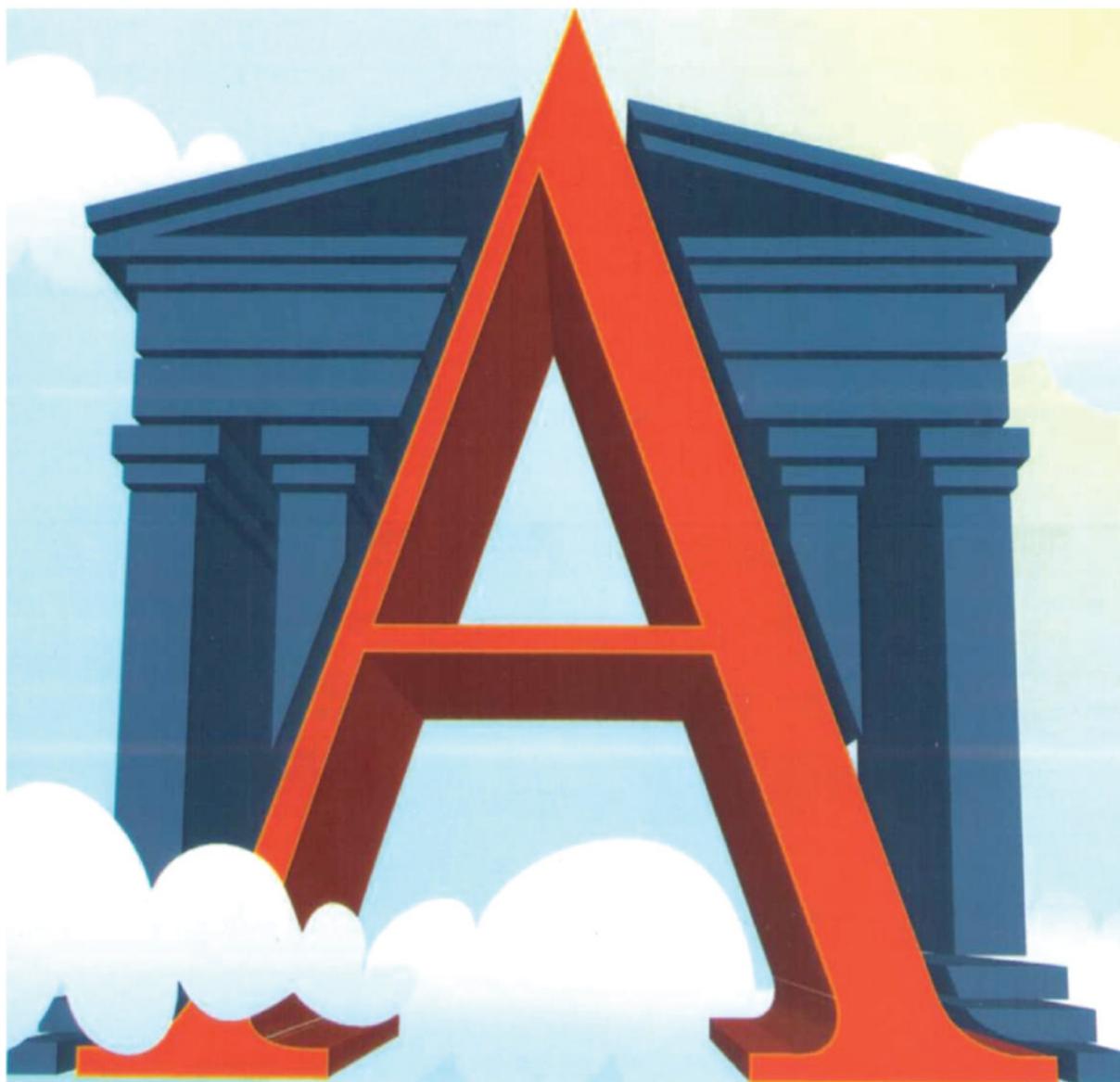


# INTERNAL AUDITING & RISK MANAGEMENT

ANUL VIII, Nr.4(32), December 2013



U N I V E R S I T A T E A  
A T H E N A E U M

& Centrul de Excelență în Managementul Financiar și Audit Intern

# **INTERNAL AUDITING & RISK MANAGEMENT**

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**Revistă trimestrială editată de Universitatea „Athenaeum” &  
Centrul de Excelență în Managementul Financiar și Audit Intern**

