

General Economics

The Production Functions from the Point of View of 3- Dimensional Geometry

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Abstract: In this paper we shall make an analysis of production functions from the space point of view. We shall obtain some interesting results like that all the points of the surface are parabolic, the total curvature is always null, the conditions when a production function is minimal and finally we give the equations of the geodesics on the surface i.e. the curves of minimal length between two points.

Keywords production functions, metric, curvature, geodesic

Jel Classification: C70

1. Introduction

In the theory of production functions, usual all computations and phenomenon are studied on projections of the surface, or for a constant level of production. A complete analysis can be made only at the entire surface.

In the economical analysis, the production functions had a long and interesting history.

A production function is defined like $P: \mathbf{R}_+ \times \mathbf{R}_+ \rightarrow \mathbf{R}_+$, $P=P(K,L)$ where P is the production, K - the capital and L – the labour such that:

- (1) $P(0,0)=0$;
- (2) P is differentiable of order 2 in any interior point of the production set;
- (3) P is a homogenous function of degree 1, that is $P(rK,rL)=rP(K,L)$ $\forall r \in \mathbf{R}$;
- (4) $\frac{\partial P}{\partial K} \geq 0$, $\frac{\partial P}{\partial L} \geq 0$;
- (5) $\frac{\partial^2 P}{\partial K^2} \leq 0$, $\frac{\partial^2 P}{\partial L^2} \leq 0$.

From Euler's formula for homogenous functions we have:

$$(6) \frac{\partial P}{\partial L} = \frac{P}{L} - \frac{K}{L} \frac{\partial P}{\partial K}$$

By derivation with L and after with K in (6) we obtain:

$$\frac{\partial^2 P}{\partial L^2} = \frac{\frac{\partial P}{\partial L} L - P}{L^2} + \frac{\chi}{L} \frac{\partial P}{\partial K} - \chi \frac{\partial^2 P}{\partial L \partial K} = -\chi \frac{\partial^2 P}{\partial L \partial K}$$

$$\frac{\partial^2 P}{\partial L \partial K} = \frac{1}{L} \frac{\partial P}{\partial K} - \frac{1}{L} \frac{\partial P}{\partial K} - \chi \frac{\partial^2 P}{\partial K^2} = -\chi \frac{\partial^2 P}{\partial K^2}$$

therefore:

$$(7) \frac{\partial^2 P}{\partial L^2} = -\chi \frac{\partial^2 P}{\partial L \partial K}$$

$$(8) \frac{\partial^2 P}{\partial K^2} = -\frac{1}{\chi} \frac{\partial^2 P}{\partial L \partial K}$$

$$(9) \frac{\partial^2 P}{\partial L^2} = \chi^2 \frac{\partial^2 P}{\partial K^2}$$

2. Some notions of the space differential geometry

The graph representation of a production function is a surface.

Let:

$$(10) p = \frac{\partial P}{\partial L}, q = \frac{\partial P}{\partial K}, r = \frac{\partial^2 P}{\partial L^2}, s = \frac{\partial^2 P}{\partial L \partial K}, t = \frac{\partial^2 P}{\partial K^2}.$$

For a constant value of one parameter we obtain a curve on the surface. For example: $P=P(K, L_0)$ or $P=P(K_0, L)$ are both curves on the production surface. They are obtained from the intersection of the plane $L=L_0$ or $K=K_0$ with the surface $P=P(K, L)$.

The curvature of a curve is, from an elementary point of view, the degree of deviation of the curve relative to a straight line.

In the study of the surfaces, two quadratic forms are very useful.

The first fundamental quadratic form of the surface is:

$$(11) g = g_{11}dL^2 + 2g_{12}dLdK + g_{22}dK^2$$

where: $g_{11}=1+p^2, g_{12}=pq, g_{22}=1+q^2$.

The area element is $d\sigma = \sqrt{g_{11}g_{22} - g_{12}^2} dKdL = \sqrt{\Delta} dKdL$ and the surface area A when $(K, L) \in R$ (a region in the plane K-O-L) is $A = \iint_R d\sigma dKdL$ where $\Delta = g_{11}g_{22} - g_{12}^2$.

The second fundamental form of the surface is:

$$(12) h=h_{11}dL^2+2 h_{12}dLdK+ h_{22}dK^2$$

where: $h_{11}=\frac{r}{\sqrt{1+p^2+q^2}}$, $h_{12}=\frac{s}{\sqrt{1+p^2+q^2}}$, $h_{22}=\frac{t}{\sqrt{1+p^2+q^2}}$.

Considering the quantity $\delta=h_{11}h_{22}-h_{12}^2$ we have that:

- If $\delta>0$ in each point of the surface, we will say that it is elliptical. Such surfaces are the hyperboloid with two sheets, the elliptical paraboloid and the ellipsoid.
- If $\delta<0$ in each point of the surface, we will say that it is hyperbolic. Such surfaces are the hyperboloid with one sheet and the hyperbolic paraboloid.
- If $\delta=0$ in each point of the surface, we will say that it is parabolic. Such surfaces are the cone surfaces and the cylinder surfaces.

Considering a surface S and an arbitrary curve through a point P of the surface who has the tangent vector v in P, let the plane π determined by the vector v and the normal N in P at S. The intersection of π with S is a curve C_n named normal section of S. Its curvature is called normal curvature.

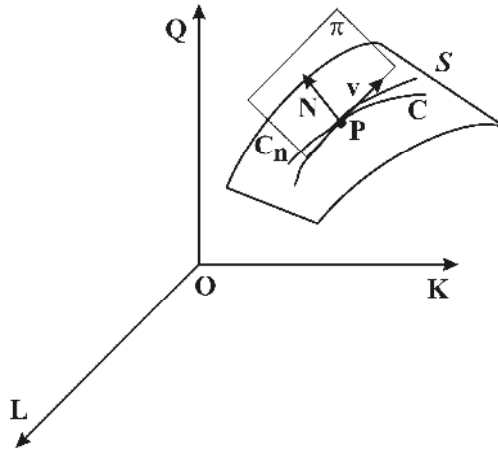


Figure-1: The normal section of a curve

If we have a direction $m=\frac{dL}{dK}$ in the tangent plane of the surface in an arbitrary point P we have that the normal curvature is given by:

$$(13) k(m)=\frac{h_{11}m^2 + 2h_{12}m + h_{22}}{g_{11}m^2 + 2g_{12}m + g_{22}}$$

The extreme values k_1 and k_2 of the function $k(m)$ call the principal curvatures of the surface in that point. They satisfy also the equation:

$$(14) (g_{11}g_{22}-g_{12}^2)k^2-(g_{11}h_{22}-2g_{12}h_{12}+g_{22}h_{11})k+(h_{11}h_{22}-h_{12}^2)=0$$

The values of m , who give the extremes, call principal directions in that point.

They also satisfy the equation:

$$(15) (g_{11}s-g_{12}r)m^2+(g_{11}t-g_{22}r)m+(g_{12}t-g_{22}s)=0$$

The curve $\frac{dL}{dK}=m$ (where m is one of the principal directions) is called line of curvature on the surface. On such a curve we have the maximum or minimum variation of the value of Q in a neighbourhood of P .

The quantity $K=k_1k_2$ is named the total curvature in the considered point and $H=\frac{k_1+k_2}{2}$ is named the mean curvature of the surface in that point.

We have therefore:

$$(16) K=\frac{h_{11}h_{22}-h_{12}^2}{g_{11}g_{22}-g_{12}^2}=\frac{\delta}{\Delta} \text{ and } H=\frac{g_{11}h_{22}-2g_{12}h_{12}+g_{22}h_{11}}{g_{11}g_{22}-g_{12}^2}$$

A surface with $K=\text{constant}$ call surface with constant total curvature and if $H=0$ call minimal surface.

If we consider now in the tangent plane π at the surface in a point P a direction m , if $h_{11}m^2+2h_{12}m+h_{22}=0$ we will say that m is an asymptotic direction, and the equation:

$h_{11}\left(\frac{dL}{dK}\right)^2+2h_{12}\frac{dL}{dK}+h_{22}=0$ gives the asymptotic curves of the surface in the point P .

3. The space differential geometry for production functions

From (6), (10) we have that:

$$(17) g_{11}=1+\left(\frac{\partial P}{\partial L}\right)^2=1+\frac{1}{L^2}(P-Kq)^2$$

$$(18) g_{12}=\frac{\partial P}{\partial L}\frac{\partial P}{\partial K}=\frac{q}{L}(P-Kq)$$

$$(19) g_{22}=1+\left(\frac{\partial P}{\partial K}\right)^2=1+q^2$$

$$(20) \Delta=g_{11}g_{22}-g_{12}^2=1+q^2+\frac{1}{L^2}(P-Kq)^2$$

We have also: $1+p^2+q^2=1+\left(\frac{\partial P}{\partial L}\right)^2+\left(\frac{\partial P}{\partial K}\right)^2=\Delta$ and:

$$(21) h_{11}=\frac{1}{\sqrt{\Delta}}\left(\frac{K}{L}\right)^2 t$$

$$(22) h_{12}=-\frac{1}{\sqrt{\Delta}}\frac{K}{L} t$$

$$(23) h_{22}=\frac{1}{\sqrt{\Delta}} t$$

$$(24) \delta=h_{11}h_{22}-h_{12}^2=0$$

From (24) we have that all the points of the surface are parabolic.

The principal curvatures satisfy the equation:

$$(25) \sqrt{\Delta}^3 L^2 k^2-t(P^2+L^2+K^2)k=0$$

therefore: $k_1=0, k_2=\frac{t(P^2+K^2+L^2)}{\sqrt{\Delta}^3 L^2} < 0$.

The values of m corresponding to k_1 and k_2 satisfy the equation:

$$(26) (E\mu-F\lambda)m^2+(Ev-G\lambda)m+(Fv-G\mu)=0$$

If $t \neq 0$ then

$$-K[L^2+P(P-Kq)]m^2+L[L^2+P^2-2qKP-K^2]m+L^2[qP+K]=0$$

We have now:

$$(27) K=\frac{\lambda v-\mu^2}{EG-F^2}=0$$

therefore the surface is with null constant total curvature and:

$$(28) H=\frac{t(P^2+L^2+K^2)}{L^2\sqrt{\Delta}^3}.$$

In order to have a minimal surface we must have: $t=0$ therefore $\frac{\partial^2 P}{\partial K^2}=0$ i.e. $\frac{\partial P}{\partial K}=f(L)$ and after: $P=f(L)K+g(L)$ where f, g are differentiable functions of order two.

The asymptotic directions are, if $t \neq 0$:

$$(29) \left(\frac{K}{L}m-1\right)^2=0$$

therefore: $m = \frac{L}{K}$. But $m = \frac{dL}{dK}$ gives that $K = CL$ with $C = \text{constant}$.

With notations $x^1 = L$, $x^2 = K$, let define now the Christoffel symbols of first order:

$$(30) \quad |ij,k| = \frac{1}{2} \left(\frac{\partial g_{jk}}{\partial x^i} + \frac{\partial g_{ik}}{\partial x^j} - \frac{\partial g_{ij}}{\partial x^k} \right)$$

and of second order:

$$(31) \quad \begin{vmatrix} i \\ |jk| \end{vmatrix} = g^{i1} |jk,1| + g^{i2} |jk,2|$$

where $g^{11} = \frac{1}{\Delta} G$, $g^{12} = -\frac{1}{\Delta} F$, $g^{22} = \frac{1}{\Delta} E$ are the components of the inverse matrix of

$$\begin{pmatrix} g_{11} & g_{12} \\ g_{12} & g_{22} \end{pmatrix}.$$

We have now:

$$(32) \quad |11,1| = \frac{1}{2} \frac{\partial g_{11}}{\partial L}, \quad |11,2| = \frac{\partial g_{12}}{\partial L} - \frac{1}{2} \frac{\partial g_{11}}{\partial K}, \quad |12,1| = \frac{1}{2} \frac{\partial g_{11}}{\partial K}, \quad |12,2| = \frac{1}{2} \frac{\partial g_{22}}{\partial L},$$

$$|22,1| = \frac{\partial g_{12}}{\partial K} - \frac{1}{2} \frac{\partial g_{22}}{\partial L}, \quad |22,2| = \frac{1}{2} \frac{\partial g_{22}}{\partial K}$$

$$(33) \quad \begin{vmatrix} 1 \\ |11| \end{vmatrix} = g^{11} |11,1| + g^{12} |11,2| = \frac{1}{\Delta} \left[\frac{1}{2} g_{22} \frac{\partial g_{11}}{\partial L} - g_{12} \left(\frac{\partial g_{12}}{\partial L} - \frac{1}{2} \frac{\partial g_{11}}{\partial K} \right) \right],$$

$$\begin{vmatrix} 2 \\ |11| \end{vmatrix} = g^{21} |11,1| + g^{22} |11,2| = \frac{1}{\Delta} \left[-\frac{1}{2} g_{12} \frac{\partial g_{11}}{\partial L} + g_{11} \left(\frac{\partial g_{12}}{\partial L} - \frac{1}{2} \frac{\partial g_{11}}{\partial K} \right) \right],$$

$$\begin{vmatrix} 1 \\ |12| \end{vmatrix} = g^{11} |12,1| + g^{12} |12,2| = \frac{1}{\Delta} \left[\frac{1}{2} g_{22} \frac{\partial g_{11}}{\partial K} - \frac{1}{2} g_{12} \frac{\partial g_{22}}{\partial L} \right],$$

$$\begin{vmatrix} 2 \\ |12| \end{vmatrix} = g^{21} |12,1| + g^{22} |12,2| = \frac{1}{\Delta} \left[-\frac{1}{2} g_{12} \frac{\partial g_{11}}{\partial K} + \frac{1}{2} g_{11} \frac{\partial g_{22}}{\partial L} \right],$$

$$\begin{vmatrix} 1 \\ |22| \end{vmatrix} = g^{11} |22,1| + g^{12} |22,2| = \frac{1}{\Delta} \left[g_{22} \left(\frac{\partial g_{12}}{\partial K} - \frac{1}{2} \frac{\partial g_{22}}{\partial L} \right) - g_{12} \frac{1}{2} \frac{\partial g_{22}}{\partial K} \right],$$

$$\begin{vmatrix} 2 \\ |22| \end{vmatrix} = g^{21} |22,1| + g^{22} |22,2| = \frac{1}{\Delta} \left[-g_{12} \left(\frac{\partial g_{12}}{\partial K} - \frac{1}{2} \frac{\partial g_{22}}{\partial L} \right) + \frac{1}{2} g_{11} \frac{\partial g_{22}}{\partial K} \right]$$

From (6)-(10) we can write:

$$(34) \quad p = \frac{P - Kq}{L}, \quad s = -\frac{K}{L} t, \quad r = \left(\frac{K}{L} \right)^2 t$$

We have from (17)-(19):

$$(35) \quad \frac{\partial g_{11}}{\partial K} = -\frac{2Kt(P - Kq)}{L^2}, \quad \frac{\partial g_{11}}{\partial L} = \frac{2K^2t(P - Kq)}{L^3}$$

$$(36) \quad \frac{\partial g_{12}}{\partial K} = \frac{t(P - 2Kq)}{L}, \quad \frac{\partial g_{12}}{\partial L} = -\frac{Kt}{L^2}(P - 2Kq)$$

$$(37) \quad \frac{\partial g_{22}}{\partial K} = 2qt, \quad \frac{\partial g_{22}}{\partial L} = -\frac{K}{L}2qt$$

From (33)-(37) we obtain:

$$(38) \quad \left| \begin{matrix} 1 \\ 11 \end{matrix} \right| = \frac{K^2t(P - Kq)}{\Delta^2L^3}, \quad \left| \begin{matrix} 2 \\ 11 \end{matrix} \right| = \frac{K^2tq}{\Delta^2L^2}, \quad \left| \begin{matrix} 1 \\ 12 \end{matrix} \right| = -\frac{Kt(P - Kq)}{\Delta^2L^2},$$

$$\left| \begin{matrix} 2 \\ 12 \end{matrix} \right| = -\frac{Kqt}{\Delta^2L}, \quad \left| \begin{matrix} 1 \\ 22 \end{matrix} \right| = \frac{(P - Kq)t}{\Delta^2L}, \quad \left| \begin{matrix} 2 \\ 22 \end{matrix} \right| = \frac{tq}{\Delta^2}$$

A geodesic is in common language the shortest curve between two points. The equation of a geodesic is:

$$(39) \quad \frac{d^2x^i}{ds^2} + \left| \begin{matrix} i \\ jk \end{matrix} \right| \frac{dx^j}{ds} \frac{dx^k}{ds} = 0$$

that is:

$$(40) \quad \frac{d^2L}{ds^2} + \left| \begin{matrix} 1 \\ 11 \end{matrix} \right| \left(\frac{dL}{ds} \right)^2 + 2 \left| \begin{matrix} 1 \\ 12 \end{matrix} \right| \frac{dL}{ds} \frac{dK}{ds} + \left| \begin{matrix} 1 \\ 22 \end{matrix} \right| \left(\frac{dK}{ds} \right)^2 = 0$$

$$(41) \quad \frac{d^2K}{ds^2} + \left| \begin{matrix} 2 \\ 11 \end{matrix} \right| \left(\frac{dL}{ds} \right)^2 + 2 \left| \begin{matrix} 2 \\ 12 \end{matrix} \right| \frac{dL}{ds} \frac{dK}{ds} + \left| \begin{matrix} 2 \\ 22 \end{matrix} \right| \left(\frac{dK}{ds} \right)^2 = 0$$

After a long computation, we have:

$$(42) \quad \Delta L^3 \frac{d^2L}{ds^2} + t(P - Kq) \left(K \frac{dL}{ds} - L \frac{dK}{ds} \right)^2 = 0$$

$$(43) \quad \Delta L^2 \frac{d^2K}{ds^2} + tq \left(K \frac{dL}{ds} - L \frac{dK}{ds} \right)^2 = 0$$

Because $P=P(K(s),L(s))$ we have:

$$\frac{dP}{ds} = \frac{\partial P}{\partial K} \frac{dK}{ds} + \frac{\partial P}{\partial L} \frac{dL}{ds} = q \frac{dK}{ds} + \frac{P - Kq}{L} \frac{dL}{ds} = \frac{1}{L} \left[q \left(L \frac{dK}{ds} - K \frac{dL}{ds} \right) + P \frac{dL}{ds} \right]$$

therefore:

$$(44) \quad q = \frac{P \frac{dL}{ds} - L \frac{dP}{ds}}{K \frac{dL}{ds} - L \frac{dK}{ds}}$$

and also:

$$(45) P-Kq=L \frac{K \frac{dP}{ds} - P \frac{dK}{ds}}{K \frac{dL}{ds} - L \frac{dK}{ds}}$$

$$(46) \Delta=1+q^2+\frac{1}{L^2}(P - Kq)^2=$$

$$\frac{\left(K \frac{dL}{ds} - L \frac{dK}{ds}\right)^2 + \left(P \frac{dL}{ds} - L \frac{dP}{ds}\right)^2 + \left(K \frac{dP}{ds} - P \frac{dK}{ds}\right)^2}{\left(K \frac{dL}{ds} - L \frac{dK}{ds}\right)^2}$$

If we note now:

$$(47) A=K \frac{dL}{ds} - L \frac{dK}{ds}$$

$$(48) B=P \frac{dL}{ds} - L \frac{dP}{ds}$$

$$(49) C=K \frac{dP}{ds} - P \frac{dK}{ds}$$

the equations (42), (43) become (again after a long calculus):

$$(50) [A^2 + B^2] \frac{d^2L}{ds^2} + BC \frac{d^2K}{ds^2} - AC \frac{d^2P}{ds^2} = 0$$

$$(51) BC \frac{d^2L}{ds^2} + [A^2 + C^2] \frac{d^2K}{ds^2} - AB \frac{d^2P}{ds^2} = 0$$

from where:

$$\frac{\frac{d^2L}{ds^2}}{\begin{vmatrix} BC & -AC \\ A^2 + C^2 & -AB \end{vmatrix}} = \frac{\frac{d^2K}{ds^2}}{\begin{vmatrix} -AC & A^2 + B^2 \\ -AB & BC \end{vmatrix}} = \frac{\frac{d^2P}{ds^2}}{\begin{vmatrix} A^2 + B^2 & BC \\ BC & A^2 + C^2 \end{vmatrix}}$$

or simply:

$$(52) \frac{\frac{d^2L}{ds^2}}{C(A^2 + C^2 - B^2)} = \frac{\frac{d^2K}{ds^2}}{B(A^2 + B^2 - C^2)} = \frac{\frac{d^2P}{ds^2}}{A(A^2 + B^2 + C^2)}$$

The equations of geodesics are: $L=L(s)$, $K=K(s)$ where s is the element of arc on the curves.

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Implementing a CRM System in the Context of Internet Technologies

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Abstract. The dynamics of the relationship with customers was fundamentally modified with the extremely fast evolution and development of the Internet, as a new channel of communication also as an opportunity to effective fast dissemination. The Internet shifted the ability to control the market from seller to buyers and led to the fundamental modification of the relations with clients. The new client that comes from the Internet channel is looking mainly for 24x7 accesses to seller's information and resources. The Internet client wants right context and ease of navigation with effective search tools. Ultimately, he is looking for a personalized buying experience, defined by ease of opening a personal account, ability to review his shopping cart in real time. CRM (Customer Relationship Management) is defined as the sum of business processes that an organization needs to execute in order to identify, choose, buy, develop and retain its clients. The current article is aiming to present the current architecture designed to fulfil all these requirements.

Keywords: CRM, Internet, Client, Supplier, Marketing, Selling Policies.

Jel Classification: M31, L86, M29

1 Introduction

The dynamics of the relationship with customers was fundamentally modified with the advent of the Internet as a new type of communications and selling channel. This shifted the market control from the sellers to buyers, the latter being able to effectively access competitive offers without any time or distance constraints. While in the traditional selling system sellers had a tremendous advantage over buyers due to better product knowledge, actual costs and availability, nowadays, buyers have in turn basically unlimited access to all this information.

Up until not long ago, each commercial entity had its own distribution channel. By controlling this, the firm also was defining the main way to interact with the client,

thus, for example, the client could only purchase a TV set only from a “brick-and-mortar” store and only during its working hours. Similarly, a car could only have been bought only from a dealer showroom through one of its sales associates and only during their hours. In conclusion, the classic CRM business model was characterized by only one distribution channel. It was fairly simple, well defined and based mostly on face-to-face interaction with the client.

What is the Internet buyer looking for? Besides 24x7 access to seller’s offers and info (technical data, prices, order tracking, warranty, technical assistance data base), the Internet buyer is requiring complete disclosure placed in correct context, easily accessible with powerful, yet simple to follow search tools. Client wants access to a wide range of product and services. Last but not least, client requires a personalized buying experience: a personal “welcome” to the virtual store, the ability to create an individual account where personal data would be stored safely for later purchases, also to track purchase history in real time. Also, client would prefer to freely choose between available distribution channels: Web, storefront, call centre and back the Web, all the time being able to be recognized and treated the same way.

As a result, a selling outlet’s only choice is to do business in the way the client demands it: anywhere, anytime, in any language and in any currency.

2 How CRM would work

Proper management or client relationship requires two major related objectives:

- First of all, to be able to grant the organization and its employees involved in customer service, a complete and unique approach regarding each client no matter where he/she is located in the buying cycle;
- Secondly, to offer the client a complete and unique vision of the company and its extended channels.

Remarkably, in this context, the majority of companies in this day and age, are still product oriented and not client oriented. Accordingly, the same client would have to deal with multiple sales associates, call lots of phone numbers, etc, a totally unacceptable fact in the Internet age.

One interesting aspect of the CRM e-business process is constituted by the fast increase of repeat business from loyal customers. The costs of acquiring a new client can be 5 to 10 times higher than retaining an existing client. Of these costs, we stress on expenses associated with marketing towards new clients, recording them in company’s data base and introducing them to its products and services.

Among the best software applications supporting the CRM model above, are offerings by companies like Siebel¹ and Clarify. A basic CRM model, centred

¹ www.siebel.com – Now purchased by and integrated in Oracle

mainly on sales is offered by SalesForce.com and UpShot.com¹.

A modern business process should be able to offer sales professionals automated tools to manage all aspects related to sales-prospecting, manage opportunities, presenting offers and sales reports.

System must offer a clear snap-shot of each client, thus, sales representative would be able to instantly access the customer account (previous sales, pending orders, sales history, service issues, profitability, buying habits). Sales representative could, for example, avoid unpleasant situations where he needs to adjust the price in order to appease an unhappy client.

A major objective of the modern CRM model is to assist the sales rep. in quickly identify the profitable clients and dedicate more efforts in this direction rather than on lesser attractive prospects.

The automation of the selling process must happen all the selling channels (TV shopping ads, direct sales, storefront, Web...), no matter what device is used (handheld, laptop, mobile phone).

A significant difference of the Internet transaction experience is the personalization of the selling-buying process. Based on specific qualifying questions, the software determines client's profile and offers a personalized account customized to his or her preferences and wish list. Some sophisticated sites also offer a "personalizing engine" based on various techniques: rule-driven personalization, collaborative filtering or instantaneous personalization.

The product catalogue also became a sophisticated instrument offering instant access to countless combinations of prices and features according to buyer's preferences. This way, potential cross-selling or up-selling becomes possible.

3 Implementing a CRM system.

Customer Relationship Manager is a wide company strategy based on acquiring and maintaining a long term relation with its clients. Although a lot of commercial software packages are available on the market, CRM is not a technology in itself, but more likely, a shift in the whole corporate philosophy with accent on the client.

A successful CRM strategy is not focused solely on installing and integrating a software package to instantaneously update the existing situation. Changes should happen at all levels including corporate policy and procedures, employee training, management of data systems, all to be repositioned and centred towards the client.

To be effective, CRM processes should be integrated within marketing, selling and client relations policies. A good CRM should offer:

¹ UpShot.com, also now is acquired by Oracle

- ☑ Identifying clients' key success factors;
- ☑ Creating a client-centred culture;
- ☑ Adopting client based decisions;
- ☑ Developing new procedures to benefit the client;
- ☑ Defining a questionnaire to be address with the client in order to solve a problem;
- ☑ Recommending a procedure to deal with a client's complaint about a product;
- ☑ Tracking all steps of the sale.

While implementing a CRM model, one must take into account the company's profile, also relevant aspects pertaining to its field, information to be related to customers, tracking orders and history, ultimately reducing redundancy and eliminating superfluous data.

4 Architecture of a CRM system

Usually, the architecture of a CRM system is structured on three components¹:

- ☑ Operational CRM – dealing with data base management and client relations;
- ☑ Analytical CRM – analyzing and improving client relations;
- ☑ Collaborative CRM – facilitating interaction with clients on all communication channels.

4.1 Operational CRM

This component of the CRM is dealing with process management relating to direct contact with clients: sales, marketing and service. Results of these processes are directed to the staff members in charge, also being offered necessary info to run these operations and the ability to store references for later usage.

Benefits include:

- ☑ Allowing personalized and effective marketing, sales and marketing via multiple collaboration channels;
- ☑ Offering a 360 degrees image on the client during the interaction;
- ☑ Sales and service departments could access transactions history relating to customer's interaction with the company not matter when it happened and what associate assisted at certain times.

¹ http://en.wikipedia.org/wiki/Customer_Relationship_Management

According to the analysts from Gartner Group, the operational side of a CRM system typically deals in three areas of the business:

- Sales force automation – SFA:** dealing with automation of some of the critical functions of sales force management, contract management, predictions, sales administration, tracking preferences, buying habit and demographics of clients. SFA instruments are designed to ultimately increase team productivity;
- Customer service and support – CSS:** integrates product info requests, complaints, returns and warranty inception. CSS applications allow effective management of a large volume of such event.
- Enterprise marketing automation – EMA:** offers info regarding business environment including the competition, industry trends, etc. The scope of EMA is to increase efficiency of marketing campaigns based on demographic analysis and segmentation on interest field of the campaign.

4.2. Analytical CRM

Within Analytical CRM, data gathered by the Operational CRM, or other sources, is analyzed in order to separate clients in several categories, or to identify ways to improve relations with clients. Typically, client analysis could lead to personalized campaigns centred on certain types of clients. Examples of such campaigns:

- Informing campaigns: offering personalized info on a regular basis
- Updating campaigns – modifying customer info

Data collection and analysis is perceived as a continuous and repetitive activity. Ideally, business decisions are modified in real time based on feedback data. That is the reason why the most successful Analytical CRMs are the ones benefiting from the accessed databases in order to obtain all necessary info.

4.3. Collaborative CRM

This type of CRM facilitates interaction between company and its clients on all existing communication channels (direct communication, direct mailings, email, fax, telephone, Web), and helps with coordination between all employee teams and communication channels. It is a solution grouping human resources, processes and data in such way that the final result is better customer service, thus creating a loyal customer base.

Some benefits of Collaborative CRM:

- Increasing the efficiency of interaction with clients via all communication media

- Allowing client interaction via the Web, translated into reducing communication costs.
- Integrating call-centres, allowing client interaction via multiple channels.
- Integrating vision on client while interaction happens at transactional level.

The e-business system centred on the client would also need to allow a completely automated marketing policy, offering marketing specialists the ability to execute campaigns based on actual consistent data.

Great emphasis should be put on integrating the marketing process with business data management process (Business Intelligence). Accordingly, there is a need for sophisticated analytical techniques in order to dissect and classify market data. A consequence of these techniques is the unprecedented refinement of the possibilities of segmenting a market and the creation of unique clients profiles based on data furnished by anonymous clients.

Modern systems offer such extensive possibilities to track the objective effects of promotional campaigns and automated integration of data collected in the unified storage area of the company.

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Influence of Social and Cultural Expenses on the Population's Pauperization Process

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Abstract: Eradication of poverty and economic development are essential for a durable development. High access to production resources and the activity of effective public institutions are the most important conditions for the fight against poverty. Public and private investments in education, health care and social programs are indispensable for offering market economy integration opportunities to the paupers and to contribute to an economic development for everyone's benefit. The satisfaction of social needs, aiming the improvement of life conditions for each person in a given society, defines an aspect of the importance of public expenses. (Economy dictionary, 1999) The amount of public expenses allocated for socio-cultural actions has an essential economic and social role and has effect on the education, the professional training and qualification, the cultural, artistic and civilisation level, the quality of medical assistance and infant mortality, the system of social protection.

Keywords: poverty, public expenses, social protection, transition, health, education, social assistance programmes

Jel Classification: H40, H55

Detaining an important role in the economy of each country, public expenses for health and education represent almost 1/3 of the state's expenses, the average being lower in the poorest countries and regions.

**Table 1. Weight of public expenses for health and education
in the total public expenses and in GDP***

Region	Weight of public expenses %			% of GDP		
	Medium	Minimum	Maximum	Medium	Minimum	Maximum
Extreme Orient and Oceania	27	12	53	6	2	11
Europe and Central Asia	31	18	59	10	4	17
Latin America and the Antilles	33	14	52	8	4	13
Medium Orient and Northern Africa	23	13	39	7	4	12
South Asia	21	16	25	5	4	8
Sub-Saharan Africa	25	13	34	7	2	12
Countries with low incomes	25	12	59	6	2	17
Countries with average income	29	13	53	8	4	14
Countries with high income	33	20	56	11	3	15

Source: Banque Mondiale – „Rapport sur le développement dans le monde”, 2004, ESKA Publishing House, page 39; WDI

*The survey has been performed on 135 countries, based upon data from year 2000 (52 countries), year 2001 (8 countries), 1998 (17 countries) and relatively before 1990 for 28 countries.

Still, there are weight variations of these expenses between countries which belong to the same region (year 1998) Sierra Leone – 13%, Kenya – 34%; (year 1997) Estonia - 18%, (year 1996) Republic of Moldavia - 59%) (BIRT, 2004). *There are*

two explanations for the state's contribution to increasing or decreasing these public expenses:

1. *Market imperfections*, caused by external factors, when the volume of produced and consumed services is inferior to an optimal social level; increase in public expenses and their effective management (through measures to reduce infant mortality or educational reforms in order to increase registration rates in primary education structures, especially for low income countries) can have an essential contribution to the promotion of health and education progress.

2. *Social equity and fundamental human rights*: "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care" (Universal Declaration of Human Rights). Corruption, government and urbanization can play an important role, but different in each country.

The analysis of the public expenses incidence consists of the calculation of the proportion between their financial volume and the beneficiaries of the financed services. Efficiency in using these funds is variable, given that it is difficult to find a coherent relation between the evolution of these expenses and the results. Similar evolutions of public expenses, applied on samples from different countries, produce different evolutions of the results. Result evaluation depends on the specifications in the analysis.

For example, in *Thailand*, the infant mortality rate dropped from 74 deaths / 1000 births (1970) to 42 deaths / 1000 births (1985), respectively 28 deaths / 1000 births (2004). The doubling of public expenses (between 1970 – 1980) and the state's supported and continuous involvement: through building medical centres in distant areas and stimulating doctors to move in these areas, service orientation towards poor areas or families, improvement in the medical staff's professional training, took part in the above mentioned results. Instead, in *Mexico*, the increases of public expenses lead to a decrease in infant mortality rates among poor families, but without a global significant effect. Results were obtained, but these are inconclusive at a statistical level. We consider that public financing is useful to the extent there are implications and appropriate measures which can generate progress.

An analysis on the incidence of public expenses benefits for medical services per patient confirms inequality between poor and non-poor population regarding resources access, as well as the fact that the distribution of these expenses does not favour the first ones. For example, in the *Republic of Moldavia*, the public expenses quota for the poorest quintile is 10 times smaller than the one addressed to the rich quintile. In *Ghana*, in 1994, the distribution of public expenses for health has been of 12% for the poorest quintile and of 33% for the richest one. A survey performed by the primary health centres from Bangladesh found that the rate of doctor's job absenteeism is of 74%, as well as the inadequate professional conduct towards the

poor patients. In *India*, subsidies for curative treatments addressed to the richest quintile are 3 times higher than those for the poorest quintile. Often, medicines destined to health centres never reach the destination: in *Guinea*, in 1980, 70% of medicines disappeared; in *Cameroon*, *Uganda* and *Tanzania*, 40% have been abstracted for personal use.

Public expenses for health or education do not particularly address the poor population, the results indicating that the poorest quintile benefits of less than 1/5 of these expenses, while the remainder belongs to the rich quintile. *The reason for this lack of balance is the orientation to the services sector, used in a disproportionate manner, mostly by those with high incomes.*

Eventually, GDP¹, an economic component of the human development, represents the level of subsistence and it is the most powerful predictor of the health status of nation. The sources of financing for the health care are: the state and local budgets (for investment, endowment, and large-scale programmes), state or private health insurances (for a part of manual work, materials and drugs) and population. All these represent only a part of GDP health financing sources per capita. For poor countries is difficult to attain the level health financing of the rich countries. Moreover, a reduced GDP leads to a smaller deducted percent allocated in the state and local budget for health care. In the same time, the decrease of family budgets means the reduction of the percentage allocated to health care, directly or indirectly, within families.

¹ Rada Cornelia et al. *Socio-medical impact of GDP on the life expectancy and infant mortality in Romani*, in *Revista medico-chirurgicală a Societății de medici naturaliști*. Iași, *Medicina Preventivă*, vol. 110, nr. 3, 2006, pp. 711-717.

Table 2. Expenses for health care

Country / Zone	Public expenses (% of PIB) , in 1995	Public expenses (% of PIB), in 2003	Beds in hospitals (per 100,000 inhab.)		Doctors (per 100,000 inhab.)	
			1995	2003	1995	2003
UE 15	7.4	7.7	690	593	-	-
UE 25	-	7.6	719	618	-	-
Zone Euro	-	-	745	641	-	-
<i>Belgium</i>	6.3	7.6	744	686	345	394
Czech Republic	6/4	7.1	939	868	346	389
<i>Sweden</i>	7.5	8.5	609	-	286	333
Denmark	5.5	6,1	489	398	251	285
Germany	8.4	8.1	970	874	307	337
France	8.1	8,9	890	796	-	-
Netherlands	8.3	8.2	533	463	186	-
<i>Great Britain</i>	6,5	7.7	-	397	173	216
<i>Greece</i>	5.6	6.7	500	-	393	-
Cyprus	-	4.1	452	431	220	263
<i>Italy</i>	5.5	6.5	622	418	-	-
Latvia	-	3.0	1099	779	278	278
Hungary	-	6.2	909	-	303	324
Austria	7.1	7,1	755	836	266	338
Poland	-	4.3	769	668	232	243
Slovenia	-	7.8	574	509	-	228
Lithuania	-	3.9	1083	866	405	395
Bulgaria	-	-	1034	627	345	356
Romania	2.9*	3.9**	763	656	-	200
Norway	7.4	9.4	406	428	279	329
Japan	-	-	1330	-	-	-
USA	-	-	413	-	203	-

Source: EUROSTAST – „L'Europe en chiffre”, *Annuaire Eurostat 2006-07, 2007, p. 112*

*- For **Romania** the source is *RNDU 2001-2002, pag.102*; **- the source is *RNDU 2003-2005,*

Romania, p. 122, elaborated by PNUD, 2005; In 2004, 3.6% of PIB was allocated for health.

The necessary budget for a fair financing of the health system is affected by many variables, including the following: the morbidity rate, the level of population aspirations, geographical constraints. “The open method for coordination” is defining a common framework to support efforts of UE member states for

development and reform of health system. In UE25, a percentage of 7.6% of GDP has been allocated in 2003 for health expenses. Germany, France, The Netherlands and Sweden registered percentages over 8%, while the Baltic States, Cyprus, Poland and *Romania* spent only 4% on health care.

As results from the Table 2, over the period 1995-2003, countries as Belgium, Italy, Greece, Sweden and Great Britain had a rate of growth of over 1%. In *Romania*¹ the public health expenses varied between 2.8 and 4% (years 1990-2003), equivalent of 28-70 USD per capita, while other transition countries spend a few hundred dollars and the developed countries an average of 2000 USD. In absolute figures (PPP\$ - parity of purchase power) this difference is much larger, 16 times less than the average for UE, 8.3 times less than in the Czech Republic, 6 times less than in Hungary and 4 times less than in Poland. This fact shows that the precocity of allotted financial resources in Romania is correlated to the alarming status of the most important health indicators. In countries with large health expenses per capita, the *life expectancy at birth* is bigger, but the relationship is not linear: if reduced amounts can assure a life expectancy of 68 years, larger expenses (10 to 20 times) assure a life expectancy of 78 years, approaching asymptotically age 80, it seems that this average age is impossible to be exceeded even with ten times expense increase. In other words, as life expectancy increases, each step costs much more and is smaller than the previous one. (Cotigaru, Petrescu, & Rosca, 2004, pp. 282-291) Romania has yet acute problems in the health-care sector. Some of the priorities are to make aware of institutions' responsibilities, establishment of competences, coordination and collaboration of all persons involved in the reform of the health-care system.

The population health status, the dynamics of the natural movement of population (birth-rate, mortality, natural growth, infant mortality) and life expectancy at birth reflect and correlate a series of indicators as: indicators of material and human resources of the health-care system concretizing the number and structure of health units (hospitals, polyclinics, medical consulting rooms, health centres); indicators for human resources concretizing the number and structure of the medical personnel: physicians, dentists, pharmacists, other medical personnel, etc; indicators for the medical activity, as: medical consultations and attendances per inhabitant, vaccinations and revaccinations, hospital internments. In 2002, UE-25 has an average of 618 hospitalization places per 100,000 inhabitants, compared to 715 places in 1995.² This 10% diminution results from a more efficient utilization of the resources allocated to the health-care system, the performance of the medical services allowing ambulatory care or diminution of post-surgery hospitalization period.

¹ Until the introduction of health insurance, the state budget was the most important financing source.

² EUROSTAT - In Romania from 763 beds (1995) to 656 beds (2003).

In accordance with a report of the World Bank, in 2005 and 2004 *the expenses allocated in Romania for education and health-care* was among the lowest in UE.

As regards the health-care expenses, Romania occupies the last place. In 2004, 5.1% of GDP was allocated to health care, compared to the average of 6.6% in the states with medium to raised revenues. In 2004, Bulgaria allocated for health-care 8% of GDP, Hungary 7.9%, and Poland 6.2%. In 2004, the health-care expenses per capita in Romania were 178 \$, while in countries with medium to rise revenues were 342 \$. The similar expenses were in Bulgaria 251 \$, in Poland 411 \$, and in Hungary 800 \$.

