure in innovation between 2003 and 2008, the (multinational) subsidiaries have increased such spending by 25.44% over the same period." The aim would be to capture this increase by foreign firms while promoting economic development areas around them.

According to the results of the study, multinationals are positive about Spain's market potential and its relationship with Latin America, and the availability of academic staff, technicians and scientists, as well as a governmental science policy which, on paper, is aligned with corporate interests. However, the study says that foreign corporations want stronger action in the form of public aid and investment in R&D, are wary of the ability to attract talented researchers and do not find enough top-notch research centers in Spain. The weight of the bureaucracy, the lack of research clusters and the excessive distance between academia and business, along with other minor factors, hamper the interest of multinational subsidiaries to invest in R&D on Spanish soil.

The vast majority of empirical studies analyzing the determinants of foreign investment in Spain have tended to focus upon macroeconomic factors and to a lesser

extent on regional factors (X. A. Rodríguez, J. Pallas, 2008). This study looks jointly at macroeconomic, regional and sectoral factors. The analysis investigates the sectoral, regional and macroeconomic variables that have successfully attracted FDI inflows from those that have not. Empirical results suggest that the differential between labour productivity and the cost of labour has been an important determinant of FDI in Spain during the analyzed period. Factors related to demand, the evolution of human capital, the export potential of the sectors, and certain macroeconomic determinants that measure the differential between Spain and the European Union average, also play a very important role in attracting flows of FDI. Certain policy issues that are relevant to the results are also discussed.

The demand factors have, in general, been statistically significant. It should be underlined that the variable that takes in the difference between the productivity of labour and its cost plays a key role in explaining the behaviour of FDI. This result both clarifies and, reaffirms the results obtained in similar studies, in the sense that it quite clearly shows that firms are motivated, not solely by the evolution of labour costs, but by the relative difference between labour productivity and labour costs.

Human capital, which is a fundamental element of increased per-worker labour productivity, when considered individually, is also a significant determinant of foreign investment in the different regions. In addition to productivity, a further indicator of competitiveness is the export potential of the manufacturing sectors, which clearly reveals itself to positively influence the entry of flows of foreign investment.

Of all of the macroeconomic factors utilized that measure the situation of Spain with respect to the EU average, the two which, in general, have been statistically significant and take a negative sign in the definitive models estimated were, fiscal pressure and the inflation differential.

Fairly predictably, the sectoral or regional determinants have performed better than those that work on the national Spanish level (the specific factors have been shown to be relatively more important than macroeconomic factors). This result is in line with those obtained by Giulietti, Mccorriston and Osborne (2004).

In view of the results, it would seem evident that economic policy in Spain orientated towards attracting foreign direct investment, besides taking into account the traditional factors of demand and costs should focus on boosting all of those variables that favour the growth of labour productivity as is the case of investment in education, research, innovation and technology.

### **2.1. Measures to prevent the loss of foreign investment in Spain during the crisis**

When the global financial crisis struck and the very favorable international credit conditions suddenly disappeared, the Spanish economy began an inevitable adjustment process, with a substantial reduction in consumption and investment by 2008, when housing investment plummeted. This adjustment, that has helped to correct the excessive indebtedness of the private sector, has led however to a large decrease in economic activity, with GDP growth in 2009 at around -3.6%. At the same time, the work of automatic stabilizers, the loss of the revenue windfalls obtained during the expansion and the expansionary fiscal programs put in place by the government to

mitigate the effects of the crisis, have led to a very rapid deterioration of public accounts, that have moved from a surplus of around 2% of GDP in 2007 to deficits of around 4% and 11% in 2008 and 2009, respectively. All together, the Spanish economy has very quickly reduced its need for external financing as its current account deficit has decreased from around 10% of GDP in 2008 to around 6% in 2009, being now mostly driven by fiscal deficits rather than by private indebtedness as in the expansionary phase.

With this evidence in mind, several questions arise: i) to what extent are the fall in interest rates and the profound demographic changes witnessed in the Spanish economy over the last decade responsible for the expansionary phase and the build-up of imbalances?, ii) could have fiscal policy contributed more to avoid the build-up of these imbalances?, iii) how would structural reforms increasing competition in the product and labor markets have diminished the saving-investment gap and the loss of price-competitiveness of that period?, and iv) looking ahead, once the economy has been hit by the global financial shock in 2008, how would alternative fiscal policies and reforms in the labor and product markets may affect the expected macroeconomic evolution of the Spanish economy?

The empiric results of Ángel Gavilán, Pablo Hernández de Cos, Juan F. Jimeno and Juan A. Rojas in 2011 indicate that, in line with Izquierdo, Jimeno and Rojas (2010) “Life-cycle earnings, cohort size effects and social security: a quantitative exploration”, interest rates and demographic changes are the main responsible for the investment boom and the build-up of a sizable external imbalance (measured as the ratio of net foreign assets to GDP) witnessed in the Spanish economy during the expansionary phase. In this context, we find a very limited role for fiscal policy in reducing the external imbalance accumulated in Spain over the period 1998-2008. In particular, our results show that a temporary reduction of government expenditure over the expansionary phase would have reduced the size of the Spanish external imbalance by 2008 only very slightly.

A more permanent tightening of fiscal policy could have even increased this imbalance. With respect to the effects of structural reforms in product and labor markets pursuing an increase in competition in these markets, we find that, although they would have not helped in reducing the external imbalance of the Spanish economy over the period 1998-2008, they would have led to a short- and long-run expansion of output, employment and investment, and to a substantial improvement in competitiveness and in public accounts. It is precisely due to these positive effects on the economy that these structural reforms may naturally induce in the short-run an increase in the external indebtedness of the economy, as forward-looking households anticipate lower taxes and a more efficient economy in the future and try to smooth their consumption.

As for the macroeconomic behavior of the Spanish economy beyond 2008, this empiric model suggests that, even without the arrival of the crisis, in the medium- and longrun the Spanish economy would have entered into a phase of lower GDP growth where the external imbalance of the economy would have been reduced but where public accounts would have deteriorated. This process, mostly driven by the aging of the Spanish population, has become more pronounced with global financial crisis.

Furthermore, the model highlights the relevance of fiscal policy and of structural reforms in the post-crisis scenario. Front-loading in fiscal consolidation would contribute to public accounts' sustainability and to mitigate the output losses induced by the crisis in the medium-term. In addition, policies aimed at improving competition help in reducing short- and medium-term output losses, while inducing a positive long-run effect on the level of output.

The authors mentioned above tried to find out what was the role of the fiscal policy during the entire period analysed for Spain. The restrictive fiscal policy is simulated through lower public expenditure growth than that observed in the data. Their results show that the role that a tightening of fiscal policy could have played in the reduction of the Spanish external imbalance would have been very limited and would have depended on the temporal dimension of this tightening. A transitory change in fiscal policy would have reduced the economy's external imbalance only very slightly, by affecting public savings without significantly distorting private ones. Instead, a permanent fiscal tightening would have had a negative effect on the economy's net foreign assets as it would have distorted optimal decisions by forward looking agents and reduced private savings.

Second, they investigate the role played by labor and product market reforms in the correction of this imbalance. This is relevant insofar as the Spanish economy experienced a progressive increase in its prices and costs relative to those of its main competitors during the economic boom, which may have had an effect on net exports, and there is evidence that this rise in relative prices and wages is related to labor market rigidities and insufficient competition in some markets. The results show that, if structural reforms in labor and product markets had been adopted in the Spanish economy over the period 1998-2008, the expansion of economic activity, investment and employment would have been more intense than the one observed over that period.

The external competitiveness of the economy would have also improved relative to a non-reform scenario and the improvement in public accounts would have been larger. These reforms, however, would have implied a further deterioration of the Spanish external imbalance over the 1998-2008 period. Increased investment, once market distortions had been reduced, and reduced private savings, as households try to smooth their consumption anticipating lower taxes and a more efficient economy in the future, would be responsible for this further deterioration.

The framework set out in this paper has also been used to analyze the different policy options faced by the Spanish economy after the crisis. Several results are worth mentioning. First, even without the arrival of the crisis, in the medium- and long-run the Spanish economy would have entered into a phase of lower GDP growth where the external imbalance of the economy would have been reduced but where public accounts would have deteriorated. This process, mostly driven by the aging of the Spanish population, a factor that is common to most industrialized countries, has become more pronounced with global financial crisis. Second, the model highlights the relevance of fiscal policy and of structural reforms in the post-crisis scenario. Frontloading in fiscal consolidation would contribute to public accounts' sustainability and to mitigate the output losses induced by the crisis in the medium-term. In addition, policies aimed at improving competition help in reducing short- and medium-term

output losses, while inducing a positive long-run effect on the level of output. In light of the complementarities between these policies, the recovery of economic activity in Spain after the crisis could be more successful and less costly if they were implemented together.

Researchers at Universidad Carlos III de Madrid (UC3M) assert that certain recent decisions made by the Administration which affect the taxation system of Spanish holding companies are producing legal uncertainty which could lead to loss of foreign investment in Spain.

The theory holds that one of the best ways to attract foreign capital consists in the adoption of a reduced level of taxes in certain cases, and above all, in the provision of legal certainty. This aim of attracting foreign investment inspired the measures for the the Entidades Tenedoras de Valores Extranjeros (ETVE) or Spanish holding companies, adopted in Spain in the late 1990's and which led to the establishment of these companies in Spain by multinational companies. However, things are changing, according the head of the UC3M Research Group of Taxation and Finance Law, Juan Zornoza Pérez, who pointed out that in the last few years the Spanish Administration is revising the tax situation of these holding entities in order to limit some of their obtained profits by considering that they are committing unfair practices, which could, in fact, hurt the Spanish economy.

The holding companies have capital shares in other entities and the essential advantage that they enjoy in our country, in theory, is that when these entities distribute dividends to the holding companies, the dividends that they obtain from the foreign shareholders, they are tax exempt in Spain. Furthermore, the holding company at the same time distributes profits to non-residents shareholders in Spain, who are also tax-exempt in our country. "By doing this, the holding company income is exempt from taxes in Spain, and this prevents any kind of double imposition of taxes", Zornoza explained, who is Full Professor of Taxation and Finance Law at UC3M.

In recent years, researchers from this Madrid university have observed that this change does not reflect a legal decision, but rather an Administrative policy. "There are some Administrative Court decisions that manifest the Administration's behavior, always being based on alleged situations of unfair practices", he remarked. In this sense, for example, share buying by the holding companies is almost always financed with credit, which generates expenses that are tax deductible. "In many cases", Zornoza explained, "the Spanish Administration is questioning the deduction of these expenses thereby eliminating part of the tax benefits of the holding companies as they were initially conceived, and generating an enormous level of uncertainty for foreign investors who had decided to use this formula to attract investments to Spain", he concluded.

The main suggestion made by the researchers in this respect is based on the application of the principles of Rule of Law. "This is something obvious, but it is necessary to stress this fact given the lack of understanding from which our Tax Administration suffers and on occasions our Courts as well, when it is actually an international taxation matter. What must not occur within this framework, they point out, is that the legislator establishes a system, by which certain tax benefits are obtained and then the Administration partially or totally eliminates most of all of those

benefits by applying unfair practice laws in a very debatable way, and of course, very inadequately so in the international context. "If a legislature wants the interests that are paid when shares are acquired which result in exempt income to be non-deductible then what they have to do is to say so and modify the law, because as long as they do not do that, it is the duty of the Administration to respect it, in accordance with its spirit and within the framework that guarantees the legal certainty of investors", Zornoza declared. "On the contrary", he added, "we shall be witnessing a steady decline in the holding company system as this form of investment leaves Spain, thereby damaging our economy to some extent."

### 3. SPANISH INVESTORS IN ROMANIA

Romania is actively integrated into the European economical environment, as reflected by the distribution of FDI per countries of origin. The top ten countries' classification according to foreign capital registered at 30th of December 2008 is presented in the Table 1. Table 2 presents the largest foreign companies that activate in Romania.

**Table 1. Top ten countries according to foreign capital registered at 30th of December 2008**

Distribution of FDI per countries of origin for companies with foreign ownership (30 <sup>th</sup> of December 2008)				
No.	Country	No. of registered companies	Value of the registered shared capital (EURmn)	% in total capital
1	The Netherlands	3,456	4,016	18.49%
2	Austria	5,375	2,651	12.20%
3	Germany	16,664	2,278	10.49%
4	France	5,873	1,777	8.18%
5	Cyprus	4,255	1,099	5.06%
6	Italy	26,984	936	4.31%
7	USA	5,755	725	3.34%
8	Spain	3,451	701	3.23%
9	United Kingdom	3,940	661	3.04%
10	Greece	4,484	655	3.02%
TOTAL registered capital - top 10		80,237	15,499	71.36%
TOTAL registered capital in companies with foreign participation		159,927	21,723	100%

Source: Statistical bulletin of the National Trade Register Office, December 2008

Spain is placed on the eighth place in the top ten major investors in Romania, with over 3,400 companies with Spanish participation registered by the end of 2008 within the Trade Register Office. The Spanish investment in Romania amounts to approximately EUR 700 mn, preferred investment fields being: automotive sector, construction industry, real estate, regenerable energy sector, clothing, food industry, agriculture, etc. Major players are: Acciona, Soluziona, Grupo FCC, NH Hotels, Enaco, Campofrio, Fadesa, Grupo Losán, Mango, Zara, etc.

Lately, in the last decade, Spain became one of the important world investors. The main destination for Spanish investments is EU-15, with a share of almost 75% of the total net investments (74,47%, respective 14.858 millions euro in 2003). Next, there is USA with 1361 mil. Euro (6,82%) and then follows the Latin America countries with 906 mil. Euro (4,54%). It is worth noticed that in this region, investments tended to decrease (79,85% comparing to 2002).