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## **MODERNIZING MANAGEMENT ACCOUNTING BY THE ABC METHOD**

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### **Abstract**

*In recent years the relationship between direct and indirect costs in total costs has changed a lot, due to the technological evolution in the sense of increasing the share of indirect costs. Thus was imposed the orientation of cost calculation to a method to allow the identification of the origin, analysis and control of indirect costs. In order to control the overheads it is necessary to be aware of the causal factors that generate resource consumption. The method that best meets these requirements is the ABC (Activity Based Costing) method. After clarifying the concepts of “activity” and “driver”, this paper presents the methodology used in the ABC method. The allocation of indirect costs on products, works, and services is calling for the activities of the company. The last part of the paper is limited to a case study conducted in a company producing automotive parts.*

**Keywords:** activity, expense, costs, cost driver, resources, value

**JEL Classification:** M410

### **1. Introduction**

Activity-based costing originated from the U.S. in the paper entitled “The hidden factory”, authors being G. Miller and Thomas E. Vollmann who stated that to control indirect costs is necessary to identify the causes that generated these costs. The first attempt to achieve cost calculation according to this system was made throughout the U.S. by Kaplan, Johnson and Cooper in 1987. Thus a system called “Activity Based Costing” has emerged.

In recent years the cost structure has changed a lot due to technological evolution. In order to compete, companies allocate large sums for research, development, renovation, adaptation. By automating the

production process increase the number of administrative, control and management activities. This led to the relationship between direct and indirect costs in total costs to change in the sense of increasing the share of indirect costs. The importance of direct costs decreases in the favor of indirect costs, while increasing the share of fixed costs. It becomes necessary focusing the cost calculation on one method to allow identifying the origin of indirect costs, their analysis and control, the control being achieved by knowing the causal factors that generate resource consumption.

The main objective of this research is to highlight the advantages of using ABC method in cost calculation. Pierre Mevllec in "Cost calculation within companies" (Mevllec, 1995, p. 118), indicate the main objectives of the ABC method as:

1. Highlighting as directly as possible the activities of the company to obtain value (products, services).

2. Analyzing the activities showing: the nature of activities, the place of their occurrence and the main causes that trigger activities and determine the increase of resources consumed and thus of their costs.

The analysis is performed on two main axes:

1. relationship between resources, activities, products,
2. relationship between causes, activities, results.

The concept of the ABC method is that: activities consume resources and products consume activities.

ABC method is a method of absorbing type as settles on products all business expenses, both the direct and the indirect. The method involves allocating the indirect costs on products, works, services appealing to the company's activities. Traditional methods involve indirect cost allocations based on arbitrary quotas which very often lead to inaccurate results and this that due to increased share of indirect costs in the total company expenses.

## **2. Concept of activity**

The activity can be defined as a part or all of the obligations of a compartment to achieve a product, provide a service, perform a work for which a group of people or one person uses a specific savoir-faire. It is a homogeneous set of operations, characteristic to a process of achieving value chain and resource consumption. No activity is isolated within the company. The company appears as a set of activities with links between them. It should build up an activity network in order to optimize the cost-value relationship.

To implement the activity-based costing it is necessary to abandon the approach of the company as a body with different functions; the company should be approached as a network of activities that consumes resources to create value in order to satisfy internal and external customers

of the company.

**Activities can be grouped by the nature of the decisions and their horizon: activities related to production and marketing of products, activities related to the organizational form, activities related to the existence of the product, activities related to production capacity.**

**The stage of identification of the activities is extremely important. It is necessary to distinguish between the duties, operations, activities, processes and functions, in practice they are often confused.**

*Duties* are operational steps required to perform an activity. *Elementary operations* are expressed by a verb and a direct object (e.g. launching a manufacturing order, shipping a product). In a company we can identify hundreds of elementary operations.

*Functions* are grouping activities by occupations. They help to manage human resource skills (e.g. of functions within a company: acquisition, development, production, coordination, control, sale).