The poor segment of population is not the main beneficiary of the public health-care or education expenses, the results indicate that the poorest quintile is the beneficiary of less than 1/5 of expenses, the rest favouring the rich quintile. *The reason of this disequilibrium is the orientation towards the service sectors used especially by persons with raised revenues.*

„Education is not a way to escape poverty. It is a way to fight against it (Julius Nyerere). In *Nepal*, the richest quintile of the population benefits from 46% of the education expenses, toward only 11% for the poorest quintile. Instead, in *Armenia*, in 1999, the poorest quintile benefited from almost 30% of the advantages distributed through these expenses. In the beginning of the '90s, primary schools from *Uganda* received only 13% from the government subsidies distributed to primary education, because of the number of credits received by schools from underprivileged areas, obviously inferior in comparison with the average number. The rest of the funds were addressed to non-educational activities or private advantages.

The challenges of the Lisbon strategy involve the UE states in permanent debates regarding the modalities for increasing financing of educational systems, improving the efficiency and promoting equality. Several of the aimed objectives are: the right of enrolment, administrative and examination expenses, scholarships or loans aimed to raise the rate of enrolment in higher education institutions for those in need, attracting funds for promotion of partnerships between enterprises and universities.

In 2003, the public education expenses in UE-25 was 516 bld.SPA, meaning 4.9% of UE-25 GDP. The diagram no. 1 demonstrates that the development and modernization of education lead to an increase in resource allocation, especially in the developed countries: Germany – 91.5 billion SPA; France – 88.5 billion SPA; Great Britain – 77.8 billion SPA; Italy – 64.1 billion SPA; Japan – 111.7 billion SPA; SUA – 521.4 billion SPA.

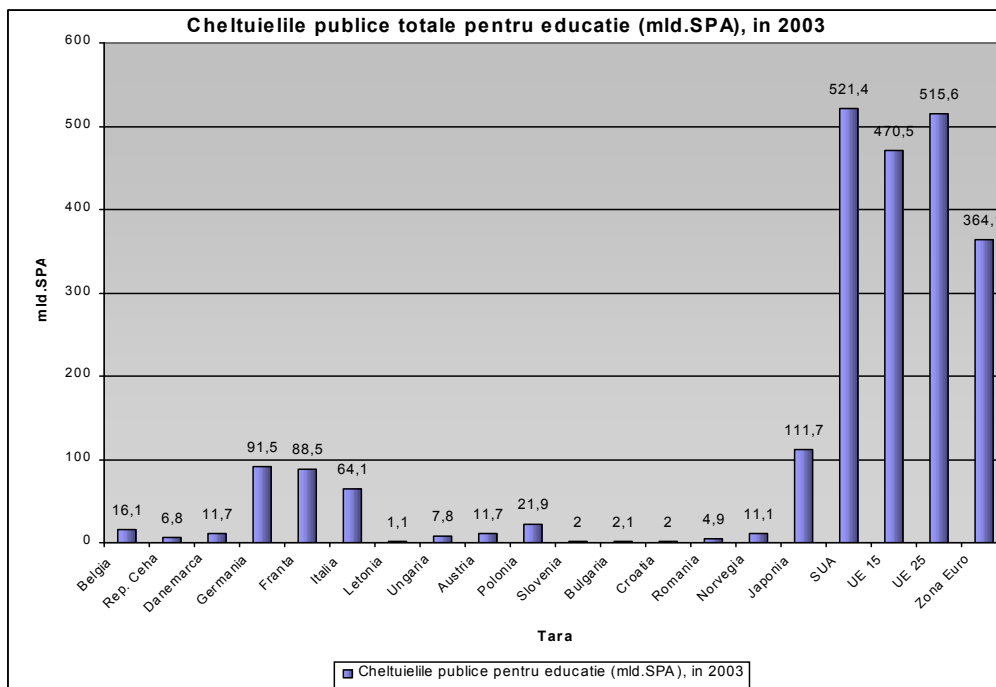


Fig. 1

Source: EUROSTAST – „L’Europe en chiffre”, *Annuaire Eurostat 2006-07, 2007, p. 96*

Despite the decrease of birth rate, in time, the public education expenses have a slight increase as a result of the conjugated action of economic factors (one of the requirements of economic development is the investment in the human capital, consequently medium and high qualified labour force), social and politics (facilities and grants for pupils / students, obligatory education, school policy). The education financing depends on its structure taking in account that the education systems are different from one country to another. In 2003, the annual expenses for the public and private education were 5518 SPA in UE-25. The expenses / pupil or student increase with the education stage. In 2003, the expenses allocated for a (8060 SPA) in UE-25, was ~1,9 times bigger than for a pupil in primary school (4331 SPA), but inferior to Japan’s expenses (2,2 times) or SUA (2,9 times). The rate of public expenses / private expenses varies from one country to another. In Germany, Great Britain, Malta, Cyprus, Lithonia, the importance of private expenses is given by the allocated percentage, i.e. sixth part of public expenses. (Eurostat, 2006-2007, p. 96)

Table 3. Expenses for education institutions in 2003

Country / Zone	Public expenses (% of GDP)	Private expenses (% of GDP)	Annul expenses for public and private education/pupil or student (PPC)
UE 15	4,9	0,6	6002
UE 25	4,9	0,6	5518
Zone Euro	4,8	0,6	5883
Belgium	5,8	0,4	6396
Czech Republic	4,3	0,4	3279
Denmark	6,7	0,3	7251
Germany	4,4	0,9	5861
France	5,7	0,6	6248
Italy	4,5	0,4	6251
Lithonia	4,9	0,8	2234
Hungary	5,5	0,6	7481
Austria	5,2	0,3	2657
Poland	5,6	0,7	
Slovenia	5,4	0,9	4968
Bulgaria	3,9	0,7	1634
Croatia	4,6	-	-
Romania	3,4*	-	-
Norway	6,5	0,1	8207
Japan	3,6	1,3	6779
USA	5,4	2,1	10005

Source: EUROSTAT – „L'Europe en chiffre”, *Annuaire Eurostat 2006-07, 2007, p. 97*

*For the same year, 2003, RNDU- Romania, 2003-2005 presents a percentage of 3% of GDP allocated for public education expenses.

The diversification tendencies of the Romanian education system represent the dimension of transition and the need for creating a strategic connection between the educational system and the needs of the market economy and the modern society in continuous changing. But the education indicators for Romania are in a good position compared to other countries in Central and East Europe and CIS. However, the level of public education expenses is under the average of UE countries.

Several fields of Romanian education system needs special attention on politics as the modernization of the educational infrastructure (technological progress included), the training of teachers and the structure of salaries, as well as the

prevention of the school dropout. If in 2000 the rate of the premature school dropout (young people between 18-24 years) was 23.3% for boys and 21.3% for girls, in 2005 the values were 21.4% for boys and 20,1% for girls. (Eurostat, 2006-2007, p. 90) During 1996-2003, the gross rate of scholar inclusion in all education stages increased, as the table below shows:

Table 4. The gross rate of scholar inclusion (%) in all educational stages, during 1996-2003

Gross rate of scholar inclusion (%) in	1996	1998	2000	2002	2003
Primary education	100.3	99.8	100.3	103.7	109.1
Gymnasium education	87.9	94.3	94.7	93.7	93.5
Secondary education	69.1	67.8	71.7	75.0	74.7
Higher education	22.2	25.4	31.9	38.9	41.2
Gross rate of scholar inclusion in preschool education	60.4	64.2	66.1	71.0	71.8

Source: PNUD - „Romania, RNDU 2003-2005”, tab.7. Education, p. 115

In 2005, the education expenses represented 3.6% of GDP, under the average level of 4.6% registered in the state with medium to a raised level, Romania belonging to this category. Greece occupied the penultimate place in UE, with expenses 4% of GDP. Bulgaria allocated for education 4.2% of GDP, Hungary 5.9%, and Poland 5.6%. The budget project for 2007 was based on a budgetary deficit of 2.8% of GDP, an economic increase of 6.4%, an inflation rate of 4.5%, an increase of the medium gross salary of 12.4% and a level of the public debt lower than 60% of GDP. (Eurostat, 2006-2007, pp. 96-98) The public expenses were estimated to 38% of GDP, compared to 34.8% in 2006. A comparative evolution favourable to actions financed from the general consolidated budget is presented in the table below:

Table 5

Actions	% of GDP 2006	% of GDP 2007
General public services	0.89	0.38
Defence	1.48	1.30
Public order and national security	2.56	2.75
Education	4.46	5.18
Health	3.64	4.00
Culture, recreation and religion	0.70	0,75
Social protection and assistance	9,69	10.34
Services and public development, housing	1.31	1.50
Environment protection	0.37	0.44
Economic actions	0,18	0,16

Source: Marin Marina – *Doctoral thesis*, p. 67

The budget project elaborated by the Government for 2008 is based on a GDP increase of 6.5% and a budgetary deficit of 2.7%, the same as in 2007. The priorities for 2008 aim education, health, infrastructure, agriculture and distribution of economic development to disfavoured categories. Thus, 6.0% of GDP shall be allocated for education (26% more than in 2007, meaning an increase of budget by 5 billion lei, from 9.1 billion lei in 2005 to 25.5 billion lei in 2008), for research 0.7% of GDP, for health 4.5% of GDP (the government announced the construction of tens of hospitals at national level, the necessary equipment included), for social protection and assistance 11.9% of GDP.

Social security expenses comprise money support, treatment and leisure tickets, medical assistance, drugs, pensions, social, unemployment, disease support, allocations for disabled persons, allocation for children, support allocations, differentiated on social groups: old persons, invalids, disabled persons, unemployed persons, women, young, children. All expenses aim the increase of disfavoured groups of persons. Each category of expenses may have different numbers of components.

For example, *the social protection expenses* comprise supports for aged persons, IOVR, disabled persons, expenses for families with many children, maternity and children care, etc. Often, the notion of social protection is used together with the notion of social security. *The social protection* comprises the economic and social interventions of public and private organisms and aims to support households or persons requiring assistance and guarantees their defence against negative phenomena or actions affecting their situation.¹ *In UE there are 8 functions of social protection.* (Eurostat, 2006-2007, p. 125)

The statistics regarding the expenses and collecting for social protection are harmonized in accordance with the European System of Integrated Statistics–*Esspros*. *Esspros* is a unique instrument to compare social politics in several European countries founded on the concept of social protection and developed after a common methodology. In 2003, almost 39% of social protection contribution collect in UE-25 resulted from employers, 37% from governments, 21% from employees, and the rest from other sources. In 2003, in UE-25, 28% of GDP was allocated for social protection expenses. Sweden registered the largest amount (33.5% of GDP in UE -25), and Lithuania and Estonia registered the smallest amounts (13.4% each). In 2003, the social protection expenses / inhabitant in UE-25 hardly surpassed 6000 SPA,² registering a maximum of 10905 SPA in Luxembourg, respectively a minimum of 1174 SPA in Lithuania. The differences between countries

¹ Several countries includes in the social protection expenses other economic and social expenses (ex: expenses for services and public development, housing, environment and waters) under motivation of their contribution to the increase of life quality. In Romania these expenses are a distinct group of socio-cultural expenses. The ONU functional classification, for Romania to be consulted.

² Purchasing Power Standard, used for measuring the comparisons between countries and taking into account the differences of price levels.

results from countries' different level of development, the diversity of social protection systems, the demographic evolutions, unemployment rates as well as other social, institutional and economic factors. The basic pensions for work and age limit – the most important social protection for citizens - represented 41% of UE-25 expenses in 2003, or 12.6% of GDP IN UE-25, with an maximum of 15,1% in Italy and a minimum of 3.9% in Ireland.

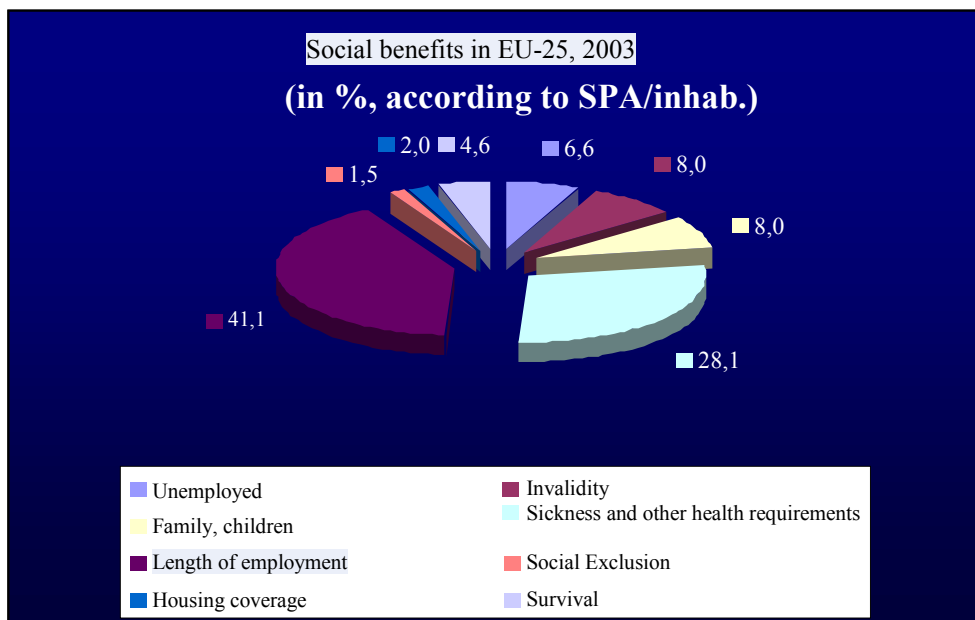


Fig 2

Source : Eurostat - "L'Europe en chiffres", Annuaire Eurostat 2006-07, p.130

ROMANIA

In Romania, during the 90's the social protection expenses represented between 22.5% and 31.5% of the total expenses of the general consolidated budget. In the period 2000-2006 these expenses were 30%-33%.¹ Also, the social security expenses were between 56% and 61% of the total public social expenses.

„The social protection transfer significantly differs by proportions and efficiency. Two opposite cases are the allocation for (in 2002 the transfers represented 0.63% of GDP for less than 5 million beneficiaries) and the programme VMG (with transfers representing in 2002 0.28% of GDP for less than 1 million of beneficiaries) with an exact target. If in 2002 the poorest quintila benefited from only 20% of

¹ In 2003, 32.9%, according to the „National Report of human development 2003-2005 for Romania”, p. 130

allocations for children, 62% of the provided services were allocated to the poorest quintile through the programme VMG (a very good performance compared to the performance of similar programmes from other countries in this region).” (Bank D. o., oct. 2003)

“The way of child valorisation is represented by the society’s concern regarding the observance of child rights and the implementation in all the fields of social life”.¹ *The state allocation for children* is an amount of money for children under 18 years and following a legal education form and over 18 years and following a higher education form. The beneficiaries of the allocation are children under 18 years with invalidity of Ist or IInd degree of invalidity. Beginning with January 2007, the monthly quantum of the state allocation for children increased from 24 to 25 lei, except for the state allocation for children fewer than 2 years, respectively 3 years for children with disabilities, for which the quantum is 200 lei.² The amount is intended to cover the expenses necessary for children support. The amount is unconditionally awarded to children between 0-7 years and for children between 14-16 years not attending school. After the age of 7, the allocation for children depends by the regular school attending and partially loses the function of social protection.

The social support is meant to complete the net monthly revenues of family or single person in order to insure the minimum guaranteed revenue (MGR).³ *The minimum guaranteed revenue* is insured by the monthly social support, on the basis of the present law. MGR is based on the principle of the social solidarity, in the frame of the national policy for social protection. For the amounts representing the social support, one of the major persons able to work has the obligation to carry out monthly actions or works of local interest, under normal work conditions and observing the security and hygiene norms.⁴

¹ DGPC Galați. *Results and perspectives of child protection*, 2004.

² According to Art. 4 alin. 1, lit. a) of O.U.G. no. 148/2005.

³ Provided by art. 4 alin. (1) and (2) of Law no. 416/2001.

⁴ The number of work hours is calculated proportionally to the value of social support for the family or the single person, with an hour tariff corresponding to the national minimum gross salary reported to the average monthly duration of the work time. The formula for the calculation of numbers of hours is as follows:

16,9 333 hours*) x VLU of social support Number of work hours = paid minimum gross salary **) in Official Journal, Part I no. 690 din 11/08/2006, of applying the Law no. 416/2001 regarding the minimum guaranteed revenue.

Table 6

Family's type	Level VMG (lei) 2006	Level VMG (lei) 2007
Single person	92	92
Families 2 persons	166	173
Families 3 persons	231	241
Families 4 persons	287	300
Families 5 persons	341	356
For each person over the fifth persons	23	24

Source: M.M.S.S.F., Direction M.M.S.F. Galati

The minimum guaranteed revenue was much disputed. In 2005 the number of beneficiaries of the social support was 390,000 and the budgetary effort was 472 million lei. In the second trimester of 2006, the number of beneficiaries decreased by 20,000, and the budgetary allocations decreased by 160 million lei.

It's clear that, in the best case, only a segment of population belongs to the category of severe poverty. The poverty is found not only at level of those receiving the social support. Of course, the priority is the persons in trouble, with completely insufficient resources for survival, but the theme of poverty has to be globally treated. Let's think on a single subject: how a person can survive with a monthly support of only 92 lei? What can be put in the "daily basket" with this money? (Daily basket, August 2006) It's a question awaiting answers from those who established these amounts.

*Unemployment insurance in Romania*¹ comprises for types of used money: unemployment support, support for the integration of graduates, allocation for long-term unemployed and compensatory payments for the collective dismissed persons. The unemployment support represents 50-60% (depending on the work limit) from the average of the net salary in the last three months, but between the inferior (20%) and superior (55%) limits of the average net salary. (Teşliuc C. M., 2001, pp. 83-86) In Romania, the unemployment salary has a pronounced function for the poverty reduction and is awarded to the persons at risk to lose the job on short and medium term, until one year, depending on the work period. The unemployed can benefit by AJOFM programmes, comprising a series of active measures beginning with June 2005.

The evolution of unemployment rate in Romania had an ascendant trend of 11.8% in the period 1995-1999 (except year 1996, when a rate of 6.6% was registered), since 2000 registered a decreasing tendency so that in 2003 was 7.4%. (Bank D. o., oct. 2003) The incidence of long-term unemployment registered at «6 months o more »

¹ Beginning with 1990, the social protection of unemployed was regulated by the following legislative papers: Lg. 1/1991, regarding the social protection of unemployed and their professional reintegration and lg. 76/2002, regarding the unemployment protection system and the stimulation of the labour force, modified and completed by OUG 124/2002. Law 107/2004, OUG 144/2005.

had an inversely proportional tendency compared to the unemployment rate, decreasing from 70.4%, in 1995, to 59.3% in 1999, after that, the increasing tendency reappeared and surpassed the value of the year 1995 and in 2003 was 78.7%. The unemployment rate for young (18-24 years) decreased from 50.35 in 1996 to 17.7 % in 2003.

Table 7. The evolution of the unemployment rate in Romania (%)

Rş (%)	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total	9.5	6.6	8.9	10.4	11.8	10.5	8.8	8.4	7.4
Men	-	5.7	8.5	10.4	12.1	10.8	9.2	8.9	7.8
Wo men	11.4	7.5	9.3	10.4	11.6	10.1	8.4	7.8	6.8

Source: PNUD Romania – „RNDU, 2003-2005”, pag.118

Most interesting is that the same tendency was registered at category «12 months and over», as well as for the category «24 months and over». As regards the unemployment rate for men, it kept the same tendency with for women, except the unemployment rate for women, 9% bigger than the rate for men for categories «6 months and over» and «12 months and over», except the category «24 months and over» for which the difference is 5%. The explanation of the deterioration of the report employees / unemployed can be summarized in three words: privatization, restructuration, bankruptcy. The public sector generated unemployment, while the private sector has created few jobs and the opportunities and possibilities were limited. From national sources, between 1995 and 2005, *the public expenses for pensions* were stabilized to 6.5% of GDP. After 2005, the expenses for the payment of some categories of pensions were externalized, i.e. were excluded from the state social insurance budget and included in the state budget. If in 1995 the pension system registered deficits covered from the state budget, in 2006 a surplus was registered. (Teşliuc C. M., 2001, pp. 83-86) In Romania, the average amount of pension represents 38.8% of the average revenue. The reforms in Romania comprising the pensions by repetition as well as the development of new capitalization pension funds (obligatory or voluntary contribution) reflects the similar reform packages adopted in Europe, especially in the new member states. The pension systems in Eastern Europe, like in the occidental countries, were born from the increasing concern regarding the pauperism risk after industrialization and aiming that the generation before the war benefits from the economic raising after the war. The eligibility criteria and the pension amount were generous, representing ~60-70% of the average gross salary in some countries (Poland, Georgia, Yugoslavia). With its main objective «the insurance of welfare on the basis of inter and intra-generative redistribution» (Davis, 1998), the public pension system PAYG («*Pay-as-you-go*») aimed the protection of aged workers against poverty. This system was financed by the contribution of the active generation and was criticized,

especially in the transition period. The appearance and increase of the number of unemployed, the migration of labour force, the decrease of birth rate and the massive reduction of contributions are a part of the critics of this system. Many economies in transition takes measures aiming the long-term increase of the durability of pension systems: increase of pension age (Romania, Bulgaria, Czech Republic, Hungary, Poland, Macedonia), the indexation rules were changed using prices instead salaries (Croatia), a combination between salaries and prices (Czech Republic, Hungary, Poland), a calculus formula for pensions (Macedonia, Slovenia). But what was the strategy of the economies in transition for the recovery of the state pension system? As Rutkowski said, in 1998, the implementation of *a multi-pillar pension system* will allow to persons to diversify the risks in many countries, regions or assets.¹ In Romania the system was recently implemented, in 2007. The projection of the concept of «*the pension system based on three pillars*», suggested in 1994 by the World Bank, is presented in the table below:

Table 8. The reform of the pension system in Romania

PILLAR I	PILLAR II	PILLAR III
Actual system – obligatory	Obligatory system - 01 August 2007	Optional system - May 2007
Public	Public/Private	Private
System of collective contributions	System of predefined individual contributions	System of predefined individual contributions
PAYG →3.5% of employee's gross salary (actual level is 9.5%); Employer's contribution =19.5%	PAYG Financed →6% (actual 2 %, increasing by 0.5% →6%)	Financed →15% of gross salary
Anti-poverty, contribution→ 1 pensionary	Forced economies	Personal economies
Reduced social protection (30%)	Investment in own pension (20%)	Investment in own pension (30%)

Source: Personal adaptation after Hemming, 1998, pag.6

In Romania, the social protection programmes (World Bank, 2001, p. 30) are important from point of view of financial covering, number of beneficiary persons or families. The measure of the success of any system of social transfers is represented by the contribution to the decrease of paupers. The application of Law VMG, dedicated to the most pauper social segments and the constant increase of the minimum salary are the two factors contributing to the redistribution of the resources of economic growth in 2003 towards the disfavoured categories of population and maintained the Gini indices at the same level as 2002. In 2001, the

¹ It was owed to the reduction of expenses as a result of the externalization of benefits on short term and the renouncement at obligations regarding the pensions of independent farmers.

richest 20% of population had an income 4,6 times bigger than poor 20%, compared to the report 4,4 in UE-15 or in UE-25 (Eurostat și JIM). The program is rather «specialized» in fighting against risks of paupers. Many poor persons can “slide” between programmes and remain without support (e.g.: unemployment support substantially reduces the paupers of families whose head had been unemployed, the allocation for children reduces paupers in families with many children).

MEXICO

The main issues the Latin America deals with regarding social policies are poverty and social inequity. The causes of these issues are various, the mainly cited one (Carlos Filgueira, Andrés Peri, 2004) being the advanced demographic growth – in geometric proportions – towards the economic growth at national level – which advanced in arithmetical proportions. Over the year, especially after 1997 up to the present, these discrepancies lead to a surplus of active population of the job market.

The fight against poverty and the measures for decision making and administrative privatization and decentralization constitute the new orientation of social policies in the Latin America’s countries, including Mexico. There are statistics which show the fact that over 40% of the Latino American population lives in poverty, many of these persons confronting extreme poverty issues. Generally, social policies in the Latin America’s countries use the model “state (source) of social welfare” and, in accordance to this model, the states in the region often granted many social benefits to the poor class. As crisis grew deeper, the national economic growth could not ensure the necessary amounts to continue social measures. Consequently, measures as allocating an increasingly lower percentage for social policies from the national budgets were applied, following that in 2003 the allocated amounts would be similar to those from the ‘80s (although the population had seriously increased, and issues related to unemployment and jobs were accentuated). As time passed, these measures generated serious financial problems, and, when these measures started to again reduce financial allocations, the poor population expressed its disapproval in several ways, with negative effects on the social security system, the public health system and the access to education – essential elements which contribute in a fundamental manner to the development / wellbeing of a society. Because of this, the quality of public services decreased, especially in the field of public health and education, where salaries dropped drastically.

Poverty in the countries from this region can be classified in two main categories: structural poverty (referring to the society’s marginal population sectors, population percentage which is excluded from the formal economic circuit of these regions, with a limited and insufficient access to offers on the job market and to education) and newly appeared poverty (phenomenon appeared following the entrance in these countries of persons banished from their origin countries or of immigrants who left their countries because of economic or structural restrictions – unemployed youth, retired persons or early retired persons). Hence, countries like Mexico, Costa Rica,

and Cuba have more developed social systems, ensuring a population percentage of 70 up to 100% integrated in this system, while countries like Honduras, Guatemala, and Salvador have poorly developed systems, the ensured population segment being of maximum 20%.

Criticism towards this social security system refers to it not taking into account the poor population (unemployed persons, gutter men without workman's pass, seasonal workers, persons ensuring housekeeping in households), which cannot contribute to these funds, creating nevertheless "privileges" systems for persons in the medium class of the society.

The recent Mexico financial crisis (caused by the privatization of state banks and, subsequently, by the constitution of the FOBAPROUA Fund regarding bank compensations) and the deficiencies existent in the traditional social security system (financial crisis of the Mexican Institute of Social Security – IMSS) maintained the crisis of social policies in this country. The social services in these countries imply social security systems, for typical cases of disease, accident, disability, as well as universal social security measures, such as offering public health services for free.

On the one hand, there will be practical measures, of financial intervention, for the very poor population, by connecting poor population groups to the national social security system. In Mexico, the access of very poor population to public health centres and to education is free – according to the political principle of the universalistic state, the principle of redistributing social incomes.

In the countries of this region, there are social services addressed to supporting the poor class. Starting with the '60s – '70s, countries like Mexico, Costa Rica, and Guatemala began to adopt social programs for this class of the population, consisting of food assistance measures and additional funds, free access to public health centres and to education. The free social assistance and social support measures represent a new element. During the '80s and '90s, the national funds were supplemented through the BM and BID structural funds destined to countries in the region – funds for social assistance and investments in social policies (social security). Starting with this period, social projects have been performed, containing measures like: building social houses, conceiving and applying emergency plans for fighting unemployment among the underprivileged population, social intervention programs in the food sector, opening information and legal and social assistance desks in the districts with poor population and without financial means, so as the payment of this public services could be afforded – programs developed especially through NGOs, which started to develop their activities and become visible after 1990, free courses for different poor population segments.

The aim of this external structural financial support was to initiate social measures under social reform programs from these countries, these funds being accessible on short term and ensuring the background for national measures to be included in long

term reformation programs. These funds were especially addressed to NGOs existent in these countries, and the target groups were children, women, unemployed persons and marginalized persons from the poor population segment. The problem was that these funds were obtained by NGOs experienced in the field and acquainted with the application of BM proposed methodology.

The concrete measures to be adopted in order to improve social services are: programs which would sustain free access to good quality education for children from the poor population segment, in accordance with the needs noticed in the production fields; programs for preventing diseases; social funds for social support.

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Development of Nominal Convergence Indicators in New Member States of European Union under the Challenges of Economic and Financial Crisis

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Abstract. The importance of compliance with nominal convergence criteria is crucial for adopting the euro in New Member States (NMS). Although some of these countries have made remarkable efforts for complying with nominal criteria, structural and conjunctural macroeconomic imbalances have created big problems in this respect. Also, the global financial crisis revealed new challenges for the NMS which are not yet members of the euro area. Having imbalances widened further much more than the countries in the euro area, many of them have come to appreciate the protection of the euro area membership, especially at times of financial and economic crises. Though, some NMS would like to speed up euro adoption, they now face conditions that may make it more difficult for them to satisfy the requirements of the nominal convergence criteria. Thus, in this article we try to capture the effects of economic and financial crises on the nominal convergence indicators in NMS.

Keywords: inflation, long term government bond yields, exchange rate, fiscal and budgetary criteria, euro adoption, structural and conjunctural macroeconomic imbalances

Jel Classification: G01, H87

1 Introduction

The New Member States of the European Union are affected by the ongoing global financial crisis, and growth will be slower this year and next due to weak external demand and tight credit conditions. The global financial crisis created new challenges for the countries which have joined the European Union since 2004 and

are not yet members of the euro area. Having suffered stronger market disturbances than the countries in the euro area, many of them have come to appreciate the protection that euro area membership can provide at times of financial crises and would like to speed up euro adoption.

Being in the process of economic catching up, the new member states have to struggle to create economies similar in structure with those of the old members of European Union and to assure, in time, a steady growth of real GDP toward the levels of the most developed countries in the euro area. This situation can be challenging for NMS because they have to satisfy Maastricht criteria, especially the exchange rate and inflation criteria, which are harder to tackle. It is known that, under the fixed exchange rate arrangement, the convergence of prices during the catching up process can only take place through higher inflation and in the floating exchange rate, the price level convergence can take place by a nominal appreciation of the exchange rate or higher inflation, or by both. In crisis situation, it is a real provocation for all NMS to try to maintain the indicators of convergence under the reference values. In this article we will analyze each of them: inflation, long-term interest rate, exchange rate, governmental deficit and public debt.

2 The evolution of Nominal Convergence Indicators in NMS after the Economic and Financial Crisis

2.1 Inflation

Prior to the financial crisis, the criterion on price stability in NMS was the most problematic of the nominal convergence criteria, because of the catching-up process of these economies. Until 2008, except Poland and Slovakia, the NMS failed to accomplish admissible values for this criterion. The main drivers, which have contributed to this situation, were both the adjustments of real economy to the market dynamic and exogenous factors, which determined the increasing inflation.

Among the *domestic determinants* that have contributed to inflationary pressures in the NMS were the buoyant domestic demand (both private consumption and investments), the changes in administered prices and indirect taxes in many countries under review. The domestic demand was underpinned by the development of credit activity, a strong growth in disposable income and lower real interest rates. The increasing investment activity has also stimulated the domestic demand, the expanding of economies supply capacity. Rapid employment growth and labour outflows to other EU countries have led to a tightening of labour markets in many of the NMS. Therefore, the occurrence of labour shortages phenomenon has generated upward pressure on wages, which, in some countries, have been rising considerably above productivity growth, especially in the fastest growing economies.

Among the most important *external* determinants of inflation has been the increase in energy and food prices, which has had a strong impact in most NMS, because of the relatively large weight of these components in the consumption basket. In some countries with flexible exchange rates, however, these price increases were dampened by an appreciating currency. An exception in this regard is Romania, where a depreciating currency has added to inflation since mid-2007. Besides these factors, as determinants for inflation pressure, there are also the convergence factors, those corrective elements for emergent economies from the catching-up process, which drive the Balassa-Samuleson effect.

In those countries which have adopted inflation targeting as monetary strategy (Czech Republic, Poland, Romania and Hungary¹) the inflation development was different. On the one side, the values of this indicator in Czech Republic, Romania and Hungary were well above the reference value stipulated by the Maastricht Treaty. On the other side, Poland has registered the best values for it, under or at the reference value. In the NMS which have adopted exchange rate targeting as monetary strategy, with euro as nominal anchor, (Baltic States and Bulgaria), inflation was higher than in the other countries.

Generally speaking, prior to the financial crises, in most countries under review, the inflation pressure was growing. Poland and Slovakia were the only NMS which recently have recorded a better inflation level. The main drivers for inflation pressure were relatively the same in NMS, but its development is different, and each country has its own path of inflation, as a consequence of each economy's pattern. The most austere situation has been registered in NMS under fixed exchange rates arrangement, and the bursting of economic and financial crisis has also affected the forecast for inflation development in the near future.

Since September 2008, NMS of EU have experienced a deterioration of investors' sentiment. This was reflected by a decrease in the foreign currency financing, by stumbling of the interbank money markets, and also by the deterioration of bond spreads and credit default swaps (CDO's) on government debt. On the other side, it is remarked a disinflation process in most of the NMS, since September 2008, and the reference value have been declining, too. Such a tendency of the inflation phenomenon is due to the sharp economic downturn of these countries, and to the easing of global price pressures. In spite of the weakened national currencies against euro, inflation was not affected in the NMS, because their main commercial and financial partners (European countries) have been suffering a recession period.

¹ Until February 2008, Hungary had a mixed monetary policy strategy - inflation targeting with a fixed exchange rate regime against the euro. Since February 2008, the Hungarian central bank has allowed the forint to trade freely on foreign exchange markets.

Table 1. HICP and Long term government bond yields in 2008 (April, October, December) and in February 2009

April 2008			
Harmonized Indices of Consumer Prices		Long term government bond yields	
Malta	1,9	EU	4,28
Slovakia	2,4	Slovakia	4,46
EU	2,6	Slovenia	4,47
Euro area	2,8	Euro area	4,52
Cyprus	3,2	Lithuania	4,59
Poland	3,4	Cyprus	4,6
<i>Czech Republic</i>	4,8	<i>Czech Republic</i>	4,72
<i>Slovenia</i>	5	<i>Malta</i>	4,77
<i>Romania</i>	6,4	<i>Bulgaria</i>	4,8
<i>Hungary</i>	7,3	<i>Latvia</i>	5,93
<i>Lithuania</i>	8	<i>Poland</i>	5,99
<i>Estonia</i>	8,8	<i>Romania</i>	7,35
<i>Bulgaria</i>	10,1	<i>Hungary</i>	8,02
<i>Latvia</i>	13	<i>Estonia</i>	8,34
Reference value	3,43	Reference value	6,39

October 2008			
Harmonized Indices of Consumer Prices		Long term government bond yields	
EU	3,5	EU	4,3
Slovakia	3,7	Czech Republic	4,53
Euro area	3,8	Euro area	4,58
<i>Poland</i>	4,3	<i>Cyprus</i>	4,6
<i>Malta</i>	4,4	<i>Slovenia</i>	4,66
<i>Cyprus</i>	4,6	<i>Malta</i>	4,81
<i>Slovenia</i>	6,1	<i>Slovakia</i>	4,95
<i>Czech Republic</i>	6,5	<i>Bulgaria</i>	5,17
<i>Hungary</i>	6,6	<i>Lithuania</i>	5,4
<i>Romania</i>	7,9	<i>Poland</i>	6,35
<i>Estonia</i>	10,9	<i>Latvia</i>	6,6
<i>Lithuania</i>	11	<i>Romania</i>	8,27
<i>Bulgaria</i>	12,6	<i>Estonia</i>	8,46
<i>Latvia</i>	15,8	<i>Hungary</i>	9,57
Reference value	4,23	Reference value	6,22

December 2008			
Harmonized Indices of Consumer Prices		Long term government bond yields	
EU	3,3	EU	4,3
Euro area	3,7	Euro area	4,54
Slovakia	3,9	Cyprus	4,6
<i>Poland</i>	4,2	<i>Slovenia</i>	4,61
<i>Cyprus</i>	4,4	<i>Czech Republic</i>	4,63
<i>Malta</i>	4,7	<i>Slovakia</i>	4,72
<i>Slovenia</i>	5,5	<i>Malta</i>	4,81
<i>Hungary</i>	6	<i>Lithuania</i>	5,61
<i>Czech Republic</i>	6,3	<i>Poland</i>	6,07
<i>Romania</i>	7,9	<i>Latvia</i>	6,43
<i>Estonia</i>	10,6	<i>Bulgaria</i>	7,76
<i>Lithuania</i>	11,1	<i>Estonia</i>	8,16
<i>Bulgaria</i>	12	<i>Hungary</i>	8,24
<i>Latvia</i>	15,3	<i>Romania</i>	8,38
Reference value	4,07	Reference value	6,24

February 2009			
Harmonized Indices of Consumer Prices		Long term government bond yields	
EU	2,9	EU	4,26
Euro area	3,4	Cyprus	4,6
<i>Cyprus</i>	3,8	<i>Czech Republic</i>	4,62
<i>Slovakia</i>	3,8	<i>Slovenia</i>	4,68
<i>Poland</i>	4	<i>Malta</i>	4,78
<i>Malta</i>	4,6	<i>Poland*</i>	6,06
<i>Slovenia</i>	4,8	<i>Lithuania</i>	7,21
<i>Czech Republic</i>	5,2	<i>Latvia</i>	7,38
<i>Hungary</i>	5,3	<i>Hungary*</i>	8,63
<i>Romania</i>	7,8	<i>Bulgaria</i>	:
<i>Estonia</i>	9,4	<i>Estonia</i>	:
<i>Bulgaria</i>	10,8	<i>Euro area</i>	:
<i>Lithuania</i>	10,8	<i>Romania*</i>	:
<i>Latvia</i>	14,1	<i>Slovakia</i>	:
Reference value	3,77	Reference value	6,19

Source: Eurostat, authors' calculation; * the exchange rate over the +/- 15 % band in February 2009

2.2 Long term government bond yields

When we consider the criterion of long term government bond yields, it can be seen that, except Hungary, Poland (only in 2004) and Romania, all new Member States met this convergence criterion since 2004, the year of joining the EU, until 2007. Year 2008 brings a change to this situation. Thus, countries that have not fulfilled this criterion in 2008 are Latvia, Estonia, Hungary and Romania. Taking into account the Eurostat data on the first months of 2009, it can be concluded that Lithuania could be added also to the countries that do not meet this criterion.

For the Baltic countries and Bulgaria, the trust offered by the fixed exchange rates and high inflation associated with the real convergence process have led to a level of the nominal interest rates on the market close to those of euro area, leading to negative real rates of interest (because the domestic inflation is well above that of the euro area). This resulted in macroeconomic overheating and credit boom, interest rates playing a pro-cyclical role, putting additional pressure on prices. In recent years, because they brought higher yields than the euro area, interest rates have attracted foreign capital, leading to the lowering of interest rates, inflaming again the (consumption) credit. Although most of the NMS recorded considerable current account deficits, they reduced interest rates on the market, situation which reflected also the increased confidence in the economy and sustainability of future trends, resulting in a decrease in long-term interest rates, thus fulfilling the Maastricht criterion until the first trimester of 2008.

Effects of the crises could be seen in growing difficulties in all NMS to keep the indicator under the reference value from the second trimester of 2008 until first trimester of 2009. Thus, in April 2008, Estonia does not meet the criterion, adding itself to Hungary and Romania. In October 2008, Poland and Latvia could be considered, too, out of range of the criterion and in December 2008, Bulgaria is in the same situation. We can see that, one by one, the Baltic States have violated the long term government interest rates criterion as Hungary and Romania and only the floating exchange rate countries (Poland, Slovakia) seems to be capable of getting out of the trap of non-conformity.

In the period April 2008 - February 2009 the reference value is decreasing as an effect of the current crisis. The motivation of this evolution is the reduction of the inflation in the states that were the best performers in fulfilling the price stability criterion. Thus, we can observe a divergence in evolution between NMS and euro area, the Maastricht criterion on long-term government interest rates may be now more difficult to achieve. If these countries had tried to achieve the criterion in a sustainable manner in "good times", now they would not have any difficulty in fulfilling it. In 2008, in the case of Slovakia, the Czech Republic and Poland, long-term interest rates have not felt strong disturbance due to the crisis. The prudent macroeconomic situation, with smaller fiscal and current account deficits and a more healthy structure of GDP growth, has put its fingerprints on balancing NMS

economies with inflation targeting in the moment of crisis appearance. This is especially the case of Czech Republic.

The evolution of interest rates on the market, inflationary expectations and the market perceptions about future developments are reflected in long-term interest rate. So, the recent trends of long term government bond yields are not surprising - the fulfilment of this criterion is a real challenge for all NMS.

2.3 Exchange rate

Between 2004 and 2008, all NMS have fulfilled the exchange rate convergence criterion. Romania was the only country from EU, which didn't satisfy this criterion between 2001 and 2003.

In Slovakia, a member of ERM2 until January 2009 and then in the euro area, the exchange rate had hardly suffered from the effects of the crisis in 2008. The Slovak currency enjoyed already the protective umbrella of the ECB and market confidence did not shake. So, the Slovak koruna was among the few currencies of NMS with floating exchange rates, which didn't depreciate in 2008, suffering even an appreciation.

The Czech koruna and the Polish zloty are the other currencies of NMS, which appreciated in 2008. But in the first two months of 2009, the Czech koruna suffered depreciation. The Polish zloty began to depreciate in November 2008.

The exchange rates of the countries having a currency board (Bulgaria, Estonia and Lithuania) have remained unchanged in 2008. The currencies of Latvia, Romania and Hungary have suffered depreciations in 2008; the most serious being affected the Romanian leu (RON). The severe depreciation of RON began in October 2008, as for the Hungarian forint, too.