The net Spanish investments in the new member states recorded in 2003 a rise of 20 times comparing to the previous year. Romania became a new pole that attracted Spanish investors, Spanish firms looking to benefit from the increased European funds available for Romania in the pre-accession period and especially, after its accession in 2007. The main sectors attractive for Spanish investments are infrastructure, energetic sector, agriculture and real estate sector.

**Table 2. Largest foreign companies in Romania**

Largest foreign equity investors in December 2008				
No.	Investor	Country of origin	Activities	Subscribed capital (EUR mn)
1	E.ON Romania SRL	Germany	Energy	72,3
2	Roche SRL	Switzerland	Healthcare	41,5
3	Unita Vienna Insurance Group SA	Austria	Insurance	35,9
4	WS Renewable Energy Hydro SRL	Austria	Energy	22,3
5	Lidl Romania SCS	Germany	Retail	21,4
6	Degi Titan SRL	Germany	Real estate	17,5
7	Nova Imobiliare SRL	Cyprus	Real estate	15,8
8	Kato Drys SRL	Cyprus	Real estate	14,8
9	Stret Furniture Company SRL	Netherlands	Furniture	12,0
10	Trelleborg Automotive SRL	Sweden	Automotive	11,9

Source: Romanian Trade Register Office, December 2008

Management of the EU member state position for Spain was based on three fundamental principles. First, professionalism and continuity inside the administrative organisms that managed the Spanish relations with EU. Second, presenting an Europe image that could show the compatibility between defending the national interest and the general interest of EU. Meaning, an image of an integrated and solidar Europe to which Spain can contribute as a nation inside the European family. Finally, it is very important fiability in the moment of achieving the assumed tasks and the concern about the interests of other state members.

Regarding the problem of accession to EU, Spain received a substantial assistance after its accession to EU. Still, Spanish development was based mainly on foreign investments rather than European help. In the previous years of accession to EU, Spain was practically isolated, a closed economy. In 1986, when it acceded to EU, GDP/capita in Spain was 70% of the EU average. In the last 20 years, things are changed. In 2007, it reached 101% of the EU average. Beyond this numbers, it is impressive that Spain succeeded even from '90s to change from a country that exported labor force into a country that imported labor force and, starting with 1997, the volume of its businesses abroad overcame the volume of the foreign direct investments.

Today, Spain can be proud of its group of top companies that are worldwide known: Zara, Porcelanosa, Banco de Santander. Spain ranks on 8<sup>th</sup> place in the top of the world investments and on 2<sup>nd</sup> position regarding the investments in the Latin America. In the last 15 years, its development was faster than the European average and that placed Spain on 7<sup>th</sup> position worldwide. Spain is mainly known for turism and that is normal if we consider that it is the 2<sup>nd</sup> turism destination in the world. But, what is less known are the performance of the Spanish companies in different technical sectors. In telecommunications, Telefonica ranks on 3<sup>rd</sup> position worldwide.

If some years ago we talked about an Austrian investors invasion, lately it is visible "a Spanish explosion": in the last years have settled here 2300 companies Spanish owned, that represent almost 60% of the total Spanish firms existing in Romania, according to the Spain Embassy at Bucharest. And if this trend will continue, Spain may become one of the first economic parteners of Romania in the following years. Significant Spanish investments in the Romanian real-estate sector - also accelerated by the crisis in the real estate iberic sector - represent one of the reasons for Caixa opening a subsidiary in Bucharest in 2007.

The large number of Spanish investors in Romania during 2002-2008 has brought to Bucharest the first iberic bank "la Caixa". And the volume of the announced Spanish investments here implies that the bankers will work hard from now on. La Caixa, from the capital of Catalonia, is the 3<sup>rd</sup> large Spanish financial group regarding its assets and imcomes, after Santander and BBVA. Completing its "shy presence" in the Central Europe, the largest Spanish saving house, la Caixa, has started its activity on the Romanian market. With only one subsidiary at Bucharest, the Spanish bank doesn't address (and it couldn't) to retail business, but only to companies. At least, for the moment.

Spanish bank opened one subsidiary in Bucharest and doesn't intend to settle other subsidiaries, they want to know first the Romanian market. Their bet is simple and reminds us somehow of the one made, many years ago, by other foreign banking

groups, such as ING, Bank Austria or AMN Amro: to do business with the clients from their country or coming from there - in this case with Spanish companies that are settled here or intend to settle here on the Romanian market or, viceversa, with Romanian companies that are willing to invest in Spain. But, the actual context for the Spanish bank is very different from the one of many time ago when the foreign banks afforded to concentrate only on corporate segment - the bankers of the Romanian market that were interested in the past only of the corporate segment are saying now that a profitable business and of large volume can't be imagined without retail segment.

According to their statements, the Spanish bankers don't want a business of a large volume and numbers. They came here to join the clients from home, given the rising volume of FDIs on the Romanian market. So, if in 2005 the investments volume was under a level of 25 millions euro, in 2006 the Spanish investments increased to over 150 millions euro. But, beyond the numbers, that are small comparing to the number of the total direct foreign inflows in Romania in 2006, that was over 9 billions euro, we can see that the Spanish money in the Romanian economy are more and more present and noticed. For example, on the real-estate market, the Spanish companies became, at least until the crisis that has started since 2008, an important presence. Following a long raw of Israelian, Austrian or English investors, the Spanish companies started to come on the Romanian market in large numbers.

Despite the Austrian or English investments funds that acquired lately started or finalized projects, the iberic companies preferred to invest greatly in lands acquisitions, announcing real estate projects of millions of euros. And the investment amounts announced by companies such as Fadesa Imobiliaria, GEA Prasa, Riofisa, Detea, Grupo Lar, NH Hoteles or Hecesa (to name only some of the 20 companies in this area that are present in Romania) will overcome 500 millions euro in the following years.

In fact, the constructions and real estate sectors are preferred by the Spanish companies, even if iberic investments don't lack eighter in other sectors, such as component auto industry, wood industry. In the present, in Romania function almost 3500 Spanish companies and almost half of them are in the real estate sector.

If we take into considerations all these realities, the initiative of the banking Spanish group on the Romanian market becomes more consistent, even if it doesn't consider the retail business. In fact, they entered the same way on the Polish market, when they settled a subsidiary in Warsaw. Poland and Romania, the greatest markets in the Central Europe as population, are therefore a logical destination for the Spanish saving house. Neither in Poland, Caixa looked for the retail business. Back to the Romanian market, they stated that if they will have the opportunity to buy a retail bank, they won't hesitate. Despite their neighbors, the Portugese from Millennium bcp - that settled an universal bank from "zero" on the Romanian market - Spanish bank don't consider greenfiled investments for the retail business.

Either in Romania or in other Central and East European countries they entered, the retail business won't be developed step by step, but only by acquisition of some banks that have already had a market share of at least 3-4% to offer to the Spanish bank. It also tried to enter into Bulgaria - competing with the Belgium KBC for buying

the major stock pack of the ninth local bank, EI Bank - but it offered less than the competitors and it lost. But in Romania, it didn't make any offer to any retail bank. It is difficult to anticipate to whom the Spanish bank will make an offer, given that Romanian banks (such as Transilvania or Carpatica Banks) are already too expensive, and not many years ago, Romanian state refused to sell CEC Bank for a very large amount.

Almost 20 Spanish real estate companies have projects in Romania, but only 9 of them announced significant investments, that overcome 3,2 billions euro, in the next years, although the numbers have been changed once the crisis erupted in Romania. For the next ten years, the estimated numbers reach a level of 7-10 billions euro. The largest investment is the one announced by Fadesa in residential sector.

But, the most active Spanish investors in Romania is Bogaris group, that has businesses in real estate, agriculture and eolian energy sectors. In Romania it focuses on real estate sector, but in Spain it doesn't make residential projects. Company businesses weren't much affected by the crisis in the real estate sector in Spain, because 90% of their incomes are from renting the commercial spaces they have built and the Spanish crisis manifested only on the residential segment. The company started its expansion in the Eastern Europe 4-5 years ago and it also settled on the Romanian market in 2005, just like it intended to overcome the crisis effects. After a rebranding at the central level - the Spanish company has changed its name from Detea to Bogaris, that has unified all the group divisions - Spanish company declares that is ready to build in Romania as many retail parks as it could. And to attract another iberic investors, for whom it has already searched lands around Bucharest.

But not all the Spanish investors are as lucky as Bogaris, so they won't be affected by the real estate crisis. Financial Times says about another important Spanish company in the construction sector, FCC, that is "extremely exposed to collaps, given the lately investments" that imposed a rise of the residential prices with an average of 150%. The demand was already quite low, especially after the redirection of the buyers from Northern Europe to another markets (including Romanian market). And the effect on the construction companies has already been seen at the Stock Exchange, where they suffered important losses. And here appears the redirection plan to the Romanian market, that many Spanish firms have considered the logical next step for their development. From two reasons: Romania, after its accession to EU in 2007 is just like Spain of the '80s - in the time of its accession to EU, in 1986, Spain was one of the lowest economically developed country - so, the Spanish recognize the pattern of a similar evolution, and also, the ratios of rentability are greater here than in other Eastern European Countries. Looking from this prospective, it is no wonder that FCC, although in Spain is falling at the Stock Exchange, has an investment portfolio of 500 millions euro in Romania, so being able to become the main player that invests in infrastructure. And only in great project: together with the Italians from Astaldi, FCC built the Basarab pasaje from Bucharest, an investment worthing 135 millions euro.

Also, Graells&Llonch company has an ambitious project that has started in 2005, namely building a logistic ensemble at European standards at Prejmer (close to Brasov). It is an unique project, on industrial segment of real estate Romanian market, and its value is of 350 millions euro. Initially, it was supposed to be finished in 2009

and it brought a new concept for the logistic investments in Romania: the companies can buy lands, and on these surfaces it will be built industrial deposits, according to the requests of the businessmen. Plan of the Graells&Llonch also contains a series of connex services and facilities for the business environment: a medical centre, restaurants, banking offices, infrastructure for telecommunications, transport agencies, business centre, conferences halls, internal program of administrative de residuals.

Apart from the real estate sector, the auto components sector has attracted significant Spanish capital, among iberic companies being ACE from Cluj, CIE-Matricom from Targoviste, MMF and Mapsa, both from Turda, Caucho Metal from Sibiu or BAMESA from Topoloveni.

The Spanish offensive regarding investments is still derulating, even in the context of diminishing the FDI's in Romania. What are the Spanish looking for, beyond the profit granted by the attractiveness of the local market? The investors want that the volume of their business abroad to overcome the FDI's from Spain. So, we can say that the inflows of the Spanish capital won't stop here.

The main Spanish investors in Romania and their projects are: FADESA residential projects in Bucharest and Bacau, BOGARIS residential, commercial projects and office, HERCESA INMOBILIARIA residential projects in Bucharest, GRAN VIA residential projects in Bucharest, RIOFISA mixt projects in Timisoara and Brasov, GEA PRASA residential projects in Bucharest, GRUPO LAR residential projects in Bucharest, IBIZA HOUSE residential projects in Bucharest, IUE LEADER IMOBILIARE residential projects in Bucharest.

An OECD Report of 2010 ranks Romania on 4<sup>th</sup> position worldwide regarding its openness to FDI's, while Spain is on top too, on 7<sup>th</sup> position. The Report analyzes the obstacles for FDI's using four main indicators: restrictions against capital participation, the necessity to obtain or not the approval of the administration for doing the investment, some eventual obstacles for the foreign workers and some other restrictions. These four indicators were studied in 22 economic sectors of each country.

Spain scores great at three of four indicators and registers restrictions only for capital participation. This fact is because some limitations in transport, communication media and business services (consulting, audit) sectors and less, in financial services area (banks, insurance companies).

The study underlines that OECD countries are the most opened to FDI's. The first place is for Luxemburg, followed by Netherland, Portugal, Romania, Slovenia, Belgium and Spain. The greatest obstacles for FDI's are in the emerging countries such as China, Russia, Saudith Arabia, Indonezia and Mexico.

An efficient administrative system, massive investments in infrastructure, privatization of state-owned companies, an economic policy oriented more to investments than to consumption, a legislation package well elaborated, decentralization, flexibility of the labor force is the model that helped Spain to reach an economic growth above the EU average.

Since 2004 to present, the trade between Spain and Romania has doubled. Spanish exports to Romania increased over 30%/year, at least until 2009. Although Romania was many years on a descendant path of economic growth, the main problem which needed to be considered by the Romanian officials was how sustainable was that

economic growth. Spanish model could be a good example for the Romanian government.

Spain has invested much in the last years in infrastructure, having a very modern network of highways today that cross entire Spain. Just as Romania, Spain is a peripheric country and quickly realized that is essential for their economic growth to have a modern infrastructure that could connect them with the Central and Eastern Europe. They faced difficulties, because the Spanish relief is not very plain, but they used their creativity and labor force and all the necessary resources to develop one of the most performant infrastructure in Europe.

After its accession to EU, Spain invested almost 3% of GDP for infrastructure. The path of investments has decreased lately to 1,5-2% of GDP, but it still means an important amount, because Spanish GDP is nine times bigger than the Romanian one. Spain spent in 2007 25 billions euro in infrastructure, which means almost the entire amount that Romania will receive during 2007-2013 from EU as non-repaying funds.

Another important factor that helped the development of the Spanish economy is administrative system. When Spain has acceded to EU, it has already had a functional public administration, competent, efficient and that is what should be improved in Romania also. The Romanian government should allocate resources to establish an administrative model that it wants to develop. An essential factor is training and keeping the labor force in this sector. It is essential to maintain the people in the system, because if they leave after a few years, they will take with them the know-how and then, it starts from "zero" all over again. The administration plays a key role in derulating the EU funds and not only.