**A chain of activities oriented to obtain an output forms a *process* characterized by the actual output, the consumption of resources and the factor that influence costs. Processes regroup activities after a common end. Each process has an external or internal customer. Processes are generally transversal to hierarchical organization and functional divisions.**

### **3. Stages of cost calculation according to the ABC method**

After identifying products for which costs are calculated, the cost calculation according to the ABC method involves the stages:

#### ***1. Identifying expenses incorporable into costs.***

Full economic cost is determined according to the following rules:

- not all expenses and losses recorded in financial accounting are taken into account by management accounting;
- can be incorporated into costs also the expenses unrecorded in financial accounting);
- certain incorporable expenses are considered by management accounting at a value different from that recorded in financial accounting.

The expenses incorporable into costs are divided into: direct costs and indirect costs for whose allocation in the cost of products appeals for the company's activities.

#### ***2. Identifying the activities.***

The method aims to cut costs on company's activities. Identifying the activities is independent of the organizational cutout. A service (department) runs usually several different activities. In addition, an activity

can be found in more than one service.

In this respect it is necessary to draw up a map of activities. It should be considered to simplify the mapping of activities as at the level of society they are very numerous to be mentioned in a costing model. There may be activities related to the existence of manufacturing capabilities (research and development activity), the actual production (manufacture preparation, execution of production, quality control, stocking production in progress, finished goods stocking) or may be distribution related activities (market prospecting, shipping, billing) etc.

### ***3. Identifying cost drivers for each type of activity.***

The cost driver is the factor explaining the costs variation, is the reference size for allocating indirect costs. It is also used the concept of *incentive costs*. They are predominantly expressed in quantitative units, but can also be used as value or time units. With the cost driver is eliminated the conventional allocation of indirect costs of traditional costing methods. The costs driver is the unit of measurement of the activity. By this driver are measured the benefits provided by the activity to products.

The ABC method is based on the following premise: the control of resources consumption cannot be effective unless it is made in the same place of consumptions and as all company resources are engaged in activities it is necessary to identify the causal factors of resources consumption.

Choosing a cost driver for a given activity is based on: the objectives, the degree of fineness of the work, and the availability of information cost.

*Depending on the objectives*, as cost drivers we can choose:

- factors of consumption of resources, when very accurate costing is desired. These drivers are directly related to the amount of resources consumed and by using them, this consumption is accurately measured.

- measures of the work performed for each activity, in those areas where it is not possible to use factors of consumption of resources.

- activity triggers (corresponding to elements that trigger an activity).

They allow describing business processes (which are defined as a series of activities having the same trigger factor). Their use makes possible to understand the links between activities.

*The degree of fineness of activities* is also a factor influencing the choice of cost driver. When the activity is incorporating a large number of different operations, it is used, usually, a consuming factor driver type. When, however, the work is detailed, using units of work as cost drivers is sufficient to identify the relationship between the subject of cost and resource consumption.

For example, the management of supplies may have as driver the

number of orders received - is an inducer of work unit. If orders received are complex and various it is recommended the choice as cost driver - the number of components received.

The choice of cost driver is influenced by the *availability and the cost of obtaining information*. Being directly related to the activity, information about work units are usually easier to achieve, to identify, except those relating to consumption triggers or factors.

The number of cost drivers is higher, the quality of the information obtained, the accuracy of the calculated cost is greater. However, we should bear in mind that using too many drivers leads to increased costs for recording and calculating them. If big differences between products in terms of consumption of resources and activities appear, a short number of cost drivers may lead to inaccurate costs. Also, an increase in the total cost of the indirect costs requires the use of a large number of cost incentives.

#### ***4. Grouping activities with the same cost drivers in regrouping centers.***

After completing the analysis phase of activities, the company is divided into a large number of base units. This is beneficial for better oversight of resource management, but the division of the company in many activities aggravates the work of whoever is calculating costs.

There may be activities for which are identified the same causal factors, activities having different relations. After identifying the cost drivers, in order to simplify the model, activities with the same cost drivers are grouped in a **regrouping center**.