As the risk appetite waned, capital was withdrawing from the emerging markets across the globe and EU membership alone did not prove to be a strong enough protection against the flight of capital from the NMS. The most dramatic turn of events took place in Hungary in October 2008, when the government securities market came to a full stop and the central bank of Hungary had to intervene to breathe life into this market. The financial support from the IMF and the EU within the framework of a stand-by arrangement helped to prevent a collapse of the Hungarian financial markets, thereby helping to avoid a dangerous contagion of other markets in the region. The Latvian lats began depreciating sharply in June 2008.

In 2009, some of the NMS failed to fulfil the exchange rate criterion. From January, Poland and Romania have been in this situation, followed by Hungary in February (see Tables no. 1 and 2).

The forecast for 2009 of the European Parliament Economic Department shows that the currencies of all NMS (excepting those having currency boards) will depreciate, the sharpest depreciation being suffered by the Polish zloty. Also, it is mentioned that Romania, Poland and Hungary will not fulfil the exchange rate convergence criterion in 2009. According to the same forecasts, in 2010 all NMS will satisfy this criterion.

Recent events on the global financial markets have convincingly demonstrated that membership in the euro area provides protection against exchange rate risks and the associated shocks at times of financial crisis. This is particularly true considering that a very large part of the credit granted to corporations and households in the NMS has been in foreign currencies.

Table 2. Exchange Rate development in 2008 (April, October, December) and in February 2009 compared with December 2007

Country	Apr. 08	Oct. 08	Dec. 08	Feb. 09
Bulgaria	0	0	0	0
Czech Republic	-4,76118	-5,88593	-0,74857	8,146825
Estonia	0	0	0	0
Latvia	-0,01434	1,691756	1,562724	1,16129
Lithuania	0	0	0	0
Poland	-4,42593	-0,6886	11,18701	29,02124
Romania	3,04659	6,019632	10,96433	21,25258
Hungary	0,225136	2,752982	4,676515	17,82131

Source: Eurostat, authors' calculation

2.4 Fiscal and budgetary criteria

Public finances are also being hit hard by the slowdown. As economic growth will remain below potential, a further deterioration in the budgetary outlook is expected for 2009 and 2010.

Unlike other indicators, in the case of public finances, the euro membership is no more protecting. As regards *governmental deficits*, several Member States (new and old) are projected to breach or stay over the 3% of GDP reference value in 2009. For euro area and EU, these values would represent the highest general government

deficit in almost fifteen years.

Looking at the prognosis for 2009 (see Table no. 3), despite the big number of countries falling under the line, Malta and Hungary are recovering and pass above the line. In Hungary, the deficit is projected to have fallen to 3,3% of GDP in 2008, mainly due to expenditure restraint and it is expected to decline further to 2,8% of GDP in 2009 as a result of budgeted expenditure cuts. In Estonia, the scale of the downturn of the economy is set to severely affect public finances and even though the government plans significant fiscal restraint, there is a risk that the deficit to GDP ratio will breach the 3% reference value in 2009. In Poland, in 2009, the general government deficit is likely to increase to about 3,6% of GDP; this reflects a much gloomier outlook for consumption, imports and wage growth, but also the personal income tax reduction and the intended acceleration of public investment aimed at moderating the effects of the global financial crisis. In Latvia, the deficit is growing as the revenue shortfall due to the recession is expected to be only partly counterbalanced by the package of expenditure restraint and tax increases adopted in December. The highest deficit is expected to be registered in Romania, as tax revenues will be affected by the economic slowdown as well as by various tax changes.

Table 3. General government surplus (+) or deficit (-) and General government gross debt 2007 - 2009

General government surplus (+) or deficit (-)					General government gross debt						
2007		2008		2009	2007		2008		2009		
Reference value: - 3% of GDP					Reference value: 60% of GDP						
Cyprus	3,4	Bulgaria	3,2	Bulgaria	2	Estonia	3,5	Estonia	4,3	Estonia	6,1
Estonia	2,7	Cyprus	1	Cyprus	-0,6	Latvia	9,5	Bulgaria	13,8	Bulgaria	12,2
Slovenia	0,5	Slovenia	-0,9	Czech Republic	-2,5	Romania	12,7	Romania	15,2	Lithuania	20
Bulgaria	0,1	Czech Republic	-1,2	Malta	-2,6	Lithuania	17	Latvia	16	Romania	21,1
Latvia	0,1	Euro area	-1,7	Slovakia	-2,8	Bulgaria	18,2	Lithuania	17,1	Slovenia	24,8
Euro area	-0,6	EU	-2	Hungary	-2,8	Slovenia	23,4	Slovenia	22,1	Czech Republic	29,4
EU	-0,9	Estonia	-2	Lithuania	-3	Czech Republic	28,9	Czech Republic	27,9	Slovakia	30
Czech Republic	-1	Slovakia	-2,2	Estonia	-3,2	Slovakia	29,4	Slovakia	28,6	Latvia	30,4
Lithuania	-1,2	Poland	-2,5	Slovenia	-3,2	Poland	44,9	Poland	45,5	Cyprus	46,7
Malta	-1,8	Lithuania	-2,9	Poland	-3,6	EU	58,7	Cyprus	48,1	Poland	47,7
Slovakia	-1,9	Hungary	-3,3	Euro area	-4	Cyprus	59,4	EU	60,6	Malta	64
Poland	-2	Latvia	-3,5	EU	-4,4	Malta	61,9	Malta	63,3	EU	67,4
Romania	-2,5	Malta	-3,5	Latvia	-6,3	Hungary	65,8	Euro area	68,7	Euro area	72,7
Hungary	-5	Romania	-5,2	Romania	-7,5	Euro area	66,1	Hungary	71,9	Hungary	73,8

Source: Eurostat, authors' calculation; EC forecast for 2009

The increase in budget deficits in 2009 is due to both cyclical and structural factors. The sharp downturn in GDP growth implies a significant increase in government deficits via the cyclical component of the government balance. In addition, the reversal of past revenue windfalls (from high corporate profits and asset prices) and a generally less tax-rich growth composition are expected to lead to additional revenue shortfalls in 2009. Finally, governments have announced or already adopted significant discretionary fiscal stimulus measures in response to the downturn.

Regarding the *public debt*, except Hungary that is representing NMS, the euro area and EU are below the reference value for 2007-2009, and their values are increasing from one year to another.

3 Conclusion

In NMS, after the recovery of the economy and regaining the market confidence, inflows of portfolio and foreign direct investments, which stopped in the moment of crisis appearance, should determine the interest rates return on their path and also the fulfilment of long-term government bond yields criterion. However, a too rapid decline (both in terms of time and proportion) of interest rates, without a structural macroeconomic balancing, could reinstall "boom & bust" cycle and therefore, once again, inflame the inflation. As a result, the situation would lead to a prudent policy of central banks (increasing key interest rates) and a reluctance of commercial banks to offer more attractive and competitive interest rates. Thus, interest rates, placed on the upward trend, might act according to its pro-cyclical nature and become a factor of perturbation and not a fender for shocks, as it is design for the convergence process.

The sharp depreciations of the floating exchange rates and the associated increases in risk premia and domestic interest rates in the wake of the crisis proved once more the validity of the findings reported in the economic literature that for small open economies, an independent exchange rate is more a source of shock than a shock absorber (Darvas-Szapáry 2008, pp. 18-20) For the NMS, which pegged the exchange rate to the euro, the crisis-caused shock translated into substantial increases in domestic interest rates and sharp downturns in the rates of economic growth, as these countries struggle to reduce their outsized current account deficits

In the countries with floating rates, the economic downturn has been less sharp, as these countries had experienced less overheating fuelled by excessive credit growth prior to the crisis and have been better able to maintain competitiveness.

Although for some NMS, which are not in the euro area, the crisis has raised the attractiveness of euro area membership, it should be emphasized that the euro is not a cure against all risks. Experience has shown that the greatest risk for countries in the euro area is loss of competitiveness due to excessive price and wage inflation.

Once the independence of monetary and exchange rate policy has been relinquished, the burden of avoiding overheating and maintaining competitiveness falls on fiscal policy and on policies which improve productivity. The task of improving productivity most often involves structural reforms in areas and of importance that can vary from one country to the other. The types of reforms that will enhance competitiveness have been spelled out in the Lisbon agenda, the implementation of which should be as high on the list of priorities of the new Member States as satisfying the Maastricht nominal criteria.

It is recommended that the NMS also prepare for the time when financial conditions return to normal. This would require deepening structural reforms to reduce vulnerabilities, improve the investment climate and increase total factor productivity, and closely follow future developments in monetary conditions as volatility declines, intensifying banking supervision.

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The Criteria and Principles of Sustainable Development in Terms of Changing the Quality of It

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Abstract: Along with responsible addressing for future generations, efficient use of natural resources, energy, materials, informational and technologic presumes, in the same time, intensifying the activity of durable economy for satisfying today's requests of human society. Sustainable development provides a framework trough which the communities can use the resources efficiently, create efficient infrastructures, protect and improve the quality of life and new technologies, create new activities, which will strengthen their economy. It can help at creating of healthy communities that can sustain both our new generation, and those that follow. The sustainable development was the innovative concept of development, after that, from the general and theoretic plan of development, to be founded the solutions of particularization of it on activity domains, concomitantly with the appropriate measures of practice realization the principles of the concept. Efficient use of natural, energetic, material and informational resources suppose both the responsible approach for the future generations and the intensifying of the sustainable economy working for the actual requirements satisfaction of the society. The work treats a unified and coherent set of criteria and principles specifics for the strategic and integrated management of sustainable development in relation with increasing the efficiency of using natural resources, energetic, material and informational.

Keywords: sustainable development, resources, economic development, technological changes

Jel Classification: O33, Q01

1. Introduction

Human species has entered in the stage of history and creation 80,000 years ago, but 200 years of industrialization managed to endanger the life of the planet, that is over 4.5 billion years. And that is because the economy and industrial era have irresponsibly abused of nature, in order to increase profits, treating it as a mere resource. Only in the last hundred years the world's population tripled, the global economy has increased 20 times, the consumption of fossil fuels increased by 30 times and the industrial production by 50 times.

At the beginning of this millennium, human society is facing global problems such as overcrowding, food shortages, pollution, climate changes, resource depletion, economic instability, species disappearances, illiteracy, social and political instability, inadequate healthcare system, the danger of a nuclear war, increase crime etc. A special place in the global problems of humanity is taken by the environmental issues; this study is important especially when we talk about environmental protection.

The current economic development, in the forms that we know, is entirely destructive to the environment. It has been observed a quantitative worsening of pollution and a change of environmental problems, *a change of resources' quality*. As prominent phenomena: local pollution engages the global pollution, which enhances the greenhouse effect, this is the most significant example. There is a "disconnection" of the geographical origin of pollution from the place of its manifestation, and some environmental problems will easily affect the whole planet. The ecological and economic interdependences are becoming more powerful, this way increasingly affecting the farer territories. A decision at a microeconomic level influences, through the chain of causality, the economic and the environmental conditions, which are often ignored, and as a result the shortcomings of the legislative framework.

2. The Tendencies of Changing the Sustainable Development Resources

2.1. The concept of Sustainable Development

It is Lester Brown's merit to have launched first - in the World Watch Institute in 1984 - the term "sustainable development" which then came into specialized literature as a reference term and it became the subject of all studies and policy documents that analyzes the issues of the contemporary economic and social development.

The first definition came up in the World Commission on Environment and Development entitled “Our Common Future” (Brundtland, 1987): “the development which aims satisfying the present needs without compromising the possibility for the future generations to satisfy their own needs”. Since the Commission was chaired by the Prime Minister of Norway, Dr. Gro Harlem Brundtland, was also known as the Brundtland Report. In an interview in 2003, the author of the report shows that, although “the definition of sustainable development remains the same, [...] the world today understands much better the economic, social and ecological pillars of sustainable development and how they are intrinsically connected” (Bugge and Watters, 2003).

To talk about the pillars of sustainable development, it must be stated that the original definition was formulated in English and the term is and remained “sustainable development”.

As mentioned in the article (Petrisor, 2003), the word “sustainable”, stands for “sustain” and “able”, stands for capable. From here it derived two interpretations that lead to the same result, namely “the development of the support capacity” (Conway and Barber, 1988):

- a. “the ability to support” - in this respect, it is about the capacity of natural resources to sustain indefinitely the human society development (Markandya and Pearce, 1988), that is a *sustainable use* of natural resources (Allaby, 1988). In other words, it speaks of the use of natural resources within *the capacity of support* (IUCN, WWF, UNEP, 1980).
- b. “self-sustaining capacity” - in this case, it is about a development that will ensure the human socio - economic evolution without major changes (which could jeopardize the existence of future generations), but this leads to the idea of an evolution in the limits of the
- c. capacity of support (Coomer, 1979).



Figure 1. Spatial Dimension of Sustainable Development

2.2. Changing resources of Sustainable Development

The essence of sustainable development of human society is given by the management, its actual and future *natural and energetic resources, materials and information*, in relation to the projects of economic growth, ensure an increasingly better quality of life and of the environment.

Taken as a whole, the *natural resources and natural conditions* represent **the natural factor** which, together with the demographic factor and the level of development of instruments, influences the economic development of the countries and it is at the basis of the sustainable development. The economic development is achieved not only to satisfy the basic material needs, but also to provide resources that would improve the quality of life in directions such as health, education and a good environment. Many forms of economic development call for the environment, meaning that they use natural resources, energy, materials and information (resources available, most often at the limit) that generate polluting products and environment deterioration. But at the same time there are many ways in which certain types of economic activity can protect or improve the environment. Regarding *natural and energy resources*, the activities are conducted in two main directions: *the rational use of natural resources* through economic processing

technology (reduction and recycling of waste) and *reduce consumption and use of unconventional sources of energy*. Currently, the emphasis is on the rational use of natural resources and energy, becoming an imperative for the present. Along with that, the material and information resources complete the sustainable development.

2.3 Criteria and principles

Sustainable development principles will continue to be the subject of wide discussion and debates on the national and international level but, in general terms, they are currently well established and conceptualized. The economic development is important for any company, but its benefits must be greater than the costs, including the costs related to the environmental conservation and protection. In this context, it should be focused on the ways in which these principles can and should be applied in various sectors of the economy and social development.

Sustainable development, by its essence, expresses the need for harmonious integration of economic development, responsible governance, ensuring social cohesion and human-nature biome; these issues are revealed by the principles of sustainable development made in **Agenda 21 of the World Conference on Environment and Development** in Rio de Janeiro (1992). Among these **principles** there are:

- people must be at the centre of all development initiatives;
- searching solutions to problems should be through a holistic approach, making use of science and technology;
- encouraging human communities to recognize their cultural, moral and spiritual values;
- communities' capacity of self determination by protecting the rights to their own development;
- national sovereignty implies insuring the security of people and the quality of the environment;
- gender equality;
- peace, order and national unity;
- social justice, spatial equity, and intra and intergenerational, that would ensure equitable distribution of resources and it would provide equal opportunities for the members of the society;
- democratic participation in decision making;
- institutional viability that would ensure the convergence of interests of different groups;
- viable economic development based on equity between communities, age, social classes, ethnic groups, geographic areas, generations, etc;
- human population distribution so as not to exceed the support capacity of the environment;

- ecological health through the recognition of nature as a common heritage for future generations;
- the equity between bio geographical areas in the management of natural resources;
- global cooperation of nations on Earth.

To achieve this goal it is necessary to promote specific strategies, based on the theoretical, economical, social, technological, political, cultural, ecological and institutional point of view.

2.4 Climate Changes

Climate changes represent the greatest threat that the mankind is facing in the last millennia, threatening the natural environment, world economy, lifestyles, everyone's security and safety. Climate changes are of two kinds: **continuous** that progresses slowly and **anomalies** that occur suddenly. Strongly felt in Romania and in other parts of the world, they both predict an era fraught with catastrophic dangers. According to previous evaluations of the specialists in the atmospheric physics and meteorology, the average global temperature will increase by approx. 1.7 ° C during this century; they are now contested by other studies that claim that the effect will be several times more intense. Because of planetary green house phenomenon, the atmosphere is as a ship in a microwave. But, in order to uniform a bit the global temperatures, there must be intense storms and rainfalls, which have been unusual so far; unfortunately the local excesses such as: heat, drought, forest fires, etc. cannot be avoided. The Tropical areas have hurricanes with winds exceeding 250 km / h and the temperate areas experience violent storms and most probably periods of frost or strong blizzards. These weather disturbances, that we were convinced that they would occur in a fairly distant future, that would leave us time to prepare; they already occur all over the world. Tornados occur in Romania and, weekly, in the Gulf of Mexico, destructive hurricanes happen.

The Global warming, due to greenhouse gas (GHG) and other less obvious reasons will be followed by consequences that will manifest slowly, that in the end it will be catastrophic. Besides hurricanes, melting icebergs, in the mountains and the poles, the heating marine waters and enhancing rainfalls will raise the level of oceans, making them invade permanently and transiently the islands and continental plains, reducing the cultivated areas. Rivers will be shorter and along with the rivers and ponds, they will overflow from time to time, as happened in the summer of 2005. Note the fact that the torrential rains, which flow on slope land, slip in basements, garages, destroying the walls made of adobe and other light materials, triggering landslides, undermines foundations, etc. Because of that it will be necessary of gradually moving towards higher ground, and then people will feel the lack of agricultural products, being obliged to resort additionally to the food from the sea.

The temperature increases faster at the poles than to the equator and more in the Northern hemisphere than the one in South; it was estimated that in these areas it will be 5 to 6° C higher in the coming decades. However, the reduction of areas covered with snow or ice will decrease the ability of solar radiation reflectance of light, increasing the absorption of heat from the earth. It will reach an increase of 5 to 6 m at the ocean level so that the Netherlands, half of Bangladesh and Calcutta could be invaded by water.

Table 1. Temperature rising, the medium average towards the period 1951-1980, according to GHCN (2008)

Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Temperature rising °C	0,35	0,12	0,14	0,24	0,38	0,30	0,40	0,57	0,33	0,33
Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Temperature rising °C	0,48	0,56	0,55	0,49	0,62	0,54	0,57			

Simultaneously, the favourable influence of the bay current will be hindered by numerous icebergs detached from Northern Calotte, in their movement towards the South. Thus, North-West Europe will suffer a strong cooling, possibly even a new glacial era, whose duration is unknown. To a certain extent, the rest of the continent will also cool.

The unpredictable volcanic phenomena and other natural factors may influence climate changes. Floods as in the summer of 2005 and the Frost as in early 2006, it could be just a warning for what awaits us in the near future.

3. Conclusions

The resources of sustainable development are constantly changing. At this time the climate changes will lead to the changes of other resources that lay at the basis of this development.

1 Scientists attribute most of these temperature risings to human activities which release carbon dioxide (CO₂) and other greenhouse gases (GHG) into the atmosphere. According to recent research, an average global warming of 2°C or above compared to the pre-Industrial Revolution level would result in dangerous and irreversible impacts, including the following projections:

- **Water shortages** — Globally, more than three billion more people would be at risk as a result of water shortages. The predicted loss of ongoing glacier melt

water in India alone would cause water shortages for 500 million people and for 37% of India's irrigated land.

- **Food insecurity** — More frequent droughts in Africa and elsewhere would lead to lower crop yields, and there would be a general decrease in cereal crop yields extending beyond the tropics to mid-latitude and temperate regions, mainly due to increased evapotranspiration.
- **Health impacts** — Three hundred million people would be at greater risk of malaria and other vector- and waterborne diseases; and the health costs of climate change are projected to double by 2020, partly as a result of heat stress, but primarily because of increased rates of diarrhoea and malnutrition in low-income countries.
- **Socio-economic impacts** — Initial estimates of socio-economic losses with moderate temperature increases include gross domestic product (GDP) losses of a few to several GDP percentage points, with net global damage of up to 20% for unmitigated climate change compared to much lower abatement costs in the case of early mitigation action.
- **Effects on ecosystems** — 35% of terrestrial species would be at or near extinction by the year 2050, including the loss of unique ecosystems/species

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The Methods of Professional Development within the Higher Educational Institutions

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Abstract: The main purpose of this analytical research paper was to distinguish the importance/the contribution of development methods – formal/non-formal, the analysis of different programs framed on one of these, but also, the correlation of these development methods with the research population profile – the didactic personnel that activates in the Faculty of Economics and Business Administration¹ frame. Among the subjects approached through the implementation of the research methodology used (questionnaire) on population, we mention: the personal policy promoted by FEAA, the delineation of the researched population profile, the presentation of professional development needs of the didactic personnel (formal, non-formal), the importance and contribution of faculty internal professional development programs on the didactic personnel.

Keywords: personnel policy, development needs, professional development programs, university management, formal methods, non-formal methods.

Jel Classification: M12, M53, M54.

1. The present stage of knowledge of the researched domain

"To perfect means to change, to be perfect means to change often."

(Winston Churchill)

This paper wants to be a thoroughgoing analyze of professional development in the context of the concept of "continuous formation" of human resources from educational services in Iasi city². Often incorporated in the large concept of "continuous formation", professional development means much more than formation/obtaining knowledge and abilities, it means in fact to improve the existing knowledge and abilities, and to raise the level of professional preparation according with the institutional and/or functional changes existing in the context that human

¹ In the present paper it will be used the short form of the *Faculty of Economics and Business Administration, Iasi – FEAA*.

² This exploratory study is only a part of a more extended research on the "Analysis of the professional development of human resources in the higher education system", which was realized in may 2008; and the results were presented in the dissertation paper of the author (in June 2008).

resources activates (in the case of educational services – "homo academicus", after the term used by A. Neculau, in „*Câmpul universitar și actorii săi*”). The professional development takes place on the whole professional life period under the form of programs organized inside and outside the organization/institution, and assures the improvement of knowledge/abilities, which will allow the persons to unfold their activities in an efficient manner and also to keep up with the institutional and/or functional changes that appear on the way.

Bolam (1982) distinguishes as purposes the following personal professional development activities:

- The improvement of performance of the entire personnel of the school (as a whole) or of the group;
- The improvement of the professional performance of each teacher;
- The extension of individual professional experience through the career development or promotion;
- The development of professional knowledge for each teacher;
- The extension of personal or general education of each teacher (example: lectures that don't have the content related to education or taught discipline).

Beside these purposes, the personnel professional development also has to include: (1) the attitude change regarding the involvement of the employees; (2) the growth of communication abilities; (3) the usage of the best judgements in innovative decisions (Rotaru, Prodan, 2005, p. 177).

But there isn't only one unanimous accepted definition for this concept. The human resource professional development pursues the growth of teachers' professional capacity for their continuous increase and promotion in institution. The purpose of human resource development is to increase the teachers' capacity to fulfil successfully bigger duties and responsibilities for upper level. For example, Hoyle (1982) defined „the professional development” as the process through which a professional develops his/ her knowledge and skills necessary for an effective professional practice” leads to the idea that “professionals need to have a certain degree of autonomy in deciding the type of developing activity they need (Gavrilovici, Iosifescu, Prodan, 2004, p. 189).

Therefore, the process of professional development establishes the connection between institutional and individual needs. In an educational context, this need is expressed as “a systematic effort to harmonize personal interests, wishes and needs, carefully evaluated, in the view of continuing a career, with the developing needs of the organization in which the person works”. The final purpose is the one of improving the education's quality in higher educational institutions. (Piper, Glatter, 1978, p. 58).

There are more methods to divide on categories the personnel professional development activities. One way is to distinguish between the activities or *the programs that are taking place in the interior of the institution and the ones organized in its exterior*. The activities that take place in the interior of the institution can divide also in two subcategories: *methods direct related to the function/job* (example meditation, committee association, job rotation, job assistance, professional preparation with the purpose of fulfilling the responsibilities, etc.) and *methods indirect related by function/job* (for example; senior lectures, psychological testing, the formation in the human resource area, case study, role playing, business games, etc.)

Also the improvement of necessary intellectual and emotional abilities can also be obtained through the formal and non-formal professional development methods¹

The evolution of the university career is realized in rapport of scientific educational – didactic criteria, but also in rapport of reference elements for the candidates research activity and even in rapport of organizational variables (of involving in development organizational activities and tasks). The scientific criteria that were mentioned before can be fulfilled by the didactic personnel through the participation to various formal professional development methods, especially. Among the specific formal methods, the more used ones are: scientific conferences/conventions (national and international), the international mobility programs (the type “visiting professors”), the research projects, and the publishing activity.

At the opposite pole, between the specific non-formal development methods, we mention: workshops, trainings (in domain/personnel development), summer school (national/international), etc.

2. The presentation of hypothesis, of an possible solution or an systematize proposal

The subjects of this exploratory study have been selected randomly from the didactic staff of the Faculty of Economics and Business Administration of Iasi. In order to obtain a representative sample, “*stratified sampling*” has been used; the research instrument (in this study – the questionnaire) has been applied to: 10 junior assistants, 10 university assistants, 10 readers, 10 lecturers and 10 professors; in total - 50 members of the didactic staff. The final sample was made up of 34 members of the didactic staff of FEEA, because of the difficulties encountered during the application of the questionnaires.

¹ For the present research paper because of the specifics of analyzed services – educational ones, it is the best to fold the classification formal – non-formal.

Fig. 1 Graphic representation of the sample according to the subject category given by the academic title

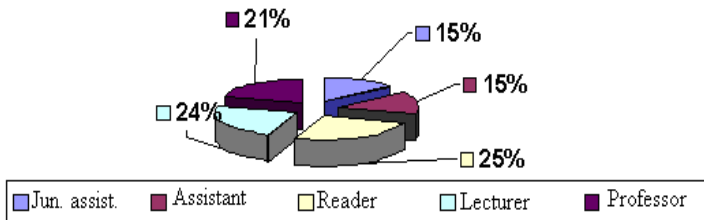
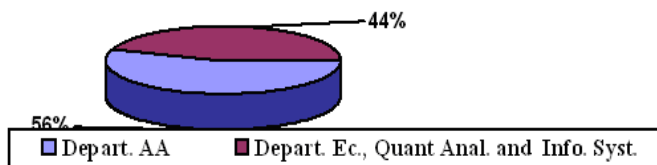


Fig. 2. Graphical representation of the studied population (criterion - belonging to a specific department)



For this research, the used sample¹ has been random, stratified and simple, and the selected collectivity was structured in homogenous sub-groups according to a single characteristic – *the academic title of the subjects*. The technique used for collecting the data for this research was the questionnaire, applied through direct contact with the subjects classified in the investigated reality.

The purpose of this scientific paper is to correlate and to observe the manner and the proportion in which the formal and non-formal professional development influences the continuous formation of the researched population, formation that unfold in the entire professional life period.

For fulfilling the proposed objective were emitted the following hypothesis:

¹ For the current research it would have been interesting to use stratified multiple sampling, structured on two homogenous sub-groups/ “layers”, by introducing the trait of belonging to the department (in the Department of Business Administration or of the Department of Economics, Quantitative Analysis and Information Systems) of the subjects.

General Hypothesis:

The formal/non-formal professional development methods influences and have a big role in the continuous formation of didactic personnel framed in the university education system that unfolds on the entire professional career.

Research Hypothesis:

a) *The formal professional development methods* occupy a high percentage in the quantum of continuous formation of university didactic personnel.

- the subjects that obtained higher frequencies of the item “the number of participation in the last 12 months” are more predisposed to be influenced in a higher percentage in the continuous formation process by the formal professional development methods;

b) *The formal professional development methods* occupy a low percentage in the quantum of continuous formation of university didactic personnel.

- the subjects that obtained low frequencies of the item “the number of participation in the last 12 months” are less predisposed to be influenced in a higher percentage in the continuous formation process by the formal professional development methods;

c) *The non-formal professional development methods* occupy a high percentage in the quantum of continuous formation of university didactic personnel.

- the subjects that obtained higher frequencies of the item “the number of participation in the last 12 months” are more predisposed to be influenced in a higher percentage in the continuous formation process by the non-formal professional development methods;

d) *The non-formal professional development methods* occupy a low percentage in the quantum of continuous formation of university didactic personnel.

- the subjects that obtained low frequencies of the item “the number of participation in the last 12 months” are less predisposed to be influenced in a higher percentage in the continuous formation process by the non-formal professional development methods;

3. Scope and objectives of the study

The implementation of the Bologna system had and will have still a special impact on FEAA teacher's activities. As any implemented change it brought many changes in the syllabus and in the each teacher's duty. One of the most important changes aimed at the reorganization of departments in functional units/in the two existing

departments and in abnegation of different disciplines that don't have any more correspondents on the work market.

As a sequel to this reorganization, the present requests of the teachers grown in rapport with the student's expectations and with the assessed standards of European Union. Many professors were forced to give up to discipline that they lectured many years and to come up with new information, innovations, and recent discoveries in the areas that they represent. Also, the co-operation between different departments of the faculty will have to become more present as a sequel to the fact that the students will have the possibility to choose the lectures that are part in the education offer of other faculties.

In this context, the professors are induced to present new proposals of attractive lectures, having practical practicability and correspondence on the work market. This aspect will only imply a sustainable effort from their part with the purpose to face the societal requests, to gather and to organize suitable information into an lecture material that will respond to the quality university standards as well as to student's needs.

Once we have shown the professional development needs – the continuous development of the FEAA didactic personnel and the analysis of professional development that is realized in the present, the mission/*purpose of the present paper* is to observe the percentage of formal/non-formal professional development methods in the continuous formation process of the examined population.

In order to meet its declared purpose, this research is directed at the following *specific objectives*:

- *To identify the needs for professional development of the investigated population* and to classify the needs according to the typologies presented in literature;
- To explore the FEAA didactic personnel professional development in general and *in function of the professional development methods classification (formal, non-formal)*;
- *To explore/to distinguish the importance and the contribution of internal professional development programs*;
- *To create and apply a questionnaire* whose items allow the classification of the investigated population according to general criteria (e.g. age, gender) as well as to specific criteria (e.g. academic title of the subject, connected responsibilities fulfilled, didactic experience, department in which the subject activates etc.), and also to support the mentioned objectives.

The study has an exploratory nature and is aimed at analyzing the needs for professional development of the didactic staff of FEEA; the methodology used is *quantitative analysis*, with research techniques such as systematization, simple grouping (using a single characteristic), tabling, and graphic representation.

4. The research design

This *mixt research step* was realized into a first part of the research through the presentation of professional development methods and illustrating the specific programs of these methods, so that in the pure monograph part/casuistry part through the built research instrument - the questionnaire, to analyze after the importance/contribution criterion the formal/non-formal development programs and to explore the specific methods of each program; in the conclusion part was realized the interpretation and the systematization of obtained data as a sequel of implementation of the study.

The built and used questionnaire, although isn't an exhaustive one and it cannot cover all the situational aspects of the present study, it did explore some main directions:

- the delineation of a general profile of the researched population through some general characteristics prism, as : gender, age, owned academic title, the professional experience (measured through the number of years of didactic activity), etc.;
- the importance or the existing percentage in the professional development design frame of the subjects of the formal professional development, respective of non-formal (measured in the apparition frequency);
- the comparison of the importance of the formal professional development programs, respective non-formal through the subject's gathered data;
- the correlation of the researched population designed profile with the result analysis regarding the FEAA didactic personnel professional development (e.g. : for an university preparatory prevails as apparition frequency the formal methods or the non-formal ones?, but for an university professor?, etc.).

5. Research strategy

In the construction of the questionnaire, that had 24 items, was taking into consideration the objectives elaborated before the beginning of the research (the point 3), and that can be directional expanded as the following:

I. The built profile of the investigated population:

- *Tracing the profile of the investigated population:*
- According to *general criteria* such as gender and age;
- According to *specific criteria* such as: academic title of the subject, responsibilities connected to the didactic activity, didactic experience (measured in number of years of didactic activity), the department in which the subject activates, and the importance of the job for each subject;

II. The needs for professional development of the didactic staff:

- *Tracing the needs for professional development inclusion in the typology;*
- *Needs for professional development at an organizational level;*
- *Needs for professional development required by the job:* multiple choice;
- *Needs for professional development at an individual level:* multiple choices.

III. The analysis of the FEAA professional development didactic personnel :

1. The didactic personnel formal professional development methods:

- the quantitative measurement (annual participation number), through the frequency of apparition of answer variants;
- formal professional development specific methods;
- the demotivation of the didactic personnel in participation of these kind of programs;
- the contribution/the importance of formal professional development programs felt by the subjects (in general);
- the contribution/the importance of formal professional development programs felt by the subjects, according of the institution that organize these.

2. The didactic personnel non-formal professional development methods:

- the quantitative measurement (annual participation member), through the frequency of apparition of answer variants;
- non-formal professional development specific methods;
- the demotivation of the didactic personnel in participation of these kind of programs;
- the contribution/the importance of non-formal professional development programs felt by the subjects (in general);

- the contribution/the importance of non-formal professional development programs felt by the subjects, according of the institution that organize these.

3. *The hierarchy/the priority in the frame of formal and non-formal professional development programs of specific methods;*

IV. *The existence/the importance and the contribution of didactic personnel internal professional development programs of the faculty.*

The subjects were chosen in the randomly manner from the two existing FEAA departments: 19 teachers from Business Administration Department and 15 teachers from Economics, Quantities Analysis and Informational Systems.

The criterion for choosing these subjects took in consideration the moment of application of the questionnaire. From the 34 of participants, 7 subjects are university professors, 8 are university readers, 9 are university lectures, 5 are university assistants and 5 university preparatory (as in Figure 2). The numerical superiority of the university lecturers in the frame of sampled population is due to their accessibility of the moment of questionnaire application.

6. The validation of results procedure

This present research paper is difficult to frame into an economic or business administration unique discipline, being an interdisciplinary research, at the human resource (the monograph is realized upon FEAA human resource) border with service management (the monograph is centred upon educational services of university level).

The present research paper doesn't represent only a pure analytical research, but also *an explicative research*, in the way that it propose to fulfil the objectives established before, but also to discover the possible causative relations between the concept of didactic personnel professional development, on one side, and the two methods theoretical analyzed – formal/non-formal, and the importance of each method in professional perfecting achievement.

Also, the paper had an explorative character and propose itself to develop professional the FEAA teachers, using as its methodology the *quantitative analysis*, with research techniques as – the systematize, the simple grouping (using one characteristic), tabling and graphic representation.

Regarding the part of data interpretation, we will refer to an analysis of didactic personnel professional development in general, to the weight and to the apparition

frequency of formal and non-formal development methods, with its specific programs, and to the correlations that emerge as a sequel to the obtained data.

The estimated results are the ones that acknowledge the research hypothesis. Exists the possibility that the hypothesis will not be confirmed as a sequel to some variables that weren't taken in consideration or couldn't be controlled (e.g. the subject's personality features, the socio – professional background, etc.).

7. Conclusions

For a better exemplification of the weight of the formal professional development methods we will analyze the obtained data under the two aspects:

- the total annual number of participation of the subjects;
- the annual number of participation of the subjects, according to the hold academic title.

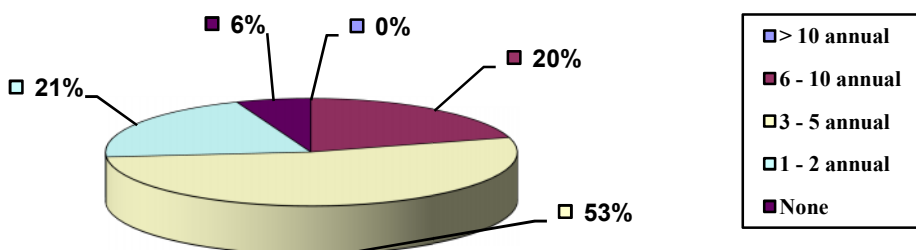


Fig. 3. The graphic representation of the subject's participation weight at the formal professional development programs

In general (as in Fig. 3), during the current university year, the FEAA didactic personnel attended between 3 – 5 formal programs with 52% percentage, an 6% percentage of subjects declared that didn't attend to such a program in the current year and none of the subjects didn't attend to more than 10 programs.

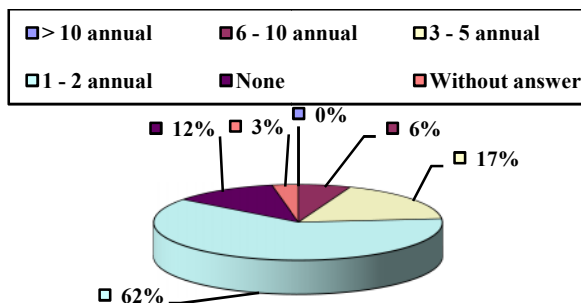


Fig. 4. The graphic representation of the subject's participation weight at the nonformal professional development programs

Under the aspect of *annual number of participation* at non-formal professional development programs, 61% of the subjects attended in the current year at 1 – 2 such programs, from witch approximately 15% are represented by university assistants and by university readers; at the opposite pole a percentage under 5% was registered by university preparatory. *The higher rate of participation* expressed in number of participation (6 – 10 annually) was registered by the subjects – *university professors* with a percentage of 100% from the percentage 6% registered totally. At the opposite pole – with no participation in the current year at any non-formal development program – is it situated the subjects' university preparatory, they registered 100% of the percentage obtained by these variant of answer – 12% from the total.

To observe which of the two types of professional development programs registered the higher rate of participation from the researched population we will compare the figures 3 and 4, the extract findings are presented diagrammatic as following:

1-2 annual participation		3-5 annual participation		6-10 annual participation	
F	N	F	N	F	N
21%	61%	52%	18%	21%	6%

Accrue that the general hypothesis that is confirmed is the one that : *The formal professional development methods* occupies a *high* percentage in the quantum of continuous formation of university didactic personnel (an 73% percentage of the subjects have a participation number in the last 12 months of 3 – 10 formal development programs).

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Education and „The New Institutionalism” – The Paradigm of Economic Development within the Context of European Integration

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Abstract. We shall open this paper with reference to the book “*Understanding the Process of Economic Change*” by D.C. North being considered of reference in the issues which are subject to research („there are some fundamental characteristics of successful economic development which are common for all the economies but at the same time there is no universal pattern to reach these results”- North). How can poorness be explained in most of the states of the world where the sources for economic growth are known? The human failure and the institutional framework have a special contribution in finding solutions in order to obtain economic growth and implicitly the growth of economic development. The article makes references to the institutional framework and its importance for the economic development of a country, to the educational organizations and to their contribution to the economic development. Viewed from a reactive factor of development, *the education has become proactive*. This is because the perspective of education has been accentuating more and more, called in to prepare the people for types of societies which have not existed yet. The gap within the field of education has a fundamental character in maintaining and emphasizing the gaps between the social – economic development of different countries.

Keywords: education, institutionalism, economic development, progress, rules

Jel Classification: H52, I23 I24

1 Introduction

Even from the time of Adam Smith, education was thought to be an element contributing to the economic and social equality. Even before Adam Smith, there had been references in the specialty literature referring to the role of the education in this direction. William Petty was among the first persons to promote the fair distribution of education. Some Mercantilists supported main stream education with the aim to improve mainly the productivity from the agricultural field and the progress of the society in general. During the 18th and 19th centuries, the school reformers from the USA favoured the spread of education among the poor. One of them saw school as an instrument to reach justice and equality of all opportunities and to remove poverty.

A long time ago, Simon Kuznets foresaw the fact that the distribution of income in the capitalized countries would be equitable the more educated the working force was. Theodore Schultz, in a study entitled “The Economic Value of Education”

emphasized: “these changes in the human capital represent the basic factor in reducing inequality from the distribution of the income”. The education has proved to be vital in the economic progress and in the improvement of economic equality. A group of specialists have reached the conclusion that the most important factor of income inequality is the human capital.

2 “The New Institutionalism” – a new paradigm of the development

An economy may be characterized by means of innumerable demographic, economic, institutional and technological statistics but what is really needed for us to know is the interaction among them. Why do we make references to these things in relation to education? It is because the basis of this interaction is represented by the *stock of knowledge* which the society possesses; firstly it is the *institutional framework* which establishes the set of play rules and the *demography* which describes the quantity and quality of the human beings. This stock of knowledge determines the superior potential related to the wellbeing of the society and the institutional framework determines the simulation structure of society. The centre of the study for North and for the improvement of economic performance is surely the effort of the human being to control the interaction of these three aspects.

Institution is the term the evolutionary (institutional) economists use to describe normal behaviours, common to the people in the society and to describe the ideas and values associated to these regularities. There are numerous phrases that can define “the institutions” or “an institution” like: a use has become axiomatic by means of repeated use; collective action which controls an individual action; drawing social behaviours which are very standardized; a way of thinking or of action found in the behaviours of a group or in the traditions of people; pre-established common aspects of an associated behavior¹. But none of these definitions offers to the term an equivalent sense used by the evolutionary economists.