Spain is different from other EU countries by adopting a privatization policy of the companies from the key industries. In Spain, all the governments decided that the best way to keep on going was to privatize the companies from strategic sectors, such as energetic one. The Spanish citizens were allowed to buy stocks, and meanwhile, these companies became multinational. The efficient management implemented after the privatization have had a positive effect because the state wasn't forced to allocate funds to cover the debts of the companies that lost important amounts, so it was a relief for the state budget. The state not only escaped the debts, but it succeeded in collecting incomes and taxes and now, these companies have become multinational.

In the telecommunication area, Telefonica ranks on 3<sup>rd</sup> position worldwide. In the top technology and software, INDRA realizes the soft for three of five planes that lands anywhere in the world, and manages 70% of the Romanian electric market. It has also a contract with the Romanian Ministry of Defense worsing 80 millions euro to elaborate the supervising system for the fronteers at the Black Sea. These are only few examples of Spanish companies that belonged to Spanish state 20 years ago and now they are in the private sector.

A Spanish advantage as economic policy concerns was to orientate more to investments than to consumption. In the present, from the beginning of 2011, in Spain registers a second wave of downturn trend, after the crisis that erupted in 2007. But, it may be a normal situation given the fact that Spain had an economic growth over the EU average for ten years. Still, the problem is that the recession is greater than it was

expected and that led to the diminishing of the economic activity that continued also at the beginning of 2011 and that causes social frictions.

In Romania, are needed some policies that would help people to move on to the regions with jobs and to attract back home the labor force went to work abroad, especially in Spain and Italy. In Spain, Romanians have become the first minority. Some of the people that are working in Spain now should reorientate in the frame of the actual crisis or decide if they will come back home.

If you need a developed country, you should insure labor mobility to the regions with a development potential. For example, in Bucharest there are many jobs, but the main problem is finding a house at an acceptable price or rent.

It is also necessary a stable legislative system to attract the investors. Unfortunately, in Romania the laws keep on changing and there are many interpretations of law and this can't help long-term investments, because the climate should be much more predictable.

Among the factors that are deemed to support higher FDI in the future, the following are the most important: Romania is a politically and socially stable country, Romania represents the second largest market in the CEE region, after Poland, Romania offers a strategic position, Romania offers relatively high qualified labor force at low costs, still below the levels of other countries in the CEE region, the country has rich natural resources (agricultural land and mineral deposits) and offers proximity to energy suppliers and, as part of the EU, Romania has access to European fund and offers the advantage of having bilateral agreements with other countries, bilateral diplomatic relations and free trade agreements signed.

#### **4. CONCLUSIONS**

After 1989 the economic development of Romania was supported by various incentives or benefits offered to the investors, such as free trade zones, tax exemptions on profits or employees taxes, funds for low developed areas etc. However, once Romania has entered in European Union the number of such incentives that may be granted to various investors has been reduced as a common legal framework for all EU countries is intended to be applied. Moreover, most of the actual incentives need to be agreed with EU before being announced and applied. The most important support measures for companies now are the EU structural funds and the state aid schemes. In Romania, the main interest nowadays is focused on the state aid schemes that have as objective the regional development through stimulation of realizing investments and creation of new workplaces.

At the end of the '90s, Spain had already a decade of membership in the European Union. FDI played an essential developing role in both cases, however in the CEE region FDI was also a vehicle of internationalization, a way of connection of these countries to the western developed countries. In the decade after 2000 integration of both Spain and the CEE countries strengthened by entering the EMU and the EU. With respect to FDI we cannot speak about massive inflows yet, but large single deals can determine the amount of yearly inflow in all countries. In the CEE countries

outward FDI became more and more significant - although not to the same extent everywhere. In Spain OFDI started much before, but also became more intensive.

One major concern of a developing country, such as Romania, is how to retain existing investment and attract new FDI in times of global recession. Economic stimulus programmes can be an incentive for foreign investment, but many developing countries do not have the financial resources to successfully compete with the investment promotion packages of developed countries. Moreover, incentives based competition for foreign investment may risk lowering social and environmental standards which would be detrimental for sustainable development. Governments have several tax instruments that they can use to attempt to influence the effective tax rates and the location decision of multinational companies (an effective tax rate was achieved in Spain with a lower corporate tax rate (35%), and lower rates of depreciation of buildings (3%) and equipment (12%)).

A number of countries have adopted economic stimulus packages that might have some positive impact on global FDI flows. Many countries - such as France, Germany, Spain and the United States - have also announced large public investment programmes mainly aimed at infrastructure development. These programmes may likewise have a positive effect on inward foreign investment provided that they are designed in a non-discriminatory manner and open to participation by foreign investors. But, keeping public revenues too low to adequately maintain or invest in infrastructure is unlikely to be a successful long run policy. Anyhow, there seems to be a relatively clear division between investment policies of the CEE countries and of the Western European Countries of EU. While the former may gain most by focusing on infrastructure and R&D policies, in the latter group policies to reduce the share of low-skilled workers, for example by encouraging firms to restructure production and increase capital intensity and through a reduction of labour costs via a decrease in non-wage-labour costs, would attract most FDI.

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## **THE ACCOUNTING TREATMENT OF THE TOURISM UNIT'S FINANCIAL STATEMENTS IN AGREEMENT WITH THE INTERNATIONAL FINANCIAL REPORTING STANDARDS**

**BOGDAN RĂVAȘ \***

**ABSTRACT:** *Financial statements should be presented on a going-concern basis unless management intends to liquidate the tourism unit or cease trading. If not presented on a going concern basis, the fact and rationale for not using it should be disclosed. Uncertainties related to events and conditions that cast significant doubt on the tourism unit's ability to continue as a going concern should be disclosed. The Statement of Financial Position provides information about the financial position of the tourism unit and it should distinguish between major categories and classifications of assets and liabilities current or noncurrent distinction.*

*Departure from the requirements of an IFRS is allowed only in the extremely rare circumstance in which the application of the IFRS would be so misleading as to conflict with the objectives of financial statements. In such circumstances, the tourism unit should disclose the reasons for and the financial effect of the departure from the IFRS.*

**KEY WORDS:** *financial; statement; tourism; standards; performance.*

**JEL CLASSIFICATION:** *M 41; M 48.*

The objective of this paper is to prescribe the basis for presentation of general purpose financial statements and what is necessary for these statements to be in accord with IFRS. The key issues is to ensure comparability both with the tourism unit's financial statements of previous periods and with the financial statements of other entities. It also enables informed users to rely on a formal, definable structure and facilitates financial analysis.

The paper is focused on the following issues:

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- *what constitutes a complete set of financial statements (namely, Statement of Financial Position, Statement of Comprehensive Income, statement of changes in equity, cash flow statement, and accounting policies and notes);*
- *overall requirements for the presentation of financial statements, including guidelines for their structure;*
- *the distinction between current and noncurrent elements; and*
- *minimum requirements for the content of financial statements.*

Performance reporting and the reporting of comprehensive income are major issues dealt with, and voluntary name changes are suggested for key financial statements.

The financial statements should present fairly the financial position, financial performance, and cash flows of the tourism unit. Fair presentation requires the faithful representation of the effects of transactions, other events, and conditions in accordance with the definitions and recognition criteria for assets, liabilities, income, and expenses set out in the framework. The application of IFRS is presumed to result in fair presentation.

Departure from the requirements of an IFRS is allowed only in the extremely rare circumstance in which the application of the IFRS would be so misleading as to conflict with the objectives of financial statements. In such circumstances, the tourism unit should disclose the reasons for and the financial effect of the departure from the IFRS.

The presentation of the current assets reflects the following:

- *assets expected to be realized or intended for sale or consumption in the tourism unit's normal operating cycle,*
- *assets held primarily for trading,*
- *assets expected to be realized within 12 months after the Statement of Financial Position date, and*
- *cash or cash equivalents, unless restricted in use for at least 12 months.*

The presentation of the current liabilities reflects the following:

- *liabilities expected to be settled in the tourism unit's normal operating cycle,*
- *liabilities held primarily for trading, and*
- *liabilities due to be settled within 12 months after the Statement of Financial Position date.*

Noncurrent assets and liabilities are expected to be settled more than 12 months after the Statement of Financial Position date. The portion of noncurrent interest-bearing liabilities to be settled within 12 months after the Statement of Financial Position date can be classified as noncurrent liabilities if

- *the original term is greater than 12 months,*
- *it is the intention to refinance or reschedule the obligation, or*
- *the agreement to refinance or reschedule the obligation is completed on or before the Statement of Financial Position date.*

Financial statements should provide information about an tourism unit's financial position, performance, and cash flows that is useful to a wide range of users for economic decision making.

Departure from the requirements of an IFRS is allowed only in the extremely rare circumstance in which the application of the IFRS would be so misleading as to conflict with the objectives of financial statements. In such circumstances, the tourism unit should disclose the reasons for and the financial effect of the departure from the IFRS.

The presentation and classification of items should be consistent from one period to another unless a change would result in a more appropriate presentation, or a change is required by the IFRS.

A complete set of financial statements comprises the following:

- *Statement of Financial Position (Balance Sheet)*
- *Statement of Comprehensive Income (Income Statement)*
- *Statement of changes in equity*
- *Cash flow statement*
- *Accounting policies and notes*

Entities are to be encouraged to furnish other related financial and nonfinancial information in addition to the financial statements. The financial statements should present fairly the financial position, financial performance, and cash flows of the tourism unit.

The following aspects should be addressed with regard to compliance with the IFRS: *compliance with the IFRS should be disclosed, compliance with all requirements of each standard is compulsory, disclosure does not rectify inappropriate accounting treatments, premature compliance with an IFRS should be mentioned.*

Financial statements should be presented on a going-concern basis unless management intends to liquidate the tourism unit or cease trading. If not presented on a going concern basis, the fact and rationale for not using it should be disclosed (Monea, et al., 2008). Uncertainties related to events and conditions that cast significant doubt on the tourism unit's ability to continue as a going concern should be disclosed.

The accrual basis for presentation should be used, except for the cash flow statement. Aggregation of immaterial items of a similar nature and function is allowed. Material items should not be aggregated.

Assets and liabilities should not be offset unless allowed by the IFRS. However, immaterial gains, losses, and related expenses arising from similar transactions and events can be offset.

With regard to comparative information, the following aspects are presented: *numerical information in respect of the previous period, relevant narrative and descriptive information*

Financial statements should be clearly identified and distinguished from other types of information. Each component of the financial statements should be clearly identified, with the following information prominently displayed: *name of reporting tourism unit, own statements (distinct from group statements), reporting date or period, reporting currency, level of precision*

The Statement of Financial Position provides information about the financial position of the tourism unit and it should distinguish between major categories and classifications of assets and liabilities current or noncurrent distinction. The Statement of Financial Position should normally distinguish between current and noncurrent

assets, and between current and noncurrent liabilities. Disclose as current amounts to be recovered or settled within 12 months (Monea, et al., 2008).

Where a presentation based on liquidity provides more relevant and reliable information (for example, in the case of a bank or similar financial institution), assets and liabilities should be presented in the order in which they can or might be required to be liquidated.

The treatment of the current assets in this case reflects:

- *assets expected to be realized or intended for sale or consumption in the tourism unit's normal operating cycle*
- *assets, held primarily for trading*
- *assets expected to be realized within 12 months after the Statement of Financial Position date, and*
- *cash or cash equivalents unless restricted in use for at least 12 months.*

The treatment of the current liabilities in this case reflects:

- *liabilities expected to be settled in the tourism unit's normal operating cycle,*
- *liabilities held primarily for trading, and*
- *liabilities due to be settled within 12 months after the Statement of Financial Position date.*

Long-term interest-bearing liabilities to be settled within 12 months after the Statement of Financial Position date can be classified as noncurrent liabilities if

- *the original term of the liability is greater than 12 months,*
- *it is the intention to refinance or reschedule the obligation,*
- *the agreement to refinance or reschedule the obligation is completed on or before the Statement of Financial Position date.*

Capital disclosures encompass the following:

- *the tourism unit's objectives, policies, and processes for managing capital*
- *quantitative data about what the tourism unit regards as capital*
- *whether the tourism unit complies with any capital (adequacy) requirements*
- *consequences of noncompliance with capital requirements, where applicable*
- *for each class of share capital: number of shares authorized, number of shares issued and fully paid, number of shares issued and not fully paid, par value per share, or that it has no par value, reconciliation of shares at beginning and end of year, rights, preferences, and restrictions attached to that class, shares in the tourism unit held by the tourism unit itself, subsidiaries, or associates, number of shares reserved for issue under options and sales contracts*

Other information that must appear on the face of the Statement of Financial Position or in notes includes the following: nature and purpose of each reserve, shareholders for dividend not formally approved for payment, amount of cumulative preference dividend not recognized

Information about performance of the tourism unit should be provided in a single Statement of Comprehensive Income or in two statements: a separate income statement followed immediately by a statement displaying components of other comprehensive income. Minimum information on the face of the Statement of

Comprehensive Income includes the following: *revenue, finance costs, share of profits or losses of associates and joint ventures, tax expense, discontinued operations, profit or loss, each component of other comprehensive income, total comprehensive income, profit or loss attributable to non-controlling interests, profit or loss attributable to owners of the parent, comprehensive income attributable to non-controlling interests as well as to owners of the parent*

Other information on the face of the Statement of Comprehensive Income or in notes includes: *analysis of expenses based on nature or their function (see the example at the end of the chapter), if expenses are classified by function, disclosure of the following is required: depreciation charges for tangible assets, amortization charges for intangible assets, employee benefits expense, dividends recognized and the related amount per share*

IFRS no longer allows the presentation of any items of income or expense as extraordinary items.