#### ***5. Identifying costs related to each regrouping center.***

Center-specific costs are charged to the respective center and the common costs of regrouping center will be distributed on them using the cost drivers of resources (indirect cost allocation keys on regrouping centers).

For example, for indirect costs with space depreciation may be used as the key to their distribution on aggregation centers, the centers area (in square meters) for the distribution of costs with indirect wages, we can use the number of hours worked by staff indirectly productive within the regrouping centers, the distribution of equipment maintenance and operation costs can be based on the number of hours worked in the maintenance and repair of each center.

**6.** The next step in costing according to the ABC method is the ***determination of unit cost per driver***.

Determining the unit cost per driver ( $cu_i$ ) is similar to calculating the unit cost per unit by global method, being reported the indirect costs of each regrouping center to the number of drivers in that center.

$$cu_i = \frac{\text{Indirect costs of the regrouping center}}{\text{Number of drivers in the regrouping center}}$$

7. The next stage is the **allocation of indirect costs in the cost of products**.

Compared to traditional costing methods that have the assumption that products consume resources, the ABC method assumes that the **activity consumes resources, and products consume activities**. It is determined, for each product, the activities that were used to achieve them and the drivers of these activities. If the activities are specific to a particular product, their costs can be attributed to the product. If activities correspond to several products, their costs should be distributed to products using the drivers of activities.

Indirect costs due to an item are calculated based on the formula:

$$CI_j = \sum_{i=1}^m (n_{ij} \times cu_i)$$

where:

$j$  – the product to which indirect costs are distributed;

$CI_j$  – indirect costs related to product  $j$ ;

$n$  – volume of cost drivers  $i$  for product  $j$ ;

$i$  – cost driver;

$m$  – number of drivers related to the activities that were used to develop the product  $j$ ;

$cu_i$  – unit cost of driver  $i$ .

8. After allocating indirect costs to products we can proceed to **determine their unit cost**.

The ABC method calculates the full cost of not only products but also services, papers, orders, customers, product lines etc. The cost obtained is composed of all direct costs plus the cost of activities consumed by the products. The formula applied is:

$$cu_j = \frac{CD_j + CI_j}{q}$$

where:

$j$  – product for which unit cost is calculated;

- $c_{uj}$  – unit cost of product j;  
 CD – direct costs;  
 CI – indirect costs allocated to product;  
 q – quantity of products j obtained.

In terms of performance management, the usefulness of the ABC method can be given by the following aspects (Ionescu, 2007, p. 119):

- the possibility of determining the indicators necessary for the management in a total quality approach and the knowledge of the business cost;
- the analysis of the ways to reduce costs or to streamline production by reducing the number of components or by limiting specific series;
- empowering decision makers regarding the level of expenditure, in particular for support activities;
- a better grasp of the cost of launching new products or those relating to changes in existing products.

#### 4. Study on the application of the ABC method in an enterprise producing spare parts

To illustrate the application of the ABC method we resorted to a case study at an enterprise which has as main activity the production of spare parts for vehicles. To simplify the calculation of the cost, I assumed that there are no finished products in stock, and neither a work in progress, neither at the beginning of the period nor the end of it.

For a certain reporting period are known the following information from table 1, information relating to the overall activity of the enterprise and product “Planetary”.

**Table 1. Indicators on the enterprise activity**

Indicators	Total enterprise	Planetary
Number of models produced	10	1
Number of finished products manufactured and sold	15.000	2.000
Labor hours	6.000	1.000
Number of batches released in manufacturing	50	5
Number of components	140	20
Number of orders placed to suppliers	55	2
Number of order received from the customers	50	10

For product "Planetary", direct costs are:

- raw materials: 50 lei/pcs.

- labor: 0,5 h/pcs. x 25 lei/h = 12,5 lei/pcs.