The main aim of the institutional analysis within the context of education is to investigate the miscellaneous institutional frameworks within which an economic development can take place. Moreover, Picciotto and Weisner (Picciotto & Wiesner, 1998) see the “new” institutionalism as the appearance of a “*new paradigm of the development*” which considers the institutions and organizations to be basic determiners of the economic, social and political process. The organizations and institutions find themselves in a strong interdependence, whereas the educational organizations together with the political and social ones serve as agents of the institutional mutations or as fructification factors of the opportunities created by the institutions. (Pohoța, September 2006)

The question „*Why are some countries richer than the others?*” is crucial for the economic theory. Starting with the 18th century, there has been proposed a lot of theories and models of economic growth and development with different echo upon

the real economic processes. The source of the economic growth, different in the approaches of the most important theoreticians, has been considered to be the work division for A. Smith, the accumulation of the capital for K. Marx, the innovations for J. A. Schumpeter, the rate of economies and investments for R. Harrod and E. Domar. The neoclassic pattern of R. Solow explains the difference between the developed countries and the countries in on-going process of development by the differences in the efficiency to combine the factor of work, capital and of the new technologies. J. Stiglitz explains it through the efficiency of the functioning of the private and public sectors as well as through the level of development of the civil society and of the individual by means of the educational and health systems.

D. North and R. Thomas have offered a totally different hypothesis: the named factors – innovation, the scale economy, education and capital built-up etc. - are not causes of the growth but they represent growth itself. The differences among the national economies as related to growth and economic development are due to the development level and the nature of the institutions. Because any transaction is done in certain political, management and cultural conditions which impose certain behaviour restrictions thus influencing the efficiency of the economic activity. It is 30 years since the launching of the hypothesis, but still an integral institutional theory of the developments has not been created yet. The explanation could be seen in the prior orientation towards economic reform, partially politic and the ignorance of the truth that the market economy is characterized by certain cultural traditions reflected in the institution. Their lack or the insufficiency determines, to a certain extent, the costs of transition and thus the possibilities of the further development.

The greatest merits in promoting and arguing the role of the institutions, which is of importance for our approached subject, belong to D. North whose activity has received the maximum qualifier for the economists – the Nobel Prize. Practically, there is no publication which has not directly approached the institutional theme and which has not cited D. North. In his paper, „Institutions, Institutional Change and Economic Performance”, he gives sufficient arguments in favour of the reconsideration of the institutions; moreover D. North makes special references to the economies in transition – one of the aspects that will be approached in the present article. The appearance of the institutions is a controversial topic even in the main paper of D. North, where he supported R. Sugden who stated that they [the institutions] “represent rules which were not consciously created and which are maintained for everybody’s welfare”, but, at the same time, “the development of some complex forms of exchange in the late Middle Ages or of the Modern Ages was possible due to a variety of institutions like the first codes of commercial behaviour published by the specialists in commercial law”. (North, 2003, p. 42)

In the analyses made by the great economists, the institutions have gained two nuances: *formal institutions and informal institutions*. Our analysis resumes to the informal institutions as they object of internalized traditions, common laws, customs

and standards of conduct (ethic norms, corporatist codes of behaviour), while formal institutions are object of the constitution, codes of laws (civil, commercial, penal etc.), common laws, status, regulations.

Why are we resuming or referring mainly to the informal institutions? Because **the informal institutions which vies the economic sphere represent a product of the social rules, they are transmitted by means of the culture and they determine the relatively long-term human economic behaviour.**

Just as one of the positive characteristics of the institutions is their perpetuation, continuous improvement, as well as their adjustment to the needs of the individuals, the latter's trust and civic freedom are necessary for the promotion of the social – economic and political initiative and for the exchange of opinions. It thus becomes clear that, in order to maintain the competitiveness and the performance of a national institutional system, both the stability and the change of the latter are necessary.

3 The institutional and educational implications within the development of the emergent countries

One of the critics of applying the Occidental theories of the economic development for the countries in on-going development process, *Gunnar Myrdal*, awarded for his theoretical and practical accomplishments with the Nobel Prize, is the founder of the School for Macroeconomics from Stockholm, also named the institutional – sociologic current. He was preoccupied with the monetary equilibrium, demography, racial relationships, the economy of "the third world" countries, but his greatest contribution he brought is in the analysis of the socio-cultural causes of the underdevelopment, as he is the author of the concept of "cumulated causality" which he has promoted in his most important works: *The Political element in the development of economic theory*, 1930; *Monetary equilibrium*, 1939; *An American dilemma: the Negro problem and modern democracy*, 1944; *An International economy, problems and prospects*, 1956; *Beyond the Welfare State: Economic planning and its international implications*, 1960; *Asian drama: An Inquiry into the Poverty of Nations*, 1968; *Against the stream: critical essays on economics*, 1973; *Political and institutional economics*, 1979.

In one of his well-known works, "*Asian Drama: An Inquiry into the Poverty of Nations*", published in 1968, the Swedish economist analyzes the economic development of India, Pakistan, Sri Lanka, Thailand, Indonesia, Campuses, Laos and Vietnam. According to his perception, the poverty of these countries is caused by *the predominance of archaic institutions and views*, which influence the socio-economic system. In his view, all the social groups from South Asia are characterized by the breach of the work discipline, the lack of accuracy and punctuality. Superstitions are extremely strong; there lack the feedback to all that is innovative, as well as their acceptance and adaptation to the new. There also lack the

spirit of initiative and ambitions. In the traditional psychology the citizenship towards power is dominant while social cohesion lacks. (Myrdal, 1968, p. 520) All these characteristics paralyze the technical updating and the economic performances, increasing the differences between the developed countries and the ones in on-going development process.

Taking into account the above-analyzed, G. Myrdal considers that for the economic development, the change of the informal and out of the new institutions becomes decisive. ***Only if they are undertaken in parallel – the technical – scientific modernization, the economic reformation and the measures to diminish the impact of the dominant archaic informal institutions, will they be positive.*** In his view, the change of the informal institutions must take place by means of the demographic control, the support of the educational system and the reforming of the agrarian sector.

Being a reflection of the situation of the on-going development countries, the "drama" consists in the consequences of the decolonization process for these countries, in the hold-backs in the way of the economic development. The underdevelopment is no longer considered only a hold-back for the "third world" countries, but also a drama of these peoples and especially of the intellectuality who was the first to approach quite quickly the enormous downshift between the developed countries and those in on-going development. The intellectuality was also supposed to elaborate the strategy and the tactics to overpass it and even more to reevaluate their own cultural heritage. (Myrdal, 1968, p. 100)

Criticizing the occidental approach of the problems of the "third world", especially the attempts to apply the functioning mechanisms of the economies developed within environments which were not ready for them, G. Myrdal mentions that, as a result, there were formed economies of the type of the enclaves – a *performant* industrial sector, but at the same time narrow, oriented mainly towards the external market and not towards the internal one and towards a wide but inefficient agrarian sector. These measures have had no other apparent effects but the disintegration of the economic system, the technological dependency, the increase of the corruption and bureaucracy of the clerks.

Myrdal, old tradition institutional scientist, appreciates the success or the lack of success of the national economies not from the perspective of the concepts of "costs of transaction" or "rights of ownership", but of "economic culture" or "economic mentality", that is a set of stereotypes and values which influence the economic behaviour and which are common to a wide social group. The Norwegian scientist was quite sceptical regarding the economic development of the Asian countries, because western individualism and materialism are not one of their features and because the excessive religiosity was considered a hold-back in the economic activity.

Another important idea is that the phenomenon of poverty in the developed and on-going development countries has totally different features. If being poor in the developed countries means just a possibly temporary situation, in the underdeveloped countries poverty is considered as fate because of the national social structure based on social classes or castes.

The implications especially of the academic education should not be treated with indifference within this given context, as it is crucial for the economic, social and cultural health of a nation. It also contributes to the intellectual development of the students and to their training for the world of work, as well as to the development of culture and to the promotion of the values which characterize it: the concern for rigor, the respect for the individuals and for their opinions and the research for the truth". (Dearing, 1997) The difference in the field of education has a fundamental character in maintaining and emphasizing the differences among the socio-economic development of the different countries.

The quality of the institutions is determined based on their effectiveness and on their efficiency. For the time being, the reflexes of the policy of education in many countries are conditioned by the "constructivist" rationalism. The countries included in this category are not the countries where the dominant is represented by the "cleptocratic" or the "totalitarian" states, but only the countries where the politic tradition is *the liberal democracy*. The respective evidence is not an argument for the institutional construction. It may at least represent a reason for sadness for the way in which the splendid discovery of the personal freedom is depreciated by the insidious innovation of the "compulsory happiness" (V. Işan, D. Oprea). Frederic Bastiat caught, in a successful metaphor, the political bad habits and the administrative imitations of the protectionism: "If all countries throw blocks in their harbours, it is not necessary to fill with blocks our own harbours". Paraphrasing him, we may say that: *"Even if all countries throw the State in their universities, this is not yet a sufficiently serious reason to throw the State bomb at our universities"*. With other words, *the institutional "construction"* of the academic education in Romania may benefit from the analogy with the liberal order of the society. From a theoretical and normative point of view, the "critical" rationalism makes this thing possible. The answer is still at the surface without the clarification of the specific concept of institutional "construction".

J.S. Mill refused the collectivist and holist conceptions about education in general and academic education in particular. He considered the educational romanticism, detached from the pedagogy of Rosseau and the philosophy of Hegel (the existence of the general will, of a national spirit or of a collective mind) a chimera and at the same time an attempt to the development of the individuality.

Certainly, it may be considered that Mill's idea of academic education could be valid for the industrial - agrarian society from a century and a half ago, when the University would address to the elite. This is no longer valid nowadays within the

complex society based on knowledge when the academic education has become a main stream one. Nothing could be more false. The free choice has nothing to do with the number of the students and teachers or of the universities, but with the social interrelations and the universal regulations which are established and consistent. And from the Hayekian perspective, the complex society needs simple rules in order to allow the blossom of the spontaneous order. The more numerous the knowledge is, the more it is broken-down and its use for the development of the social activities and markets needs more free choices. Alternatively, the more complex the society is the more ineffective and inefficient the centralized government and the constructed order become.

Until the appearance of the „welfare state”, the universities enjoyed rights of ownership over their assets. Noting of the philosophical, theoretical and practical does it justify the “nationalization” of the academic education (Tooley, 2001). Only the tribulations of the intellectual progressing, the recrudescence of the mercantilist state in an attenuated form (the “providential” State, newly the “Babysitter State”) and the academicians’ illusion that “public financing and the care of the state protects their “ivory tower” fish up the misalliance between collectivism and conduct (V. Işan, D. Oprea).

In Romania, the genesis of the universities happened by political decision. They would be organized by the State, without giving any importance to the role of the informal institutions and of the spontaneous order. The initial confusion between the external organizations and institutions (coercively created) and between the social order and the management of the society made by the State (inclusively of what we call civil society) has created a line dependency. The communist “Regime” would cancel any attribute of the academic freedom and of the organizational autonomy, forging the historical dependency to an almost unbeatable level.

The enrichment and adjustment of the modern university’s mission by means of specific activities regarding *life-long learning* have a strong support in the results of the Summit of the European Council in Lisbon (March 2000) and in the launched Lisbon strategy for 2010, approved in 2005. Here it was confirmed that the educational systems from Europe have a key role in the future changes, taking into account the fact that the successful transition to an economy and society based on knowledge is comprised within the approach of the life-long learning.

4 Conclusions

Neglecting nowadays the education of a person means sentencing that person to the mediocrity of tomorrow. The same thing may be also applied to countries. The education is the basis of a free society, the ground base on which a strong and healthy state is built. The needs of the modern age are greater and greater due to the rapid technological progress. The societies which anticipate this progress and best

train their descendents for the future will profit from it at the most while those societies which do not do this will be disadvantaged.

As far as it concerns the forming of the legal framework of the economic activities, the present state of the on-going development is only a stage from the not so far past of the developed countries. Thus, the informal institutions, even if they have generated the appearance of the obscure economy, have also impelled the creation of the so-called “enterprising spirit”, as well as the forming of the authentic “economic culture”, characteristic to the national specific of this category of states, therein attesting their economic viability.

The institutions are not static, the institutional change being a continuous phenomenon. In spite of the persistence in time of the institutions, according to which it takes 100 – 1000 years for the modification to arise, we however consider that the speed of this process depends on:

- The initial impulse, either from the exterior or the interior of the national institutional framework;
- The norms complied to the change: the more widespread a norm is, the more difficult it will be to comply it to the change;
- The used mechanisms and the professionalism of those who promote them.

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Business Administration

General Considerations on Leisure Services

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Abstract. The leisure is a component of standard of living and quality of life, expresses the level of material and spiritual life, without it can't be held the multilateral development of the human, enforcing recovery functions of the organism, formative and instructive – educative, cultural and social. In pre-modern times, the free time was located on religious holidays and in the rest days established on the basis of religion (Sunday at Christians, Saturday at Jews, etc.) The good of the individual towards trends any true democracy has in its structure, along with the material components and social and spiritual. In the economic and social framework, the reproduction of material conditions of existence is doubled by the health care, intelligent, creative force of the society members

Keywords: Services, tourism, leisure, SME development

Jel Classification: Q19

1 Introduction

In a free society, we consider that free time is a part of the time situated outside of work, devoted to family life, education, entertainment, sport which allows the human to restore its spent energies in the complex process of the labour and, also for harmonized development of human personality. The free time appears thus like a quality indicator of life and its dimensions is differentiating depending on profession, practice degree, age, sex, tradition and culture. Thus with how it increases the possibility that a part of the time of some activities to be reduced with the help of some service providers (SMEs specialized in the provision of services), the duration of the free time will have another dimension that will allow to the individual to orient towards appropriate forms of tourism.

The leisure is a component of standard of living and quality of life, expresses the level of material and spiritual life, without it can't be held the multilateral development of the human, enforcing recovery functions of the organism, formative and instructive – educative, cultural and social. In pre-modern times, the free time was located on religious holidays and in the rest days established on the basis of religion (Sunday at Christians, Saturday at Jews, etc.)

The good of the individual towards trends any true democracy has in its structure, along with the material components and social and spiritual.

2 The signification and the functions of leisure

In the economic and social framework, the reproduction of material conditions of existence is doubled by the health care, intelligent, creative force of the society members. These characteristics can be maintained, developed or languished in the free time affected their maintenance. Down through the mankind history there have been several attempts to define the notion of free time, each leaving place to perfection, according to the conception of life and the politics of its author.

Thus, in the undemocratic societies, “the work time” belongs to all “common people” – direct producers of material values – and “the free time” is the attribute of the “leading class”.

The beginnings of industrialization – car era – has brought an emphasis of the opposition time worked/ time uncultivated by the latter being understood free time.

Under the pretext of training “ new multilateral- developed human”, the communist ideology into the concept of “leisure” and the affected time of public works (“patriotic”) or political preparation.

In a free society, we consider that the leisure is a part of the time situated outside of work, devoted to family life, education, entertainment, to sport and that allows to the human to restore its energies spent in the complex process of labour and also for harmonious development of human personality.

The leisure appears thus as an indicator of the quality of life, and its dimensions is differentiated depending on the profession, education level, age , gender, tradition and culture.

The time functions are:

- *the recovery function of the body*

The modern man, caught in the vortex of the daily obligations (the work, social obligations, politics, fashionable) addicted of television and computer leaves a small part of its free time for resting. The leisure contributes at restoring the work capacities, at maintaining and improving the state of health. These are being realized

trough resting itself (sleep) and trough active recreation (fishing, hunting and other hobbies).

▪ *training function*

This comprises several aspects: the instructive-educational, aesthetic, intake. With this function is followed auto-instruction, completing of studies for efficiency of the work. The training position is done in multiple activities: visits to museums, reading, scientific contacts viewing of performances and concerts, participation in sport activities.

▪ *social function*

In the democracy conditions, this function is getting a growing share in the budget of free time. The man isn't thinking only for themselves, but also to his fellows. Thus as an employer or a simple seller, the man engaged in charity activities in the context of foundations. Sometimes, the social function gains a politic tempt, some members of the society engaging, in the free time, activities at the parties residences to who they belong.

Accomplishing the free time functions contributes at qualitative reproduction of the labour, at intelligence stimulating, of creative capacities, at achieving of an elevated lifestyle.

3 Leisure – the consequence of increasing the SMEs' services specialized on the budget structure of time and the relations between its components

Throughout history, our perception concerning the time has knows significant modifications. And this because, among others, it has modified the period of life, has extended the work period, were accelerated the rhythms and has appeared the concurrence between the employees. It is more obvious that, in an organization, the time has become a resource that must be optimized, streamlined and controlled. Newer, in present, the employee is looking a magic formula in dividing the time between work, family and his own aspirations. How can be balanced the allocated time for satisfying these three options? There isn't a general answer to this question; all depends on the cultural, social, economic and legal norms from the country.

The time budget of the members of a society has the following structure:

3.1 Work time

The work period is a concrete period during which a person is disposed to exercise professional activities. She affects the periods allocated for satisfying of other need that give to the individual the feeling of accomplishment, balance. The work

duration knows, in present, in many industrialized countries a significant reduction. By this change was desirable:

- to create new jobs for those who don't work. This goal was only partially achieved because, in practice, creating of new jobs is directly linked to the appeared changes in the technical field;
- to avoid the dismissal of workers;
- to increase the available time for relaxation, for holidays or cultural activities

Comparing the changes that it has experienced during the work in different countries isn't easy. The main difficulties are caused by the collecting methods at the international organisms' levels and by the variety of the forms that is taking the work duration (e.g. we talk about the legal week of work, overtime, reduced program, etc.).

3.2 Time excepting the production process

- a) time related to work (the transport at and from the work place);
- b) time for satisfying personal needs of life (personal care, food, sleep, etc);
- c) time for household activities (cleaning, magazines visiting, purchasing, food preparation, etc.)
- d) time dedicate to family (supervision, taking care and education of the children, visit to parents, etc.)
- e) free time (necessary for cultural formation, spiritual, for physical exercise, relaxation, recreation, entertainment, social activities)

The relation between the work time and free time it isn't a simple quantitative relation of complement-rarity. There is thus a series of economic, social, psychological, factors that influences this relation. If the work time is extended over the physiological and social normal limits then the free time can't any longer fulfil the regeneration function of the psychic and spiritual forces. If the work time falls, and the additional free time obtained is spent in household activities, domestic or defective transport then will not create conditions for specific leisure activities.

The report time of work/free time has and a historical character. Thus, at a reduced level of development of the employment, the free time isn't clearly delimiting by the work time. As the human society evolves and raises the level of science development, technology as the organization methods and management, the free time volume increases.

Always, the human has endeavoured to find ways of measuring time. The time management imposes the same thing.

Time measuring isn't making however only on the outcome of each realized activity base in a time interval fixed in advance. In other words, we don't manage the time itself, but its activities developed in a certain period. The time management is based on three pillars: planning, organization and time control. The notion of efficiency requires that for each individual, the time to be used rationally and productively in line with the personal rhythm and with the resources of what each individual disposes, with the purpose to ensure the achievement of some specific activities in a given time.

The time management assumes that, for each individual, to be allocated time sequences, precisely calculated for each activity that must be unfolded (planning), to make all the possible efforts to respect them (organizing) and to evaluate regularly, the obtained results (the control).

Time management is based on a paradoxical aspect: although, in real way, we dispose today of much more time than formerly, we have the feeling that it isn't enough. In reality, any individual has 168 hours on week which they distribute them, approximately, in the following way:

- 40 hours for professional activities;
- 56 hours for sleep;
- 72 hours for various personal activities

Those 40 hours destined for professional activities are directly influenced by the other two destinations:

- if the individual doesn't cover the needs of sleep, he can't obtain maximum performance in his work. We are talking here, no incidentally, about the efficacy of using personal time and about the maximum productivity: it is obvious that, without productivity, the organization can't be competitive and, finally, can't survive.
- if the employee work too much, without managing itself "scientific" the activities, there is a risk of fatigue, reduce of productivity, of de motivation, of stress, of physical and mental effeteness. There are an increasing number of employees that suffer of depression or of professional exhaustion and training and for which is acutely putted the problem of avoiding the difficult situations. Or a better management of time is perhaps a beginning of solving problems of the employees, which wouldn't have to benefit if it would use better the time. When we manage our own time or when we deal with the others time we must take into account some general laws: a. with how much an activity is split, with that it seems that it takes longer. Everything depends on the degree of activity repeat and of motivating of the one that performs it.

- with how a activity is more interesting with so much it seems shorter and vice versa. The interest or motivation for executing an activity makes us to ignore the restrictions of time;
- the time seems, longer when we wait. Before an exam or of an event, then when we expect an answer or we sit at the dentistry door, the waiting time is impossible and we have the feeling of an unjustified loss.

A particular role in increasing the quality and quantity of free time are having the services.

4 Conclusions

In the life conditions of modern human, when the domestic device, automation and mechanization led to sedentary lifestyle, the sport, and touristic activities in free air offers the necessary balance of a harmonized development and a way of health recovering.

The time devoted to physical movement, favourite sport, hiking up depends of profession, age, sex, health status, access to sporting base, etc.

A part of physical activities and tourism of SPA can be executed without special equipment (running, physical moves in open air), and other parts needs special services (gyms, stadiums, swimming pool, aerobic gymnastics clubs, renting agencies of boats, bases of water-skiing or of alpine skiing.

Given that the practicing activities of physical movement, preferred sport, hiking and tourism characterize any age and contributes at health maintaining and implicitly at increasing the work efficaciousness, within the budget of a country must be allocated important sums from their development.

Increasing the size of free time and of the function complexities of it offers the possibility of increasing work efficiency, thus contributing at the social progress.

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Recent Trends of the EU – 27 Foreign Trade Activities

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Abstract: In line with the world economy trend, the collapse in world trade in goods and services observed in the last quarter of 2008 intensified in the first quarter of 2009, but the trough in growth rates has likely been reached; positive quarterly growth rates are expected by the end of 2009. UE-27 registered the slowest export growth of any region last year, with an expansion of just 0.0 per cent, down from 3.5 per cent in 2007. Import growth turned negative in 2008, falling by 1 per cent (+3.5 per cent in 2007). If the 27 members of the European Union are considered collectively (excluding internal EU trade), the five leading exporters were the European Union (15.9 per cent of world exports), China (8.9%), the United States (8.1%), Japan (4.9%) and Netherlands (3.9 per cent). Exports from the EU were worth US\$ 1.93 trillion in 2008. Signs of recovery are not yet so clearly visible in the EU-27 like in USA, in the last part of 2009. Each country has its own specific combination of weaknesses such as bursting housing bubbles, declining exports and damaged financial sectors. The eventual recovery is likely to be slow as rising unemployment will hit consumer spending. In the above mentioned conditions, GDP in the euro area is expected to contract 4.8% in 2009 and to show 0% growth in 2010. The previous projections were for a 4.1% fall in 2009 and a 0.3% fall in 2010. The main factors with a positive influence, taken into consideration for revising up the projections for 2010 in euro area are: the strengthening growth in world trade which will help support a turnaround in exports, the governmental policy support and an easing of financial conditions adopted in some countries.

Keywords: exports, imports, world trade, recession, recovery, accession, integration share.

Jel Classification: G01 O24, F43, P45

After the Second World War, international trade entered a long period of record expansion with world exports of goods rising by more than 8 per cent per annum in real terms over the 1950-1973 period of time. Trade growth slowed thereafter under the impact of two oil price shocks, a burst of inflation caused by monetary expansion and inadequate macro-economic adjustment policies.

In the 1990s, trade expanded again more rapidly, partly driven by innovations in the information technology (IT) sector.

In 2000 – 2007 period of time, the average expansion of world exports of goods continued to be high – averaging 6 per cent per year.

For the entire 1950-2007 period, international trade expanded by an average rate of 6.2 per cent.

The financial crisis that erupted in the United States around mid-2007 has broadened to include non-bank financial institutions and rapidly spread to the rest of the world. Following the collapse of Lehman Brothers in mid-September 2008, a generalized loss of confidence between financial institutions triggered reactions akin to a “blackout” in global financial markets. Spreads in credit and bond markets surged to very high levels, paralyzing credit and money markets. Prompt and massive policy action to restore confidence and provide liquidity appears to have successfully limited the period of panic, but the need for financial institutions to operate with less leverage and to repair their balance sheets remains. This process of adjustment will take time and impair the flow of credit, and is the key factor weighing on activity going forward.

World economy now looks to be approaching its lowest point, the ensuing sooner recovery at economic and social level being likely to be both weak and fragile for some time, is the opinion of the Western specialists in this moment. But on the way out it looks as if recovery will take hold in a staggered manner across countries reflecting, not least, the extent of policy stimulus and the force of problems every country being confronted with.

In line with the world economy trend, the collapse in world trade in goods and services observed in the last quarter of 2008 intensified in the first quarter of 2009, but the trough in growth rates has likely been reached; positive quarterly growth rates are expected by the end of 2009. The OECD projections estimate that after the severe decline of 16% registered in 2009, the world trade will grow by 2.1% in 2010.

The European Union’s trade grew strongly between 2002 and 2007, both with the upswing in world trade taking place after 2003 and with the growing participation of the new Member States on the international stage, some of which simultaneously witnessed rapid internal economic development. Although its international trade in goods grew by 6.8% in exports and by 8.75% in imports, between 2002 and 2007, the European Union (27) has actually lost weight in world trade, given that the growing reciprocal exchanges of goods between the older EU-15 and those Member States that joined during the course of the 2004 and 2007 enlargements have been “internalized”. What used to be extra-European Union trade has now become part of intra-European Union trade.

UE-27 registered the slowest export growth of any region last year, with a zero growth rate, down from 3.5 per cent in 2007. Import growth turned negative in 2008, falling by 1 per cent (+3.5 per cent in 2007).

If the 27 members of the European Union are considered collectively (excluding internal EU trade), the five leading exporters were the European Union (15.9 per

cent of world exports), China (8.9%), the United States (8.1%), Japan (4.9%) and Netherlands (3.9 per cent). Exports from the EU were worth US\$ 1.93 trillion in 2008.

Germany confirmed again its reputation as exporting nation with a share of 9.1% in the world exports in 2008. It is followed at a considerable distance by Italy and France with shares of 11.5% and 11.4% respectively. Together these three countries were responsible for more than half of all EU-27 exports.

With a share of 21%, and corresponding to a value of EUR 261.7 billion in 2007, the United States remained by far the main destination country of EU-27 exports. Switzerland (EUR 92.8 billion) and Russia (EUR 89.1 billion) both accounted for a 7% share, followed by China with 6%. Together, those four countries are responsible for over 40% of all extra-EU shipments.

Since 2000, exports to Russia and Ukraine have developed particularly rapidly, displaying average annual growth rates of 22%. Impressive increases were also noted for China (+16% per year between 2000 and 2007), and, at a lower level in absolute terms, for India and the United Arab Emirates (both at +12% per year). The total value of exports to Japan stagnated at the precedent year level.

With regard to imports, in 2007, Germany kept its first position, as 18.8% of all imports arriving from outside the European Union were destined for this country. The United Kingdom and the Netherlands follow with shares of 14.4% and 12.5% respectively.

Looking at EU-27 imports, China overtook the United States in 2006 and it was, in 2007, the European Union's main supplier, with a share of 16% of the total. The value of imported goods from China more than tripled since 2000 (from EUR 74.6 billion to EUR 231.4 billion in 2007), with an 18% average annual increase registered over that period.

With the two most recent enlargements, the European Union has grown into the EU-27, the world's largest open market. Today's 27 members benefit in many ways including the proximity of export markets, barrier-free distribution and integrated transport networks, the ready availability of quality goods at competitive prices and reduced political risk in trade. The EU-27's exchanges have further been facilitated by the euro's implementation by actually sixteen Member States.

Under the influence of a lot of general and specific factors, the foreign trade of Central and Eastern European (CEE) countries which recently joined the European Union has been constantly growing till the second part of 2008 year, registering higher yearly growth rates than the total of EU-27 (Tabel 1).

With the exception of Czech Republic, the CEE countries registered a 18.9% export growth rate and a 20.1% import rate, for the entire 2005-2007 period of time, with a

growing trade balance deficit from 36.4 billion ECU in 2005, to 60.6 billion ECU in 2007 (Table No.1).

In the last years, for the foreign trade of all the ten new EU members CEE states it appears like a common trace the deeply process of growing the importance of the intra EU commercial relationship within the total international economic relationship of these countries. Between the new EU members, the most important weight of the intra EU commerce in their total foreign trade is registered by the Check Republic (83%), Slovakia (80%), Latvia (76%), Poland (75%), and Estonia (75%) – Table No.2.

In business environment, institutional, and logistics performance, the EU accession countries stand out as the best performers. Most of the new EU member states are in fact catching up to OECD countries on some measures of logistics performance, and all rank in the top 50 with the exception of Lithuania (ranked 58th).

Trade integration of goods and services is measured as the average value of debits and credits (summed together and divided by two) expressed as a share of GDP. This indicator is calculated for both goods and services; higher values indicate higher integration within the international economy. It is normal that smaller countries will display a higher recourse to international trade, as they are more likely to import a range of goods and services that are not produced within the domestic market. All the EU-27 countries, including the new CEE states, have become steadily more integrated with the world economy as measured by their trade-to-GDP ratios – Table No.3. The value of this indicator varies, in the case of CEE states, between 78.5% (Slovak Republic) and 33.0% (Romania).

On the bases of a lot of relevant indicators drawn up by the World Bank specialists (Table No.4) the following ideas can be revealed for the CEE states, new EU members:

- Most of the countries with fast trade growth are those that have recently joined the EU and have implemented policy and economic reforms in the context of their accession. The Slovak Republic saw the highest trade growth of nearly 17 percent in 2007, its third consecutive year of double digit growth following its 2004 accession to the EU.
- From the point of view of the commercial policy indicators, CEE countries are considered to be between the most permissive markets in the world, the region's trade-weighted tariffs in 2007 of 2.1% (on an MFN basis) being very low.
- Over all sub-periods during the last decade, the CEE countries' currencies, on average and on a real, trade-weighted basis, have appreciated in the range of 3.2–5.7 percent annually. Large exchange rate appreciations (on a real, effective basis) have been experienced by Hungary (12.2 percent), the Slovak

Republic (10.8 percent), Romania (9 percent), and to smaller extent by Bulgaria. Despite the exchange rate appreciation, export growth ranged from 12 percent to 17 percent, suggesting that other policy and institutional factors, generally good economic performance, or international market developments were more important in affecting trade performance

- In business environment, institutional, and logistics performance, the EU accession countries stand out as the best performers. Most new EU member states are in fact catching up to OECD countries in this respect.

Table 1. Foreign trade of Central and Eastern European (CEE) countries which recently joined the European Union (2005-2007)

Country	EXPORTS				IMPORTS				Commercial balance sold		
	2005	2006	2007	Annual Growing Rate 2005-2007 (%)	2005	2006	2007	Annual Growing Rate 2005-2007 (%)	2005	2006	2007
CEE - TOTAL	278.0	335.8	393.4	18.9	314.4	372.7	454.0	20.1	-36.4	-36.9	-60.6
Bulgaria	9.2	11.7	13.5	21.1	12.5	15.3	21.9	32.0	-3.3	-3.6	-8.4
Czech Republic	62.8	75.7	89.3	19.25	61.5	74.2	86.0	18.2	1.3	1.5	3.3
Estonia	6.2	7.5	8.0	13.6	8.2	10.6	11.3	17.4	-2.0	-3.0	-3.3
Latvia	4.2	4.9	6.1	20.5	7.0	9.2	11.2	26.5	-2.8	-4.3	-5.1
Lithuania	9.5	11.2	12.5	14.7	12.5	15.4	17.7	19.0	-3.0	-4.1	-5.1
Hungary	50.6	59.3	69.0	16.8	53.5	61.3	69.3	13.8	-2.9	-2.0	-0.3
Poland	71.9	87.9	101.3	18.7	81.7	100.3	118.7	20.5	-9.8	-12.5	-17.4
Romania	22.3	25.9	29.4	14.8	32.6	40.7	51.0	25.1	-10.3	-14.9	-21.6
Slovenia	15.5	18.5	21.9	18.9	16.4	19.2	23.0	18.4	-0.9	-0.7	-1.1
Slovak Republic	25.8	33.2	42.4	28.2	28.5	26.5	43.9	24.1	-2.7	-3.3	-1.5

Source: *Europe in Figures – Eurostat Yearbook, 2008*
 Eurostat – Statistical Books – Panorama of European Union Trade. Data 1999-2006. 2007 Ed.

Table 2. Central and Eastern European (CEE) countries, which recently joined the European Union, contribution to Intra- and Extra-EU-27 trade in 2007

Country	Share in total trade ¹⁾		
	Total trade ¹⁾	Extra-EU-27 trade ¹⁾	Intra-EU-27 trade ¹⁾
Bulgaria	100.0	41	59
Czech Republic	100.0	17	83
Estonia	100.0	25	75
Latvia	100.0	24	76
Lithuania	100.0	33	67
Hungary	100.0	26	74
Poland	100.0	25	75
Romania	100.0	29	71
Slovenia	100.0	28	72
Slovak Republic	100.0	20	80

1) Exports plus imports

Source: Eurostat – Statistics in Focus No. 92/2008

**Table 3. Central and Eastern European (CEE) countries, which recently joined the European Union - Share of international trade with goods and services in GDP
(% of GDP in 2006)**

Country	Goods			Services		
	Exports	Imports	Share of international trade in GDP	Exports	Imports	Share of international trade in GDP
EU-27	10.1	11.5	10.8	3.8	3.3	14.0
Bulgaria	47.8	71.7	59.8	15.9	12.0	14.0
Czech Republic	66.7	64.0	65.4	9.6	7.9	8.8
Estonia	60.5	75.6	68.1	22.7	15.1	18.9
Latvia	30.9	55.6	43.3	12.4	6.2	9.3
Lithuania	46.4	63.2	54.8	12.6	8.4	10.5
Hungary	65.6	66.7	66.2	12.2	10.0	11.1
Poland	34.3	36.5	35.4	5.9	5.5	5.7
Romania	26.8	39.1	33.0	6.2	6.2	6.2
Slovenia	55.8	59.1	57.5	9.9	6.6	8.3
Slovak Republic	75.1	81.9	78.5	9.1	6.8	8.0

Source: Europe in Figures – Eurostat Yearbook, 2008

Table 4. Central and Eastern European (CEE) countries, which recently joined the European Union – Key Trade-Related Indicators

Country	Trade Restrictiveness Index (2006)	Applied tariff trade weighted (2007)	Market Access Trade Tariff Restrictiveness Index (2006)	Rest of the world applied tariff trade weighted (2006)	Ease of doing business (2007)	Logistics Performance Index (2006)	Real growth trade (2007)	Real growth exports (2007)	Export concentration index (2007)
Total CEE countries	5.7	2.1	3.6	2.8	41.9	3.0	13.3	11.7	13.4
Bulgaria	5.9	2.1	2.0	1.3	46.0	2.9	11.9	10.8	15.4
Hungary	3.8	2.1	4.4	2.6	45.0	3.2	12.0	13.4	13.8
Latvia	3.8	2.1	4.4	2.9	22.0	3.0	13.8	9.3	10.8
Lithuania	3.8	2.1	4.4	3.4	26.0	2.8	11.1	10.0	18.9
Poland	3.8	2.1	4.4	3.7	74.0	3.0	13.5	12.1	8.2
Romania	14.8	2.1	1.5	0.9	48.0	2.9	13.9	8.0	11.5
Slovak Republic	3.8	2.1	4.4	5.0	32.0	2.9	16.9	18.0	15.2

Source: World Bank – World Trade Indicators, 2008

Global economic integration creates opportunities for growth and for development for all the member countries, including the Central and Eastern European states, which recently joined the European Union. But it also increases pressure on global resources and on traditional industries and livelihoods. The European Union is committed to ensuring that the European economy is open to the world and competitive on the world stage. It supports a strong multilateral trading system as the most effective means of managing trade for the benefit of all.

In this respect, it has to be mentioned the fact that, during 2003-2007 period of time, the commercial balance with the other EU countries of the Central and Eastern European (CEE) countries, which recently joined the European Union, was a negative one, with the exception of Czech Republic, Hungary and Slovak Republic (Table 1).

In EU-27, there was a sharp turn-around in economic activity after the first quarter of 2008 for both industry and services. This was reflected most clearly in a rapid and steep reduction in output; industrial output declined by 16.7 % between the first quarter of 2008 and the first quarter of 2009, and that of services by 8.3 %.

There was a relatively rapid reaction to this downturn in industrial employment, with cumulative cutbacks of 4.9 % in the four quarters through to the end of the first quarter of 2009.

There was also a relatively rapid downturn in the index of persons employed in services; growth in the second quarter of 2008 slowed markedly, followed by accelerated declines in the three quarters through until the first quarter of 2009. These were the first falls in the index of persons employed in services recorded in the period for which EU-27 data are available (since 1998).

The index of production for the *capital goods* in EU-27 peaked in the first quarter of 2008, after almost five years of sustained growth. In the year following that peak, the index of production for capital goods fell by 22.3%, returning close to the level of the previous relative low reached in the second quarter of 2003. The decline in the number of hours worked in capital goods activities was the fastest to reflect the downturn in production, falling back in the second quarter of 2008 after two years of growth; the index of the number of persons employed started to decline one quarter later. By the end of the first quarter of 2009, the decline in the index of the number of hours worked in capital goods activities in the EU-27 had reached 6.2 %, twice the rate of the decline in the index of the number of persons employed.

Among all of the manufactured industrial goods, the sharpest decline in output in the year to the end of the first quarter of 2009 was in *intermediate goods*; from the relative peak in the first quarter of 2008, output declined by 23.5 %, to its lowest level since the first quarter of 1997. After years of a relatively steady level of employment in these activities within the EU-27, the knock-on effect of this change in production was a decline of 9.1 % in the index of hours worked over the year between the first quarters of 2008 and 2009, with the index of persons employed also falling by 5.8 % in this same period.

The EU-27's production index of durable consumer goods fell by almost one fifth (18.8 %) up to the end of the first quarter of 2009 from the relative peak one year earlier. The level of the EU-27's production index at the end of the first quarter of 2009 was the lowest since the fourth quarter of 1993. This sharp and deep turn-about in production is also reflected in employment data. After years of relative stability in the indices of persons employed and hours worked within the grouping of durable consumer goods activities, there were also steep cutbacks in the year to the end of the first quarter of 2009. The index of hours worked fell by 9.1 % from the level recorded at the end of the first quarter of 2008, with the index of persons employed declining by 7.9 %.

The EU-27 indices for persons employed and hours worked in the grouping of *non-durable goods* activities fell at almost identical rates between the first quarters of 2008 and 2009 (-5.6 % and -5.5 % respectively). These rates were slightly steeper than for the index of production in the same period (-4.2 %).

In contrast to the other manufactured industrial goods, the volume of output of *energy* activities in EU-27 has been on a downward trend for a number of years. For much of this period, there was also a steady fall in the indices of persons employed and of hours worked, which broadly continued in the year after the first quarter of 2008.

As a highly labour intensive sector, the sharp downturn in *construction activities* in EU-27, after the first quarter of 2008 was closely followed by the labour input indices. Against the background of a 10.3 % fall in the production index for construction activities in the year to the end of the first quarter of 2009, the index of hours worked in construction in the EU-27 declined by 7.2 % and the index of person employed reduced by 6.9 %.

Signs of recovery are not yet so clearly visible in the *euro area* like in USA, in the last part of 2009. Each country has its own specific combination of weaknesses such as bursting housing bubbles, declining exports and damaged financial sectors.

The eventual recovery is likely to be slow as rising unemployment will hit consumer spending. In the above mentioned conditions, GDP in the euro area is expected to contract 4.8% in 2009 and to show 0% growth in 2010. The previous projections were for a 4.1% fall in 2009 and a 0.3% fall in 2010. The main factors with a positive influence, taken into consideration for revising up the projections for 2010 in euro area are: the strengthening growth in world trade which will help support a turnaround in exports, the governmental policy support and an easing of financial conditions adopted in some countries.

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The Critical Aspect on Using Fair Value for Financial Instruments

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Abstract. The variety of the book-keeping practices, of the financial auditor, of the fiscal norms and rules, can have a negative impact, not only on the companies' ability in furnishing the needed and true financial information to the creditors and investors, but also on the capacity to analyze the future investment opportunities regarding the financial instruments, which are vital for the economic increment. Under the Accounting Standard for Financial Instruments, fair value measurement is required in certain circumstances similar to IFRS or US GAAP. There are also specialists who criticize the limited use of fair values in IFRS. However, those criticizing fair value accounting do not seem to provide any credible alternatives. Do we go back to historical cost accounting, wherein the financial assets are stated at outdated values and hence are not relevant or reliable? In the current crisis, a question that is raised is: Should financial instruments be marked down to their current throw away prices? This paper describes how the fair value is used under the Standard and purposes to decide whether fair value measurement is required or not based on the type of investment.