The statement of changes in equity should reflect information about the increase or decrease in net assets or wealth. Minimum information on the face of the changes in equity statement includes the following: *profit or loss for the period, each item of income or expense recognized directly in equity, total of above two items showing separately the amounts attributable to minority shareholders and parent shareholders, effects of changes in accounting policy, effects of correction of errors*

Other information on the face of the changes in equity statement or in notes includes the following: *capital transactions with owners and distributions to owners, reconciliation of the balance of accumulated profit or loss at beginning and end of the year, reconciliation of the carrying amount of each class of equity capital, share premium, and each reserve at beginning and end of the period*

Accounting policies and notes include information that must be provided in a systematic manner and cross-referenced from the face of the financial statements to the notes: *disclosure of accounting policies, measurement bases used in preparing financial statements, each accounting policy used, even if it is not covered by the IFRS Judgments made in applying accounting policies that have the most significant effect on the amounts recognized in the financial statements, estimation uncertainty*

Key assumptions about the future and other key sources of estimation uncertainty that have a significant risk of causing material adjustment to the carrying amount of assets and liabilities within the next year

Other disclosures include the following: *domicile of the tourism unit, legal form of the tourism unit, country of incorporation, registered office or business address, or both, nature of operations or principal activities, or both, name of the parent and ultimate parent*

Financial analysis should apply analytical tools to financial statements and other financial data to interpret trends and relationships in a consistent and disciplined manner. In essence, the analyst is in the business of converting data into information, thereby assisting in a diagnostic process that has as its objective the screening and forecasting of information. The financial analyst who is interested in assessing the value or creditworthiness of an tourism unit is required to estimate its future cash flows, assess the risks associated with those estimates, and determine the proper

discount rate that should be applied to those estimates. The objective of the IFRS financial statements is to provide information that is safe to users in making economic decisions. However, IFRS financial statements do not contain all the information that an individual user might need to perform all! Of the above tasks, because the statements largely portray the effects of past events and do not necessarily provide nonfinancial information. IFRS financial statements do contain data about the past performance of an tourism unit (its income and cash flows) as well as its current financial condition (assets and liabilities) that are useful in assessing future prospects and risks. The financial analyst must be capable of using the financial statements in conjunction with other information to reach valid investment conditions.

The notes to financial statements are an integral part of the IFRS financial reporting process. They provide important detailed disclosures required by IFRS, as well as other information provided voluntarily by management. The notes include information on such topics as the following: *specific accounting policies that were used in compiling the financial statements, terms of debt agreements, lease information, Off-Statement of Financial Position financing, breakdowns of operations by important segments, contingent assets and liabilities, detailed pension plan disclosure*

Supplementary schedules can be provided in financial reports to present additional information that can be beneficial to users. These schedules include such information as the five-year performance record of a company, a breakdown of unit sales by product line, a listing of mineral reserves, and so forth. The management of publicly traded companies in certain jurisdictions, such as the United States, is required to provide a discussion and analysis of the company's operations and prospects. This discussion normally includes the following: *a review of the company's financial condition and its operating results, an assessment of the significant effects of currently known trends, events, and uncertainties on the company's liquidity, capital resources, and operating results, the capital resources available to the firm and its liquidity, extraordinary or unusual events (including discontinued operations) that have a material effect on the company, a review of the performance of the operating segments of the business that have a significant impact on the business or its finances, the publication of such a report is encouraged, but is currently not required by IFRS.*

Ratio analysis is used by analysts and managers to assess company performance and status. Ratios are not meaningful when used on their own, which is why trend analysis (the monitoring of a ratio or group of ratios over time) and comparative analysis (the comparison of a specific ratio for a group of companies in a sector, or for different sectors) is preferred by financial analysts. Another analytical technique of great value is relative analysis, which is achieved through the conversion of all Statement of Financial Position (or Statement of Comprehensive Income) items to a percentage of a given Statement of Financial Position (or Statement of Comprehensive Income) item.

Although financial analysts use a variety of subgroupings to describe their analysis, the following classifications of risk and performance are often used:

- Liquidity. An indication of the tourism unit's ability to repay its short-term liabilities, measured by evaluating components of current assets and current liabilities.
- Solvency. The risk related to the volatility of income flows, often described as business risk (resulting from the volatility related to operating income, sales, and operating leverage) and financial risk (resulting from the impact of the use of debt on equity returns as measured by debt ratios and cash flow coverage).
- Operational efficiency. Determination of the extent to which an tourism unit uses its assets and capital efficiently, as measured by asset and equity turnover.
- Growth. The rate at which an tourism unit can grow as determined by its retention of profits and its profitability measured by return on equity (ROE).
- Profitability. An indication of how a company's profit margins relate to sales, average capital, and average common equity. Profitability can be further analyzed through the use of the Du Pont analysis. Some have questioned the usefulness of financial statement analysis in a world where capital markets are said to be efficient. After all, they say, an efficient market is forward looking, whereas the analysis of financial statements is a look at the past. However, the value of financial analysis is that it enables the analyst to gain insights that can assist in making forward-looking projections required by an efficient market. Financial ratios serve the following purposes:

Financial ratio analysis is limited by the use of alternative accounting methods. Accounting methods play an important role in the interpretation of financial ratios. Ratios are usually based on data taken, from financial statements. Such data are generated via accounting procedures that might not be comparable among firms, because firms have latitude in the choice of accounting methods. This lack of consistency across firms makes comparability difficult to analyze and limits the usefulness of ratio analysis. The various accounting alternatives currently found (but not necessarily allowed by IFRS) include the following: *First-in-first-out (FIFO) or last-in-first-out (LIFO) inventory valuation methods, Cost or equity methods of accounting for unconsolidated associates, Straight-line or accelerated-consumption-pattern methods of depreciation, Capitalized or operating lease treatment*

IFRS seeks to make the financial statements of different entities comparable and so overcome these difficulties such as:

- *the homogeneity of a firm's operating activities. Many firms are diversified, with divisions operating in different industries. This makes it difficult to find comparable industry ratios to use for comparison purposes. It is better to examine industry-specific ratios by lines of business.*
- *the need to determine whether the results of the ratio analysis are consistent. One set of ratios might show a problem, and another set might prove that this problem is short term in nature, with strong long-term prospects.*
- *the need to use judgment. The analyst must use judgment when performing ratio analysis. A key issue is whether a ratio for a firm is within a reasonable range for an industry, and the analyst must determine this range. Although financial ratios are used to help assess the growth potential and risk of a business, they cannot be used alone to directly value a company or determine*

*its creditworthiness* The entire operation of the business must be examined, and the external economic and industry setting in which it is operating must be considered when interpreting financial ratios.

Financial ratios mean little by themselves. Their meaning can only be gleaned by using them in the context of other information. In addition to the items mentioned above, an analyst should evaluate financial ratios based on the following:

- *Experience.* An analyst with experience obtains a feel for the right ratio relationships.
- *Tourism unit's goals.* Actual ratios can be compared with company objectives to determine if the objectives are being attained.
- *Industry norms (cross-sectional analysis).* A company can be compared with others in its industry by relating its financial ratios to industry norms or a subset of the companies in an industry. When industry norms are used to make judgments, care must be taken, because
  - many ratios are industry specific, but not all ratios are important to all industries.
  - differences in corporate strategies can affect certain financial ratios. (It is a good practice to compare the financial ratios of a company with those of its major competitors. Typically, the analyst should be wary of companies whose financial ratios are too far above or below industry norms.)
  - economic conditions. Financial ratios tend to improve when the economy is strong and to weaken during recessions. Therefore, financial ratios should be examined in light of the phase of the economy's business cycle.
  - trend (time-series analysis). The trend of a ratio, which shows whether it is improving or deteriorating, is as important as its current absolute level.

The financial statements should provide insights into the microeconomic relationships within a firm that help analysts project earnings and free cash flow (which is necessary to determine entity value and creditworthiness), provide insights into a firm's financial flexibility, which is its ability to obtain the cash required to meet financial obligations or to make asset acquisitions, even if unexpected circumstances should develop. Financial flexibility requires a firm to possess financial strength (a level and trend of financial ratios that meet or exceed industry norms); lines of credit; or assets that can be easily used as a means of obtaining cash, either by selling them outright or by using them as collateral and also provide a means of evaluating management's ability. Key performance ratios, such as the ROE, can serve as quantitative measures for ranking management's ability relative to a peer group.

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## **ENVIRONMENTAL ACCOUNTING, AN ENVIRONMENTAL PROTECTION INSTRUMENT USED BY ENTITIES**

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**ABSTRACT:** *The purpose of this article is to present certain aspects regarding environmental accounting and the environmental costs, which are instruments that the entities can use to identify and prevent the effects of their activities on the environment. The main objectives aimed by the article were to present the state of knowledge starting with the 1970s, when the concept of environmental accounting emerged for the first time, up until now; to define the concepts of environmental accounting and environmental costs; to present an analysis of how economic agents in Romania, and implicitly, accounting regulations, are getting involved in environmental issues.*

**KEY WORDS:** *environmental aspects; accounting profession; environmental costs; environmental protection costs; costs.*

**JEL CLASIFICATION:** *M41; O13.*

### **1. INTRODUCTION**

Given the intense process of normalization and standardization of accounting, must know that in regard to environmental management and protection of its efforts to make a joint representation of such activities. Accounting is required to submit various types of user information on the financial position and performance of entities in the management of resources at their disposal. Historically speaking, the accounting was limited, mostly, to the resources represented by material and financial goods of entities. This became less appropriate, being left out of accounts significant "costs", such as environmental, social, which were not found in the financial statements of entities.

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This is because entities didn't "pay" anything for the environment, and only little for social issues. This does not mean that society as a whole does not support these "costs". Various other factors have forced the conservative to take measures of modernization. In recent decades a growing number of entities give great importance to environmental issues and their reflection by accounting, either under the influence of administrative regulations or because of their information needs. In certain circumstances, for certain fields, they can have a significant impact on the financial statements, and that of their users. The first occurrence of the concept of environmental accounting goes back to 1970, and since then, the concept has had a growing development.

## 2. RESEARCH METHODOLOGY

The methodology is a complex word (concept), etymologically composed of *method's* and *logos* which mean "method" and "science", in Greek, and free translation "science method", the science of conception, choice and use of method in the investigation process of economic phenomena. The research methodology is the theory and practice methods, an activity that is studying the essence, nature, status, definition, classification, etc. the construction of explanatory models. The need for scientific research in accounting is particularly important today, more than that pluridisciplinarity in accounting research is necessary and sometimes profitable. Scientific research is necessary to seek and find solutions or answers to immediate problems and to achieve reasonable theorizing about environmental issues and how they are perceived by the entities and professional bodies. The scientific demarche is based on information from the national, European and international specialized literature and practice regarding environmental accounting and environmental costs. Our approach turned to research methods like documentation, analysis, synthesis, comparison, all these being part of the positivist research current.

## 3. THE CURRENT STATE OF KNOWLEDGE IN THE AREA OF ENVIRONMENTAL ACCOUNTING

At the beginning, environmental accounting went through a period of uncertainty. Mathews (1997), as well as Ienciu and Matis (2010), described the development of environmental accounting in four stages, as follows:

- **1970-1980**: represents the beginning of the first researches in the area of environmental accounting, which had a more descriptive character. As studies from that period, it is worth to mention the articles of the authors: Beams and Fertig (1971), Churchman (1971), Linowes (1972), Mobley (1970), Dierkes and Preston (1977), Ullman (1976), Abbott and Monsen (1979), Belkaoui (1980), Bowman and Haire (1975), Grojer and Stark (1977), Trotman (1979), Anderson (1980);

- **1981-1994**: there are debates regarding the role of accounting in the disclosure of information regarding environmental activities. During this period, the interest of researchers for this area increases; the managers and even accountants start to pay more attention to the issue of environmental accounting. The number of

researchers of environmental accounting is also increasing at the expense of researches regarding social accounting. As studies, the following may be mentioned: Burchell (1985), Arlow and Gannon (1982), Belkaoui and Karpik (1989), Brooks (1986), Freedman and Jaggi (1988), Guthrie and Mathews (1985), Guthrie and Parker (1989), Rockness (1985), Shane and Spicer (1983), Trotman and Bradley (1981), Ullmann (1985), Brooks (1986), Burke (1984), Mathews (1984), Logsdon (1985), Wartick and Cochran (1985), Donaldson (1982), Richardson (1987), Cooper and Sherer (1984), Gray (1990), Harte and Owen (1991), Roberts (1992), Hindle (1993);

- **1995-2001**: the maturation of environmental accounting; environmental information is starting to be taken into consideration, environmental audit is launched; environmental accounting, both theoretically and practically, is beginning to be widely discussed, especially in developed countries. The studies from this period are starting to grow, this period being named the “cornerstone” of environmental accounting. The researchers of this area are starting to pay increased attention to this field, the number of studies is beginning to grow considerably, and the environmental reports remain the main sub-field approached by researchers. This sub- field is starting to gain interest due to the implementation of standards regarding environmental management, standards that also include a part of audit or verification: Burritt (1995), Owen (1995), Gamble (1995), Deegan (1998), Friedmana and Miles (2001), Kitzman (2001), Wilmshurst and Frost (2001), Frost (2001);

- **2002-2010**: guides regarding the reporting of environmental information and regulations about environmental accounting are issued. The number and quality of articles about environmental accounting continue to grow. The studies in this field are more numerous, more ample, and bring important contributions to the development of this research area: Gibson and Bruce Martin (2004), Brown and Michael Fraser (2004), Watson (2003), Watson and Emery (2004), Parker (2005), O’Dwyera and Owen (2005), Mobus (2005), Patrick de Beer and Francois Friend (2006), Richard Howarth (2006), Fleischman and Schuele (2006), Christine Jasch (2006), Martin (2007), Auty (2007), Robert Repetto (2007), Bartelmus (2007), Ubaldo (2009), Jeliazkov (2009), Henri (2010), Gray and Bebbington (2010), Burritt and Schaltegger (2010). In terms of Romanian researchers, we mention the studies conducted by: Crețu (2004), Dumitrana, (2005), Lungu (2008), Caraiani (2007), Borza (2007), Tabără and Nuță (2007), Bonaci and Ienciu (2007), Mățiș, Ienciu and Cioara (2010).