Keywords: measurement, fair value, convergence, financial instruments.

Jel Classification: D46, G01, O16

1 Introduction

The most incomplete component of the existing frameworks of the IASB and FASB is measurement. The frameworks merely provide a list of the existing measurement attributes, one of which, present value, is actually measurement technique rather than a measurement attribute. No attempt is made to evaluate the identified measurement bases. Not surprisingly then, one of the major phases of the conceptual framework project currently being progressed by the IASB and FASB is the measurement phase. This will involve identification of possible measurement bases and evaluation of those bases by reference to higher order concepts in the framework, namely the objective of financial reporting and the qualitative characteristics of decision-useful information.

In the Roadmap for Convergence between IFRS and US GAAP the IASB and the FASB established explicit long-term objectives for improving financial reporting for financial instruments, to help the boards evaluate and prioritize future projects on financial instruments. In addition, the boards agreed to work towards those long-term objectives while retaining the ability to work either jointly or separately (if necessary) on shorter term objectives that are consistent with the long-term objectives.

These long-term objectives for simplifying and improving the accounting for financial instruments – assuming that technical and practical hurdles can be overcome - are to:

1. Require that all financial instruments be measured at fair value with realized and unrealized gains and losses recognized in the period in which they occur;
2. Simplify or eliminate the need for special hedge accounting requirements;
3. Develop a new standard for de-recognition of financial instruments.

It seems that establishing a long-term objective sends a signal to any other interested parties that the two boards are committed to improving and simplifying financial reporting. In particular, the first long-term objectives are to require full fair value. However, we have concerns about the above long-term convergence objective because:

1. The types of investments in the financial instruments are not simple. Accordingly, simplifying by full fair value would not satisfy representational faithfulness. Rather, such simplification would prioritize form (as financial instruments) over substance, and thus would not improve the financial reporting.
2. Simplification or improvement could not be achieved, even if all financial instruments were to be reported at their fair values, as long as the non-financial instruments are accounted for by mixed-attribute. The reason why most non-financial instruments such as inventories and properties are reported on a cost basis should be debated. We believe that the use of mixed-attribute measurements determined by the type of investment, including financial instruments, is more appropriate than fair value for financial instruments.

Under the Accounting Standard for Financial Instruments (IAS 39), fair value is defined as follows:

Fair value means the value fairly measured based on market prices actually transacted or other quoted market prices such as indicative prices or indices (hereinafter referred to as 'market prices'). If there are no observable market prices, rationally calculated values are used as the fair values.

Therefore, under the Accounting Standard for Financial Instruments, there are two types of fair value used to measure financial instruments: value based upon market

prices and value rationally calculated. Furthermore, the Practical Guidelines of the Accounting Standard for Financial Instruments stipulates fair value in detail as follows.

If financial instruments are traded in an active market and have a quoted price in the market, such instruments must, in principle, be measured at the fair value based on market price. Market prices are the amounts that are either obtained from the sale, or paid for the purchase, of the financial instruments in the market.

Although the information on future cash flows is used in various ways, including assessing the probability of solvency, estimating the value of an entity is one of the key aspects for users, in particular when investors decide whether to buy, sell, or hold their investments in stocks or bonds. We believe that when investors use information on future cash flows to estimate the value of an entity, profit information is important. In other words, historical profit, which is the performance of investments, is more useful than historical cash flows in predicting future cash flows (including future profit and future dividend) under the accrual accounting system.

The measurement of financial instruments at fair value, with subsequent gains or losses recognized in profit or loss, should be limited to financial investments that are readily convertible into cash or cash equivalents in active markets and that are not constrained by any business purpose.

On the other hand, even though assets and liabilities are exposed to changes in the market price, those that are expected to obtain future funds and are constrained by some business purpose (non-financial investments) should not be measured at fair value through profit and loss.

2 The concept of fair value for financial instrument

The accountancy of the XXIst century requests a unique value. A solution for the amelioration of the accountancy information could be, after some of the specialist, the real value. This instrument was introduced by the accountancy-shapers as answer to degradation of the confidence into the financial measurements and regards a new system of evaluation for the assets and the debts of the entity.

Using the existing definition of fair value in IFRS literature, fair value represents the amount for which an asset or liability could be exchanged in a current transaction. That amount compounds the expectations of market participants regarding the future net cash inflows to be generated by an asset or the future net cash outflows to be sacrificed in settling or extinguishing a liability.

For the following financial instruments, market prices are considered as being quoted in the market:

1. Financial instruments listed on exchanges

In principle, the market price of a financial instrument listed on an exchange is the price at which transactions take place on the exchange. If a financial instrument is listed on more than one exchange, the market price is the price available at the exchange where it is traded most actively.

2. Financial instruments traded in over-the-counter transactions

The market prices of financial instruments that are traded in over-the-counter transactions are the prices quoted by business associations which were established with the purpose of collecting information on over-the-counter markets in order to provide information on fair prices. In cases where it is difficult to obtain the prices of financial instruments from such business associations, or the prices are not available at all, the prices at which brokers transact the financial instruments (including the indication prices for the financial instruments quoted by the brokers) may be recognized as the market prices.

For some listed financial instruments, the market prices used at exchanges are not fair values, either because the financial instruments were a very limited issue, or because the volume of trade in the financial instruments is too low. In such cases, the prices used in over-the-counter transactions are more appropriate to indicate fair value.

3. Financial instruments transacted similar to (1) or (2) above, through systems that allow financial instruments to be sold, purchased or converted readily into cash

When financial instruments are traded neither at exchanges nor in over-the-counter transactions, but are sold, purchased or converted readily into cash, using transaction systems (including exchange markets between financial institutions, securities companies and dealers, and by electronic means), and there is a suitable environment to facilitate circulation of the financial instruments, the prices used in such systems may be regarded as market prices.

The market prices of financial instruments are to be obtained by the same method in every fiscal period. The method must not be changed, except for rational reasons such as to improve the accuracy of the valuation.

When there is no quoted market price for financial instruments, but it is possible to calculate their value rationally, the rationally calculated value is used as the fair value. Financial instruments for which there is no market price are instruments other than those listed in (1) to (2) of the preceding section and include the following:

1. Financial instruments for which there is no quoted market price, or for which the price is only as agreed on between seller and purchaser for a particular sale;

2. Financial instruments which are sold at exchanges or in over-the-counter transactions but for which the number of transactions is extremely small, and which otherwise have no market price.

When there is no market price for financial instruments, or the market price is inadequate to be recognized as fair value, the fair value is the value rationally calculated by finance managers using any of the following methods:

1. The methods used to set market prices quoted by exchanges or over-the-counter market for similar financial instruments, making adjustment for variables such as interest rates, maturity dates and credit risks. In these cases, adjustments must be reasonable, without any element of subjectivity.
2. The methods used to calculate the current value of financial instruments by discounting future cash flows to be generated by the instruments. In these cases, other factors should be taken into consideration. The rate of discount must be reasonable, without any element of subjectivity.

Models adopted by the entity, and volatilities that are reflected in calculations using models and factors used in determining prices, such as interest rates, must be decided reasonably, without any element of subjectivity.

When the entity encounters difficulty in estimating objectively the fair value of financial instruments, it may obtain a calculated value based on one of the above three methods by a broker, and may use that value as a rationally calculated value. It is also acceptable for the entity to use prices quoted by information vendors (companies that provide information related to investments, including financial indexes, market information, fair value information and so on), who calculate market prices objectively, based on average prices from brokers, or theoretical values.

Rationally calculated values for financial instruments are to be obtained by the same method in every fiscal period. The method must not be changed except for rational reasons, such as to improve the accuracy of the valuation.

The existence of markets makes it possible to obtain the fair value of financial assets that may be used as an objective value. It is also possible to convert financial assets into cash and to make settlements at fair value. The following reasons support requiring the fair value measurement of financial assets:

Measurement at fair value of the financial assets of the entity is to be implemented so as to present in financial statements the actual status of the financial activities of entity and to provide appropriate financial information to investors. Such information would help investors make their own decisions on investments, under the current circumstances in which financial assets are held, the risk of price volatility is increasing, and financial transactions are made internationally.

Accounting is to reflect the actual status of financial asset transactions. Such accounting is useful for the entity itself to obtain a sufficient understanding of the details of transactions, to conduct thorough risk management and to evaluate the results of financial activities precisely.

According to the FASB project of financial instruments, the second long-term objective is to simplify the requirements for hedge accounting and, if possible, to reduce or eliminate the need for special accounting for fair value hedges.

The fair value option in IAS 39 substantially reduces the need for special accounting of fair value hedges of financial instruments. Thus, it permits entities to avoid the related burden of designating hedging relationships, and tracking and analyzing hedge effectiveness.

However, as the project also mentioned, special hedge accounting rules would still be required in the following cases even if all financial instruments were measured at fair value:

1. Situations in which the hedged item is not a financial instrument and is not measured at fair value under existing accounting requirements (e.g. a commodity);
2. Some hedges of future cash flows (such as hedging the risk arising from forecast future sales denominated in a foreign currency or hedging a variable interest rate financial instrument when changes in rates do not change the fair value of the financial instrument).

In the same time, thus hedging fair value exposure would conceptually be an exceptional treatment; rather, hedging cash flow exposure would be a core concept of hedging that is consistent with the recognition and measurement method for non-financial (operating) investments.

But the problem appears when hedging the exposure to variability in future cash flows (e.g. debt with variable interest covered by fixed interest swap), the deferral method is necessary to achieve the objectives of financial reporting. In this case, the fair value of the existing asset or liability having the cash flow exposure (e.g. debt with variable interest, a forecasted transaction) will not change significantly, and therefore, deferral of the gain or loss on the hedging instrument is the only way to account for the hedge relationship. This shows that deferral hedge accounting' is a primary method because the mark-to-fair-value method cannot substitute for it.

If the hedged items are ones that are measured or are to be measured at fair value because variability in those future fair values is exposed, hedge accounting is not or will not be necessary. Therefore, hedge accounting for hedging the exposure by a derivative is limited to the hedged items that are not to be measured at fair value (e.g. in cases where loans to originated customers with fixed interest (non-financial (operating investment) are economically converted to loans with a floating interest

rate by entering into an interest rate swap). Even in such cases, the deferral method may also be applied.

So, hedging that had the effect of combining the hedging instruments and the hedged items would be deemed to be a non-financial (operating) investment because the hedged items were originally non-financial (operating) investment, as mentioned above.

Merely providing fair value information in the notes to financial statements would not be a sufficient disclosure of fair value information on financial assets. Financial assets that can be converted into cash or settled (except for financial assets for which an objective fair value is unobtainable) are to be measured at fair value and the fair value is to be reflected appropriately in financial statements.

However, given the characteristics of the financial assets and the entity's purpose for holding them, there may be financial assets which are substantively free from risk on change in the market price, or where disposals or conversion into cash are constrained by business objectives. We believe that measurement at fair value, without taking into consideration the purpose for holding financial assets, would not adequately reflect the financial situation and operating results of an entity in its financial statements. Therefore, in our view, while establishing measurement at fair value as a basic principle, it is appropriate to apply different accounting treatments to financial assets depending upon the purpose for holding them.

On the other hand, there may well be no active market for financial liabilities, such as loans payable. Even in the case of financial liabilities for which markets do exist, such as corporate debt securities, business activities restrict entities from settling their own debt securities at fair value. Accordingly, it is appropriate to measure financial liabilities (except for net payables resulting from derivatives) at face value, not fair value. However, when the face value differs from the amount received (e.g. corporate debt securities issued at a discount or premium), the amortized cost is to be used in balance sheets.

Based upon the discussion of profit information in the preceding section, if financial instruments are categorized as non-financial investments (operating investments), past changes in fair value are meaningless for users of financial statements in making predictions of future income or cash flow, and in confirming or correcting their past expectations. This is because such investment is carried out irrespective of the past changes in fair values of the individual financial instrument.

3 Conclusions

IAS 39 currently contains an option that permits entities to measure most financial assets and liabilities at fair value with changes in fair value being recognized immediately in profit or loss. The consequences include lack of reliability due to

absence of quoted prices in active markets, increased volatility of reported profit creating potential for misunderstanding by investors and irresponsible lending practices resulting from the recognition of unrealized gains.

Of course it is unrealistic to expect the Board to require all financial instruments to be measured at fair value as result of a fundamental review of IAS 39, even if a substantial majority of the Board believes that ultimately fair value should be the required measurement attribute for all financial instruments. However, it is reasonable to expect the Board to give serious consideration to requiring greater use of fair value than the existing Standard. A likely candidate is measurement of financial assets.

In conclusion, some of the reasons why the boards believe that fair value is the most relevant measurement attributed for financial instruments are presented as follows:

1. Fair value incorporates the current market assessment of the future, including the amount, timing and uncertainty of future cash flows attributable to a financial instrument. Fair value information provides a benchmark measurement that users of financial statements may adjust to reflect their own expectations. Fair value information permits financial statement users to make decisions based on information about current conditions rather than on information about conditions that existed at the time an entity purchased a financial asset or incurred a financial liability.
2. As a concept, fair value reflects the collective assumptions and expectations of market participants rather than entity-specific assumptions and expectations. Fair value information facilitates period-to-period comparisons for a single entity, as well as comparisons between different entities.
3. Changes in fair values reflect the effects of changes in market conditions when they occur. Therefore, they reflect the effects of management decisions to buy, sell, incur, extinguish or hold financial assets or financial liabilities on a timely basis.
4. Volatility in reported financial performance arising from changes in fair values of financial instruments reflects market volatility. The boards believe that reporting the volatility arising from changes in fair values of financial instruments provides information that helps users of financial statements in making their predictions of future income expectations and potential variability of future returns, and in confirming or correcting their past expectations.

Even if fair value is the most relevant measurement attribute for all financial instruments for balance sheet presentation purposes, changes in the fair value of financial instruments should not necessarily be recognized directly in net income. Similar to the treatment of available-for-sale securities, a combined approach where

fair value is presented in the balance sheet but not included in net income should be applied to some financial instruments that have subjective goodwill.

On top of that if all financial instruments were measured at fair value with changes reported in earnings, the concept of hedge accounting for hedging cash flow exposure would still be indispensable. This is because non-financial instruments were not always measured at fair value.

Fair value is here to stay. It is already deeply embedded in IASB and FASB literature and there are growing calls from the user community to increase its use in financial reporting. Conceptual support for fair value is demonstrable and will be further underpinned in the revised conceptual framework. Users, preparers, auditors and regulators will become more comfortable with the use of fair value as time passes. Concerns about the 'lack of reliability' of fair value estimates and about the reactions of market participants to 'increased volatility' of reported profit will diminish as markets develop, as valuation methodologies improve and as the financial reporting community becomes more experienced in its use of fair value. Those who criticize the limited use of fair values in IFRS should question their application of national GAAP and whether previous financial statements really had the qualities they claimed.

Moving from theory to practice, the question perhaps becomes: What are the informational advantages and disadvantages of the practicable proxies to fair value, value, both when applied consistently, and when applied pragmatically on an item-by-item basis? This takes us back to the academically traditional debates on the pros and cons of the various theories of income measurement and asset valuation. Many academics have strongly held view on these issues.

The conclusions refer to possible areas in which the IASB might provide further clarifications and guidance or extend the use of fair values. Moreover, as all interested parties gain experience in the use of fair values for financial instruments, the aforementioned concerns will dissipate.

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Risk Determination in Projects. The Advantages and Disadvantages of Stochastic Methods

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Abstract: This paper is a comparative study about the principal stochastic methods that is used in Project Management. Risk determination is a must for every Project Manager worldwide, but the methods have, of course, advantages and disadvantages. Further, many Project Managers work with deterministic methods, but they see only the advantages or disadvantages of those methods. In Subject of this paper it is *Risk determination in projects. The advantages and disadvantages of stochastic methods*. Choosing the theme of this paper is not random, it continues a series of articles published for strengthen of scientific research in the Doctorate studies that I followed since 2005.

Keywords: project management, risk, stochastic, PERT, Monte Carlo, Latin Hypercube

Jel Classification: C73, D81

1. Introduction

Primary organizational structures of traditional organizations - institutions and companies - are rigid systems, which record the failures in practice whenever the need arises to solve new problem in a short period. These linear organizational structures with hierarchical dependencies are designed to solve routine problems. To solve the tasks with unique character, so the tasks of the project, is necessary to extend the primary organizational structure in an organization with concepts of secondary organizational structure namely with project management.

According to the latest edition of the book on which the Project Management Institute (IPMA, 2009) organize the contest to obtain the title of a professional project manager, there are identified nine areas of expertise of the project manager areas which reflect, in fact, nine processes in structure of project management: integration management, scope management, time management, cost management, quality management, human resources management, communication management, risk management, acquisitions management (outsourcing management).

2. Risk Management in Projects

Risk management is an active process for reducing exposure and adverse consequences of future events that could lead to failure goals. Projects involve identification and assumption of multiple risks, related to this specific area. Conduct work under the direct elements of nature, the mobility of the production process, high duration of execution, large number of activities to be led and coordinated, the production process complexity, contractual relations between the many parties involved - often with diverging interests - are arguments in support of the earlier allegation.

We call "risk" the uncertainty associated with any result. Uncertainty may relate to the probability of occurrence of an event, or influence, or effect of an event if it occurs. The risk occurs when:

- occurrence of an event is certain, but the result is uncertain;
- the effect of an event is known, but the event occurrence is uncertain;
- the occurrence and effect are doubtful.

We call element of risk in a project any item that has a measurable probability to deviate from plan.

One element of the project, noted (a) may be considered risk element if is following two conditions simultaneously (Opran, C. et all, 2001, p. 52):

$$\begin{aligned} 0 < P(a) < 1 \\ L(a) = 0 \end{aligned} \quad (1)$$

where:

P (a) = probability to produce event (a) and

L (a) = monetary evaluation of the event (a).

Risk analysis in projects

The main benefit of risk analysis it is constitute by possibility of assessment exposure to the risk (quantification) of a project, activity or phase. To quantify, the risks are defined as the product of the probability of occurrence of the event and the negative impact that would result from the event:

$$Er = \text{Event} \times \text{Impact} \quad (2)$$

Risks should be assessed in advance. The first evaluation must take place before the start of the project. Then, identification of risks should be ongoing during the project. Project members that are familiar with its circumstances must have an active role in identifying and assessing project risks. This collective participation will facilitate the identification of risks, making quick decisions to solve problems and reach a consensus on the necessary measures.

An event is a problem that must be solved, while risk is a potential future problem that has not occurred yet. Mathematically, the risk may be manifested by the percentage of occurrence probability. If the occurrence probability of the problem aims to 0%, then the risk will be ignored. Conversely, if the probability of occurrence of the problem is over 50% then the risk becomes a constraint that must be taken into account.

All projects have a degree of uncertainty because of associated assumptions and environment in which they are executed. Thus, although the risks cannot be completely eliminated, many of them can be anticipated and solved in a timely manner.

The purpose of risk analysis is to identify risk factors for the project and to develop a plan for risk management to minimize the probability of risk materialization.

Estimation and risks evaluation

Estimation is a quality evaluation that sets probability of risk occurrence and impact, measuring the probability and impact of each risk, classify into risk categories, and finding a common basis for classification risk tables - matrix of probability/impact, decision trees and series of distributions, Monte Carlo and Latin Hypercube curves, trend reports and risk register.

Evaluation is determining of acceptability degree for each risk and the needed actions for risks manage and need including risks minimization that contains identifying remedial actions, risk separation (only monitoring is required), developing action plans for those risks who can materialize, despite measures for minimize it.

Avoiding risk means eliminating the requirement that cause the problem. For example, if part of a project associated with a high degree of risk, then that whole part of the project is removed or replaced with another. Risks associated with a supplier can be avoided if it's choosing another supplier. This is a very effective way to eliminate risk, but may be applied only in certain situations.

The simplest method of quantification of risk is the expected value (VA), which is calculated as the product of occurrence probabilities of certain events and their effects:

$$VA(a) = P(a) \times E(a) \quad (3)$$

where:

VA (a) = the expected event (a);

P (a) = probability of event (a) occurrence;

E (a) = the occurrence of the phenomenon (a).

Stochastic Methods Used in Project Management

The main methods used in project management for analysis, monitoring and evaluation of risks are CPM - Critical Path Management, PERT - Program Evaluation and Review Technique, and statistical analysis Monte Carlo and Latin Hypercube.

PERT is probabilistic, which allows to calculating risk in completing of a project. CPM is deterministic, relying on single estimate of duration. Both CPM and PERT allow to use artificial activities (which do not consume resources and time) to determine the logic of the project. PERT is used especially in projects where the risk of having large differences in estimating duration is high.

Further we will present briefly only probabilistic methods, the CPM do not belong to this category, and finally we will describe the main advantages and disadvantages obtained by applying these methods.

PERT-Program Evaluation and Review Technique

PERT (estimating in three-point), is a management tool for planning and control. PERT uses three estimating sample (optimistic, most likely, and pessimistic). From these estimates may be deduce the duration of the project. In many cases, PERT networks are built from end to start, because the project end date is the most important key to the whole project.

Building PERT network we can determine the relevant time for the project. One aspect which should take into account when calculating the duration of the project is loading degree which it's taking into account.

We must keep in mind that team members may be sick, are entitled to holiday leave, and benefit, like any employee, to the legal holidays.

In network building must be established if the event represents the beginning or end of an activity.

In the PERT method each activity required three estimates:

d_o =duration most optimistic

d_e =duration of the most likely

d_p = duration of most pessimistic

Starting from these quantities, it's calculated the probable duration of each activity, based on statistics and start from the premise that errors it fall within the normal distribution curve.

$$DE = \frac{d_o + 4d_e + d_p}{6} \quad (4)$$

where:

DE is the estimated duration.

This calculation is repeated for all activities of the network. The results are used to determining probability that the project be completed within the time scheduled. If the network is more than one hundred activities, using of computer becomes imperative, which takes the hardworking of this laborious calculations and produce results in time, for do the necessary measures.

Some experts do not accept the use of a normal distribution curve to predict the distribution of estimation errors. It is well known that estimates are often more optimistic than pessimistic. This trend may be offset by using an asymmetric distribution curve (or misplaced). As an example, it is used the following variation on the formula above:

$$DE = \frac{d_o + 3d_e + 2d_p}{6} \quad (5)$$

Whatever is the statistical basis, PERT will generate the critical path in the same way as any other method of network analysis. The focus is moving, in this case, from cost-time and determining of critical path to a statistical approach, able to indicate the likelihood of project completion date set.

Although many users talk about their networks as PERT type, the term is often used improperly, in most cases was a classic analysis of critical road, with simple estimates of time, which is the most widely used.

Example: Suppose you have an F phase of a project P . F has four sub-phases SF1, SF2, SF3, and SF4 have estimated the following times:

Table no. 1 PERT analysis for F task of P project

Phase / Sub phase	d_o	d_e	d_p	PERT1	PERT2
F	50	74	116	77,0	84
SF1	10	15	25	15,8	17,5
SF2	8	13	19	13,2	14,2
SF3	2	6	12	6,3	7,3
SF4	30	40	60	41,7	45,0

The calculation of the estimate PERT1 we consider for calculating formula no. 4, and for PERT2 formula no. 5. Observe that the estimation of asymmetric distribution PERT2 is almost 10 percent more pessimistic than PERT1.

3. Monte Carlo Analysis

To overcome the challenges associated with the PERT method, Monte Carlo simulation can be used as an alternative. Monte Carlo is a mathematical method used in the analysis of risk in many areas and is used to estimate the distribution of potential outcomes based on probabilistic input links.

Statistical-mathematical analysis Monte Carlo is a class of computer algorithms that rely on computerized repeat, random, of samples for analysis results. Monte Carlo method has been used mainly to simulate the physical and mathematical systems.

Because it is based on random repeated or pseudo-random of a large number of inputs, Monte Carlo method is used mainly help by a computer when it is impracticable or impossible to calculate exact results through a determinant algorithm. Monte Carlo simulation was used especially in studying systems with a high degree of freedom of data, such as fluid mechanics, cellular structures etc. Recently, Monte Carlo analysis is used in estimating of the risk in business.

Latin Hypercube Analysis

Statistical-mathematical method Latin Hypercube was developed to generate a distribution of plausible parameters collection values within multidimensional distribution. The method is applied in the unreliable analysis.

In the context of statistics, a grid square containing sample position is a *Latin square* if and only if there is only once sample per row or column. *Latin hypercube* is a generalization of this concept to arbitrary values of dimensions, whereby each single value is in the proper axis (axe-aliened) hyper-plane what it contains.

When populating a function with n variables, the limit of each variable is divided into m probabilistic intervals. M points corresponding to values are placed so as to satisfy the Latin Hypercube – must be kept in mind that forces us that m be identical for each n variables. Also must be noted that this scheme does not require multiple values from multiple dimensions (variables), this "independence" is one of the great advantages of this scheme of values. Another advantage is that random values can be considered one by one, reminding us what values we were late.

Values collected for Latin Hypercube can actually improve Monte Carlo simulation, by choosing inputs more efficient. While the methodology for collecting of Monte Carlo method agree the random choice of domain values, Latin Hypercube collecting data from the whole area more systematically.

Monte Carlo simulation or Latin Hypercube has proven an effective methodology for the analysis of programming projects which contain uncertainties.

Each statistical-mathematical simulation has specific functionality; however, some issues are common for all. Firstly it entitles the user to: assign different statistical distributions including, of course, distributions specific for the project (activities duration, costs, etc.); perform Monte Carlo simulations and to export results in various formats. For example we can use frequency or cumulative diagrams of the probabilities or histograms to see the chance that project be completed in a given period. We can also calculate the criticising index or the probability that the projection of one of activities "lie" in a project.

We can generate a sensitive analysis or calculate how sensitive are the results of the project (projection duration, costs, risk, deadline etc.) based on irresolutely input dates (action duration, deadline etc.). The sensitive analysis results can be incorporated in graphics. Actions that are listed at the above on graph have the potential to affect the project duration the most.

Simulation tools can provide opportunities like: conditional disintegration or probabilities. An example of disintegration is when the user defined as a 40% chance that the activity A succeeds to B and 60% that C succeeds to B. Another example of conditional disintegration is when the user defines that activity A will be

followed by activity B if the duration of A activity is equal to or greater than a certain value.

Classical Monte Carlo simulation has a number of limitations. The statistical of the project dates as activities duration, can be obtained on the basis of historical dates and in many cases they are usable. For example, a project manager usually known as a specify activity of construction work will take between 1 and 3 days and can be defined by normal distribution. However, in some cases, particularly in research projects, this information cannot be obtained and using Monte Carlo simulation we cannot improve estimates.

It is also very important to constantly check the performance of the project and to change the input data and associated distributions using performance measurement data. Another problem associated with the Monte Carlo simulation is that if a project "slide", project manager, usually carried out several actions to redress. It is difficult to define prognosis and response to a Monte Carlo simulation.

To defeat these challenges, was developed Event Chain Methodology (Event chain methodology) as the extension of classical methods of Monte Carlo simulation.

Uncertainty of the projects can be defined as a set of risks or probabilistic events (the list of risks) that may be designated to activities, resources and project scheduling. Several events may occur in the middle of work, and lead to delays in work, restarting, or stopping them etc. Events can cause other events and generate chain events. Project managers can monitor these events, determine the critical risks - which affect the project's most - and they can mitigate. Event Chain Methodology allows performing quantitative risk analysis combining project schedule with the lists of risks.

4 The Advantages and Disadvantages of Stochastic Methods in Project Management

Using stochastic analysis in project management can be beneficial for project managers who are overburden in the estimation of the duration or cost phases of the project, or even of the whole project.

The main advantages of using these methods have resulted in minimizing risk. Thus:

1. Probabilistic analysis can estimate the project completion date. By using their combined CPM and estimates like "bottom-up" or "top-down" a trained project manager can estimate and determine completion of a project;
2. If a customer requires a deadline for a project, the analysis may determine the chances that the project be completed by that date. In such situations should take into account the possibility of erroneous estimate data, so the pessimistic methods being useful to us;

3. A big advantage of project managers is that, using the methods described above can cause the flexibility of projects that are major differences between the and optimistic and pessimistic estimates. In this sense, if a project manager is forced to modify the programming accomplished initially, probabilistic methods can help to determine which phases of the project are more flexible and may change without risk.

4. Probabilistic methods help project managers to consummate programming and project activities. By estimating the duration of using probabilistic methods and standard deviation formula, project managers can schedule the start and end actions accurately. And this is a big advantage, especially in complex projects, where ever the start and finish are not clear from the outset.

Of course like any method, methods described above have disadvantages. Further, we enumerate a number of these disadvantages:

1. One of the most important factors in the probabilistic analysis is to establish accurate baseline data. Thus the optimal, the probable and the pessimistic duration become critical, whereas all the above using triangular-based data. Clearly, provision of inaccurate initial samples will compromise the outcome of reviews and of course the standard deviation, that are imminent result changing the time required for each project.

2. Probabilistic analyses require more time and certainly a lot of work. Where we have a simple project for a few tens of tasks, necessary time for forecasting stochastic of course using software tools, is in the order of days or weeks. When we talk about complex projects, that containing hundreds or thousands activities, the situation is complicated, adding the terms necessary modelling activities in each part is a mistake for any project. This argument leads invariably at affirmation that probabilistic modelling in large projects is ineffective and should not be used. The situation is not like that. In large projects, the project manager and team are very well prepared to estimate correctly, without the need for probabilistic modelling, operations and activities of most project components so that just the area of high risk involves stochastic modelling.

3. Probabilistic analyses are not practical. This argument shows that the second biggest drawback of probabilistic methods applied to projects. Because all methods require at least three sample of duration in the same task, and because methods listed require knowledge-statistical and mathematical, analysis presented are rarely used in practice.

4. One of the biggest disadvantages of the methods listed above is that the duration resulting from the calculations is more accurate or underestimated than correct estimating or overestimated. Underestimation of time can cause huge problems in project management. Late project is not the only problem that could

arise in case of underestimate one of activities, this will be resulting inevitably at overcome by supplementing resources budgets.

5. Conclusion

The question to ask is if we can overcome the disadvantages described above, and of course if we can use the methods listed in any project regardless of size? The answer is definitely yes, if we prove the precise initial estimates, where we use estimates in the scenarios of risk and of course if double the probabilistic methods with the classical deterministic mentioned above. Also prove to be patience and perseverance, which will obviously be rewarded by the accuracy of estimates, in which case the benefits of the methods listed above will overcome their disadvantages.

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Corporate Social Responsibility and Sustainable Development

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Abstract: For that the enterprises can proceed at implementation in practice of the generous humanitarian principles of sustainable development is necessary to find and dowering of those with specific operational tools, accessible to the height of each economic unit. The concrete proposed solution globally lies in the concept of social responsibility of the enterprise in their policy of sustainable development. Social responsibility of the enterprise can be considered as a new framework that allows putting the security and health in work on a strategic position within an organization. The principles of sustainable development and of integration of the knowledge results in the entire socio-economic life, have been confirmed and recognized by the Lisbon Agenda (2000), reaffirmed at the European Council in *Göteborg* (June 2001), highlighting the close link between sustainable economic growth, social cohesion and environmental protection. The urgent actuality and immense potential for development of the concept, allows that though enrichment of knowledge in this area to increase the awareness over the importance of CRS, maximizing its positive effects. The work aims to highlight issues linked to the necessity of approaching and in Romania of this concept, in the current context of globalization and of new competitiveness as a major vector of knowledge society.

Keywords: sustainable development, social responsibility of enterprise, stakeholders, innovation centres, centres of technological diffusion.

Jel classification: M14O33, Q01

1. Introduction

Globalization, sustainable development and competitiveness, these are the three major challenges and milestones of our present.

The sustainable development as concept and objective has in view building “a better life quality for us, for our children and for our grandchildren” and it involves the integration of the economic, social and environmental dimension. In order to achieve this goal it is “necessary an economic growth that would favour the social progress and would respect the environment, a social policy that would stimulate the economy and the environmental policy that should be effective and economical.” The production and the consumption are at the heart of the sustainable development.. Moreover, if there will be a drain on the essential resources before finding affordable alternatives, there will be a serious threat to the economic development. These problems occur not only in the countries where their own resources are consumed, but also in the countries where raw materials and finite products are imported. They appear obvious interdependences between the economic, social and environmental process, and the fact that it may not be possible to analyze the performance of a state on only one dimension. This aspect was acknowledged at the World Summit on Sustainable Development from Johannesburg (2002), where it was noted the fact that changing modes of non-sustainable consumption and production must become two major and global priorities, according to the requirement for poverty eradication.

This broad issue was also on the agenda of important international and European bodies; there were concerns established as objectives, that may be found in international speeches and documents, such as: OECD guidelines for Multinational Enterprises (1977), the Brundtland Report, the Final Declaration of Conference in New York on the rights of children (1990), the conclusions of the Conference on Environment and Development and Agenda 21 (Rio 1992), the conclusions of World Summit for Social Development (Copenhagen 1995), the Pact on Economic and Social Rights and the Additional Protocols, the Tripartite Declaration of the International Labour Organization (1999), the Millennium Development Goals (2000), the EU Strategy for Sustainable Development, *Göteborg* (2001), the Doha Development Agenda (2001), and the Summit on Sustainable Development from Johannesburg (2002).

We point out, supporting this work’s thematic, the fact that the EU Strategy for Sustainable Development, *Göteborg* (2001), aimed at achieving a reconciliation between the economic development, social cohesion and environmental protection. Also, the Action Plan resulting from Johannesburg Summit (2002) refers primarily to the collective social responsibility towards the social and environmental impact that the enterprise decisions of public administration and consumers have, stressing upon the important role that the enterprises have today in ensuring sustainable development, in poverty eradication and in sustainable management of natural resources. The social, environmental and economic dimensions should be integrated into all stages of the products life cycle.

2. The Perception of Corporate Social Responsibility CRS

2.1. Basic Concepts

Although the concept has been developed since the early 1970s, there is no single, commonly accepted definition of “Corporate Social Responsibility”(CSR). There are different perceptions of the concept among the private sector, governments and civil society organizations. Depending on the perspective, CSR may cover:

- a) a company running its business responsibly in relation to internal stakeholders (shareholders, employees, customers and suppliers);
- b) the role of business in relationship to the state, locally and nationally, as well as to inter-state institutions or standards;
- c) business performance as a responsible member of the society in which it operates and the global community.

The first perspective includes ensuring good corporate governance, product responsibility, employment conditions, workers rights, training and education. The second includes corporate compliance with relevant legislation, and the company's responsibility as a taxpayer, ensuring that the state can function effectively. The third perspective is multi-layered and may involve the company's relations with the people and environment in the communities in which it operates, and those to which it exports. All the concerns and problems that are associated with the CSR concept, as it has been stated before, have a global dimension. In fact, an increasing number of European companies, and not only, develops their activities in several other countries, obtaining profits as a result of these markets openings.

The globalization and trade relations, the investment and sustainable development have become the fundamental problems in addressing CSR. Acknowledging the issues and concerns related to CSR, favour the investments, develop the cooperation and stimulate the technologic transfer.

Furthermore, the CRS represents the microeconomic dimension of the macroeconomic concept of sustainable development. In another interpretation, CRS is perceived as an integral part of the sustainable development concept, a contribution to the business environment in achieving sustainable development objectives.

One of the CRS definitions, which comprise the broad consensus across Europe, is found in the document published by the European Community Commission in July 2001, known as the “Green Book”: “it is a concept whereby a company voluntarily integrates the concerns over the social and environmental issues, in business operations and in the interaction with their stakeholders”. We define corporate social responsibility (CSR) as: conducting business in a socially responsible and ethical way, protecting the environment and the health and safety of people, supporting

human rights, and engaging, respecting and supporting the communities and cultures with which we live and work.

2.2. The favourable premises of CSR development

The premises which favour the adoption and the development of CRS attitude may be:

- the global tendency to reduce the state's role in the economy as a result of some reunited factors under the name of “globalization”;
- the liberalization of international trade and financial transactions;
- the consolidation of firms in the global transnational corporations;
- increasing information flows through the development of new technologies;
- reducing the state's role in achieving the expectations of its citizens, ensuring social and environmental protection.
- In this context, they are long term viable, but only those enterprises which:
 - stimulate the formation, providing suitable environment for the transmission of knowledge, access to culture, the formation of lifelong learning, expertise development and transmission, basic elements of knowledge society;
 - provide an environment adapted to diversity, equality, openness, transparency, taking into account the consequences of the decisions on sustainable development;
 - have important role in social responsibility;
 - answer to a large number of issues regarding the competencies in the enterprises domain;
 - negotiate the instruments capable of measuring the performance of enterprises and report;
 - negotiate targets;
 - ensure the necessary framework for exchanging the points of view between all stakeholders.

The globalization leads to complex economic change, where the enterprise, as major factor of this process, must redefine its position, being placed in a new interdependence with “stakeholders”, the implementation of generous humanitarian principles (Framework Program) mentioned above, sometimes too vague / general to

be able to work with them at a microeconomic level; it is necessary to find and integrate them with specific operational tools, accessible to the height of each economic unit.



Figure 1. Process Corporate Social Responsibility

The proposed solution consists of integrating the concept of CRS in their policy of sustainable development. Through this process, the idea of Sustainable Development can be found at the level of enterprises as concrete CRS (an accessible approach to any enterprise, regardless of its size), having as main objectives: *social ethics, environmental protection and economic efficiency*. In this way it can be ensured the durability of an effective and sustainable enterprise, in terms of social and societal peace.

2.3 About the explicit and implicit social responsibility

The implicit social responsibility relates to *formal and informal institutions* of a country through which the responsibility of companies towards the interests of the society is approved and allocated to companies. The implicit social responsibility includes values, rules, that are expressed (most often) in the binding rules for companies, on the base of which they should concern about those aspects that, from social, political and economical point of view, they are considered an appropriate and reasonable responsibility of the companies.

The explicit social responsibility refers to corporate policies that led to assuming responsibility by the companies for certain aspects of society. The explicit social responsibility includes usually policies, programs and strategies of companies adopted voluntarily and in their own interest, which it deals with those issues perceived by the company and / or the stakeholders in the area as part of the company responsibility towards society.

The implicit social responsibility is predominant in Europe, compared with the United States, due to higher level of taxation and to the more extended social protection, that induces the companies the perception that certain domains (such as education or the arts) are more in the sphere of the responsibility of the state. It has been noticed a recent tendency of transition from implicit social responsibility to the explicit one also in Europe.

The social responsibility, the moral price for the company's success

In some studies in Romania (Chişu V., INCSMPS 2008) it was observed that corporate social responsibility (CRS) does not only mean fulfilling a duty towards the society, but on the contrary, it is a new style of doing business, integrated into the company's culture at all of its levels. The study shows that only 17% of companies in Romania, with more than ten employees have a clear strategy for future development of CSR activities.

- 12% of enterprises have drawn up a report on the activities and programs of CRS domain. Out of these, 7% have drawn up a report annually, and 5% only occasionally.
- The communication related to CRS considered as a form of assumption of enterprise responsibility towards their own employees, customers, business partners and local community members, records very important values. The ratio of companies with specific CSR programs, which make them public, structure their activities, as it follows:
- appropriate behaviour of the market firm on the: 66% of the companies transmitted information about the company's efforts to impose an ethic marketing policy, advertising and consumer rights, the use of fair pricing, criteria for selecting business partners, shares for customer loyalty etc.

- policy towards company employees: 63% of companies transmitted information about the training and career development, the facilities for health and sport, equal opportunities in employment and promotion, the balance between work and personal life etc.;
- environment protection: 57% of companies transmitted information about the enterprise initiatives - other than the mandatory measures - which contribute to energy conservation, pollution prevention or reduction of air and water pollution, reducing the use of dangerous chemicals, maintaining biodiversity, recycling waste etc.;
- involve the enterprise in the community: 44% of companies transmitted information about the company's voluntary actions to support local suppliers, supporting healthcare and education in the community, cultural or entertaining activities, supporting the local development infrastructure, etc.

3. Conclusions

Removing the obstacles that appear on the merge of a broad knowledge, the companies transmit and adopt social the responsible practices and they have the following leaving points:

- insufficient knowledge regarding the relationship between social responsible practices and economic performance of enterprises (“economic argument”);
- consensus among various “stakeholders” taking into account the global dimension of the CRS concept, and mainly the diversity of the national strategic framework where it s applied;
- training, general and individual, in some economic schools, such as the role that CRS has in the economic development, and the long-term development of an enterprise;
- transparency in the application, which comes mainly from the lack of widely recognized tools for designing and managing policies in the CRS domain;
- recognition and acceptance, both as consumers and investors, of the social responsible behaviour;
- the policy coherence of the public powers.

In the transition to a knowledge-based economy, a great importance has the continuous training and preparing the employees and the entire citizens. This way, the information on the consequences of some incorrect decisions made at the local or global level, may be better known and understood, so that long-term effects may be

prevented through a responsible attitude adopted by all “stakeholders”, including the public bodies.

CSR is a concept with a growing impact around the globe. Today, CSR goes far beyond the “philanthropy” of the past; it is about the business contribution to sustainable development. The promotion of CSR as a mandatory support for other policies and priorities and as proactive solutions to societal and environmental challenges, it can enhance the competitiveness in the Europeanization and in the globalization context.

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Finance and Banking

The Value Relevance of IFRS: The Case of Turkey

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Abstract: Accounting standards that are mostly compatible with International Financial Reporting Standards (IFRS) are required for consolidated financial statements of all Turkish listed firms starting from 2005 fiscal year end. Before that, financial reporting in Turkey was closely related to tax reporting. Until 2003, all Turkish listed firms were preparing their financial statements in accordance with the local standards issued by the Capital Market Board of Turkey. In this study, I examine the relative and incremental value relevance of earnings and the book value of equity under Capital Market Board (CMB) Accounting Standards (2001-2002) and under IFRS (2005-2006) for Turkish listed firms. I compare these two periods to investigate whether the mandatory adoption of IFRS increase relevance of earnings and book value of equity which are accepted as proxies of accounting quality. I find evidence that the value relevance of earnings and book value of equity has increased significantly after adopting IFRS. In addition, I find that the incremental value relevance of earnings increased between the CMB accounting standards period and the IFRS period. However, the incremental value relevance of book value of equity decreased in the same period.

Keywords: accounting standards, fiscal year, incremental value, IFRS, Capital Market Board.

Jel Classification: M40, M41, G28

1. Introduction

Since January 1st 2005 EU publicly traded companies are required to prepare consolidated accounts on the basis of International Financial Reporting Standards (IFRS) that are developed by International Accounting Standards Board (IASB). Prior to that, using IAS/IFRS was voluntary in many European countries. This paper explores the impact of transition to IFRS on accounting quality in Turkey by examining and comparing the value relevance of earnings and the book value of equity under Capital Market Board Accounting Standards during 2001-2002 with those under IFRS during 2005-2006. For this purpose, I conduct my investigation using all Turkish companies listed on the Istanbul Stock Exchange (ISE). The study is based on the model which has also been used in prior research (Ohlson, 1995). This model expresses stock price as a function of both earnings and book value of equity. I measure value relevance in terms of the ability of accounting measures to explain stock prices. Particularly, I investigate whether there is a change in the relative and incremental value relevance of earnings and the book value of equity during these two periods.

I limit my investigation to Turkish companies to control for institutional and political factors such as legal system, taxation, providers of finance, and inflation which affect companies' reporting and stock market participants' investing behaviors. The other reason for choosing Turkey as the focus of this study is that relatively little is known about its accounting practices although it has an attempt to become a full member of the European Union (EU).

The Turkish economy has been an emerging one during the last decades. So has been the Turkish Capital Market. Total number of companies listed in the ISE was 304 and the shares of the foreign or international investors represented 66, 3% as of 2005. As well, there had been hyper-inflationary environments since the early 1970s. For some years, the annual inflation rate had been more than 100% (Pekdemir & Turel). Having high inflation for over 30 years, the financial statements in Turkey have been considered useless tools in decision-making. The companies tried to benefit from the incentives in the Turkish Tax Regulation (i.e. LIFO, accelerated depreciation) to negate the effects of inflation till the year 2003. In recent years, this problem seems to be solved with the legislations about the mandatory application of inflation accounting and subsequently full IFRSs (Yılmaz & Sarioglu, 2005). Moreover, foreign exchange rates have been stabilized, interest and inflation rates have declined to reasonable levels since 2003. Therefore, I think that Turkey offers an interesting setting because of its distinctive economic context.

The aim of the accounting regulations in Turkey was to protect the interests of the Treasury. Therefore, accounting practices for most companies in Turkey has been strongly influenced by the need to produce information to tax authorities (Cooke & Curuk, 1996). Besides this, there have been significant changes in accounting rules in Turkey. In an attempt to become a member of the EU, publicly traded companies in Turkey have been presenting their financial reports under IFRS since 2005. Without mentioning the level of compliance, a study reported that Turkey has been among the countries where the IFRSs have been entirely implemented since 2005 (Barth, 2007). This research is mainly motivated by the major revisions to Turkish accounting rules that have been following the development of new and revised IASs and IFRSs. Many of these revisions and new standards reflect IASB's preference for fair value measurement of assets and liabilities (King, 2006). Taking into consideration the developments in the accounting practices in Turkey, I predict that these changes are likely to affect the value relevance of earnings and book value of equity.

The remainder of this paper is organized as follows. In section 2, a short overview of the development of International Financial Reporting Standards in Turkey is given. In section 3, prior research on the value relevance of earnings and book value is briefly discussed. In section 4, the research design and the sample is described. Section 5 presents the results while section 6 concludes.

2. The Development of International Financial Reporting Standards in Turkey

The development of IFRS in Turkey has a long story. The most influential institutions affecting the development of International Financial Reporting Standards in Turkey can be cited as (1) The Expert Accountants' Association of Turkey (TMUD) (2) Capital Markets Board of Turkey (CMB) (3) Turkish Accounting and Auditing Standards Board (TMUDESK) (4) The Banking Regulation and Supervising Agency (BDDK) (5) Turkish Accounting Standards Board (TMSK).

The first attempt was made by the TMUD that was established in 1942. Following the establishment of International Federation of Accountants (IFAC) in 1977 (of which TMUD was a founding member) the TMUD translated all IASs and presented them to TMUD members. Since the TMUD had not been a powerful organization the implementation of International Accounting Standards Committee (IASC) standards was not very effective (Yılmaz & Selvi, 2004).

The forceful implementation of accounting standards came with the establishment of CMB that was empowered by the Capital Markets Law (CML), which was enacted in 1981. CMB was based on the Securities and Exchange Commission in the US and has extensive powers including specifying accounting standards for companies. The listed companies in the Istanbul Stock Exchange (ISE) have started to use accounting and reporting standards that were set by the Board. In 2001, the Board issued a communiqué on inflation accounting and a revised communiqué on consolidation of financial statements. The first financial statements prepared using these communiqués were published as of December 31, 2003. These regulations were fully compatible with the related IASs. Moreover, the Board issued a broad set of financial reporting standards that are mostly compatible with IASs and IFRSs in 2003. These standards became effective for listed companies from the beginning of 2005.

Another attempt was made by the TMUDESK which was established in 1994. The members of this board were appointed by Union of Chambers of Certified Accountants of Turkey (TURMOB) and the representatives of the related institutions. From 1994 to 2001, TMUDESK has published 19 Turkish Accounting Standards which were in conformity with the IASs. However, these standards could not be applied by companies due to lack of sanction.

BDDK which was established in 2000 after the banking crisis in Turkey, was another regulatory body that set accounting standards for banks and financial institutions. The standards issued by BDDK in 2002 were compatible with IASs and IFRSs.

TMSK was established in 2002 by a legal regulation. This new Board has legal power for setting Turkish Accounting Standards and sanction for all companies in

Turkey. The Board has been publishing accounting standards which are fully compatible with IASs and IFRSs.

All of the accounting standards published by these different regulators were similar in nature. However, a harmonization of accounting standards was needed within the country. For this purpose, BDDK abolished its accounting standards by issuing a regulation in 2006. BDDK decided that banks and financial institutions will use accounting standards published by the TMSK. In addition to that, CMB of Turkey abolished its accounting standards by issuing a communiqué in 2008. The communiqué requires listed companies in the ISE to prepare their financial statements compatible with IFRSs adopted by the European Union. The communiqué specifies that companies can use accounting standards published by the TMSK which are compatible with the IFRSs adopted by the European Union. Currently, TMSK became the only organization that published accounting standards which are fully compatible with IASs and IFRSs. Moreover, the draft of Turkish Commerce Law requires not only public companies, but all companies' to prepare their financial statements in accordance with the Turkish Accounting Standards that are compatible with International Financial Reporting Standards (IFRS).

3. Prior Research

A large number of studies compare the accounting quality of IFRS versus national GAAPs after mandatory IFRS adoption. Paananen et al. (2005) found that the accounting quality increases in Sweden after the adoption of IFRS as the association of book values and share prices increases significantly after the switch. In addition, they find an increase in the incremental value relevance of both measures.

Bellas et al. (2007) examine the value relevance of the 2004 book values on 2004 market values and compares the value relevance of the restated 2004 IFRS figures again on the 2004 market values. They find book value of equity to be more value relevant under IFRS for Greek companies. However, they could not reach the same result for profit after tax.

Jermakowicz et al. (2007) examine the association between book values of earnings and equity with market values for DAX-30 companies during the period 1995-2004 to assess whether adopting IFRS or US GAAP or cross-listing on the NYSE improves or worsens the association between book values of earnings and stock prices. The results confirm that adopting IFRS or US GAAP or cross-listing on the NYSE significantly increased the value relevance of earnings relative to market prices.

A study conducted by the Callao et al. (2007) partly focuses on the effects of the new standards on the value relevance of financial reporting in Spain. They find that there has been no improvement in the relevance of financial reporting to local stock

market operators because the gap between book and market values is wider when IFRS are applied.

Morais & Curto (2007) investigate whether adopting IASB standards is associated with higher value relevance for Portuguese listed firms. They find that the value relevance of accounting information decreases with the adoption of IASB standards.

Finally, Gjerde et al. (2008) examine the firms listed on the Oslo Stock Exchange in Norway. They test whether the IFRS accounting figures correlate more strongly with stock market values than the corresponding Norwegian Generally Accepted Accounting Principles figures. They find little evidence of increased value-relevance after adopting IFRS when comparing and evaluating the two regimes unconditionally.

4. Hypothesis and Research Design

As it is stated earlier, Turkey had a hyper-inflationary environment for over 30 years. Because of that fact, financial statements in Turkey had been considered useless tools in decision-making. However, this problem seems to be solved with the mandatory application of inflation accounting and accounting standards enforced to listed companies by the CMB of Turkey. These standards are mostly compatible with IASs and IFRSs. The first financial statements prepared using inflation accounting was published as of December 31, 2003 and the accounting standards enforced by the CMB became effective for listed companies from the beginning of 2005. The application of inflation adjustment was a turning point for the financial statements of listed companies in Turkey (Arsoy & Gücenme, 2009). Therefore I regard the period 2003-2004 as a transition period and excluded from the study. I compare the value relevance of earnings and the book value of equity under CMB accounting Standards during 2001-2002 with those under IFRS during 2005-2006.

It is expected that the change from CMB accounting standards to IFRS should increase the accounting quality in Turkey, defined as the relationship between accounting measures and market values. Accordingly, my research hypothesis is stated as follows;

(H1): The Value relevance of accounting measures increases after the switch from CMB accounting standards to IFRS.

My test of relative value relevance is based on a valuation framework provided by Ohlson (1995) where a firm's share price is a function of both earnings and book value of equity.

$$P_{it} = \beta_0 + \beta_1 E_{it} + \beta_2 BVE_{it} + \varepsilon_{it}$$

Where P_{it} is the market value of the company at the end of the fiscal year end in year t of company I , and E_{it} , and BVE_{it} are earnings, and book value of stockholders'

equity three months before fiscal year end in year t , respectively, and ε_{it} is the other value relevant information of company i in year t . The regression model's R^2 indicates the strength of the association between the respective accounting variables(s) and stock price.

To examine the incremental explanatory power that earnings and equity book values have for stock prices, I follow the approach adopted in Collins et al. (1997) and used by Lin & Paananen (2008). I estimate the following three equations over the CMB accounting standards period and the IFRS_{mandatory} period.

$$P_{it} = \beta_0 + \beta_1 E_{it} + \beta_2 BVE_{it} + \varepsilon_{it} \quad (1)$$

$$P_{it} = \beta_0 + \beta_1 E_{it} + \varepsilon_{it} \quad (2)$$

$$P_{it} = \beta_0 + \beta_2 BVE_{it} + \varepsilon_{it} \quad (3)$$

The relative explanatory power of earnings is defined as model (1) – model (3), and the relative explanatory power of book value of equity is defined as model (1) – model (2). These tests are outlined in Table 1.

Table 1: Comparison of models to test the incremental value relevance for earnings and book value of equity

	CMB _{STANDARDS} (2001-2002)	IFRS _{MANDATORY} (2005-2006)
Book value of equity	$R^2_{E+BVE} - R^2_E$	$R^2_{E+BVE} - R^2_E$
Earnings	$R^2_{E+BVE} - R^2_{BVE}$	$R^2_{E+BVE} - R^2_{BVE}$

5. Sample Selection

The population consists of all listed companies that are traded in ISE in the years 2001-2002 and 2005-2006. Financial institutions such as banks, insurance companies, and investment trusts had their own specific accounting regulations imposed by the Banking Regulation and Supervising Agency in the experiment periods (2001-2002) and (2005-2006). Therefore, they are extracted from the sample. The sample selection process yields a CMB Accounting Standards sample of 382 firm-year observations for 198 companies and an IFRS sample of 406 firm-year observations for 208 companies. Table 2 outlines my sample selection procedures.

Table 2: Sample Selection Process

	CMB Accounting Standards (2001-2002)		IFRS (2005-2006)	
	Firms	Firm Years	Firms	Firm Years
ISE data base	284	543	298	580
Financial Institutions	-84	-159	90	174
Excluded observations due to missing data	-2	-2	-	-
Total sample	198	382	208	406

6. Results

I measure value relevance in terms of the ability of accounting measures to explain stock prices. The R^2 from the estimated regressions measures value relevance. As shown in Table 3, my primary test of the relative value relevance of earnings and book value of equity for Turkish companies reporting under CMB accounting standards and IFRS supports my prediction and shows that value relevance of has increased significantly over time. The overall R^2 of the regression model for each of the time period examined was 0,27 in the CMB accounting standards period, and 0,84 in the IFRS period. In addition, both the magnitude of the earnings and book value of equity coefficients are significant. I find that the magnitude of earnings coefficient has changed its direction from negative to positive and increased significantly. However, the magnitude of the book value of equity coefficient has degreed. This could be interpreted as a switch to IFRS brings a greater reliance on earnings as opposed to book value of equity.

I also examine whether the incremental value relevance of earnings and book value of equity have changed over the time periods. Table 4 shows that the incremental value relevance of earnings increased between the CMB accounting standards period and the IFRS period. However, the incremental value relevance of book value of equity degreed in the same period. Both the increase in the incremental value relevance of earnings and the decrease in book value of equity are statistically significant. I interpret the increase in the incremental value relevance of earnings between the CMB accounting standards period and the IFRS period as an effect of changes mainly related to investor behaviour that rely more on IFRS performance figures. We expect an increase in the incremental value relevance of BVE between the CMB accounting standards period and the IFRS period related to changes in IAS 16 Property, plant & equipment, IAS 38 intangible assets, IAS 19 employee benefits, IAS 39 financial instruments, IAS 40 investment property, IAS 41 agriculture, IFRS 2 share based payments, IFRS 3 business combinations and IFRS 4 insurance contracts, all of which are fair value oriented. However, we could not find any statistical evidence that confirms our prediction.

Table 3: Regression results of Turkish accounting measures on share price

$$P_{it} = \beta_0 + \beta_1 E_{it} + \beta_2 BVE_{it} + \varepsilon_{it}$$

Panel A: CMB accounting standards (2001-2002)				
Variable	Coefficient	Std. Dev.	p-value	Adj. R ²
Intercept	58661,22	25753,26	0,023	
E	-3,55982	0,508437	1,16E-11	
BVE	2,432873	0,206561	1,68E-27	0,278
Panel B: IFRS(2005-2006)				
Variable				
Intercept	114095,0536	29550,73	0,000	
E	10,2786814	0,317645	4,1E-114	
BVE	0,253959423	0,087825	0,004	0,840
Panel C: Comparison of R²:				
R ² CMB accounting standards	0,278			
R ² IFRS	0,840			
Difference	-0,562			

Table 4: Evaluation of the incremental value relevance for earnings and book value of equity

Panel A: R² comparison				
	BVE	Difference	E	Difference
CMB (2001-2002)	R ² _{E+BVE}	-	R ² _{E+BVE}	-
	R ² _E	0,262	R ² _{BVE}	0,092
	0,278	-	0,278	-
IFRS (2005-2006)	0,016		0,186	
	R ² _{E+BVE}	-	R ² _{E+BVE}	-
	R ² _E	0,003	R ² _{BVE}	0,414
	0,840	-	0,840	-
	0,837		0,426	

Panel B: Evaluation of R² comparison			
Incremental value relevance of BVE under IFRS	0,003	Incremental value relevance of E under IFRS	0,414
Incremental value relevance of BVE under CMB accounting standards	0,262	Incremental value relevance of E under CMB accounting standards	0,092
Net Decrease	-0,232	Net Increase	0.322

7. Conclusion

Having high inflation for over 30 years, the financial statements in Turkey had been considered useless tools in decision-making. In recent years, this problem seems to be solved with the legislations about the mandatory application of inflation accounting and subsequently full IFRSs.

I investigate whether the change from CMB accounting standards to IFRS should increase the accounting quality in Turkey, defined as the relationship between accounting measures and market values. Therefore, I compare the value relevance of earnings and the book value of equity under CMB accounting Standards during 2001-2002 with those under IFRS during 2005-2006.

The test of the relative value relevance of earnings and book value of equity for Turkish companies reporting under CMB accounting standards and IFRS shows that value relevance of has increased significantly over time. This result is mainly compatible with previous literature that shows that the adoption of IFRSs improves value relevance which is accepted as a proxy of accounting quality. In particular, I find that the earnings coefficient has turned to positive and increased significantly from the CMB accounting standards period to IFRS period. I also find that the incremental value relevance of earnings and book value of equity have changed over the time periods. The incremental value relevance of earnings increased between the CMB accounting standards period and the IFRS period. However, the incremental value relevance of book value of equity decreased in the same period. I interpret the increase in the incremental value relevance of earnings between the CMB accounting standards period and the IFRS period as an effect of changes mainly related to investor behavior that rely more on IFRS performance figures. We expect an increase in the incremental value relevance of BVE between the CMB accounting standards period and the IFRS period related to changes in IAS 16 Property, plant & equipment, IAS 38 intangible assets, IAS 19 employee benefits, IAS 39 financial instruments, IAS 40 investment property, IAS 41 agriculture, IFRS 2 share based payments, IFRS 3 business combinations and IFRS 4 insurance contracts, all of

which are fair value oriented. However, we could not find any statistical evidence that confirms our prediction. Taken as a whole, the results suggest that the revisions and new standards of IFRS improve the value relevance of accounting measures of Turkish listed companies.

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USA between the Greatest Economic Crisis and Current Economic Crisis

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Abstract. American business system might be defined through its decentralized character, a capitalist one, based on private property and free will. Federal authorities' intercession to economy exhibits throughout budgetary and monetary policies strategy. Meantime federal budget gets a constituent referring to investment in cereals. American economic legislation acknowledges government involvement in business practice control, American Government acting as economical increase supervisor.

Keywords: environment, process, capitalist production, great depression, economical recession, business, prototype, American society.

Jel Classification: G01 B16, D91, F29

The statement built on American industrial prototype emphasizing America as a world leader is being appreciated by majority of specialists as being correct. The assertion hereby is based on U.S.A. present-day condition and this is not only about their economical potential but either about the established democracy, feature that qualifies U.S. as security and constancy pattern.

After Christopher Columbus' discovery of America in 1492, process of land colonization with Europeans has begun and further enhanced during subsequent centuries, especially in 18th century, along with capitalist manufacturing relationship development in countries like England, France and Holland.

Comparatively recent history of U. S. A. starts with those 13 English colonies in North America – Massachusetts, Rhode Island, New Hampshire and Connecticut; Central America – Pennsylvania, New York, New Jersey and Delaware; and South America – Virginia, Maryland, North Carolina, South Carolina and Georgia. (Dictionary, 1986).

In 17th – 18th century, after Holland and French colonies conquest in North America, United Kingdom hereby extends its supremacy and possession on entire Atlantic Ocean coast.

Therefore within English colonies in North America capitalist manufacturing relationship development begins coexisting along with feudal society and even with some issues of slave state on South America haciendas, wherewith economy were associated with slaves work and exploitation.

In 1776 colonies burst forth from parent state (July 4th, 1776, Declaration of Independence). Its Majesty Government appreciates as inherent all American colonies pay up their priory approved interest expanses amount. At the same time it prepares again to discuss existing relationship between parent state and colonies. There was a provision regarding exclusivity status where trough commercial relationships between colonies and other countries except parent state was forbidden and it was hereby obligatory to provide a complementary businesses, provision that was long time eluded. Getting back to status herein application practically means entire category of salesmen, ship owners and sailormen bankruptcy that were thriven upon French and Spanish Antilles business. Therefore a considerable part of colonies population was constrained to choose between political connections with England and business relationship with islands, between sacrament of loyalty to the Crown and its interests.

Gradual amplification of disputes between colonies and parent state has culminated with War of Independence concerning English colonies in North America (1775-1783), wherein "Declaration of Independence" was enacted.

The industrial American prototype mentioned at the beginning hereinabove is getting more and more obvious at the beginning of 18th century. At that time U.S.A. were definitely capitalizing on waste territory reach in ground and underground natural resources, a constantly increasing population due to natural accession and massive emigrant flow.

In 1787 the U.S.A. Constitution was proclaimed that hereby established capitalist production relationships. Starting with 19th century S.U.A. territorial expansion to Western and South part of North-American continent begins. Expansion hereby was realized by means of land purchasing – Louisiana from French in 1803, Florida from Spanish in 1819, Alaska from Russians in 1867. As result of war with Mexico, U.S.A. annexes Texas in 1845 and an important part of Mexican territory in 1846-1848 (New Mexico and California).

In the middle of 18th century U. S. A. capital market is consistently extended and U. S. A. are applying to protectionist solutions. Capital resources come from – mainly from England and, in time, Americans were investing in their own capital.

During first half of 19th century, American movement dedicated to slavery abolition was getting stronger. Contradiction escalation between South slave state and North capitalist state ended in secession war break out in 1861- 1865 (Civil War). The voidance of war hereby was Abraham Lincoln designation for the presidential position, one of the most important abolitionism initiators.

After Civil War the more developed North area wins and favourable premises for capitalist production relationship are thereby issued including for the rest of American territory. Slavery was officially abolished while the coloured category of people was further discriminated on racial criteria.

At the end 19th century S.U.A. become most important industrial power worldwide. After Paris Peace Accord that conclude the war between Spain and America that lasted since April to December 1898, U.S.A. adjunct Philippines, Puerto Rico, Guam and extend their control on Cuba, Hawaii islands and Panama Channel. In 1899 S. U. A. gives out “Open Door” policy in China.

At the end of 19th century, in fully territorial expansion, U. S. A. was experiencing a real economical bloom. American economy count on efficient economic capital and labour forces application throughout production standardization and its massive realization thanks to improved working process and production activity organization.

Between Andrew Johnson age (15.04.1865 – 03.03.1869) and Thomas Woodrow Wilson (04.03.1913 – 03.03.1921), American society has changed dramatically. Industrialization, capital inflow has brought to group of interest formation which ambitions and methods determine the emergency of public security agents’ intervention. Classic liberalism machine adjusting individuals’ relationship wasn’t any more enough; respect for society free inner spirit thereby involves its reconstruction.

In 1913 U.S.A. were in power of approximately 36% of global industrial production. Since 1895 U.S.A. are starting to export much more through the medium of American enterprises. American export is mainly based on capital direct investments.

In April 1917 U.S.A. joins Entente in the First World War. American productive power and capital affluence enable United States to play a decisive role within first world conflagration.

Before 1914 America was already quoted as World fourth leader of capital exportation.

Therefore an entire range of factors has contributed to the decision of war declaration against Germany according to American Congress resolution of April 6th, in 1914. Protection of loans provided by allies in the famous American banks, neutral states defence, agitation induced by Germany in Central America, traditional affinity for France and England, United States generous idealism, their proneness for democratic institutions, had counted differently when taking decision hereby. Due to huge production capacity and capital overflow America will play an ultimate role in the First World War by landing to its allies (which are transformed in American goods purchasing)

In early '20's after war a period of prosperity begins. After a transient crisis United States are investing in motive industries, driving industries, chemistry and electricity products. Entire America is getting involved in a real thrift race. Americans become pioneers of science work organization. The American engineer Frederick W. Taylor (1856 - 1915) concerned about raising worker’s efficiency has created a new discipline, the science

management, wherewith forecasting and labour coordination were understood as production process priorities. Process thereby was required to be divided in distinct operational sections hereby eliminating "time wastes" within mechanic routine which is augmenting productivity. Thus, Taylor System appears. Henry Ford invents band conveyor. This one together with other American techniques: labour division, standardization, capital centralization, specialization, juxtapose each one's effects generating one of the accumulating processes that pertain to economical development. "Profile as matter of fact belong and is being maintained by sustaining business growth itself", explains Ford. Ford's opinions regarding labour wages that start dominating entirely modify relationship between owners and employees. Compensation increase, their way of causing injuries to the companies, is actually provided for their interest: purchasing potential increases and so the worker becomes consumer.

New industries branches, especially car building and cinematography are standing ahead of economical breakthrough. Administration applies with no fervor the antitrust rules. Republicans agree their liberal orthodoxy and also to the general society opinion which sees prosperity as liberalism consequence. Politics surrenders in front of economy: deflation, budgetary reduction, revenue relief, and any governmental control cancellation, insure favourable circumstances for economical development. Isolationism and liberalism, there are the two basic principles of republican administration. The fabulous prosperity is the argument of politics hereby correctness.

Economical World Recession that burst out in 1928 in Wall Street covers the whole world and obviously USA wherein, at the end of crisis herby in 1933 ended by registering 17 millions of jobless personnel.

Particularly when we talk about economical recession, we understand the state of business activity deficiency, a breach, and dramatic change of economical process, materialized by deceleration, stagnation or business activity comedown. There are several types of crises like violent crisis as the one of 1929- 1933, slow ones, dead-alive like biologic anaemia. Some of economical recessions might localize only within one single national economy or few national economies, others put together all those hereinabove characterized by feature of world economical crisis.

Starting with 1929, United States get through the worst economical crisis ever in their history. Between 1929 and 1933 industrial production is reduced to the half and unemployed personnel quota reach up to 24%, which means approximately 17 millions, agrarian crisis gets worst, prices collapse and inflation fighting policies worsen the situation even more.

The whole situation was created as a result of stock exchange accident. In 1929, October 21st in Wall Street, billions of titles are displayed to be sold with no buyer in the end. In October 23rd, other 6 millions titles are meant to be sold with no purchaser as well. On October 24th stock shares are still decreasing. Quasi 13 millions of titles are discharged on market being hardly placed. Shares continue to decrease and market is being overrun by

approximately 16 millions of titles. In ten days, period called “black decade”, millions of titles are changing holders registering up to 50% loss. The global value of shares quoted at Wall Street being estimated at 89 million dollars on September

1st, goes down to 71 million dollars which means a global depreciation of 20%. In American Economy everything leans on landing. Landing makes things move on as for consumption, either for production. For an economy so addicted to landing a financial crisis might be associated with a hard attack. Industrial plants are watching their treasury melt away; banks being no more able to satisfy all requests blow up one by one thereby generating lots of companies’ insolvency. The ones that succeeded to keep their doors open slow down the activity and dismiss a significant part of employed personnel. The more people remain jobless, the fewer consumers are in the end. Stocks are cropping up and cash-in is dramatically reduced resulting in other bankruptcies.

The Great Economic Crisis or Great Depression has been characterized by a spectacular comedown of world economic activity. The first crisis features were observed since 1928.

Prelude to major economic depression in United States is usually associated with Tuesday stock exchange breakdown (Black Tuesday) in 1929, October 29th. Economic crisis had crushing effects especially in high industrialized countries which economies were mostly built on charge stock exports. Worldwide businesses fell sharply as well as personal income, budgetary income and business profit. Countries all over the world suffered the consequences of crisis hereby especially those depending of basic industry. Building activity was practically stopped. Countrified have suffered because of 40- 60% agrarian products prices decay. Mining and forest exploitation probably had experienced havoc of decrease where through request has tided away whether miners or woodcutters reemployment alternatives were absolutely reduced.

The great economic depression has ended at different times among countries worldwide. Most of them have elaborated recovering programs passing through several political reformations pushing them to right or left wing. Societies built on liberal democracy stepped out of depression completely used-up and such dictators as Adolf Hitler, Iosif Vissarionovici Stalin or Benito Mussolini have come in charge of most powerful states thereby preparing necessary background for 1939 Second World War break out.

Economic crisis was an indicator of general depression of world economy: Production and industrial prices crushed down, agrarian slough being a kind of dormant at the end of First World War emphasized and international business get confused.

Unemployment, poverty, social antagonism has increased. Economic recession reached dimensions of a universal catastrophe. The only state that remained untouched was USSR.

In September 20th 1931, British Government has severely decided to give up on gold standard, inside of imperia protective policies are being applied and preferential tariffs are being introduced. In France, from 154 blast furnaces only 90 were kept into service in

1931. In textile French industry recession has hereby collapsed production much seriously than in 1913: 35% for silk production in 1913, 60% for cotton production, 75% for wool. Approximately 28% of workers become jobless. French peasantry has been affected as well because of crisis effects so that their earnings have fined down to the half thereby equally increasing bank indebtedness. Even aloof Japan didn't succeed avoiding crisis tentacles in fully economical bloom. Therefore, in December 1931, being suffocated by the severe depression Japan has abandoned gold standard, thereby the Yen become floating currency loosing 57% value just in a year.

The Romanian economy experienced a real tragedy, small but so gifted," Latin race" born at Near East gates, with uproarious political and economical life. Prices of wheat were falling down; production was subsiding, people were getting poor and poor. The sacrifice crossroads were been accessed, no place to work at, no cash, no food, thoughts were in a mess, furrows were getting more and more obvious.

Economic powers were applying empiric methods to escape imminent disaster. Rising prices was the main objective in order to stimulate manufacturers to afford recycling, etc. Wheat was burned out and famine is installed. It was cold outside and earth coal was inhumed. People were walking around barely dressed while some of wholesale stores were burst with product. Unfortunately the results were insignificant.

Under Franklin D. Roosevelt's command, ales in 1932, astonishing the browns of liberalism, federal State interferes economy to set on the capitalism machine by means of innovative policy history recalls under the name of "New Deal". First issued provision which is being also the most debatable was National Industrial Recovery Act (NIRA) since 1933. With provision hereby government suspend antitrust rules encouraging concentration among manufacturers and setting up loyal competition, prices, wages codes, etc. Social action thereby shall be amplified Social Security Act in 1935 by creating redundancy payment and establishing federal retirement system.

Farmers bargain away as well because of agrarian product currency downturn, therefore they are sinking in enormous debts. According to Agricultural Adjustment Act (AAA, issued May 12th, 1933) and other enacted laws the agrarian landing bringing agriculturalists to reduce overstock production trough grant-in-aid system directly related to tillage land. Long term landing with small rate of interest and inflation that still continue is helping them to retrieve. Between 1933 and 1939 the minimum farmer income is almost rising to double.

Due to increasing intervention of Government to economy New Deal Policy has encouraged the interventionist and equable neo capitalism occurrence that shall restore industry new age of development.

Broadly, New Deal seek for State importance for American economy improvement, State support of under-privileged social categories, protection of banks perceived as strong and those financially viable thereafter, credit reconsideration, product launching. All the

objectives hereinabove were oriented to 1929 crisis consequences abolition and USA economic rehabilitation.

All social and economic solutions approved by Government and American Congress during New Deal application were presented to the American public audience even by President Roosevelt himself, as during his long speeches when travelling across America, either by direct mailing to the radio transmissions listeners starting with March 12th, in 1933, called “conversations to the fire”.

New Deal brought to huge governmental projects launching, as for example construction of hydropower stations, barrages, highways, bridges, residential districts, tourist areas, real estate settlement. The realization of hereinabove conducted to large number of jobless people reemployment starting with 1937, industrial and agrarian production and social insurance system formation.

At the beginning of Second World War USA pronounce for neutral position whether sustaining Great Britain and forces that declared against Fascism. After Pearl Harbour Japanese attack (December 7th, 1941) USA moves in against Axe’s Forces, fighting on Pacific, North Africa and Europe active service.

For SUA, period between 1945- 1970 signifies a large amount of investments, industrial and agrarian production development and efficiency increase. Thereafter compensation augmentation become possible that hereby carries along purchasing potential increase. Companies are hereby accounting substantial earnings which facilitates investments and modernization of producing system. Thus the American prototype could be identified wherewith offer is constantly augmenting satisfying ascendancy quotation.

On economical development background American dollar has achieved the notoriety of main currency at international level. During inter-war epoch USA continue to provide its traditional isolating policy whether the Second World War and especially when “iron curtain” appears, USA was constrained to enforce military and political power – free world leader. As per economic situation USA take the responsibility of capitalist and democratic Occident restitution. Marshall Plan issued in 1948 underlain European rebuilding and Europe revival as global economic power. Besides, after the war United States were the only ones able to support such economical effort. USA owns important gold purveyance valuable at 20 billion dollars, almost more than a half of global amount.

American economic development pattern persist influencing global economy between 1940 -1960.

A report of American Institution published in 1989 was counting following features of American Economy supremacy:

- United States local market dimensions which were eight times larger than the largest one among the rest of countries;
- Technological domination;

- American workers super qualification against the other developed countries;
- The best capital for each employee;
- American Manager Ship excellence over others being considered the best ones worldwide.

American prototype ebb-away started to be felt in the middle of '60, when American economy registers several segmental consecutive depressions. The most serious were affecting iron and steel industry, textile industry, consumer's goods industry and nautical industry. Automotive industry looses in front of Japanese engineers. Foreign companies are providing direct investments in United States. American enterprises set their criticism as against competition accusing them of disloyal practices, either against federal authorities thereby condemning them for not obtaining appropriate protectionist solutions and for overgrown taxes or budgetary deficit that call forth raised rates of interest causing unfavourable effects on entire economy.

USA economical power has been doubled by its military potential. USA takes upon oneself political and military control of few areas all over the world. Middle East, South East of Asia, Latin America, all them are thereby declared areas of strategic interest for United States.

USSR and European communism downfall brought to non-symmetrical world construction wherein USA has yet remains the only global power. Its role of Universal Solder supported by American economy open up being contested not only by terrorist community and countries willing to become global economical powers either.

At the beginning of 1970, during long travel by car, from the Eastern Atlantic to Western Pacific and from Niagara Waterfall in North to the South islands „Florida Keys”, yearly, new highways and improved main roads quality could be noticed. It is possible to drive hundred miles not hearing a „rumble-tumble”, issued by a car passing over a pot hole or a crack between bottom plates (driving on the oldest USA highway called “US 1” (dated from 17th century under name of „Boston mail road”) even the road hereby turns into a ultramodern highway as it might be observed. Driving on their amazing roads („highways, superhighways, turnpikes, parkways, country roads, scenic roads”) you could admire how accurately, soil less and how much work is being provided in America.

In the eighties, transnational companies were holding a third part of industrial production, more than a half of export trade. American transnational companies' product and provided services value at that time goes up to 350 billion dollars. Speaking of percentage, American companies were representing in 1999, 71, 8% in the amount of 50 leading transnational companies worldwide. Providing direct investments overseas, the great American companies are getting huge profits particularly finding the ways of charge stock resources control. American companies attend consumption on high level markets exclusively in areas of raw material production. Therewith American companies are further implementing the American business activity forecasting and management

prototype and newest high tech efficiency and productivity equipment. Economy globalization result in American transnational companies' development. Nowadays they are identified as great economical power and a real binder of American economy worldwide that might be detected even over the national borders. The American secret of success rest in enormous amounts granted for research and development as by private companies and federal authorities as well. Another key of success is being defined by education level and number of employees in research area. Science and technologic revolution started in United States. However the majority of Nobel Prize holders in science are Americans. High level of used technology in American industry decides giant percentage of labour forces distributed for service departments (73,2%) comparing to 24,1% for industry and 2,7% for agriculture.

Conclusion

The end of '80 records the second great transformation of American capitalism and industry. Finding themselves in the position of being threaten by foreign competition, American companies launched a transformational program where trough federal state is an ally that has concentrated its entire diplomatic power for their support in order to reduce business supremacy.

High productivity level proper for American economy allows United State to absorb giant capital flow and export American financial resources all over the world especially in Europe either. Jean- Jaques Servan Schreiber was appreciating that in 80' "third industrial power after united States and USSR could certainly be, not Europe, but American industry in Europe". The observation hereby might be applied especially today, 1989th European communism cave in allowing American companies to extend on immense market.

American economy is now at full expansion. In 90th, economic development is supported by advanced technology, low inflation, employment availability, decreased inoccupation. USA promotes a new business concept related to output factors global productivity, concept that lean on efficiency in combining employees work with research investments and newest technologies of American economy. Though USA remains the core of international system as economic and military power, economical globalization offers the opportunity for many other world powers to under-achieve and rival USA so that its single super-power is being already impeached.

The '90th signifies modernization age. In circumstances hereby the famous American enterprises have gotten global significance, many of them proceeding simultaneously on the tree topmost world markets: United States, Europe and South East.

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Economic Agents Interaction with the State Through Public Consolidated Budget

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Abstract: The proper functioning of market economy is influenced mostly by the state interaction with the economic agents, respectively, by the way the financial relations between the public consolidated budget and the economic agents run for the purposes of building the public budgetary resources and allocation of resources in economic benefit. In the given below it is presented several important issues relating to financial relations between the private and the public enhanced.

Keywords: economic, finance, financial relations, taxes, economic agents, income, expenses.

Jel Classification: H 25, H32

1 Introduction

In current conditions, the major trend is towards the internationalization of economic markets, it can be concluded that the specific economic, and implicitly, the financial activity of economic agents, it is becoming more complex and in a continuously changing.

Current economic environment is the market economy, the basic pillar of the system is economic, and specifically between the market economy and an economic relationship of interdependence, in that environment can influence economic, and these, under certain conditions and in certain forms can influence the environment. In this specific market economy, the state has an important role as the legislative and executive power that has the capacity to coordinate and manage economic activities that are conducted in its territory.

2 The Consolidated Budget

State, through its institutions, contribute to ensuring the necessary enterprise functionality (law, stability, security agreements with other states) and organizes the provision of services of public utility behave in some cases as a trader. Traders eligible for allowances in the form of subsidies for certain sectors of protectionist measures, the state orders, exemptions and tax reductions or customs premiums for export or promote productions etc. In performing the role or use the resources collected in the form of taxes from businesses. State, adopted by the tax in the

economy and the allocation of budgetary resources can create economic growth factors, or on the contrary, can generate negative effects, in case of inappropriate policies.

Private agencies are legal entities, established companies with private capital, carrying out economic activities in order to gain, such as stock companies, Limited Liability Company, partnership with simple societies, authorized persons.

All operators, regardless of legal form of organization, areas of activity or form of ownership operate in an organized, well-regulated with strict rules laid down by public authorities to support mainly the proper functioning of society.

Interactions between economic agents and state not only shapes the legal dimension, in which the state through its legislative institutions and coordinating executive management firms, but also a dimension of nature fiscal budget resulted in the mobilization of significant financial resources from economic to the state more specifically to the consolidated budget of the state and also the allocation / use of resources in such a benefit directly or indirectly firms.

So is the entity that manages consolidated budget which can be defined as all budgets, the budget components, aggregate and consolidated to form a whole, except that this budget is a budget self-standing in design, approval, execution and reporting, but is the sum of the budgets within the Romanian budget.

Term budget, in the etymological comes from French, specifically the word "bougette" that mean bag money, and the first act that could identify the concept of budget has been met in England at the beginning of XIII century, note that appeared in a number of income and expenditure on the activity of its institutions. In our country, the notion of budget has been discovered for the first time in a formal act in Organic Regulations of Moldova and Muntenia (1831-1832), but similar elements are dated since the reign of Constantin Brâncoveanu in "Book income and expenses".

Looking at the current level of economic and social development, the term budget means in fact a set of budgets that are managed by public authorities: the state budget, local budgets, budgets of the state social insurance - pensions, welfare, social health insurance etc.

From a legal standpoint, the budget is "a formal act that is scheduled and approved annual revenue and expenditure of the state." Addressing the economic notion of "state budget" put their footprint in a more visible on the economic and social life. Under this approach, the state expressed in the form of economic relations that monetary form in the distribution of gross domestic product, in accordance with the objectives of economic policy, social and financial standing of each period. These relationships occur in a double sense: on the one hand there are relationships to

mobilize resources at the state and on the other hand there are relations of distribution of these resources.