The conclusion that may be drawn is that researches in environmental accounting have grown considerably due to the importance that environmental issues started to have over entities and over society. New sub-fields of environmental accounting are developing, namely environmental audit and environmental management accounting.

#### **4. THE NEED TO INVOLVE ACCOUNTING IN THE ENVIRONMENTAL PROBLEMS OF THE ENTITY**

Environmental issues are starting to become an area of interest for the users of financial statements; a growing number of entities are beginning to pay attention to these issues also.

Today, the concept of natural environment or environment is associated with three perspectives (Neculai Tabără et al, 2009). According to the *first perspective*, the environment is *the set of natural resources*. It is the initial notion of the environment and the most intuitive. It emerged as a result of several analyses and findings at the end of the 20<sup>th</sup> century, which gained growing significance as the chance to observe global economy as a whole increased. According to the *second perspective*, the environment represents *the interaction between natural resources and human activities*. This is the notion with the most uncertain limits, which occur from the negotiation between different abilities and disciplines. In terms of the *third perspective*, the environment is *the set of all available resources*. This is the notion that derives from the concept of sustainable development, according to which environmental, social and economic elements are actually indissoluble.

Bennet and James (1997) identified six fields related to the association between environment and accounting. The goal of this association is to ensure that the management of the entity has sufficient information to improve the management of the decision-making process. Bennet and James (1997) claim that the environment-environmental accounting association may be effective in improving the efficiency of the entity's management by: identifying and reducing costs, prioritizing environmental actions, directing the process of establishing prices for products, increasing the client's value, making investment decisions with consequences on long term and assessing the eco-efficiency and/or sustainability of the entity's activities.

The incorporation of environmental issues in the life of the entity involves taking them into consideration in terms of economy, legal framework, accounting, finance and technique (Lafontaine, J.P., 2002). In terms of *economy*, taking into account environmental parameters in the cost of services and products allows the entity to ration the consumption of natural resources or energy on one hand, achieving substantial savings, and, on the other hand, it allows meeting the requirements regarding the environment and the consumers' health. In terms of the *legal framework*, taking into consideration the environment is imposed by the risks that engage the responsibility of the entity. This responsibility is generated by non-compliance with the environmental legislation and may result in administrative and/or criminal sanctions. In terms of *accounting and finance*, recording environmental costs generated by the activity of the entity and presenting the associated financial information represent a mean of assessing performances (Bețianu Leontina, 2008).

The emergence of environmental accounting dating back to 1970, interest in this area increased considerably, from managers to give greater importance to environmental issues.

## **5. CONCEPTUAL DEMARCATIONS REGARDING ENVIRONMENTAL ACCOUNTING**

The term environmental accounting has many meanings and uses, until now, there is to date no generally accepted concept of environmental accounting. Gray, Bebbington and Walters (1993) define environmental accounting as a management tool addressing all areas of accounting that may be affected by the

response of business organizations to environmental issues, including the new area of eco-accounting. Steele and Powell (2002), who define it as being the identification, allocation and analysis of material flows and of environmental cash-flows in order to provide insight into environmental impacts and into the associated financial consequences. Environmental accounting represents an efficient information system about the rarefaction degree of natural resources caused by the activity of entities and utilized to reduce this rarefaction and to inform third parties (Christophe, 2000).

According to Ienciu (2009), environmental accounting records, analyzes and reports the financial impacts caused by the environment, as well as the environmental impacts/issues of an economic system in order to provide users with a clear and complete picture of the environmental performance of that economic system.

In our opinion, environmental accounting is a tool for identifying and measuring environmental costs in order to ensure an adequate environmental performance. Thus, environmental accounting serves external users by monitoring the presentation of information about the environment within financial statements (by introducing a green column into the balance sheet in the profit and loss account or in the notes to financial statements), the calculation of intermediary balances of administration (by determining the net present value that takes into account the consumption of natural resources) and the preparation of annual activity reports or of a specific environmental report (Caraiani, et al., 2007).

Since accountancy is a very practical science, it is of vital importance to clarify the relative position of environmental accounting in the whole accounting system and its relationship with the conventional financial and management accounting systems. Parallel to the main categories of accounting, environmental accounting has also two branches. These include (Li Xiaomei, 2004):

1. Environmental Financial Accounting (EFA), which focuses on reporting the cost of environmental liabilities and other significant environmental costs, and provides related environmental financial information to external stakeholders; and
2. Environmental Management Accounting (EMA), which, as part of management accounting, addresses mainly to the information about material and energy flow, and provides information for internal decision makers of a corporation.

Environmental accounting can support national income accounting, financial accounting, or internal business managerial accounting. This primer focuses on the application of environmental accounting as a managerial accounting tool for internal business decisions. Different uses of the term environmental accounting arise from three distinct contexts (table 1).

**National income accounting** is a macro-economic measure. Gross Domestic Product (GDP) is an example. The GDP is a measure of the flow of goods and services through the economy. It is often cited as a key measure of our society's economic well-being. The term environmental accounting may refer to this national economic context. For example, environmental accounting can use physical or monetary units to refer to the consumption of the nation's natural resources, both renewable and nonrenewable.

In this context, environmental accounting has been termed „natural resources accounting”.

**Financial accounting** enables companies to prepare financial reports for use by investors, lenders, and others. Publicly held corporations report information on their financial condition and performance through quarterly and annual reports, governed by rules set by the U.S. Securities and Exchange Commission (SEC) with input from industry's self-regulatory body, the Financial Accounting Standards Board (FASB). Generally Accepted Accounting Principles (GAAP) are the basis for this reporting. Environmental accounting in this context refers to the estimation and public reporting of environmental liabilities and financially material environmental costs.

**Table 1. Type of Environmental Accounting**

Type of Environmental Accounting	Focus	Audience
national income accounting	nation	external
financial accounting	firm	external
managerial or management accounting	firm, division, facility, product line, or system	internal

Source: EPA, *An Introduction to Environmental Accounting As A Business Management Tool: Key Concepts And Terms*, 1995, p.4-5

**Management accounting** is the process of identifying, collecting, and analyzing information principally for internal purposes. Because a key purpose of management accounting is to support a business's forward-looking management decisions, it is the focus of the remainder of this primer. Management accounting can involve data on costs, production levels, inventory and backlog, and other vital aspects of a business. The information collected under a business's management accounting system is used to plan, evaluate, and control in a variety of ways:

- (1) Planning and directing management attention,
- (2) Informing decisions such as purchasing, capital investments, product costing and pricing, risk management, process/product design, and compliance strategies, and
- (3) Controlling and motivating behavior to improve business results (EPA, 1995).

According to IFAC (2005), environmental accounting is a broad term used in a number of different contexts, such as:

- Assessment and disclosure of environment-related financial information in the context of financial accounting and reporting;
- Assessment and use of environment-related physical and monetary information in the context of Environmental Management Accounting;
- Estimation of external environmental impacts and costs often referred to as Full Cost Accounting;
- Accounting for stocks and flows of natural resources in both physical and monetary terms, that is, Natural Resource Accounting;
- Aggregation and reporting of organization-level accounting information, natural resource accounting information and other information for national accounting purposes; and

- Consideration of environment-related physical and monetary information in the broader context of sustainability accounting.

At the organization level, EA takes place in the context of both management accounting (assessment of an organization’s expenditures on pollution control equipment; revenues from recycled materials; annual monetary savings from new energy-efficient equipment) and financial accounting (evaluation and reporting of the organization’s current environment-related liabilities). As mentioned in the Foreword to this document, numerous books and guidance documents have been published on the topic of Environmental Management Accounting.

Table 2 provides a brief comparison of the environmental dimensions of financial and management accounting, as well as a general mention of associated external reporting links:

**Table 2. Organization-level Accounting and Reporting**

<b>Organization level Accounting</b>	<b>Organization-level Environmental Accounting</b>	<b>Associated MANDATORY External Reporting</b>	<b>OTHER External Reporting Links</b>
Financial Accounting: An organization’s development of standardized financial information for reporting to external parties (e.g., investors, tax authorities, creditors).	Environmental Issues in Financial Accounting: The inclusion in financial reports of environment related information such as earnings and expenses of environment-related investments, environmental liability and other significant expenses related to the organization’s environmental performance.	Financial reporting to external parties is regulated by national laws and international standards, which specify how different financial items should be treated. The financial reports issued by organizations increasingly include information related to their environmental and social performance. Some countries require such content in financial reports, while some organizations include such information voluntarily.	In addition, organizations use some of the environment-related information gathered for financial reporting purposes for environmental regulatory reporting, national reporting or voluntary corporate environmental and sustainability reporting.
Management Accounting : An organization’s development of both non monetary and monetary information to	<i>Environmental Management Accounting:</i> The management of environmental and economic performance via management accounting systems and practices that focus on	There are generally no external reporting requirements specifically associated with Management Accounting or <i>Environmental Management</i>	However, organizations use some of the information gathered under EMA for environmental regulatory reporting, national reporting or

support both routine and strategic decision-making by internal managers	both physical information on the flow of energy, water, materials, and wastes, as well as monetary information on related costs, earnings and savings.	Accounting.	voluntary corporate environmental and sustainability reporting.
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*Source: International Guidance Document Environmental Management Accounting, International Federation of Accountants, 2005, p. 16*

Just as there are typically many links between an organization's management accounting and financial accounting practices and activities, there are potentially many links between environmental management accounting and the inclusion of environment related information in financial reports.

## **6. ENVIRONMENTAL COSTS – THE SUBJECT OF ENVIRONMENTAL ACCOUNTING**

The main component of environmental accounting is the environmental cost. Over time there have been many definitions for the concept of environmental cost, and we will analyze these definitions next.

Environmental costs are one of the many different types of costs businesses incur as they provide goods and services to their customers. Environmental performance is one of the many important measures of business success. Environmental costs and performance deserve management attention for the following reasons (EPA, 1995):

- Many environmental costs can be significantly reduced or eliminated as a result of business decisions, ranging from operational and housekeeping changes, to investment in "greener" process technology, to redesign of processes/products. Many environmental costs (e.g., wasted raw materials) may provide no added value to a process, system, or product.
- Environmental costs (and, thus, potential cost savings) may be obscured in overhead accounts or otherwise overlooked.
- Many companies have discovered that environmental costs can be offset by generating revenues through sale of waste by-products or transferable pollution allowances, or licensing of clean technologies, for example.
- Better management of environmental costs can result in improved environmental performance and significant benefits to human health as well as business success.
- Understanding the environmental costs and performance of processes and products can promote more accurate costing and pricing of products and can aid companies in the design of more environmentally preferable processes, products, and services for the future.
- Competitive advantage with customers can result from processes, products, and services that can be demonstrated to be environmentally preferable.

- Accounting for environmental costs and performance can support a company's development and operation of an overall environmental management system. Such a system will soon be a necessity for companies engaged in international trade due to pending international consensus standard ISO 14001, developed by the International Organization for Standardization.

European Commission Recommendation 453/2001 makes the distinction between environmental costs and other costs, defining them as costs of the actions undertaken by the economic entity and by third parties in the name of an economic entity with the purpose of preventing; reducing or repairing the environmental damages resulted from operational activities. These costs include: waste storage and disposal, soil protection, underground and surface water protection, clean air and climate protection, noise reduction, biodiversity and landscape protection. The definition given to environmental costs by the United Nations Conference on Trade and Development (UNCTAD, 2001) posits that they "comprise the costs of steps taken, or required to be taken, to manage the environmental impacts of an enterprise's activity in an environmentally responsible manner, as well as other costs driven by the environmental objectives and requirements of the enterprise".

Protection Agency (1995) defined environmental costs as being costs with a direct financial impact over entities (internal costs) and individual costs, for which the entity is not responsible (external costs). According to the Environmental Protection Agency (1995), **internal costs** include:

- *Conventional costs*, which include costs with equipments, raw materials and consumables;
- *Hidden costs*, which refer to the results of assigning environmental costs to indirect costs or overlooking future and contingent costs;
- *Contingent costs* refer to environmental costs that will not occur with certainty in the future, depending on uncertain future events, such as the costs involved in a future restoration process;
- *PR costs* are less tangible because they cover the subjective perceptions of management, clients, employees, community and regulators. This category may include costs of the annual environmental reports, as well as costs for environmental activities, such as planting trees.

**External costs** include the costs of environmental degradation for which the entities are not legally responsible and which have negative consequences on humans, property and their well being, and can't be always compensated through legal systems. Determining the financial value of external costs is difficult, but, nevertheless, some entities are trying to approach these costs as part of their environmental accounting system.

IFAC makes a distinction between waste and emission control costs, prevention costs and other administrative costs such as research and development that helps to increase eco-efficiency. According to the classification of IFAC, the following costs (table 3) are considered environmental costs.

From our point of view, environmental costs are those expenses incurred to prevent, reduce or repair damages caused to the environment, incurred at the initiative

of the entity or required by the regulations and rules in place to reduce the environmental impact of the entity and to reduce the environmental risk.