In economic interaction with the state, and more specifically the financial resources of public budgets, a default occurs in what is called "a financial management company. This notion may be briefly described as representing the overall decisions and activities that contribute to the regulation and adjustment of financial flows of funds and the management of financial resources to firms.

Regarding resource mobilization in the consolidated budget, or in other words, the revenue of public budgets, the economic category are significant contributors to public budgets, whose effective functioning is a very important condition for ensuring a high level of budgetary incomes taxes.

3 Forms Financial Relations between Private and Economic Agents on Formation of State Budget Public

Financial relations are conducted between the private and the public budget consolidated itself in the payments made by operators, which take the form of payments of taxes, fees and other mandatory contributions that public financial resources component of the state.

Public financial resources for the consolidated public budget coming from businesses can be structured in financial resources of the state budget, including taxes, fees, income revenues, donations and sponsorships, the financial resources of the state social insurance that are made up of contributions social security; resources of local budgets, consisting of taxes, income taxes and revenues of local financial resources of special funds consisting of contributions.

Taxation is the most important form of sampling to the state part of the earnings or economic wealth and the main form of public financial resources. As known since slavery times, taxes are considered to be the first element of public finance. The concept of duty means the first obligation imposed on state individuals and businesses, to surrender part of their earnings or assets in order to cover public spending.

In the processes of economic redistribution, especially GDP, the owners of income or wealth, the state in order to meet public needs, it notes the economic tax. Taxes presents a social role in that, generates a social relationship between agents (which give a portion of their income or wealth), and State or public authorities - that take on those resources with a view to establishing the necessary funds and staff to cover their expenses related to the performance of its functions and to meet members of the general interests of society.

Literature, they assigned duties, main sampling forms part of the income or economic wealth, the public budgets attached consolidated public budget, the following defining characteristics.

Tax as follows a binding, and where payment is not made in accordance with the laws, the state may resort to coercive measures such as enforcement.

Tax levy is on a non-refundable, meaning that a transfer is final, meaning that the amounts concerned are repaid taxpayers.

Another feature is that the levy of taxes to the state without a service provided direct from it. Even if the tax levy does not exclude in certain circumstances and conditions, obtaining benefits from the state, it is done in an indirect way. There is a correlation between the size of the tax levy and the size of incumbent benefits taxpayers especially that of the state services and benefit some taxpayers are not affected by the payment of some taxes.

Taxes are essentially the cost of the services that the state and committed to provide its members, directly or indirectly, and permanent in the near future. Furthermore, statistically analyzing the problem in the construction of the state budget deficit, can say with certainty that the "price" of services through state and semi-public utilities, is greater than the value of taxes and duties which they are obliged to pay at a time, in that fiscal year, exactly the size of the budget deficit.

A content tax in most cases is the newly created value and wealth in some cases individuals and businesses. In this context it can be, even only in theory, that taxes are a transfer of wealth from the state and they are carried out public expenditure, and if these expenses are targeted with predilection for expenses involving unproductive consumption of resources, that public resources have been not just about correct. Following statistical analysis shows that taxes have on the public share of 90% of them, depending on a number of factors, namely: economic power of that state, the correct assessment of taxable matter of financial policy of fiscal that promotes parties are in power in that state.

Regarding taxes and they all materialize in the form of levies from the budgets of public consolidated budget, but the essential difference lies in the fact that, unlike taxes, fees if there is a direct benefits receiving payer (e.g. fee sanitation - sanitation service). So taxes are another important form of levies, with a view to public resources and payment of legal entities and individuals, for the services rendered by the State or public institutions. They can be treated as meeting the same taxes as features: binding, definitive evidence, prosecution in the event of default. Charges must be made to the following principles: the principle of universality, that any public service requested is subject to tax, the uniqueness that promotes the idea that a service is due only once, and the payment anticipated, which requires payment before the taxes so previously related services. The main forms of taxes are: legal fees, notary fees, extra charges, other charges.

Romania has a burdensome tax system, such as annual, companies must pay taxes to the state 113. This was reported and the CE in the evaluation report in detail for each stage of implementation of structural reforms under the Lisbon Strategy in the context of the European economic recovery for 2008 and the following recommendation: "measures to substantially reduce excessive regulation (red-tape), to eliminate a major source of corruption, and improving the business environment". It refers to the commitment and our country about this subject, and to reduce administrative fees by 25% until 2012.

Another source of public revenue, along with taxes, is the contributions, which materialized in the amounts paid in voluntary or mandatory by legal entities and individuals for the establishment of public financial resources, to ensure activities in the public domain. There are a number of features by which the contributions are similar to taxes, namely: some contributions are required by specific regulations, public resources, built on the contributions are intended to finance certain requirements of the public: health care, supporting people exceeding a certain age or lose their working capacity, improve infrastructure. Also, there are features that allow distinction between contributions and taxes: some contributions are paid by certain individuals and legal persons established by the laws of the action and requirements in the public domain, public contributions cover requirements defined by the cover from the state or local budgets, some contributions are mandatory, others are optional.

Allocation of financial resources is included in the category of public spending, which in fact constitutes economic processes of allocation of GDP aimed to achieve goals considered in the public interest. Public expenditure can be found on the supply of public utilities that are aimed at both individuals and the legal and constitute an important leverage for the state institutions in ensuring the functioning of society and the economy as a whole, in achieving optimum social and economic mirrored by maximizing their gross domestic product where the most consistent contribution they have businesses. The last time was observed trend rational use of these resources for the purposes of their use not only for final consumption of resources, but also to finance economic activities whose beneficiaries are the operators (public and private) to ensure a balanced development economy and social stability. In these situations, firms can benefit both directly through subsidies, and indirectly, if the actions financed by the public turn on them.

The financial support of eligible firms can be divided into direct financial benefits, such as grants, investments, loans with subsidized interest rate, repayable advances, financial aid and indirect nature of the loans guaranteed by state tax benefits. Both types of financial assistance (direct and indirect) involve a transfer of financial resources from the state that they give to the firms that receive them.

When for economic and financial support directly and indirectly that can benefit materializes by increasing financial resources from their management regarding the

approach of the two forms of financial aid may be different. Thus, the transfer of money from the consolidated budget allows precise knowledge of the amount of aid granted by the state, and waiving the collection of budgetary revenues shows some weaknesses in this regard. Moreover, how to transfer money, specifically to provide grants, involves the collection of budgetary revenues, which leads to increase the size of public budgets, which is not valid to support waiving the collection of revenue budgets public. Where public funds are not used by rational economic agents, this form of financial support may become unprofitable, unlike the granting of tax incentives such as exemption from income tax, which is subject to profit by beneficiaries of this measure.

These aids have been assimilated into practice the concept of subsidies. Most recently, the concept of subsidies has become a very large size, the scope there may be included any form of state aid to even non-financial nature such as access to unskilled labour. Depending on the nature of which they are intended, in practice have highlighted two types of grants for significant economic aid and the investment and operating subsidies. Subsidies for investment are those allocated amounts from public budgets to support investment, indicating that these subsidies are mostly recoverable, and operating grants are intended to support the current activity (operating) companies.

Grants or capital investment as are called in literature represents amounts allocated from public budgets in order to cover expenses for investments that would support a trader. Practice has shown that these amounts of money are intended to cover only part of the investment effort that we are economic, the reasoning that a total grant not interested firms in the same way to conduct effective investment, so is not as the incentive.

Investment subsidies affect financial management in the economic sense of reducing the total cost of investment and consequently there is a diminution of effort equal to the investment subsidy. This type of grant is to supplement the resources for investment, whether own or borrowed, or internal and external present a feature to specify that this resource should not be paid, unlike the other two types of resources mentioned above. Support they enjoy a trader who receives a subsidy for investments can be easily observed using the internal rate of return (RIR), which is the minimum rate of return for that investment is warranted.

Equation 1

$$I = \sum_{t=1}^n (1 + RIR)^t = \sum_{t=1}^n CF_t$$

- a situation where an investment
does not benefit from the subsidy

Equation 2

$$I_{SV} = \sum_{t=1}^n (1 + RIR_{SV})^t = \sum_{t=1}^n CF_{tSV} - \text{a situation in which an investment subsidy benefit}$$

RIR = Internal rate of return for a situation where an investment does not benefit from the subsidy;

RIR_{sv} = internal rate of return to a situation in which an investment subsidy benefit;

CFT = cash flow generated for the situation where an investment does not benefit from the subsidy;

CFT_{sv} = cash flow generated for the situation in which an investment subsidy benefit;

I = investment of effort related to the economic investment;

The equation number is 1 if the trader does not receive subsidy for investment, and the equation number 2 represents a situation in which a trader receives a grant to finance investment. It may logically follow that if both investments (for equations 1 and 2) generates the same cash-flow sites (CFT = CFT_{sv}) then the internal rate of return of investment qualifying for subsidy will be greater than the internal rate of return on investment that not receive the subsidy, because less effort investment in subsidized investment ($I_{sv} < I$).

Operating subsidies are amounts allocated from public budgets to cover part of the current expenditures of the firms. While these grants are intended economic objectives pursued their aims by providing an area of much greater interest, therefore in most cases are supported economic initiating and developing activities of an important social and economic. Financial aid grants to the nature of exploitation to be found for example in support in order to stimulate production for export to increase employment work, those aimed at keeping prices for basic foods at low levels. Reducing unemployment and ensuring a satisfactory consumption of goods and services by maintaining prices at a certain level, pursuing social protection of individuals or certain categories of support businesses and represent goals that justify their funding by public funds, and aims to stimulate exports increased competitive strength of a country on foreign markets, and increasing revenues in foreign currency, which influence the balance of payments and exchange rates. Regarding the use of export subsidies (premiums for export) it must be carried out subject to the principles and rules of international trade established by the World Trade Organization. These complex rules are designed to prohibit or discourage those subsidies effects on the conduct of international trade.

Another important aspect with regard to subsidies (all kinds) is that these financial aids from public budgets are the result of influences exerted by several factors among which economic, social, international regulations, the interest groups, and factors policies, subsidies represent important levers by which the political class tries to win the electorate. Thus, interferences because so many factors, but not exclusively, grants cannot always effectively reach objectives for which they were designed, analyzed and used. Because the subsidies is in fact government intervention in market mechanisms, the last time the trend is to reduce domestic subsidies to limit the intervention of public authorities and to allow free operation of market mechanisms.

4 Conclusions

Analyzed of the above, which shows the importance of interdependence between these two main actors of the economic environment (state and businesses) generated by the large flows of resources that is developing between them, and making a parallel to the current economic context in which the economy is threatened of recession, we can ask to what extent this situation out of the crisis depends on a compromise between the needs of important resources in the budgets of general government consolidated budget and possible economic aid for the economy (the main engines of economic development) by adoption of financial policies relaxing.

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The International Double Taxation – causes and avoidance

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Abstract. The politics and tax legislation being a manifestation of strict sovereignty of the State, the phenomenon of double taxation occurs frequently representing a difficult poison for the foreign trade activity, especially hindering investments abroad, technology transfer or proliferation outside of the state of the companies' branches. Therefore, international legal double taxation, by the repeated taxation of the income, it is an obstacle to the development of economic relations between states, reducing the revenue of the international operators and their interests in making investment abroad. This paper presents the main causes that determine double taxation, its forms, i.e. the economic double taxation and the international legal double taxation, the need for eliminating the double taxation and avoidance methods.

Keywords: repeated taxation, tax evasion, exemption method, crediting method, tax advantages, tax reduction.

Jel Classification: H26, H30

1 Introduction

The internationalization of the economy by continuing expansion of transactions resulted in an extension and taxation systems. They appeared as overlapping or premises to conduct repeated charges of the same natural or legal persons, as negative and lasting impact on trade.

The development of the world economy, enlarging the economic and political interdependence between various regions of the world, the emergence and remarkable development of the transnational companies and the excessive taxation practised by some states have made necessary the concern of the operators for tax planning and adoption of some legal measures to stimulate the development of the international economic relations by participating countries.

The economy globalization leads to a real half of individuals and legal person's incomes, the public authorities of states seeking to take advantage of this circumstance and by doing to the taxation of the entire incomes of individuals and

resident legal persons of the states concerned, as revenues from non-residential persons on the territory taken into account.

So we get that certain income to be taxed both in the state of the origin of incomes, as well as in the state of destination, a fact of nature to prevent amplification even further of the relations between states, where they no take measures to eliminate or at least, to limit the phenomenon.

Therefore it is considered, rightly, that the internationalization of the economy leads to rising incomes that made certain natural or legal persons, in exchange global taxation (of all income of a person in its State of residence, regardless of State of origin of revenues) undermines the interest in developing relations of cooperation and collaboration among states.

Thus, taxes can become, in certain circumstances real barriers to economic and technical-scientific cooperation, the establishment of branches and subsidiaries abroad, foreign investment capital and foreign lending, so the development of economic and financial affairs, not only for the high level of taxation, but especially because of the repeated imposition of income or wealth of taxpayers. For this reason it was tried several methods of avoiding double taxation.

2 Double Taxation

In the globalized economy, the amplification and diversification of relations between states appear more frequent instances of physical and legal persons belonging to a State derives income from sources in other states.

Since each of the States concerned may claim tax jurisdiction, all or part of the persons concerned, this generates coexistence of several complementary or competing tax systems, thereby double or sometimes a multiple taxation of income that (Alexander, 2003).

Thus international tax is double taxation, which may represent an excessive taxation for the taxpayer and an obstacle to capital movements, the process of increasing cooperation between countries and increasing the economic and financial relations between them (Mosteanu, 2003).

International double taxation was determined by the diversity of the national systems, the particularities of taxation policies and how to use this tax and duties as levers to stimulate or limitation of economic activities, and not only has adverse effects on society, in general.

This affects the export efficiency and external competitiveness of goods because duties and taxes affect prices of goods and tax burden is greater than if the income or wealth would be subject to taxation legislation from a single state (Mosteanu, 2003).

Come in a more complete and as large definition, the double taxation is imposing a two or more taxes, which are similar, on the same taxable subject, for the same taxable purpose and to the same period of time (Davis, 1985).

The phenomenon is encountered only to direct taxes, i.e. in the income tax and to the tax on wealth. Double Taxation cannot occur in the indirect taxes as citizens of a state found on the territory of other state, as buyers of goods, bears the same taxes contained in prices that citizens of the state concerned. For the goods that are purchased by the citizens of a state, from a foreign country, there is no longer pay (in their country) indirect tax similar to those included in the purchase price of goods or services concerned (Vacarel et al., 2006).

Relations are established between individuals and the state is different and it can be influenced by:

- political dependence - characterized according to nationality;
- social dependence - which is manifested through the individual stay in the country of his residence or domicile;
- economic dependence - resulting from individual participation in the activity of production, circulation or consumption of goods in that State.

When these three types of dependencies are met in the same individual, one can say that there was a total membership of a state fiscal sovereignty.

Today it was observed that may occur more frequently in situations where the same individual is linked political, economic or social spot for two or more states. Thus, the same individual can be a citizen of a state to live in another country and source of income is the third state. That is why membership of double or multiple taxation causes a double or multiple taxation (Mosteanu, 2003).

The phenomenon of double taxation can be caused by a series of causes, among which:

- governments of some states apply taxes on income made in concerned territory by local and foreign taxable subjects, and on the other hand subject to taxation and income made by its nationals abroad (Leicu, 1995);
- particularities of the fiscal policy and of the taxes systems encountered in a country or another. They may lead to double taxation and to stop activities producing of incomes (Mosteanu, 2003);
- various interpretations of the terms “resident”, “source of income”, “home” etc. Because of the different content of these concepts of the country to country's is possible that the same taxable subject, considered resident in two or more states or as one and the same taxable object to be regarded as having the source in two or more states.

For the last question referred to, an interesting example is the American companies located in the United States but are administered and directed by boards of directors

located in Great Britain. This type of company will be subject to American taxes (of state in which has its headquarters), but also British taxes because it is considered to be resident in Great Britain (with the control centre located in this state).

As regards the taxable subjects as persons, interpretation of “resident” can often determine double taxation of income in the British tax system. Because, a British resident who residing in another state is susceptible to taxation for the same income in both countries. For example, the sale of properties located in another state may be the subject to duties both in the state and the Great Britain (where the taxable subject is resident).

Presenting these summary examples show the need for removal situations of double taxation and the requirement of insurance of a clear and safe position for the taxable subjects engaged in commercial, industrial and financial dealings to the international level (Leicu, 1995).

The phenomenon of international double taxation occurs because concepts (criteria) different underlying the imposition, and not because of the different structures of tax systems. Application to charge varying based on the principles of source, residence and nationality gives rise inevitably to the assertion of jurisdiction on the subject of taxation, resulting in double taxation.

Therefore, it is seen as the result of overlapping claims to impose two or more states. In other words, it appears generally to leverage international relations, as an addition to levying taxes on property and economic transactions carried out on national territory and goods and transactions performed in other states due to the fact that they are paying residents (Mosteanu, 2003)

3. Economic and international legal double taxation

With the introduction of direct taxation of personal type, which constituted a significant progress in terms of the principle of fiscal equity, subject to taxation was formed the income made or property, without taking account of their source.

Taking into account multiple consequences of double taxation, both in the statute of the taxable subjects persons (citizens and/or residents of the state), and the taxable subjects corporate (companies, corporations, etc.), literature awarded to double taxation two forms: international economic and legal (Alexandru, 2003).

3.1 Economic double taxation

Economic double taxation has a definition very similar to general definition, so that it considers this phenomenon consists of the submission of certain taxable raw at two or more taxes in the favour of the same authorities or different public

authorities, at the same financial year (Ionita et al., 2003). This means submitting to more taxes, of the same income or of the same fortunes for the same state.

A good example, but the most important and frequency form of economic double taxation, considered by the Americans and Europeans specialists, is imposing the corporation incomes. Still we will present such an example:

- Gross profit of the corporation – 50,000 Euros;
- Tax profit (16 percent) – 8,000 Euros;
- Net profit – 42,000 Euros;
- Tax on dividend (16 percent whereas is taxed as other income obtained from independent activities) – 6,720 Euros;
- Total taxes – 14,720 Euros.

Economic double taxation from presented example is a combined form of taxation since meet legal person to person in the field of taxation. The corporation bear the income tax and the shareholder bear the tax on dividend through distribution of the profit in the form of dividend.

Another classic example we meet to certain domestic products (tobacco, alcohol, etc.) to which it apply for the first excise and then value added tax. If the same products are from import, from a state that is not a member of the European Union on they apply a third tax in the form of customs duties.

This form of repeated taxation, through which certain revenue or elements of wealth are subject to separate two taxes, represents a deliberate, conscious act, of the fiscal sovereignty which it happening within state (Vacarel, 1995).

And economic double taxation may have international character when one or several taxable subjects are individuals or legal non-residential who transfer their revenue abroad. In this situation, international double taxation will be watching inevitable of the taxation system existing in the state, source of income and not a lack of harmonization of the tax systems in states involved (Alexandru, 2003). Thus, if a company with national capital, owes to the state a tax on profits before the profit distribution, and shareholders – an income tax on dividend what has been divided; if the company's shareholders are residents in the state on which territory is the source of income, double taxation of profit that is distributed as dividend will not exceed the national framework.

In case of a multinational company, however, shareholders residents of other states will transfer dividends as they are entitled to the states for which they have the tax residence, which will be subject to income tax. Economic double taxation what will occur in this situation will exceed, obviously, the national framework. This time, international double taxation will be inevitable consequence of the taxation system existing in the state source of income, and not be to the lack of harmonization of the tax laws in states involved in the matter (Vacarel, 1995).

3.2 International legal double taxation

The doctrine of international tax law raised different definition of international double taxation. Thus, for example, B. Spitz considers that this phenomenon *occur when the tax authorities of two or more states collect taxes concurrently with the same basis or the same impact in such a way that a person may bear a heavy tax obligation than if it would be subject to a single fiscal authority* (Spitz, 1972).

Definition and identify the origin of the way of its manifestation constituted a concern and the Romanian experts. Thus, the academician Iulian Vacarel defines the international legal double taxation as *submission of certain taxable raw by two different states, to the same type of tax, to the same financial year* (Ionita et al. 2003).

Also, Professor Gheorghe D. Bistriceanu identified this phenomenon following criteria: *when income and property are imposed by the two countries on the same type of tax and in the same financial year, there is an international legal double taxation.*

A classic example is the case in which a non-resident is forced to pay a tax on dividend: in the country source of dividends (shareholder in the resident company) or in the state where shareholder is resident.

In this case the taxation subject suffers a double taxation for the same income, i.e. the state of the source of income and in the state of residence.

The experts responsible for taxation which have developed conventions OECD and their comments found that the international legal double taxation appears in the following situations:

- where each contractor state requires total income and the wealth of the one and same person, which means that there is a full imposing in competition;
- if a resident person in a contractor state obtain revenue or possesses wealth in the other contracting state and where both contracting states taxed the income or wealth;
- where each state taxed the same person, which is no resident of the contracting states, for revenue from a contractor state or for wealth which he owns there. This is when a non-resident has a permanent office or a fixed basic through whom/which revenues or possesses wealth in the other contracting state.

The phenomenon of international legal double taxation occurs not because of the different structures of the tax systems but because of the different concepts (criteria) underlying the imposition.

The practice meets two such conceptions (Vacarel, 1995):

- territorial design which is based on the source criterion, income origin or the place where the fortune is situated;
- world or global design which is supported on the residence criterion or the nationality of taxpayers person, i.e. of the registered taxpayers person.

It should be noted that the international double taxation may take rise not only when a state adopted the territorial design and other state the world design, but when both countries are it the same mindset.

Thus, it occurs and when the states apply the territorial design but have done rules defining different the revenue source that, for example, to determination of the parent company profits and, i.e., its subsidiaries abroad. Also, international double taxation may also occur in the cases where the states are the world design, but define different the notion of residence, or a state used as a criterion of imposing the residence of tax payers, and another its nationality (Alexandru, 2003).

Existing double taxation of incomes and wealth is explained by fiscal policy, which varies from country to country, the peculiarities of existing systems of taxes and of the interests of these countries to use taxes levers to stimulate or braking activities producing by taxable income.

Whatever its origin, the international double taxation has effects that can only be negative. It affects, ultimately, the exports efficiency and external competitiveness of goods; whereas the burden is greater if the income or wealth would have been subject to taxation legislation of a single country (Condor, 1999).

4 The need for eliminating the international double taxation

The appearance of the international double taxation is determined by the diversity of fiscal systems, the particularities of taxation policies and how to use this tax and duties as levers to stimulate or limitation of economic activities and does not, as we said, than adverse effects on society, in general.

Therefore, fiscal factor, especially through the international legal double taxation, affect good conduct of the foreign trade and the international economic cooperation.

Come in truth, the development of foreign trade of material values and the economic cooperation requires, among other measures, and finding the appropriate means to avoid double taxation of income made in operations with foreigners, to ensure a normal swing of their and an mutual promotion of the partners and amplification in international cooperation (Condor, 1999).

Imposing of the income made from productive, commercial, for mediation and financial activities, those of dividends due to participate in the company's capital,

the interest on loans, fees for using or giving away in concession use of the invention patent, production processes and know-how, trade names and other intellectual property rights, the copyright for scientific, literary and art creations, and the other categories of income, which that takes place both in the country of origin thereof, as well as the country of residence of the beneficiaries of income, according to the tax laws of each country, can lead to hindering exchanges economic and other activities producing of income, if not creates legal instruments needed to avoid double taxation of income or wealth (Mosteanu, 2003).

If burden resulting from repeated taxation is exaggerated large, this may cancel the interest of income holder, respectively for the appropriate activities abroad (Alexandru, 2003). As a reaction to this phenomenon the multiplication of tax obligations, not only a few taxpayers seek to circumvent the imposing a higher part of the external revenues, in one or even in both countries, by failure the taxable law, occurring such the tax evasion.

Elimination of the international double taxation represents thus a necessity to develop normal international economic relations. It is necessary to clarify and ensure the fiscal situation of the taxpayers who are the main actors of economic and financial activity (Saguna, 2003), the application of common solutions to identical cases of international double taxation.

5 Methods of avoiding the international double taxation

In the fiscal conventional practice, avoidance of double taxation is ensure, either by the exemption method (exemption from payment), either by crediting method (charging). The distinction between these methods is that the exemption method refers to income, when crediting method refers to tax.

The taxation Committee of the Organization for Economic Cooperation and Development believes the double taxation can be effectively countered by both methods, but the implementation of these should be delimited and defined clearly in each tax convention.

5.1 The exemption method

In the exemption method, the residence state of the beneficiary of income or wealth not taxed income/fortune that, according to provisions of the tax conventions are imposed in other state, i.e. in the state of the source or at the taxable wealth.

In the fiscal conventions, the exemption method is used in one of the following two options: total exemption method and progressive exemption method.

5.1.1 Total exemption method

Under this version of exemption method, the residence state of the income beneficiary, to determination of the taxable income of his resident, will not take into account its taxable income in the state of origin of the income and no the income related to a permanent office or a fixed base of other contracting state. Thus, he will take into account only the rest of taxable income. In this way, by not taking account of a certain income, would be granted an exemption. Furthermore, the state of residence overlook the existence of the incomes exempt from tax, when determining the taxable income for taxpayers residing in that state.

For example, suppose a French businessman performed in France (country of residence) an income of 90,000 Euros, while in Spain (country source or of origin of the income) an income of 30,000 Euros. The two states there is an agreement on avoiding double taxation which provides to use the total exemption method. The tax quota in France, relevant for income obtained in France is 25 percent, the tax quota in Spain on income obtained in Spain is 21 percent and the tax quota in France corresponding to the total revenue obtained in the two countries is 30 percent.

In these conditions, the tax paid by France is $90.000 \times 25\% = 22.500$ Euros, the tax paid by Spain is $30.000 \times 21\% = 6.300$ Euros, and the total tax paid by taxpayer, for the revenues made in the two countries, in the conditions under which there is a convention which provides avoiding for double taxation to be made by the total exemption method is the $22.500 + 6.300 = 28.800$ Euros.

We will continue to determine the fiscal reduction granted by France for the revenues made in Spain, which is determined by the deduction of the tax due in both contracting states, in the lack of fixing the convention, of the tax due in the convention existence. In the lack of fixing the convention, the total tax paid determined by adding the tax paid by France in the lack of convention ($120.000 \times 30\% = 36.000$ Euros) with the tax paid by Spain ($30.000 \times 21\% = 6.300$ Euros) will be of $36.000 + 6.300 = 42.300$ Euros. The fiscal reduction, i.e. the advantage which benefits the French citizens is of $42.300 - 28.800 = 13.500$ Euros.

Therefore, it appears that the volume of taxes owed by French citizen, by both countries, is lower in the case of the existence of convention to avoid double taxation, by the total exemption method, paying only 28,800 Euros, than in the case in which he had not been a convention, when he would pay 42,300 Euros, more than with 13,500 Euros.

5.1.2 Progressive exemption method

Under this version of the exemption method, the taxable income in the other contracting state (which is the state of origin of the income, at the permanent office or fixed base) does not require taxation in the state of residence of the income beneficiary. Instead, the latter state retains the right to take into account that income when determining the tax related to the rest of income. And similar proceed to the wealth tax.

For example, suppose the French citizen of the subchapter 5.1.1. The two states there is an agreement on avoiding double taxation which provides to use the progressive exemption method.

In these conditions, the tax paid by France is of $90.000 \times 30\% = 27.000$ Euros, the tax paid by Spain is of $30.000 \times 21\% = 6.300$ Euros, and the total tax paid by taxpayers, for the revenues made in the two countries, in the conditions under which a convention which provides avoiding for double taxation to be made by the progressive exemption method is of $27.000 + 6.300 = 33.300$ Euros.

We will continue to determine the fiscal reduction granted by France for the revenues made in Spain. In the lack of fixing the convention, the total tax paid determined by adding the tax paid by France in the convention lack ($120.000 \times 30\% = 36.000$ Euros) with the tax paid by Spain ($30.000 \times 21\% = 6.300$ Euros) will be of $36.000 + 6.300 = 42.300$ Euros. The fiscal reduction, i.e. the advantage which benefits the French citizens is of $42.300 - 33.300 = 9.000$ Euros.

Therefore, can reach the conclusion that the volume of taxes owed by French citizen, by both countries, is lower in the case of the existence of convention to avoid double taxation, by the progressive exemption method, paying 33,300 Euros, than in the case in which he had not been a convention, when he paid 42,300 Euros, more than with 9,000 Euros.

5.2 The crediting method

The characteristic feature of the crediting method is that the residence country of the beneficiary treats the foreign taxes within certain statutory limits. When the foreign tax share is less than its domestic share, only the surplus of internal tax share is payable over the residence country of the beneficiary. When the foreign tax is higher than the domestic tax, the residence country will not levy any tax.

In the fiscal conventions, the crediting method knew two options: the total crediting method and the ordinary crediting method (or limited), each of them having the opportunity to choose the appropriate method for its internal tax system.

5.2.1 Total crediting method

Under this alternative of the crediting method, the state of residence deducted from tax related to total taxable incomes (fortune) of taxpayers the total amount of the tax paid to other state.

For example, suppose the French citizen of the subchapter 5.1.1. For Spain assume two versions of taxation rate: 21 percent and 33 percent. The two states there is an agreement on avoiding double taxation which provides to use the total crediting method.

In these conditions, the tax due to France before granting of the tax credit is of $120.000 \times 30\% = 36.000$ Euros. The tax credit granted by France, which is equal to the tax paid by Spain, will be: for 1st version: $30.000 \times 21\% = 6.300$ Euros; and for 2nd version: $30.000 \times 33\% = 9.900$ Euros.

The tax paid to France after granting the tax credit will be: for 1st version: $36.000 - 6.300 = 29.700$ Euros; and for 2nd version: $36.000 - 9.900 = 26.100$ Euros.

The total tax paid by taxpayers, for revenues arising in the two countries, as the convention which provides that avoid double taxation to be made by total crediting method is of: for 1st version: $29.700 + 6.300 = 36.000$ Euros; and for 2nd version: $26.100 + 9.900 = 36.000$ Euros.

We will continue to determine the fiscal reduction granted by France for the revenues made in Spain. In the lack of fixing the convention, the total tax paid determined by adding the tax paid by France in the lack of convention ($120.000 \times 30\% = 36.000$ Euros) with the tax paid by Spain ($30.000 \times 21\% = 6.300$ Euros in the 1st version and $30.000 \times 33\% = 9.900$ Euros in the 2nd version) will be of $36.000 + 6.300 = 42.300$ Euros in the case of 1st version and $36.000 + 9.900 = 45.900$ Euros in the case of 2nd version. The fiscal reduction, i.e. the advantage that enjoys the French citizens is of $42.300 - 36.000 = 6.300$ Euros in the 1st version and the $45.900 - 36.000 = 9.900$ Euros in the 2nd version.

So the advantage of benefiting French citizen is of 6,300 Euros, for the situation in which Spain applies a minimum rate of 21 percent and 9,900 Euros, for the situation in which Spain apply a maximum quota of 33 percent.

Therefore, it can reach the conclusion that the volume of taxes owed by French citizen, by both countries, is lower in the case of the existence of convention to avoid double taxation, by the total crediting method, paying 36,000 Euros in both versions, than in the case in which there were no convention, when he paid a tax of 42,300 Euros, with more than 6,300 Euros in the 1st version and 45,900 Euros, with more than 9,900 Euros in the 2nd version.

5.2.2 Ordinary crediting method

According to this version of the crediting method, the residence state deducted, with title of tax paid in other contracting state, an amount that can be equal or lower than that effectively paid in the state of income origin. Therefore, in cases where the rates of tax charged on two contracting states are identical, and when quotas applied in the residence state are higher than in the state source, the fiscal credit granted by the latter state is equal to the amount of the tax paid in the state of revenues origin.

If the situation in which the quotas applied in the residence state are smaller than those prevailing in the state of revenues origin, appear differences in the sense that the residence state reduced the tax due to the taxpayer in the title of fiscal credit, an amount less than the tax actually paid in the state source.

Since the tax credit granted by the state of residence to its taxpayer is less than the taxation paid by the other contracting state shows that the ordinary crediting method leads to a limited avoid to the double taxation.

For example, suppose the French citizen of the subchapter 5.2.1. The two states there is an agreement on avoiding double taxation which provides to use the ordinary crediting method.

In these conditions, the tax due to France before granting the tax credit is of $120.000 \times 30\% = 36.000$ Euros. The tax credit granted by France, which is equal to the tax paid by Spain, will be: for 1st version: $30.000 \times 21\% = 6.300$ Euros; and for 2nd version: $30.000 \times 30\% = 9.000$ Euros, since the permissible maximum quota in the country of residence France for a total income is 30 percent.

The tax paid by France after granting of the tax credit will be: for 1st version: $36.000 - 6.300 = 29.700$ Euros; and for 2nd version: $36.000 - 9.000 = 27.000$ Euros.

The total tax paid by taxpayers, for revenue arising in the two countries, as the convention which provides that avoid double taxation to be done by the ordinary crediting method is: for 1st version: $36.000 - 6.300 = 29.700$ Euros; and for 2nd version: $36.000 - 9.000 = 27.000$ Euros.

We will continue to determine the fiscal reduction granted by France for the revenues made in Spain. In the lack of fixing the convention, the total tax paid determined by adding the tax paid by France in the convention lack ($120.000 \times 30\% = 36.000$ Euros) with the tax paid by Spain ($30.000 \times 21\% = 6.300$ Euros in the 1st version and $30.000 \times 30\% = 9.000$ Euros in the 2nd version) will be of $36.000 + 6.300 = 42.300$ Euros in the 1st version and of $36.000 + 9.000 = 45.000$ Euros in the 2nd version. The fiscal reduction, i.e. the advantage that enjoys the French citizen is of $42.300 - 36.000 = 6.300$ Euros in the 1st version and of $45.000 - 36.000 = 9.000$ Euros in the 2nd version.

So, the advantage of benefiting the French citizen is 6,300 Euros, for the situation in which Spain applies a minimum rate of 21 percent and 9,000 Euros, for the situation in which Spain apply a maximum quota of 33 percent.

Therefore, it can reach conclusion that the volume of taxes owed by French citizen, by both countries, is lower in the case of existence of the convention to avoid double taxation, by the ordinary crediting method, paying 36,000 Euros in both versions, than in the case in which there were no convention, when he paid a tax of 42,300 Euros, with more than 6,300 Euros in the 1st version and of 45,000 Euros, with more than 9,000 Euros in the 2nd version.

6 Conclusions

If we will compare the results in the case of progressive exemption method with those from the total exemption method, considering that they have used the same data as in our case, it may be established that using the progressive exemption method in the convention, in the place of the total exemption is not for the taxpayers benefit, since in the total exemption method, the taxpayer benefits from a fiscal reduction of 13,500 Euros, while in the progressive exemption benefits from a fiscal reduction of 9,000 Euros.

Also, comparing the two versions of the crediting method, considering that they have used the same data, it can be found that the fiscal reduction the taxpayer benefits from using of the same two versions, if using the minimum rate of 21 percent, respectively a tax reduction of 6,300 Euros. If using the second version of the quota, the maximum, it is observed that in the total crediting method, the tax reduction is higher, to 9,900 Euros, than the ordinary crediting method, to 9,000 Euros, as the state of origin of the income cannot apply than its share maximum allowable in the country of residence, i.e. of 30 percent. Therefore, after the presentation of the two methods of avoiding the international double taxation, each of the two suitable versions and using the same data for exemplification, it can see that, the French citizen obtain the highest fiscal reduction, if the convention to avoid international double taxation concluded between the two states is considering applying the total exemption method.

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Specific Features of the Study of Purchasing Behaviour and Consumption by the Customer, Financial and Banking Sector

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Abstract: The purpose of every economic activity in general and the financial one in particular is the satisfaction of clients' necessities. The specificity of clients' consumption behaviour in the financial – banking realm, impose the understanding of the necessities and their occasional process to the banking system. The client's behaviour analysis, as an obvious barometer of a bank evolution is the most important component of a marketing research. The relationship between the client, as a natural person or a juridical person and bank, is very important and requires to be supported in order to assure clients' loyalty and to develop long term relations with them. Therefore, banks should give advice to their clients concerning their finance organization or concerning the preparation of their business plans, fact which is able to reinforce the professional image of the bank. This aspect must be completed by the presence of some communication specialists who will assure the information transfer, creating a feed-back between the employees and the clients.

Keywords: behaviour models, decision-making process, factors, elementary processes and dimensions, economic and financial crisis, acquisition and consumption financial-banking.

Jel Classification: G01, G20

The purpose of every economic activity in general and the financial one in particular is the satisfaction of clients' necessities. The specificity of clients' consumption behaviour in the financial-banking field imposes the banking system the understanding of the necessities and their occasional process.

For the contemporary society, where the technical-scientific progress tends, in many fields, to replace the producer – human being with the producer – machine, the study of buying and consumption behaviour is very important, the more the rare resources with alternative functions the human society disposes of impose only the production of those goods and services that serve the needs in necessary quantities. In the conditions of the actual economic-financial crisis it is strongly recommended to reanalyze this scientific and practical intercession, called marketing that has to give new dimensions to the study of clients' buying and consumption behaviour.

The current consumer living in full millennium of knowledge breaks up complex, discrete, permanent problems, aspects that need to be constantly observed by marketing specialists in order to find modern solutions of orientating the entire economical and social activity to the client. Due to the necessity of identifying the quantitative and qualitative that feature the consumer's behaviour a range of models have been elaborated, explaining the devices of buying and consumption behaviour. Among these, we can distinguish the pattern of attitude and preferences, of learning, of effect's hierarchy, motivational patterns, patterns based on personality study, patterns representing the buying decision, patterns that lay on the study of the buying intentions (Balaure, 2002).

Other patterns intend to explain the procedures of adopting the buying or not buying decisions. Some patterns formalize the process in which the consumer gives his income in order to buy the products and services that satisfy his consumption needs. We can identify static or dynamic behaviour patterns. The static patterns are used to explain the behaviour in different moments. From these coordinates, we can say that the study of clients buying and consumption behaviour of products and financial-banking services is very complex, which firstly dues to the object of these relations' transactions, meaning the money that turn into an untouchable merchandise.

Accordingly, the decisional process is often long and much better underlain than other merchandises. At the same time, the products and acquisition of financial-banking services decisional process is different according to the type of the buyer/consumer, in respect the physical or conventional person, market segments that strongly need to be researched.

All the acts, actions and decisions of the buyer concerning the use of a part of his income in order to buy services define the services buyer's behaviour. He is a part of the consumption behaviour and is interdependent of the goods buying and saving behaviour. So far as the savings are laid in financial operations, the saving behaviour is part of the services behaviour (Mitran, 2005), (Olteanu, 2003).

The necessity of taking into account, in the marketing research, of such bounds is much more obvious. The particularities of the financial-banking services of the consumer's behaviour determined by its content can be found both in the elementary processes and in the dimensions that define it.

The elementary processes differ by the way the perception takes place, by the development of informational/learning processes, of making and manifesting attitudes as well as of expressing the obvious behaviour (Zeithaml, 1981).

The perception in services is based on a series of specific elements such as: intangibility, the difficulty of the standardization, lack of guaranties and information (or their smallness). They generate an adequate behaviour expressed through the perception of a higher and more intense risk and as a consequent of a more difficult acceptance of the innovations.

The informational/learning process defined by the elements through which people get to know the services means to search information and to identify as credible as possible sources, the buyers having to choose between the personal ones (acquaintances, friends etc) and the impersonal ones (mass-media). The intangibility of services and the impossibility of their sincere and exact prediction gives the information obtained from impersonal sources an incomplete and incredible feature.

Therefore, in services, the consumers give more importance and trust to the information coming from personal sources. Once found, the information is much stronger kept in mind and for longer, which makes the experience play a much more important role in the learning process.

Attitudes' forming and expression process, featured by affective, cognitive and native dimensions, and reuniting influences exercised by practices, habits and motives, is mainly based on the experience obtained after the consumption. He finds himself in a bigger fidelity to the brand and, therefore, in a higher resistance to its change. The motivation for such attitude dues, in a great part, to the higher risk perceived in the idea of changing the brand, as well as to the credibility of the information concerning this change.

The effective behaviour process representing the result of the elementary processes mentioned above is found in the decision taken by the buyer concerning the buying of the service, in respect: buying, not buying, delaying the buying or replacing the service.

The dimensions of the consumer's behaviour represented by the buying (not buying) reasons, by buyers' preferences, by his buying intentions, by buying practices, consumption habits, his attitudes and his image are particular by the specific way they form and by the different role each of it play in manifesting a certain behaviour. From this point of view, the buying practices, the consumption habits and the image enjoy of a particular attention.