**Table 3. Environment-related cost categories**

<b>Materials Costs of Product Outputs:</b> Includes the purchase costs of natural resources such as water and other materials that are converted into products, by-products and packaging
<b>Materials Costs of Non-Product Outputs:</b> Includes the purchase (and sometimes processing) costs of energy, water and other materials that become Non-Product Output (Waste and Emissions).
<b>Waste and Emission Control Costs:</b> Includes costs for: handling, treatment and disposal of Waste and Emissions; remediation and compensation costs related to environmental damage; and any control-related regulatory compliance costs.
<b>Prevention and Other Environmental Management Costs:</b> Includes the costs of preventive environmental management activities such as cleaner production projects. Also includes costs for other environmental management activities such as environmental planning and systems, environmental measurement, environmental communication and any other relevant activities.
<b>Research and Development Costs:</b> Includes the costs for Research and Development projects related to environmental issues.
<b>Less Tangible Costs:</b> Includes both internal and external costs related to less tangible issues. Examples include liability, future regulations, productivity, company image, stakeholder relations and externalities.

*Source: International Federation of Accountants, Environmental Management Accounting, New York, 2005, p. 38*

Environmental costs should be capitalized if they relate, directly or indirectly, to future economic benefits that will flow to the enterprise through: increasing the capacity, or improving the safety or efficiency of other assets owned by the enterprise; reducing or preventing environmental contamination likely to occur as a result of future operations; or conserving the environment (United Nations Conference on Trade and Development, 1997). The definition of an asset indicates that where a cost incurred by an enterprise will result in future economic benefits, it would be capitalized and charged to income over the period in which those benefits are expected to be realized. Environmental costs that comply with such a criterion would, therefore, be capitalized. Capitalization is also considered appropriate when environmental costs are incurred for safety or environmental reasons, or where they reduce or prevent potential contamination, or conserve the environment for the future. While they may not directly increase economic benefits, incurring such costs may be necessary if the enterprise is to obtain, or continue to obtain, future economic benefits from its other assets.

Many environmental costs do not result in a future benefit, or are not sufficiently closely related to future benefits to enable them to be capitalized. Examples would include treatment of waste products, clean up costs relating to current operating activities, clean-up of damage incurred in a prior period, ongoing environmental administration, and environmental audits. Fines and penalties for non-compliance with environmental regulations, and compensation to third parties for environmental damage are regarded as environmentally related costs, and are also instances of costs incurred that do not result in future benefits.

When an environmental cost that is recognized as an asset is related to another asset, it should be included as an integral part of that asset, and not recognized separately. In most instances, environmental costs that are capitalized are related to another capital asset. There is no specific or separate future benefit that results from incurring the environmental costs themselves. When an environmental cost is capitalized and included as an integral part of another asset, the combined asset should be tested for impairment and, where appropriate, written down to its recoverable amount. The integration of capitalized environmental costs with the related asset could, in some instances, result in the combined asset being recorded above recoverable amount.

Sorin Briciu (2008) proposes a possibility of recording the environmental costs in the management accounting can be presented as follows:

**Table 4. Possibilities of recording the environmental costs**

<b>Environmental costs</b>	<b>Accounts of the managerial accounting</b>
A. Environmental costs for controlling environmental impacts occurring within business area as a result of production and service activities (business area costs)	923.1. Environmental expenditures of the business area
1. Pollution prevention costs	923.1.1. Environmental expenditures of the business area. Pollution prevention
2. Global environmental conservation costs	923.1.2. Environmental expenditures of the business area. Global environmental conservation
3. Resource circulation costs	923.1.3. Environmental expenditures of the business area. Resource circulation costs
B. Environmental costs for controlling environmental impacts occurring in the upstream or downstream as a result of production and service activities (upstream/downstream costs)	923.2. Environmental expenditures of upstream/downstream
C. Environmental costs in management activities (management activity costs)	924.1. Environmental expenditures of the management activity
D. Environmental costs in research and development activities (research and development costs)	924.2. Environmental expenditures in research and development activity
E. Environmental costs in social activities (social activity costs)	924.3. Environmental expenditures in social activity
F. Environmental costs corresponding to environmental damages (environmental damages costs)	923.3. Environmental expenditures of environmental damages

*Source: Briciu Sorin, Sas Florentina, Considerations regarding the pursuance and reporting of the environmental costs, Accounting and Management Information Systems, Supplement, 2008, p. 474-486*

As can be seen, environmental management accounting is considered the most appropriate form of accounting that reflects environmental costs.

## 7. THE INVOLVEMENT OF ROMANIAN ECONOMIC AGENTS AND OF ACCOUNTING REGULATIONS IN FORCE IN THE MANAGEMENT OF ENVIRONMENTAL ISSUES

Starting from the general objective of the European Union Sustainable Development Strategy, the Sustainable Development National Strategy of Romania establishes that eco-efficient management of resources consumption and their maximum exploitation to be realized by promoting a production and consumption model which would allow a long term sustainable economical growth and a successive rapprochement to the medium level of performance of European Union's countries. To promote this model, the strategy determines the need for hiring a permanent and systematic dialogue with associations of employers and social partners to agree to environmental and social performance targets for key products and processes. In this way, the achievement of the objectives requires a proactive approach from companies regarding environmental issues (Rof, & Dănulețiu, 2010).

**Table 5. Types of environmental expenses by types of producers in period 2007-2009**

- thousand LEI current prices, % -

	2007		2008		2009	
	Nominal values	%	Nominal values	%	Nominal values	%
<b>Specialized producers (total) from which:</b>	70.393.54	72	8.328.234	65	6.951.154	64
- investments	1.048.084	11	1.716.516	13	1.046.720	10
- internal current expenses	5.487.074	56	5.637.738	44	5.070.253	47
- external current expenses	504.196	5	973.980	8	834.181	8
<b>Unspecialized producers (total) from which:</b>	2.743.422	28	4.516.525	35	3.929.598	36
- investments	1.329.980	14	1.550.499	12	1.773.140	16
- internal current expenses	913.847	9	2.153.762	17	1.324.524	12
- external current expenses	499.595	5	812.264	6	831.934	8
<b>Total environment protection expenses</b>	9.782.776	100	12.844.759	100	10.880.752	100

Source: [www.insse.ro](http://www.insse.ro)

As for the Romanian company's involvement into environmental problems, we will realize an analysis on the base of the expenditure made by these for environment protection. According to National Institute of Statistics in Romania, the economic agent's expenses related to environment protection are distinctly underlined for the unspecialized economic agents, the ones that carry out an environmental activity as a secondary or auxiliary activity, and for the specialized economic agents, the ones that posses a department which has environment protection as a main activity.

In 2009, expenditure on environmental protection at national level was approximately 12, 2 billion lei, representing 2,4% of GDP compared to 2,8% in 2008 and 2,7% in 2007. Based on these data we can see that the total spending on environmental protection to producers, have a significant share of expenditure made by specialist producers (64% in 2009, 65% in 2008 and 72% in 2007) against the by non-specialist producers (36% in 2009, 35% in 2008 and 28% in 2007). In 2008 compared with 2007 the share of costs incurred by manufacturers specializing in total expenditure on environmental protection has increased in absolute size to 1.288.880 thousand and relative size by 18%, followed in 2009 compared with 2008 they decrease in absolute size 1.377.080 thousand and relative size by 17%. Analyzing the other component considered, namely environmental protection expenditure by non-specialist producers, it is noted that there was a significant increase in the period 2008-2007. So in 2008 compared to 2007 they increased by 1.773.103 thousand, in absolute and in relative value by 65%, followed in 2009 compared with 2008 they recorded a decrease in absolute numbers of 586.927 thousand, or 13% in relative numbers.

The explanation of this evolution is given by Romanian adhesion to the European Union and the necessity of economic agents to abide by the environment requirements imposed by the communitarian-aquis.

The involvement of Romanian accounting in activities of environmental protection has been stronger after the entry into force on January 1<sup>st</sup>, 2010 of *Order no. 3055/2009 for the approval of Accounting Regulations consistent with the European Directives*, which also includes aspects concerning the environment, such as:

- Inserting a new account, namely account 652 "*Expenditure on environmental protection*". With this account is recorded environmental protection expenditure recorded in the relevant period, for example, environmental taxes paid, the certificates of emissions of greenhouse gases effect purchased.
- Moving off balance sheet the received certificates of greenhouse gas emissions, which don't have a determined value and, therefore, can't be recognized in balance sheet accounts – account 806 "*Certificates of greenhouse gas emissions*".

In our opinion, the insertion of only these two accounts is not sufficient because they are not enough to reflect expenditure on separate elements of materials, wages, contributions, machineries, which incurred by the company for environmental protection.

## **8. CONCLUSIONS**

Without claiming to exhaust the topic, the primary objective of this scientific approach was to underline certain aspects about environmental accounting and about

its main object of study, environmental costs, as well as the manner in which accounting regulations and Romanian economic agents are getting involved in environmental issues.

Of the presented one can see that accounting development in recent years, were focused on environmental accounting, accounting research in the field of environmental accounting have been and continue to the detriment of social accounting research; environmental financial accounting, environmental reporting continues to represent the principal interest in research in environmental accounting, but we noticed a growing interest to other sub domains such as environmental management accounting, environmental audit; in terms of research in Romania on environmental accounting, these are still early but however it is noted an interest in this area.

As noted earlier, the term environmental accounting has three distinct meanings:

- Environmental accounting in the context of national income accounting, refers to natural resource accounting, which can entail statistics about a nation's or region's consumption, extent, quality, and value of natural resources, both renewable and non-renewable.
- Environmental accounting in the context of financial accounting usually refers to the preparation of financial reports for external audiences using Generally Accepted Accounting Principles.
- Environmental accounting as an aspect of management accounting serves business managers in making capital investment decisions, costing determinations, process/product design decisions, performance evaluations, and a host of other forward-looking business decisions. Environmental accounting can be employed by firms large and small, in almost every industry in both the manufacturing and services sectors. It can be applied on a large scale or a small scale, systematically or on an as needed basis.

Using environment accounting has a number of advantages like (Nuță, 2009):

- the possibility of managing more efficiently the flows of energy and materials, including the quantity of wastes, their type and their destination;
- the possibility of better estimating, identifying and managing of general costs and environmental costs;
- obtaining more precise information for starting and sustaining programs for improving environment performance;
- obtaining the necessary information for measuring and reporting the environment performance, for the purpose of upgrading the image of the organization in relationship with all those interested in its activity (clients, employees, government, investors, stakeholders).

Basically, as currently reflected, Romanian accounting techniques is not possible to separate coverage of environmental issues in accounting. Chart of accounts applicable to entities that do not contain separate accounts to reflect environmental issues. Entities whose activities pollute should record separately the expenses incurred for the purchase of machinery and equipment used for environmental protection, their depreciation, with the salaries of staff involved in environmental protection, materials used and other environmental costs. As opportunities for coverage of environmental

issues in accounting such as development plan accounts in the accounts of grade 2 and 3, by introducing new accounts, chart of accounts is not having a limited character. Another possibility is the organization of environmental management accounting, in this situation the development plan accounts are not required but finding the appropriate method of calculation.

In the end, we wish to point out that this paper is only a scientific approach meant to highlight a number of aspects regarding environmental accounting and environmental costs, and we hope the discussed issues and the reached conclusions will represent a starting point for future studies.

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## **ACTIVITY-BASED COST ALLOCATION AND FUNCTION ANALYZES IN TRADE**

**TÜNDE VERES** \*

**ABSTRACT:** *In this paper the author is thinking about the efficiency analyzes of trading. The most important evaluation factors of trade are the sales value, volume and the margin. Of course the easiest and fastest way is to follow the market situation by the turnover but for long term thinking the sales companies need to concentrate also for efficiency. Trading activity has some functions which can deeply effect for the final result and this is the reason to calculate their clear and reliable costs is an important condition of the decision making. The author reviews the cost categories and the basic functions in trading activity to find possible ways getting reliable information.*

**KEY WORDS:** *cost allocation; cost bearer; cost driver.*

**JEL CLASSIFICATION:** *M41*

### **1. INTRODUCTION**

The analysis of costs and resources used in production and services is one of the most important areas in the economic calculations of the business performance. Business units select their resources to be used in accordance with the requirements of the activity. Consequently, the most important guidelines for economic calculations can also be found in the characteristics of the activity.

According to a general approach in a production process material expenses, personnel expenses, services used other services and depreciation of the long-term assets are used as classification criteria. The classification of costs by type generally does not cause any major problem in practice, and the management of each document can be clearly distinguished in the cost structure.

However, the analysis of economic operation is typically based on the classification of costs according to occurrence and the correlation between costs and the changes of the produced volume. The primary problem is the management of direct

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costs, i.e. the historic costs of products and activities. In this aspect, the direct attribute can be interpreted in several ways. On the one hand, it is the resource clearly used during the creation of a product or activity, forming its value and, on the other hand, it is also the value of the use of the resource, which may be assigned to the product or activity. The purpose of this assignment or, in other words, cost allocation is mainly to establish the historic value of the product, and to prepare a cost analysis in time and in space, as well as to assess efficiency.

There are a lot of research results about the possibilities of cost allocation, as this topic has been one of the highlights in management accounting since the 1980s. It is an important topic of management accounting in relation to the analysis of economic operation and profit maximization, as well as because of its outstanding importance in pricing. You need short and long-term thinking alike for the analysis of costs. In the short run, the continuously changing costs may be influenced depending on the creation of the product. The cost factors, which may be considered fixed in the short term, typically result from the resource requirements of the background supporting the core activity.

These categories are even more difficult to manage when we are talking about a trading business. The main questions are how to define the cost bearer, what is considered the historic value of the product, what valuation procedure is applied for the registration of inventories, how to assign the costs occurring in the trading process to products, and at what cost level should we look profitability. Naturally, it is very difficult to give general definitions for these problems, yet I would still make an attempt to define some main rules for the cost allocation in trade.