The buying practices and the consumption habits are formed and act together. They are forms of behaviour's manifesting that became repeated actions. The result of a former experience, acquired during a learning process, the formation of some buying practices and consumption habits for a certain service represent ways to make its client loyal.

The image, as representation of service meaning in consumer's mind occupies the more important place among the other dimensions, particularization element of service consumer's behaviour. Making a clear and positive image represents an important objective of the promotional politics (Mitran, 2005), (Olteanu, 2003).

The explanation of the consumer's behaviour is based on the sequence of acts through which it becomes the owner of the service, sequence that defines the buying decisional process. The process is described in the specialized literature, either

synthetic, by including the acts in three groups (pre buying, buying and post buying), either analytical, by discomposing, in the following phases: the appearance of an unsatisfied need, the search for information and the identification of the variants, the mental evaluation of the variants, the resultant of the evaluation and the post buying evaluation. In the financial-banking field, the particularities of the buying decisional process are found in the content of its phases and in the factors acting way that influence the consumer's behaviour.

The appearance of unsatisfied need is the expression of the multiple situations that appear in everyday life concerning the efficient use of certain incomes and it's strongly bounded by the investment need. The need for financial-banking investments is correspondent to other needs: savings or loans, for current or future goods and services acquisitions, needs concerning the personal or goods' safety (assurances).

The search for information and the identification of the variants is particularized by the quantity and nature of the information taken into account. The intangibility of services imposes to appeal a larger and a higher quality amount of information. Such a feature can be found in the different content of the promotional activities and of their more elaborated feature. In the inner research process, as well as in the information stored actively and passively, reminding plays an important role. It can be helped by company's brand politics.

The high professional feature of the banking-financial information reported to a lower training level of demanders determines a more laborious searching process, longer, with many and repeated mental reflections. It continues also after the acquisition of the financial-banking products and services, sometimes generating doubts over the choice that had been taken.

The mental evaluation of the variants considered is of a greater impact in the bank field due to the different way to perceive the information that are on its basis. At the same time, the "set of the evoked possibilities" is more restraint. As we all know, the evoked possibility is expressed by the brand taken into account from the evaluation phase. The restraint feature of the possibilities is the consequence of the inseparable services and especially of offer's rigidity. Indeed, in services, when the consumer finds himself in a banking institution, he only has in front of his eyes the respective brand, including another possibility in the evaluation implying a walk to another similar institution. Even so, the evocation is more restraint, because the separation in space creates difficulties in making an exact comparison.

The decision rules are applied, differently, conforming to the category of services the consumer appeals to: the decision taken on the long experience, the straight compensatory pattern, the non-compensatory straight pattern and the vocabulary - graphic rule (Catoiu & Teodorescu, 2004).

The last, the most used in the financial-banking field, means to take a decision by taking into account the best attribute, in some price conditions. We speak of: risk, estimated profit, price (interest, commission, bonus, price list).

The financial-banking service acquisition and consumption represents a resultant of the evaluation and expresses the consumer's attitude towards it. Most of the authors assimilate the delivery process (acquisition) and consumption with a theatrical representation where the service labour and the consumer appear like actors and spectators. Within such an acceptance, the delivered service strongly depends on the performance of the participants and of the script's quality. The conformity with the screenplay offers satisfaction to the clients, and the deviation from this, confusion and lack of satisfaction.

The evaluation post buying has as resultant a certain cognitive dissonance expressed by the restlessness of the consumers generated by the lack of satisfaction reasons. In services, the cognitive dissonance bases on the differences between the expected level of the service and the perceived one after the labour conscription. It is bigger than in case of the goods and it's generated by the difficulty of service's tangibility and by the different rate of perceiving the offered service. The cognitive dissonance (the tolerance area) is determined by the report between the accepted level and the one wished by the buyer.

As for the understanding of financial-banking services consumer, natural person, we must take into account a few more important aspects, which can reduce a part of the difficulties its evaluation implies in all complexity (Jelev, 2008):

- Financial-banking services mean a series of selling-buying relations developed at different time distances, do not refer to a single selling transaction as in goods' case;
- The interaction that takes place between the client and the banking clerk has an ultimate influence over buyer;
- Noticeable differences appear between the information used before buying decision, during buying and post buying;
- The information obtained by clients form inner sources or during experimenting the banking service have a major importance;
- The estimation of banking service after the acquisition is ultimate because it allows the buyer to decide whether he continues or interrupts his relation with the respective banking institution.

Thus we can conclude that the study of the financial-banking products and services of the consumer's behaviour, respectively the understanding of its influence elements have a significant contribution to the efficient development of banking activity because it helps the banking institution in the planning process of the offered

products and services to define the offer's structure and to anticipate the probable clients' reactions.

Behaviour's study in general and of the financial-banking services in particular can't be achieved without taking into account the factors that influence this behaviour.

Many authors have studied the way this behaviour is made, the results being synthesized in a series of patterns, some with general feature, some specific to the services, also applicable in the financial-banking field.

Since it's impossible to identify each client's needs and wishes, the patterns try to catch the causal bounds between the factors that influence a person's behaviour; in order to understand his behaviour, the banks need to determine those aspects of the human behaviour that are consequent and regularly take place and also to determine the noticeable influences (demographic factors, economical, specific to the marketing mix, situational) with major influence over the behaviour, over the influences inferable of endogenous type (perception, motivation, personality, learning, attitude) and of exogenous type (family, reference group, affiliation group, social class, culture and subculture) (Stremtan & Bolog, 2006).

The demographic factors, associates of the influences of each person represent features that influence the banking services buying decisional behaviour at individual level (age, sex, training level, race, ethnicity, matrimonial state, occupation, working level, habitat, the size/the category of the living area, geographic/historical living area etc), of family/household (occupation and working level of the "head of the family", the size and the structure of the house by sex and age criteria, life cycle of the family, living conditions, the size/category of the living city, geographic/historical living area).

The economical factors that influence the banking services consumer's behaviour refers to the personal income and at the total income achieved by all the members of the house/family as a monthly average, refers at the prices of the banking products and services (interests, taxes, commissions, rate of exchange), at the minimum and medium wages at the national economy level, at the population incomes and at their structure on provenience sources, at the population expenses and their structure on destinations, the GNP/net medium on each inhabitant, the equipping rate of the population with different long term use goods, the inflate rate, the price index, the official national currency circulation etc.

The demographic and economic factors, considered independent variants, by which the dependent variants that describe the particular processes of the consumer's behaviour are interpreted act interconnected and divers the segment area and the types of consumers.

The factors particular to the marketing mix that influence the consumer's behaviour for banking services refers to the product (service), price, distribution and their promotion.

The banking services purveyors are permanently preoccupied to anticipate consumers' needs and often, the offer excels their expectations, according to the use of the advanced technologies in the field, financed by banks. We are witness to a shaping of the behaviour by the financial players and to a financial culture promotion, without precedent among all consumers' categories, no matter of their age, earning possibilities or training level. Financial innovations are fast adopted by the emergent markets.

The elements of the marketing mix with significant influences are the product/the service (the available banking services and products, the offered counselling services, the behaviour of bank's clerk, the function schedule of the bank, the atmosphere and the ambiance in the bank, the touchable elements), the price (the interest level, the taxes and commission level, the offered stimulants), distribution (the net of branches and agencies, the ATM net, the distribution of banking services over the internet, the distribution of banking services over the telephone) and promotion (communication about the offer service, the used promotional techniques, the oral advertising).

The situational factors refer to "all those particular factors to a well defined situation in time and space, factors that do not result by knowing the personal attributes (intra individual) and of those that characterize the stimulus (chosen variant), but that have a demonstrative and systematic effect over the actual behaviour (Catoiu & Teodorescu, 2004).

The authors remark the existence of five dimensions concerning the situational influences: physical or social ambient, time, purpose and former state.

The physical ambient includes the geographical space, the scenery, the sounds, the smells, the luminosity, the weather and the presentation way associated to the product. The physical scenery affects the individual's heart state and his attitude towards the product.

The social ambient refers to the presence of other persons in the respective situation that creates a micro-social environment during which mutual influences take place.

The time is the same with the moment of behaviours' manifestation: time of the day, day in week, season or relative period from the last acquisition. The studies over the affluence of clients indicate the fact that the greatest demands for banking products and services take part mainly at the beginning of the day, when people allocate time for bank relations, in the first and fourth day of the week. The busiest period is to the end of the year, especially in December.

The purpose refers to the personal objectives of the consumer at a certain point. A person who cares about social prestige will tend to use luxurious products (gold card) towards an ordinary person for whom a credit card is satisfactory.

The former state is a temporary state of mind or a condition of the consumer during decision (fatigue, agitation, lack of money, good will etc). The former state differs from the actual one of response to the buying stimulus, because it has already existed before the moment of buying. Taking into account the consumers' expectations and the factors that determine them, Valarie A. Zeithalm, Leonard L. Berry, A. Parasuraman achieved a very valuable pattern under the aspect of understanding the mechanism that leads to the received (perceived) banking-financial service (Mitran, 2005), (Olteanu, 2003), (Zeithaml, 1981).

The pattern, made for services in general proves its value also in the banking-financial field.

The pattern draws attention over different sources of people's expectations in general, of a certain segment and even of a single client. He allows establishing the share of each factor, and also over the way they act (permanently, occasionally).

On this basis the marketing specialists can act to reduce the tolerance area. The perceived service is determined, at its turn, by a series of factors such as: direct contact with the labour carrier (moment of truth), contact elements (personnel, ambiance and processes), image and price.

They can practically be found in the quality of service, clients' satisfaction and perceived value. Concerning the conventional persons, the most frequent need that determines the organizations to ask for the services of a banking-financial institution is the need for loans, in time and without obstacles.

Also, the organizations can appeal to the services of a financial-banking institution in order to obtain an income by way of interest, money transfers, the administration of their own businesses' risk, getting the information and financial counselling.

During the analyze of the behaviour of the consumer conventional person it is important to take into account of the important share in the economic field of the micros and of the different act of the buying and consumption behaviour according to the organization size (Jelev, 2008).

The decisional process, as a rational combination between risks and gains is influenced by a multitude of factors (medium, organizational, interpersonal and individual) that can determine certain behaviour of commercial consumers regarding the banking products and services.

Among these there are: the level of primary demand, the economic conjuncture, the buying possibility of the national currency, legislation, the rhythm of economic changes, objectives, politics, procedures, organization's dimensions, organizational

structure, field in which they work, geographical position of the company, the management style (authority, persuasiveness), commercial and financial position within the competitive area (the statute), the organization's necessities and wishes, personal features (age, education, income, attitude towards risk etc)

The buying process of the company represents "the process to take decisions in order to buy goods and services necessary to an organization, as well as their evaluation and choice from the multitude of purveyors and trades" (Webster & Wind, 1972)

In this process, the company is every time, in one of the following situations: new acquisition (the company buys for the first time a new product), repeated acquisition (the buying process repeats) and modified repeated acquisition (the modification of the way the former process has developed – quantity, price).

The most important components of the buying decision of the company must take into account the availability of the financial-banking product or service, its quality, that has to be concordant to the specifications, as well as with the best paid price for product's quality and availability, and with the services that join the product and not at last, long term relations (Anghel, 2004).

The main phases of the acquisition process are the following:

- The appearance and the identification of a certain need;
- Establishing the quality, quantity and delivery term, of graphics to spread out the payments;
- The definition of the features of the financial-banking products and services that are to be bought in order to satisfy the need and the identified ones;
- The identification of the banking institutions susceptible to answer the company's demands;
- The launch of offer demand;
- The reception and the analyze of different offers and the preliminary negotiation;
- The choose of the financial-banking institution with whom there will be discussions to enclose contracts;
- The evaluation of the relationships' efficiency with the financial-banking institutions;

The decisions concerning the acquisition process of financial-banking products and services are taken within each organization by a certain number of persons that make out the decisional centre, called in the specialized works, "acquisition centre".

The relations between the client and the bank are very important for the two parts involved in the acquisition process. A detailed analysis allowed to identify some company's buying behaviour patterns, among these being the patterns: Sheth, Webster and Wind.

As for the Sheth pattern concerning the buying decision we take into account the participation of at least two persons. This pattern makes the difference between the decisions taken in the basis of a delegation by a single person (self-governing decisions) and the collective ones of the participants to the decisional process (common decisions). The self-governing decisions are lower risk decisions, while the common decisions take into account decisions with a high risk level.

The decision process regarding the acquisitions of the organization is, in this case of organizational behaviour, influenced by six types of factors, grouped, at their turn, in two categories: production factors and particular factors to the organizations. The first category includes time pressure, perceived risk and the type of acquisition, and the second includes the size, the orientation and the centralization rate of the organization.

The Webster and Wind pattern takes into account how the company's acquisition behaviour is influenced by four categories of factors: environmental, organizational and interpersonal (acquisition centres) and individual.

These categories have influence both on individual decisions (by delegation to a component of the acquisition centre concerning the lower risk decisions), and on common ones (where the risk is high and more members have to participate at).

Though both presented levels are among the more complex ones, we must not forget that in reality, other variables can appear and influence the decisional process. In the study of clients' behaviour we need to think also of those financial products and services consumers (the investors) (Olteanu & Vlad, 2007).

The main category of clients from the capital market in Romania are the qualified professional investors (credit institutions, investments societies, other authorized entities to operate on the financial markets, assurance societies, collective disposal organism and societies to administrate them, retirement funds and societies to administrate them, national governments, banks, international and over national institutions etc) and individual investors on personal estate markets.

The consumer's behaviour is structured, in the specialized literature, in two components: buying and consumption behaviour. Within the capital market, from the financial investments view, the buying behaviour or, other said, the investment decision is more important (Gayle, 2005). In case the other advantages are equal, the investor will tend to choose the investment that offers him the greatest gain. Anyway, when calculating the potential income, we must not forget the eventual losses as well. Also, when calculating the expected incomes and when taking the

investment decision, the investment's decision, intrinsic value of the investment plays an important role.

The consumer's investment behaviour does not consist only of the maximization of the profits obtained as a result of the investment.

The fear for regret is another factor that affects consumer's behaviour. This factor prevails when the investor doesn't trust the information he has or does not believe he can process them. The main feature of the investments consists in the fact that they don't produce immediate effects and neither certain. From capital market point of view, investor's consumption behaviour appears later and it is generally conditioned by the reinvestment decision.

From European integration perspective, it is highly important to study financial service European consumer behaviour. The main factor that influences the consumer's behaviour is, in this case, close to the demographic and economic factors, culture. (Kotler, 1998).

The consumers in the European economic space presents major cultural differences that permanently influence consumption behaviour. From this point of view, marketing ensures the adjustment of organizational activity to the cultural values specific to each investor's category. The major tendency is that of cultural homogenization. Their behaviour analysis, as an obvious barometer of a bank's evolution is a main key to a marketing research.

The relation between client, either natural person or conventional one is very important and needs to be sustained in order to ensure clients' loyalty and to develop long term relationships with them. Therefore, the banks have to give consultations to their clients regarding the organizing of their own finances or the grounding of business plans that should reinforce bank's professionalism image. This aspect needs to be completed by some communication experts' presence that should provide for the information transfer, thus realizing a transfer between employees and clients. Through this brief analysis and partially completed of the way the financial-banking products and services clients' buying and consumption behaviour's expression, people tried to achieve an introduction itinerary that will be the basis of further researches to give the possibility of finding some methods and instruments adequate to the Internet and Cognition era.

The scientific revolution is necessary not only in the marketing, but in all economic sciences as well that will pave the way to multidisciplinary beginning of buyers' buying and consumption behaviour at all levels and in all the fields.

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General Considerations on Fiscal Evasion

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Abstract: Analysis of performance of any economy involves the measurement and correlation of three basic elements: the rate of economic growth, the rate of inflation and unemployment rate. When the rate of growth (rate of real GDP) is high, the production of goods and services is growing and therefore increasing the number of jobs, decrease unemployment and raise living standards. If the economy is in recession phase, increasing fiscal pressure to ensure the necessary budgetary funds triggers complex economic mechanisms. Rules more strictly is that those who are not able to operate in the normal economy to slide towards the underground economy, and this not because he wants to tax evasion, but because they simply cannot cope with new regulations. It is widely accepted in economic theory and practice the idea that reliability scale macroeconomic indicators of a country is affected by size of underground economy and the various tests made so far on this subject, focusing either on the social aspect or the economic or moral, or emphasizes the illegal or the edge of legality. This has led to various studies in this area do not provide comparable data or provide data to the contrary. Worldwide were put in place, however, some calculation methods provided that applied the same country and same period, the results are rarely consistent, sometimes even in fundamentally different.

Keywords: economic growth, unemployment, inflation, underground economy, fiscal pressure

Jel Classification: E63, E 64, E 65

Analysis of performance of any economy involves the measurement and correlation of three basic elements: the rate of economic growth, inflation and unemployment. When the rate of growth (rate of real GDP) is high, the production of goods and services is growing and therefore increasing the number of jobs, decrease unemployment and raise living standards.

The correlations between these elements have been the subject of various investigations in the field and the most important studies refer to:

➤ *Relationship: economic growth - inflation - unemployment.* The specialists argue that if the rate of growth of real GNP per capita would remain at 2% per year, then consider that per capita GDP would double every 35 years and so each generation can hope at life double than at present. If, however, GNP per capita would increase by 1% per annum will be needed 70 years for doubling the living. It should be therefore taken into account that small differences in the rate of economic

growth over long periods which can lead to large differences between the lifestyles of different successive generations.

➤ *Relationship: economic growth - unemployment or Okun's Law.* This analysis reflects the relationship between economics' growth rate and unemployment rate and is known as "Okun's Law" after the name of Arthur Okun of the Brookings Institution in the U.S. According to this law "for each of the 2.2 percent real GDP growth, it should be achieved in a year so the unemployment rate falls by one percent. This is a statistical and does not apply to any country, but only for U.S. and round the Okun did research. Such a statistical relationship can be deducted for each country separately, depending on the conditions of stage that through, and could be used in fundamental policy of strategic economic expansion to reduce unemployment to a convenient size.

➤ *Relationship: compensation or unemployment-inflation of Phillips curve.* Given that generally the cost of unemployment is lower than the cost of inflation, the politicians will opt for some increase in unemployment in return for some reduction in inflation. The essence of the relationship of inflation-unemployment compensation lies in that a lower unemployment can be achieved by accepting more inflation or inflation can be reduced by accepting more unemployment. This compensation between inflation and unemployment is given to the Phillips curve, which suggests that inflation can be reduced permanently by accepting the cost of higher unemployment and an empirical relationship that reflects the behaviour of wage and price inflation versus unemployment, has a descending slope, giving us a high rate of unemployment is accompanied by a low rate of inflation and vice versa, there is an offsetting relationship between inflation and unemployment.

If the economy is in recession phase, increasing fiscal pressure to ensure the necessary budgetary funds triggers complex economic mechanisms. Rules more strictly is that those who are not able to operate in the normal economy to slide towards the underground, and this not because he wants to tax evasion, but because they simply cannot cope with new regulations.

In the analysis of fiscal pressure, and question-generating economy, except tax rate pressure communicated officially by the Statistical Yearbook issued by INS can be calculated and recalculated tax rate pressure:

$$R_{pf \text{ rec}} = VF / GDP \times 100 \text{ where}$$

$R_{pf \text{ rec}}$ = recalculated tax rate pressure,

VF = income tax

GDP_{rec} = GDP official - the hidden economy

It is widely accepted in economic theory and practice the idea that reliability scale macroeconomic indicators of a country are affected by size of economy. **The**

underground economy of a country is composed of two broad categories of activities:

- legal transactions, which people deliberately and operators do not say to not pay taxes;
- illegal transaction (arms, ammunition, narcotics, etc.).

The underground economy is, however, and "hidden", "non", "informal", to so that quantification is in the happy expression, an inaccurate science.

To delimit the scope of the underground economy we had to found methods of control, this phenomenon should be defined and measured. Various tests made so far on the topic underground economy, focusing on either social or the economic or moral, or emphasize the illegal or the edge of legality. This has led to various studies in this area do not provide comparable data or provide data to the contrary. Worldwide were put in place, however, some calculation methods provided that applied the same country and same period, the results are rarely consistent, sometimes even in fundamentally different.

Economists Xavier Grefe and Edith Archambault have differentiated methods of measuring the underground economy and the market. If the market were identified represented several methods: by measuring the wealth of national GDP through the use coefficients of production, changes in official duties and their comparison between countries. As methods of research, investigation emerges statistical sample method of control and registration of statistical monograph, and the technical ways, the gaps between spending and income, international economic comparability, the input's physical labour census analysis volume transactions, the effects of FDI on the structure and complex modelling.

Feige analysis method or volume of transactions implies that a constant relationship between the volume of transactions and the size of GDP, based on the quantitative equation of Fisher:

$M = P \times V \times T$ where M = money, V = velocity of money circulation,

P = price, T = total transactions

Lowering the GDP of the official GDP, an estimation based on the volume of transactions, in order to obtain a value representing the size of the underground economy. Feige's method believes that in the evolution of the phenomenon is measured no shadow economy and, secondly, the $P \times T$ in the total GDP (nominal) was constant all the time if, also, would there informal economic activities.

Romanian Court of Accounts defines the economy as a heterogeneous group of illicit economic activities carried out and economic components of criminal activities. Cases objective of generating economy in our country are:

- intensity fiscal rules, and the large number of acts, frequent changes, the form of bureaucratic, legislative overlaps, etc.. The most eloquent example is the VAT tax which provides annual approx. 40% of budget revenues, has suffered over the past 15 years by implementing a number of significant changes about 30, three times adopted new acts that are ultimately adopted Tax Code, normative act of the entry into force in 2004 has undergone various changes in November.
- fiscal pressure, is a currently raised by both taxpayers and those who study the economy. In view of the analysis as relevant subjects: the real economy, and his calculation to be made after deduction of the official GDP of percentages representing the hidden economy, given that this revenue is characterized by circumvent their tax existence of a significant volume of activities exempted from certain categories of tax - a favourable tax regime applicable to free zones, duty-free design, disadvantaged areas and an impressive number of taxes, not present in the state budget but the budgets of agencies.
- corruption that found in the underground economy for the development land and has a multiplier on the level of tax fraud.
- level of poverty and unemployment.
- complex processes of capital formation.
- desire for a fast fortified specific own human nature.
- The main methods for estimating the level of shadow economy are:
 - direct estimation methods:
 - a) Direct supervision - analysis of data provided by economic agents operating in whole or in part, "underground". This method offers the knowledge underground economy but the structure is based on the accuracy of the data provided, which generates doubt the more so as some activities are illegal and operators are not prepared to recognize and involvement, even in conditions ensuring the anonymity.
 - b) detailed analysis of a sample of paying taxes, under threat of sanctions if they refuse to cooperate. In this way are obtained and data on small escapist working on their own and in most cases be exempt from payment of taxes due the state. This method however does not accurately since it is limited to taxable activities, without regard to such a significant part of the underground economy.
 - indirect estimation methods:
 - c) method discrepancies in expenses - those who work in the informal sector spends more than their declared income. This discrepancy, which reflects the amount of the underground economy, can be put in evidence at both the individual and the national financial system.
 - d) method discrepancies in the labour market - a drop gratuitous supply of labour can be considered an increase in the same measure, the underground economy. However this estimate is affected by elements interpreted. In most cases, people

working in the underground economy and in the official so that this method of estimation is least used, is referred to studies contain Bruno Del Boca (Introduzione alla Econometrics) for Italy's economy or for O'Neill U.S. economy.

e) Method discrepancies in transactions - another method of estimation was made with Edgar Feige and starts from the assumption of a constant relationship between the volume of transactions of a country and the gross national product measured officially. To estimate the level of underground economy, Feige started from a base year considered the no underground economy and considered as the volume a "normal" transactions that would remain the same for a period of several years. Obvious that these "allegations" seriously put into question the accuracy of the data obtained. In addition, it is difficult to assess volume of transactions, especially if we think the cash held.

f) Method of discrepancies on the money market - a gap is visible on the money market and underpins the most used methods of assessing the underground economy. This starts from the premise that business transactions are conducted informally in cash to make their detection more difficult by the authorities. The underground economy is then given the amount of cash used at national level in addition to the one in official transactions. This method is considered more accurate whereas the quantity and monetary structure are generally known in detail. However, it is noted that in the economy are sometimes used by bank payments or by electronic means.

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Miscellaneous**The Informative Dimension of the
Annex to the Annual Financial Statements in the
Context of the 4th European Directive**

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Abstract: The fundamental disposition of the CEE 4th Directive is represented by the art.2, in which is stipulated the structuring of the annual accounts in three documents that forms a unitary whole as following: the balance sheet, the profit and loss account and the annex. The annex is a constitutive part of the annual accounts, being a conceptual product mentioned in the art.2 of the CEE 4th Directive. This synthetic accounting has the role to explain or to complete the elements offered by the balance sheet and the profit and loss account. The annex represents a valuable instrument of informing and analysis for all the users of accounting information. The informative dimension of the annex is not limited, but the information presentation must respect the principle of true and fair view and that of the significant importance.

Keywords: the 4th European directive, annual accounts, financial statements, true and fair view, synthetic accounting documents.

Jel Classification: F15, F36

A dimension of the international accounting standardization is the process of accounting harmonization taking place within the European Union.

This process, initiated in the '70, targets especially the harmonization of the member states' accounting systems, in this sense being elaborated directives that must be incorporated in the national legislation of each of the member states.

The 4th Directive, elaborated in the 25th of July 1978 and revised in 1990, targets especially the coordination of the national dispositions regarding the structure and content of the annual accounts, of the administrative report, the patrimonial elements' evaluation norms, as well as the publishing of these documents for the companies on capitals (joint stock companies and limited liability companies), those having the obligation to integrate in the national legislation stipulations regarding the applicability of this directive.

This document fortifies the authorization of the accounting principles by the adoption of a legal rule (norm), referring only to the annual accounts and not to the organizing of the accounting or to the chart of accounts.

Having for source the communitarian law, the directive is compulsory for all the European Union member states and its application brings along an entire legislative procedure, having for effect the development of accounting normalization in these countries. **The juridical characteristics of the 4th Directive**, formulated in consensus with our opinion:

- Represents an unilateral act of the communitarian authority;
- Is meant for all the member states;
- Defines a result that must be achieved;
- Establishes the competence of member states, regarding the form and the means, proposing at the same time a procedure of integration in the national legislations.

The basic disposition of the Directive is concentrated in the Anglo-Saxon notion of ***true and fair view***, respectively the obligation imposed to the annual accounts to offer a true image of the patrimony, financial statements and the company's results; therefore, compulsory schemes were included regarding the elaboration of the balance sheet and of the profit and loss account but also the minimal informational content of the Annex and Administration Report.

We must however point out that **the Directive is not a law** for the companies interested, but leaves a large number of options and dispositions at the service of the member states that begin with the expression „**the member states will be able to authorize**”.

This document also tries to find ways to diminish the differences concerning the structure and format of the synthetic annual documents in the conditions of more options are stipulated to be legitimated by international accounting norms.

The list of options is long enough, and, in our opinion, it is possible to appear the disadvantage that certain dispositions of the Directive to be interpreted differently by the member states and the translations, in various languages, have not strictly the same significance in each and every country.

We consider that technically **the harmonization of the annual accounts signifies the approaching of their aspects: the presentation, the informing the dispositions regarding the accounting principles.**

If the two first aspects are easily into a harmony with each other, we cannot say the same about the harmonization of the accounting principles because there is no

theoretical agreement yet at the level of country, a problem still in debate even in the present.

The fundamental disposition of the whole CEE 4th Directive is represented by the art. 2, in which is stipulated the structuring of the annual accounts in three documents, that forms a unitary whole as follows:

- the balance sheet;
- the profit and loss account;
- the annex.

In the article 1, the Directive points out that its stipulations are applied to all the public limited company, Limited Liability Company and its equivalents.

The only derogations admitted are referring to the **presentation, publishing and control of the accounts** based on the criterion of the enterprise's dimensions.

This directive, as document, is made out of 61 articles, grouped in 12 sections, from which **Section nr.8**, titled "*Notes to the annual accounts*", mentions the minimal information the annex must give as synthetic accounting document.

The contents of the Directive are shared in **four parts**:

- the scheme of the balance sheet;
- the scheme of the profit and loss account;
- the evaluation norms;
- the annex to the balance sheet;
- the administrative report.

The globalization and the insufficiency of the information given by the balance sheet and the profit and loss account do not permit the achievement of the enterprise's true and fair view of the patrimony, financial situation and result. For this reason the existence of the annex as synthetic accounting document is an **informational necessity**.

The position of the annex within the assembly of the synthetic documents has generated many opinions in the specialized literature.

For some authors, „*the annex is a constitutive part of the financial statements*” (Ristea M., 2006) for others, **the annex represents an analytical approach in the conditions in which the balance sheet and the profit and loss account represent authentic synthetic documents.**

But, we subscribe to the opinion that considers “*The annex is a conceptual product, its presence being the consequence of the putting in practice of the accounting*”

principles, especially the principle of the true and fair view and the principle of the significant importance (or the significance threshold)". (Doinea, 2005)

The elaboration of an annex of quality means to select the information of significant importance **either for explaining or completing the elements offered by the balance sheet and the profit and loss account.**

Within the financial statements assembly, as the opinion unanimously accepted by the specialized literature states that **the annex has a double role:**

1. An **explicative role**, because it allows a better understanding of the balance sheet and the profit and loss account;
2. The **role of complementary instrument** to the balance sheet and the profit and loss account.

In this context, **certain characteristics** can be attributed to this statement:

- **The annex is a complementary document** to the balance sheet and the results' account.
- **The annex explains and comments** the information given by the balance sheet and the profit and loss account;
- **The annex includes a type list of accounting information**, information representing its **standardized contents**, that varies from one country to another, depending on the accounting tradition and the economic, juridical, social and fiscal environment specific to each country;
- **The annex is an open accounting document** because it includes any information that might contribute to the reflection of the entity's reality, respectively to offer an accurate image of the entity's patrimony, financial statement and result;
- **The annex contains only information of significant importance**, implicitly or explicitly sanctioning this notion;
- **The annex is a heterogeneous product**, being partially accountably but also extra accounting since a part of the information is extract directly from the accounts and others are taken from the entity's statistics.

In order to be useful, the annex must not be schematic, but neither an informational encyclopaedia, being necessary for furnishing only the information of significant importance to the users.

Considering the information mentioned above, in our opinion, **the annex represents a valuable informing and analyzing instrument for all the users of accounting information, since it brings clarifications to the policies promoted by the entity in the domains of investments, financing, fiscal and patrimony's evaluation.**

In the communitarian accounting law, The 4th Directive underlines „*the importance of the annex by the fact that it offers the explanations necessary for a better understanding of the other synthetic documents and completes the information in certain limits or presents the information in another form*”. (Ionescu, 2003)

Most of the information that must be presented in the annex is stipulated in the Directive's article 43, completed however by other articles, pointing out that certain information from the balance sheet and the profit and loss account must be detailed in the annex if they are of significance.

So, it must be presented in the annex information regarding:

- The evaluation methods applied to the different positions in the financial statements as well as the calculus methods for value corrections (amortizations and provisions);
- Information concerning the interests held, for at least 20% from the capital of the issuer companies;
- The number and nominal values of the various categories of shares that compose the capital;
- The number and size of the beneficiaries' rights, of the transferable bonds and other similar securities;
- The debts' dimensions, especially for the ones older than five years;
- The size of the financial engagements besides the balance sheet;
- The turnover's structure on categories of activities and geographical markets;
- The average number and structure of the employees, during the budgetary year;
- The incidence of the derogative fiscal evaluations on the net result of the budgetary year;
- The dimension of the postponed taxes;
- The size of the remunerations for the administrative, management and control personnel;
- The dimensions of the advances and credits given to the administrative, management and control organs as well as the engagements taken on their account, based on some guarantee.

In the article 44, the 4th Directive mentions the national accounting systems of the member states of E.U. can establish an abbreviated annex for the small and middle enterprises.

In the opinion of the Romanian standardization organism, the **annex** is substituted by the **Explanatory Notes** to the financial statements containing supplementary information, relevant for the users' necessity regarding the financial position and the results obtained.

The national accounting norms impose a pre-established structure of this set of situations forming the **Explanatory Notes**, but also a presentation model for certain notes, considered adaptable to a certain format of annual financial statements.

It must be noticed that these documents are equally important and brings about the same amount of responsibility for those elaborating and signing them in the Romanian financial reporting system.

The 10 Explanatory Notes present in a systematic manner each significant element of the balance sheet, of the profit and loss account, of the treasury and of the shareholders' equity.

The information that must be presented by the annex (explanatory notes) in the national financial reporting system are referring to:

1. Presentation of the accounting policies adopted by the enterprise for the evaluation of elements from the balance sheet, the results account, the cash flows and the shareholders' equity variations;
2. Details regarding intangible assets and provisions for liabilities and charges;
3. The manner in which the profit gained is allocated;
4. Information concerning the analysis of the operating incomes;
5. Information about the debentures and debts' situation;
6. Number and value of the shares and securities that compose the capital;
7. Information concerning the employees and the members of the administrative, management and supervision structures' remunerations;
8. Information regarding the alternative accounting policies applied in the enterprise;
9. Examples of calculus and analysis of the principal economic-financial indicators;
10. Other information concerning the presentation of the enterprise, its relations with other branches or enterprises, the size of postponed taxes and of the turnover on economic sector and markets, the remunerations paid to the auditors, the engagements given and received etc.

We point out the fact the contents of the annex as stipulated in art. 43 of the directive are also to be found in the contents of the Explanatory Notes from the national financial reporting system. But the informational value of the Explanatory

notes is higher than that of the Annex, because they have a larger opening towards the financial analysis, underlining in the Note 9 „**Examples of calculus and analysis of the principal economic-financial indicators**” characteristic for the activity of an enterprise.

Generally speaking, **the information given by the annex completes and comments upon the information offered by the other annual financial statements.**

These documents with accounting and extra-accounting character offer only information of significant importance to the users, being an excellent mean of informing and analysis.

The Annex's analysis allows the users to achieve a better understanding, especially of the balance sheet and of the profit and loss account, offering relevant supplementary information regarding the enterprise's financial position and the results obtained by it.

The role of this situation is to be found greatly in the amelioration process of the synthetic and annual reporting accounting documents' informational value.

The elaboration of the annex is made based on the **principle of good informing**, according to which the annex must include any information necessary to the users.

At the same time, even the conceptual motivation of the annex represents the consequence of some accounting principles' putting in practice, most of all **the principle of significant importance and the principle of the true and fair image.**

Therefore, besides the compulsory information stipulated by the Directive, it will be mentioned any information considered necessary and significant for obtaining the true and fair view.

Consequently, the annex to the annual financial statements must offer information regarding the synthetic accounting documents' elaboration principles and the specific accounting policies, selected and applied within those, information that are required by the 4th Directive and are not stipulated in other statements, as well as additional information necessary for the achievement of the objective to reflect the true and fair image, the financial situation and the results obtained.

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New Assignment Methods of Workers on Jobs

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Abstract: In this paper we shall give a new solution for the optimal assignment of workers on jobs from the point of view of minimization the maximal execution time using the simplex algorithm which can solve the problem using computers instead the known graphical solution.

Keywords Simplex, assignment, minimization

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1. Introduction

The problems of assignment appear usual in the process of targets allocation in an institution.

Let consider $A' = \{A_1, \dots, A_n\}$ the set of workers in an institution and $L' = \{L_1, \dots, L_m\}$ the set of jobs which must be executed at a specific moment.

In the execution of job L_j the worker A_i can spend t_{ij} units of time.

Because each worker can has a multiple qualification, but not all necessary for the entire set of jobs we put the problem of allocation on jobs such that the maximum time spent in the execution to be minimal.

Let therefore $f: A' \rightarrow P(L')$, $f(A_i) = \{L_{i_1}, \dots, L_{i_k}\} \quad \forall i=1, \dots, n'$ the function who assign to A_i the jobs: L_{i_1}, \dots, L_{i_k} which he can realize if he has the necessary qualification for at least one job and $f(A_i) = \emptyset$ in opposite cases.

We shall restrict the set A' and we shall consider, from the beginning, the subset of those workers for which $f(A_i) \neq \emptyset \quad \forall A_i \in A$. We shall note therefore $A = \{A_1, \dots, A_n\}$ with $n \leq n'$ (after a possible renotation of workers). Let now (again after a possible renotation of workers): $\bigcup_{i=1}^n f(A_i) = \{L_1, \dots, L_m\}$ with $m \leq m'$. If $m < m'$ we have that the jobs $L_{m+1}, \dots, L_{m'}$ cannot be executed from any workers, therefore will be excluded.

Finally, let consider: $L = \{L_1, \dots, L_m\}$ and the new allocation function: $f: A \rightarrow P(L)$.

We shall define a matrix:

$$M = \begin{matrix} & L_1 & \dots & L_m \\ \begin{pmatrix} a_{11} & \dots & a_{1m} \\ \dots & \dots & \dots \\ a_{n1} & \dots & a_{nm} \end{pmatrix} & A_1 & & \\ & & & \dots \\ & & & A_n \end{matrix}$$

where $a_{ij}=1$ if the worker A_i can execute the job L_j and 0 in the other cases.

We shall build the matrix $T=(t_{ij})$ of execution times, assigning $t_{ij}=\infty$ if A_i cannot execute L_j .

The graphical method of Ducamp, presented in [2], proposes a construction of a simple graph (a decomposition of nodes in two disjoint subsets: workers and jobs) and after an initial allocation a succession of improvements based on graphical observations. This method is good but cannot be easily implemented on computers.

We shall propose in what follows a new method based on the Simplex algorithm.

2. The method of Simplex algorithm

Let now, the matrix $M_t=(a_{ij}^t)$ where:

$$a_{ij}^t = \begin{cases} a_{ij} & \text{if } t_{ij} \leq t \\ 0 & \text{if } t_{ij} > t \end{cases}$$

and $A_t=(\alpha_{ij}^t)$ where:

$$\alpha_{ij}^t = \begin{cases} 1 & \text{if } A_i \text{ will assign to execute } L_j \text{ in a time less than or equal with } t \\ 0 & \text{if } A_i \text{ will not assign to execute } L_j \text{ in a time less than or equal with } t \end{cases}$$

Let now the matrix $B_t=(\alpha_{ij}^t a_{ij}^t)$ which elements belong to $\{0,1\}$ and who has the following significance: $\alpha_{ij}^t a_{ij}^t=1$ if A_i will be assigned to execute the job L_j in a time less than or equal with t and he is qualified for this thing, and $\alpha_{ij}^t a_{ij}^t=0$ in the other cases.

Because any worker cannot execute two jobs in the same time we shall have:

$$\sum_{j=1}^m a_{ij}^t \alpha_{ij}^t \leq 1 \quad \forall i = \overline{1, n}$$

Also, because any job cannot be executed in the same time by two different workers

we shall have:
$$\sum_{i=1}^n a_{ij}^t \alpha_{ij}^t \leq 1 \quad \forall j = \overline{1, m}$$

After these conditions follows: $a_{ij}^t \alpha_{ij}^t \leq 1 \quad \forall i = \overline{1, n} \quad \forall j = \overline{1, m}$.

The allocation problem becomes (for a maximal time t):

$$\left\{ \begin{array}{l} \max(\sum_{i=1}^n \sum_{j=1}^m a_{ij}^t \alpha_{ij}^t) \\ \sum_{j=1}^m a_{ij}^t \alpha_{ij}^t \leq 1 \\ \sum_{i=1}^n a_{ij}^t \alpha_{ij}^t \leq 1 \\ \alpha_{ij}^t \geq 0 \end{array} \right.$$

Let remark first that the problem has always a solution for a suitable t .

Let now $t_k = \min\{t \mid M_t \text{ has at least } k \text{ rows who have an element equal with } 1\}$.

We have obviously: $\min t_{ij} \leq t_1 \leq t_2 \leq \dots \leq t_n \leq \max t_{ij}$.

The algorithm will begin with $t = t_n$. If the problem will not have a solution, we shall grow t with one unit until we shall find a maximal allocation.

If we cannot find such allocation, we shall consider $t = t_{n-1}$ and begin again the problem.

One problem can appear after solving: what is happened if the solutions will not be entire? It is possible, for example, on the i -th row to be a lot of elements equal with 1 (appropriate to the fact that one worker can execute a few jobs), say k elements, and the optimal solution to contains the variables: $\alpha_{ij_1}^t = \alpha_{ij_2}^t = \dots = \alpha_{ij_k}^t = \frac{1}{k}$.

Because the objective function is $\sum_{i=1}^n \sum_{j=1}^m a_{ij}^t \alpha_{ij}^t$ it follows that it will not modify if we replace all the cited values with, for example: $\alpha_{ij_p}^t = 1$ for a $1 \leq p \leq k$.

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