## **2. CATEGORISATION OF COST BEARERS**

Trade focuses on the traded goods. However, for cost calculation purposes, the goods do not represent the cost bearer category. According to the general rules, the historic value of goods can be defined as the purchase price and the other items capitalized on it during the course of the purchase, and for registration purposes, it should be managed with the average or first in - first out valuation procedures. Naturally, the main source of profit in trade is the difference between the purchase and sales price of goods, therefore it is very important to define the contents of the purchase price, and to monitor the extent of its change and the factors causing the change. However, the cost bearer of the activity cannot be the goods themselves, because the resources are used for the purpose of trade as a service. The materials used (fuel, energy, forms, office stationary, etc.), the staff expenses, the services used for operation (from marketing to cleaning), and the depreciation of the intangible assets and fixed assets in use are not part of the historic value of the products and for the purpose of the analyses in order to approach effectiveness the main point is not the fact that the profitability of a product is assessed after the allocation of these costs.

Direct and indirect costs must be distinguished also in trade, i.e. the resources directly relating to the trading activity and the (indirect) resources of the operation of the business. With regard to the use of direct resources, cost bearers can be established on the basis of the trade structure. The cost bearers are identified according to the

following main initial criteria: trade business lines, characteristics of the customers, classification of markets according to geographic and sector criteria, sections and groups established according to the internal corporate structure, etc. If, e.g., a trading company owned by foreigners purchases part of its stocks from the parent company and the rest from other domestic and foreign partners, the cost bearer is identified as the business lines established on the basis of domestic and import product sales, distribution of products purchased from the parent company and other partners, and the characteristics of the products. However, if the same company sells to a retail network, logistics centres, individual customers, companies engaged in capital investment type activities and industrial users, then the classification of costs according to the structure will contain outstanding information again.

Naturally, in management accounting, the measurability of the trading activities defined as cost bearers is equally important for managing turnover data and the costs in the analysis of the efficiency and profitability of operation.

### 3. DIRECT COST IN TRADE

Once the cost bearer is known, at whom/which costs will be collected, we need to think of what we deem direct costs. According to the basic theoretical literature, the cost is the value of the resource used and clearly allocated to the cost bearer when the cost incurs. However, in trade the occurrence of costs is not easy to associate with an activity either. Let us take few examples:

- Naturally mostly fuel costs are direct material costs. The situation is no longer simple though, if fuel is used not only for the operation of the goods transportation vehicles, but also for the operation of the vehicles used by the sales staff. It gets even more complicated, if the sales employees used their vehicles not only during working hours, but also for private purposes.
- The company prepares its invoices using paper carrying the company's logo. As the use of this paper is primarily related to sales, the paper cost could obviously be direct material cost, but the same paper is also used for other correspondence, orders and all official documents.
- The most typical direct cost is the cost of a marketing service. The situation is absolutely clear cut, if the company publishes a series of articles or an advertisement in a special magazine in relation to a sales direction (product, business line, etc.), but if the company generally advertises itself, then the allocation of the costs of advertisement is no longer obvious.

Consequently, the economic calculations of the trading activities require a system based on well-considered cost allocation, and the entire process of operation. If one thinks of the occurrence of costs, the following system should be built: direct costs of trade; "other direct" costs of trade; general costs related to trade.

In this system, those resources are still defined as direct costs, which can clearly be assigned to the cost bearer (trade activity) based on the documents proving the occurrence of the costs.

**Other direct costs of trade.** The category of *other direct costs* causes a serious problem also in the cost allocation system of production companies in terms of

cost management and cost accounting. These are direct resources because they clearly relate to the cost bearer, yet the allocation can only be performed indirectly, with the help of a cost attribute or the cost driver. Such other direct costs could include the cost of operation of the production machines (e.g., energy, fuel) in production companies, the cost of employees moving the materials used in the production process, etc. In relation to trade, the other direct cost categories can be identified based on a thorough review of sales process.

We must take into account criteria, such as:

- activities that directly affect the trade (including typically the preparation and distribution of offers to customers, receipt and confirmation of orders)
- offer, order and confirmation management process (are they typically managed by various trade operations [cost bearers], or there is a central trade assistant system)
- the technical solutions used for the operation of the system (to what extent is e-commerce used, paper and tool intensity of the process itself)
- the time factor, which needs to be taken into account (in other words, the time required for preparing an offer, the time required for confirming orders, the extent to which the internal processes are influenced by the time factor, etc.)

Based on this, the following cost types are referred to most frequently in the category of other direct costs:

- payroll expenses, wage-related contributions and other personnel type payments of employees involved in specified activities,
- costs of material used by them for their activities (paper, office stationary products, etc.)
- costs of the communication tools used by them, and cost of communication with customers (telephone, postal services, Internet connection, fax, etc.)
- depreciation of fixed assets and intangible assets used for the performance of everyday tasks,
- cost of services used for the working conditions required for performing the tasks (cleaning, security services, photocopier maintenance, etc.)

Practically, the *other direct cost* category is the result of an allocation process, because these costs must be selected from the total costs of forms, telephones, depreciation, etc. Consequently, with regard to each cost type, a cost driver must be established based on which cost allocation can be performed. These cost drivers could include the following:

- paper required for producing and archiving offers, confirmations and orders,
- number and length of telephone calls with customers related to offers, confirmations and orders,
- use of photocopiers, number of copies made,
- period of operation of IT and communication devices,
- workplace requirements of employees pursuing specified activities for the allocation of the general costs of the workplace, etc.

It may be observed that each cost driver can be applied most fairly based on the continuous observation of the activity, and measurements of the specific costs. However, it is important that the observation period should be a key period for the

purpose of the activity, i.e. if sales are even in every aspect during a month, then it is enough to use the data of a week or a few days, but if the breakdown of turnover is variable, or it is hardly predictable, then a longer period must be observed.

The problem gets even more complicated, if the company has a joint trade assistant group serving the cost bearers (business line, product group), and managing and registering offers, orders and confirmations for all cost bearers. In this case, the established other direct cost category should be broken further among the cost bearers in order to establish their economic operation. In this case, the allocation can be performed on a more limited basis without making the system too complicated.

In the concepts of traditional cost calculation, a cost attribute is a technical parameter, according to which the cost varies and the correlation of which with the cost bearer can be measured, and therefore based on this the cost can be allocated to the cost bearer.

The concept of the cost driver is a category among the concepts of the ABC (Activity Based Costing) cost calculation, which has become increasingly important since the middle of the 1980-s. With this method, allocation can be performed on the basis of the activity-based analysis of the process, and the calculation of the cause of the resource requirements of the individual elements and the correlation between the cost driver and bearers of costs.

In a company performing trading activities, the processes of the activity can be defined from the receipt of the commercial product to its delivery to the customer (handover) depending on the complexity of the system. However, the trade itself contains the following processes:

- management of orders, offers and confirmations related to products to be sold
- maintenance of the inventories of products according to the warehousing policy
- physical implementation of warehousing (stock movements related to purchases and sales)
- management of offer requests, orders and confirmations received from customers
- customer complaints, information, technical advice, etc.
- financial tasks: monitoring of payments made by customers, monitoring of deadlines, establishment of sales limits, etc.

According to the above processes, the system can be simplified in several ways, as an example I shall outline the following activity groups above direct cost of sales and general administration costs:

**Table 1. Functions of sales activity**

Order registration and confirmation
Invoicing
Costs of customer relations
Costs of logistics and warehousing activities
Cost of financial task

The first category of the listed simplification contains the direct costs of trading tasks, and the use of resources that are clearly deemed direct when it occurs,

while the last category contains all the general costs of the company. How can we distinguish the value of the used resources according to the above categories? What criteria should be use as a cost driver?

**Staff proportionate cost allocation.** The implementation of staff proportionate cost allocation significantly depends on the size of the business. As the human factor is important for each partial process, the use of the staff in establishing cost categories can be an important argument.

Whenever the individual organizational units are separated by business line and activity in the corporate structure, it is easy to separate the majority of the cost types with the help of staff proportionate calculation.

If the activities of various sections serve all cost bearers (business line, product group, customer, etc.), then the accuracy of staff-based allocation involves some risk, but if the use of the system is sufficiently prepared, it may be reliable. In the preparatory phase, the staff proportionate calculation is not free of subjective factors. The most typical process is the allocation of the employees' working hours based on their voluntary declarations and the allocation of costs accordingly. Naturally, the voluntary declaration of employees can be tested with the observation of the specific working hours, and actual measurement is generally recommended. Subjectivity, i.e. the excessive evaluation of their own working hours, or even distortion of distribution among business lines in their own interest cannot be avoided in relation to human resources.

As an example, let's think about a trading company with 3 business units, employs 2 sales officers in each business units, 2 trade assistants for managing orders and invoices, 3 warehouse keepers and 1 financial administrator for monitoring the payments of receivables. According to their working time analyzes the company has the following staff allocation by functions in each unit:

**Table 2. Staff allocation by functions in units**

Definition	Breakdown of working hours between business units		
	Unit 1	Unit 2	Unit 3
Sales staff - 6 people	2	2	2
Invoicing assistant - 1 person	0.4	0.25	0.35
Trade assistant - 1 person	0.4	0.3	0.3
Warehouse keepers - 3 persons	$0.8+0.4+0.3=1.5$	$0.1+0.3+0.6=1$	$0.1+0.3+0.1=0.5$
Financial administrator - 1 person	0.2	0.5	0.3
Calculated staff / unit	4.5	4.05	3.45
Proportions	4.5/12	4.05/12	3.45/12

This calculated number of employees' in the business activity can help to allocate mainly the staff expenses and the costs that are caused or depend on the staff. Of course the calculation is more reliable if we use the detailed information about salaries and social costs according to different staff categories, but also the average calculated staff proportion should be useful in allocation where the cost depend on the number of persons.

**Selection of a cost driver by cost type.** The selection of a cost driver by cost type is more simple in relation to general costs, because it is easier to define and separate, based on documents, the cost types in the accounting records, and to define a separate cost driver for each cost type requires a considerable calculation system. Cost drivers are parameters, which can be documented in the whole system and measured well in natural measures.

For example, there are the following simple costs and cost driver correlations:

**Table 3. Correlations between simple costs and cost driver**

Cost type	Cost driver
Cleaning cost	Cleaned area in m <sup>2</sup>
Maintenance cost of the information system	Computers used and other IT equipment requiring maintenance
Heating costs	Heated air space, air m <sup>3</sup>
Bank costs	Number of paid invoices
General phone costs	Number of offers or orders
Invoicing administration costs	Number of invoice lines
Entertainment costs	Number of the business meetings or clients

With regard to cost types in many aspects, it is easy to define one cost driver, based on which the incurred cost can be allocated, yet allocation to cost bearers or measurement could be a problem also in this case. A fair system recording and analyzing of costs drivers help a lot to see clear picture about needs of units.

**Definition of the cost of a function.** The first step of the allocation of the other general costs in trading according to the ABC method is to separate the costs of the various processes. Thus, using the above examples, if we wish to know the warehousing cost by business line (cost bearers), then first we must define the cost types that may occur during warehousing and then they should be allocated to business lines according to the cost drivers. In other words, if heating costs are calculated for warehousing and logistics cost centers based on the air space of the warehouse (air cubic meter) and electricity consumption and water consumption is also allocated according to the period of operation, plus IT maintenance costs are allocated based on the warehouse computers, etc., then all the thus established costs can be allocated to business lines based on the place used by it (e.g., number of pallets).

Naturally, this calculation also requires serious cost definitions and cost drivers, but by establishing as well-founded calculation route, it is clearly suitable for measuring the activity.

#### 4. SUMMARY

The main income of trade is the margin generated based on the revenues of the traded goods and their purchase value. However, it is absolutely necessary to measure the efficiency of the activity in this aspect, too. Based on the above analyses, the activities of trading companies can be monitors and analyzed in the following structure:

**Table 4. Structure of activities of trading companies**

Net sales revenues
- Purchase value of goods sold
<b>Sales margin</b>
- Direct cost of sales
- Invoicing, order registration
- Logistics, warehouse expenses
- Costs of customer relations
- Costs of financial tasks
- Margin remaining after other direct costs
- General administration costs
<b>Operating profit</b>

The margin generated in effective trade activities covers all costs of the activity and also provides a profit. On the other hand, cost control requires considerable cost calculation. Cost allocation and analyzes is basic part of management accounting to give reliable picture about the efficiency of the business activities. The information from a theoretically well-build system about the cost structure is very important asset in decision makers' hand. These types of calculations are basically required for continuous cost control and also for pricing.

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## **ACCOUNTING ASPECTS OF PRICING AND TRANSFER PRICING**

**TÜNDE VERES** \*

**ABSTRACT:** *The pricing methods in practice need really complex view of the business situation and depend on the strategy and market position of a company. The structure of a price seems simple: cost plus margin. Both categories are special area in the management accounting. Information about the product costs, the allocation methodologies in cost accounting, the analyzing of revenue and different level of the margin needs information from accounting system. This paper analyzes the pricing methods from management accounting aspects to show out the role of the accounting system in the short term and long term pricing and transfer pricing decisions.*

**KEY WORD:** *pricing; transfer pricing; cost plus method; market price; break-even point.*

**JEL CLASSIFICATION:** *M41.*

### **1. ABOUT PRICING IN GENERAL FROM THE ASPECTS OF AN ACCOUNTANT**

At each level of corporate management, fast and effective work requires the supply of reliable and up-to-date information to the decision-makers, the involvement of experts, competent in professional and corporate strategy issues in decision-making and their responses to environmental effects within the shortest reaction time. By achieving this, in a decentralised company the divisions formed based on activities are individually responsible for influencing the results with their decisions. Thus the independence of divisions and the nature of their responsibilities may be different, depending on how the inputs required for their operation and their outputs are affected by their decision-making freedom, i.e., how they influence the results.

It is absolutely necessary to reconsider the organisational structure of the company if we talk about transfer prices, because a transfer price can only be used if

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the appropriate system of responsibilities is put in place. These days this issue is becoming increasingly important. Respect for international guidelines and the coordination of the national tax systems accordingly become increasingly important, and the documentation of co-operation is an even greater challenge with regard to domestic corporate groups. Naturally, financial management considers the transfer price issue important with regard to tax regulations and sanctions, yet transfer prices are much more widely related to accounting.

The prices of issued products and performed services are entered into the accounting information system through the sales revenues of the enterprise. The sales revenue is a fundamental component of one of the most important accounting documents therefore the issue of pricing is especially important in financial accounting. On the other hand, management accounting, which performs the internal information supply functions of accounting for the most extensive analysis and planning of the activity, relies on the prices and the external and internal environmental factors affecting them. However, as the realisation is fundamentally related to the output of the enterprise (sales), a lot of functions relate to pricing which are important in production and sales. This topic is not clearly an accounting topic, it must be managed within the complex system of corporate governance. However, below I shall still try to identify the criteria applicable to pricing from the point of an accountant.

## **2. PRICING METHODS**

The category and process of pricing is a rather complex issue. With their output, enterprises obviously intend to cover their resource consumption and all other expenses related to their operation, yet they cannot achieve long-term profitable operation without the consideration of the market factors, relying only on the internal information system. Consequently, there are two basic theoretical pricing methods, the cost-based and the market-based pricing.

The *cost-based* method is a seemingly easy method based on costs and the expected profit. On the other hand, both categories require a wide information base and a diversified analysis. The cost content is fundamentally based on the historic value of the product. The direct resource requirement of the historic value can generally be measured well, yet naturally the price must also cover the expenses which cannot be directly allocated to the product or activity for the purpose of long-term operation. Consequently, the allocation of the expenses classified as general expenses requires the reconsideration of the processes. With regard to general expenses, the traditional cost calculation can be mentioned among the allocation options, during which the general expenses are allocated to the cost bearer based on a selected cost characteristic, but we can also opt for the ABC (Activity Based Costing) cost allocation, during which the cost drivers, influencing most the serving processes, are used as the basis of allocation. However, as pricing does not take place subsequently, based on the actual data of the production process, the cost structure and cost information can be used consistently only on an empirical basis, by taking into account the future estimated impacts and using a thorough planning system. Naturally, on the one hand, this inspires experts to

think prudently and, on the other hand, it also calls for the application of some standard in order to simplify the calculation process.

Whenever prices are established, the market conditions must also be taken into account. It is important to assess the price acceptance and pricing policy of the market actors, i.e., the conduct, price sensitivity and pricing practice of the customers and competitors. In this context, the microeconomic model considers the estimated demand and supply functions the most important factors. However, there are numerous limits for that in practice. It is also true that no price can be established with sufficient profitability without the thorough knowledge of the market. The experts need to understand the market product structure, in which they sell their products in order to be able to assess the substitute products and the price reactions of the manufacturers and to also understand the decision-making habits of their customers. In other words, they must understand the other factors that also influence the purchases apart from price and can have an impact on the entire activity in terms of the product structure (material consumption, accessories, function, quality, etc.) and sales processes (advertising, other marketing-type relationship with the consumer, etc.).

In market-based pricing, the cost structure, with the help of which the expected profit can be achieved, is established on the basis of the price formed according to the market information. This concept refers back to the target cost calculation topic, where the historic value of the product is established on the basis of market information, by taking into account the customers' requirements in terms of quality, related services, durability and substitution. In this context, the required profit is an exciting issue. The profit can be defined by combining several factors. The required profit is a key issue mainly for those stakeholders who measure the activities of the enterprise in the profit or their profit share. The degree of profitability is limited by their interest in the profit, yet the volume of the budgeted costs represent a minimum limit too, because the manufacturing of a product requires certain resources, which may be changed only by deteriorating quality or functionality if the intention is to increase the profit.

### **3. LONG AND SHORT TERM THINKING IN PRICING**

It is obvious that these two methods cannot be the pure basis of a pricing policy at an enterprise, but the preference order can be established by applying some key factors. On the one hand, the market share of the enterprise limits its pricing conduct. A company with a considerable market share has a price setting position in cost calculation and in the establishment of the historic value of the product compared to another enterprise which must fit into its cost and income budget on the basis of the market prices. According to the price setting role, the enterprise may define the historic value of the product by integrating the actual resource requirement and define its price on the basis of the principle of covering the total costs, estimated on the basis of empirical experience and calculated with strategic steps.

Short-term thinking practically applies to ad hoc contracts and irregular customer relations. In the sales activities of each enterprise there are ad hoc orders originating from irregular business activities of new customers or existing customers.

Naturally, an enterprise with a price setting role has a much wider scope of competence also in this respect than enterprises that follow the prices because the maximum utilisation of the capacity limits is sufficient motivation for accepting an order. In this respect the pricing itself could be a special issue and instead of the general pricing model a price generated on the basis of the additional expenses for an order facilitating capacity utilisation could be an attractive offer. In general, the additional expenses can typically be considered the variable costs of the product. In this context, the cost content used in pricing could be significantly lower than in the pricing of a usual and ordinary trade relationship. The scope within which the enterprise can stretch itself in order to generate the profit margin included in the price must be defined not only on the basis of the information contained in the accounting records, because the understanding of the specific market conditions and factors causing the change relate to the competence of another enterprise management unit. Anyhow, accounting can provide the following information for decision-making:

- the variable costs associated with the product (product service)
- the degree of capacity utilisation
- the output margin
- the output level at the break-even point
- the impact of capacity utilisation on the margin by product
- potential capacity enhancement due to special orders, its availability in time and its impact on the prime costs.

For an enterprise that follows the prices in terms of its market position, this problem concentrates more on the need of understanding the capacity limits. With regard to fixed market prices, the enterprise could be open to any business relationship that can provide sufficient profit for it. Naturally, the attempt is to increase capacity utilisation, and therefore the enterprise is fundamentally interested in accepting special orders up to the maximum of its potential capacity. The accounting impact of this will definitely be positive, providing that the enterprise still does not have any influence on pricing, because any price decrease would 'attract the anger' of the major market forces, which would be detrimental for its long-term presence.

#### **4. PROFIT MARGIN**

Some sort of general pricing model needs to be developed in order to enable an enterprise to manage easily its decisions related to its output and market relations. In this context, the accounting information system can be used as the main information base. What information may be needed and how can the pricing framework be established in internal communication? First of all:

- The variable costs of products and activities must be understood. This method is covered in the Prime Cost Calculation Regulations (which is part of the Accounting Policy);
- The resource requirements of the operation of the enterprise, i.e., the general expenses of the company, without which market presence is unavoidable, also need to be understood;

- The profitability requirement for achieving the strategic goals of the enterprise must also be calculated.

In the market realisation process, the product issuer intends to cover all the above factors with the price formed in the trading relationship, but the profit amount is the specific margin which covers the permanent costs of the activity and the income realised on the product. This can be identified on the basis of empirical data and the estimated changes of the fixed costs. However, on the basis of the accounting information system, the margin may be analysed further in order to make the fixed asset value required for the activity and the profit impacts of the serving processes clear. The assets required for operation must be interpreted more widely than the value of fixed assets and intangible assets. These asset groups naturally fix the company's funds for a longer term and naturally with regard to their return the analysis can be based on the profitability of the long-term financial investments. It needs to be noted that the amortisation of the invested asset value is usually an item appearing among the fixed costs to be covered, therefore the capacity utilisation level of those definitely influences the recovery period.

However, tangible fixed assets and intangible assets represent only one area in the fixed asset value category, because the assets of the enterprise contain also components that are necessarily created in the operation, yet the improvement of their efficiency has a fundamental impact on the costs and income of the enterprise and the estimated profit, and therefore it should be interpreted as a factor affecting the pricing process. One issue is the inventories relating to the activities of the company and generating a warehousing demand. The analysis of inventories is an important aspect of the review of the financing activities with regard to purchased and produced inventories. Not only because the liquid assets invested into the inventories were taken from other financing processes and with regard to short-term use the risk is more complex, but also because warehousing is a rather cost intensive activity. The adequate level of inventories, the resources required for their warehousing and the mitigation of the risk factors need to be planned thoroughly when prices are established.

The volume of accounts receivable is also important in terms of the expenses of the trading process. The liquidity situation is a typical risk factor related to accounts receivable. On the other hand, the maintenance, or potential improvement of the turnover of accounts receivable, and the minimisation of loan losses require an effective customer monitoring and management system.

Consequently, when an enterprise establishes its margin, it can strive for the recovery of the capital invested into the areas referred to above and to achieve the profit projected from the business in the form of the margin contained in the price. With thorough analyses, the ROI (return on investment) based pricing method can be applied effectively, forming the invested capital category according to the outlined capital components and calculating the appropriate risk factors into the expected recovery with regard to all categories. It is an important advantage that all capital fixing referred to above are typical factors in the corporate performance evaluation. Naturally, even so truly relevant return figures can be calculated only with longer-term data and a longer-term activity base, assuming a certain level of long-term capacity

utilisation. It is difficult to manage the impacts and changes of the economic environment, and pricing itself cannot be sufficiently flexible.

## 5. INTRA-COMPANY PRICING RELATED TO TRADING RELATIONS

Pricing is an especially exciting aspect of the intra-company trading relations. Naturally, intra-company trade relations take place only if the corporate activities are performed in separate organisational units and these units are interested in making profit and their performance measurement depends fundamentally on their profit impact, influenced by their decision-making responsibilities. It is definitely important to indicate that naturally the internal sales prices are assessed assuming that the purpose is to establish a price that has some profit content, otherwise we could only talk about cost allocation. Under such conditions, the organisational units can apply the pricing methods referred to above with regard to the services rendered and goods sold to each other, i.e., they can use market-based pricing and cost-based pricing. However, the application of these basic types is interpreted differently than their general concept.

With regard to *cost-based pricing*, the accurate prime cost calculation is as important for internal sales as for external sales, and, in fact, certain cost elements can be avoided through the co-ordination of certain partial processes of the entire activity. Typically those costs can be included in this category which incur in the sales process of the product, with regard to certain special customer requirements. The examples could include the costs of packaging, transportation or supply of information to customers, which are not required due to internal use, or can be simplified. However, even in cost-based pricing it is important to integrate into the price the fixed costs required for the long-term operation of the enterprise and to consider also the degree of capacity utilisation. If the function of a particular organisational unit is to ensure the operation of the entire enterprise then, naturally, the maximum capacity must be built in line with the capacity of the other units. Otherwise, on the basis of internal prices, too high fixed costs must be assumed, which may result in a distorted historic value. Even in such cases it is necessary to consider seriously the margin of the price, because the thus calculated margin will be practically the distribution of the total company-level margin among the divisions. Naturally, the divisions may have an impact on the amount of profit based on their decision on internal efficiency, but the consideration of the costs required for the activities is always important in the selection of the average margin. As an example, let us assume an enterprise with two divisions, one of which manufactures and the other one performs distribution tasks. If the activities of the manufacturing division also contain product development, then the costs of product development represent a considerable amount of general expenses which must be taken into account during the distribution of the margin earned at company level. Otherwise, the internal conflicts will have a detrimental influence on the total company interests.

According to the research results, the internal prices are established most frequently with the total cost based pricing method. However, if an internal supplier has a trading relationship with several internal customers, the total cost content is not necessarily a good basis, because the services assisting the activities of the division are not always used equally. Naturally, a solution could be activity-based cost allocation

and the planning of needs, thoroughly considered with regard to customer requirements.

*The market-based pricing* can be applied in intra-company trading practices if the divisions of the company have full independence and maximum freedom in establishing their performance. In such cases they rely on reasonable criteria in purchasing their resources in order to achieve the maximum profit, i.e., they will opt for the lowest possible price. This means the review of the offers of the market actors. With regard to market prices, the pricing structure should be reviewed not only from the aspect of the internal purchaser, but also from the aspect of the sales unit. As the market realisation process is a factor generating basic performance for a division operating as a profit centre, it is a natural process to select the best sales opportunities in line with the better utilisation of the capacities.

What price range can the seller and the buyer envisage in relation to intra-company sales? The ceiling of the price range is determined by the customer, because he will not pay more than the lowest price available at external suppliers. The upper range can be more flexible, depending on the capacity utilisation level at which the seller can operate his activity. Consequently, with maximum capacity utilisation for longer-term contracts, the range can be narrowed until it reaches the price established on the basis of the highest sales price on the market, taking into account the costs avoidable in internal sales and preferences given for the purpose of capacity utilisation.

What was said above clearly indicates that in terms of settlement prices the accounting information system has a very important role, regardless whether we analyse the cost of the product, or the profit required for long-term, effective operation. On the other hand, co-operation among the divisions of the company is typically a long-term strategic interest, which requires consideration of the interests of the divisions and the establishment of incentive systems with regard to transfer prices. The data provided by the accounting information system are important not only for the contents of those expenses, but also in the selection of the methodology applied to performance measurement. However, in internal price negotiations the thorough knowledge of external market prices is also necessary, which must always be taken into account in internal co-operation.

## **6. SUMMARY**

*In summary*, the accounting information system has a fundamental role in pricing, as it fully grasps all processes of the business activities in terms of accounting. The price cannot be established without management accounting or cost accounting analyses. Although the financial statements disclose very little information in this respect, it is important for each enterprise to insist on a structure that supports pricing when it establishes its internal calculation system. It is also true if the divisions of the company realise the profit of their activities on the internal market and, in fact, profitability and expenditure become even more important in this case due to the performance measurement interests formed in line with the responsibilities of the division.

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