Total indirect costs are amounting to 610.000 lei, as identified by the 5 departments of the company as:

**Table 2. Amount of indirect costs**

Department	Amount (lei)
Supply	100.000
Manufacturing	350.000
Marketing	90.000
Administration	40.000
Research	30.000
Total	610.000

The list of activities of the five departments, the allocation of indirect costs on these activities and related drivers are shown in Table 3:

**Table 3. List of activities and related drivers**

Department	Activities	Amount (lei)	Cost driver
Supply	- release orders	40.000	Number of orders placed to suppliers
	- receipt of orders	60.000	Number of components
	Total supply	100.000	
Manufacturing	- preparation of production	30.000	Number of batches released to manufacturing
	- manufacturing	300.000	Direct labor
	- maintenance	10.000	Number of batches released to manufacturing
	- quality control	10.000	Number of batches released to manufacturing
	Total manufacturing	350.000	
Marketing	- dispatch	50.000	Number of orders received from customers
	- billing	15.000	Number of orders received from customers
	- advertising	25.000	Number of models
	Total marketing	90.000	
Administration	- accounting customers	15.000	Number of orders received from customers
	- accounting suppliers	15.000	Number of orders placed to suppliers
	- inventory	10.000	Number of components
	Total administration	40.000	
Research	- research	30.000	Number of models produced

It is observed that there are activities for which were identified the same driver. For the determination of product cost by applying the ABC method, these activities are grouping in regrouping centers (table 4).

**Table 4. Regrouping centers**

Regrouping centers	Cost driver	Activities
CR1	Number of orders placed to suppliers	- releasing orders - accounting suppliers
CR2	Number of components	- receipt of orders - inventory
CR3	Number of batches released to manufacturing	- preparation of production - maintenance - quality control
CR4	Labor hours	- manufacturing
CR5	Number of orders received from customers	- dispatch - billing - accounting customers
CR6	Number of models produced	- advertising - research

Next, it is determined the unit cost per driver, reporting expenses of each centre to the number of drivers in that center (table 5):

**Table 5. Unit cost per driver**

CR	Cost drivers Activities	Number of orders released to suppliers	Number of components	Number of batches released to manufacturing	Labor hours	Number of orders received from customers	Number of models produced
CR1	- release orders - accounting suppliers	40.000 15.000					
CR2	- receipt orders - inventory		60.000 10.000				
CR3	- preparation of production - maintenance - quality control			30.000 10.000 10.000			
CR4	- manufacturing				300.000		
CR5	- dispatch - billing - accounting customers					50.000 15.000 15.000	
CR6	- advertising - research						25.000 30.000
	Total indirect costs (lei)	55.000	70.000	50.000	300.000	80.000	55.000
	Volume of cost drivers	55	140	50	6.000	50	10
	Driver unit cost	1.000	500	1.000	50	1.600	5.500

At the moment we can calculate the unit cost of the products by comparing total expenditure to the amount of products obtained. For product “Planetary”, calculations are shown in Table 6.

**Table 6. Unit cost of product „Planetary”**

Costs	Calculation	Amount (lei)
<i>Direct costs</i>		
- raw materials costs	50 lei/pcs. x 2.000 pcs.	100.000
- direct labor costs	12,5 lei/pcs. x 2.000 pcs.	25.000
		<i>125.000</i>
<i>Indirect costs</i>		
- management of orders placed to suppliers	2 orders x 1.000 lei/order	2.000
- management of components	20 components x 500 lei/component	10.000
- management of batches released in manufacturing	5 batches x 1.000 lei/batch	5.000
- management of hours	1.000 hours x 50 lei/hours	50.000
- management of orders received from customers	10 orders x 1.600 lei/order	16.000
- management of models	1 model x 5.500 lei/model	5.500
		<i>88.500</i>
<i>Total costs (lei)</i>	125.000 + 88.500	<i>213.500</i>
<i>Number of pieces obtained (pcs.)</i>		<i>2.000</i>
<i>Unit cost (lei/pcs.)</i>	210.500/2.000	<i>106,75</i>

## 5. Conclusion

Managers cannot lead well unless they have as much data and information on the costs and their implications on business performance, trends and strategies in the area of cost (Budugan, 2002, p. 9).

Under the traditional costing methods, the cost analysis concerns especially the execution phase of products. The ABC method points out that the implementation of any product requires a series of activities upstream or downstream the execution phase of products such as activities of receiving raw materials, assembly, installation of machinery, logistics, scheduling, labor preparation, or activities related to quality control, distribution, development of contracts and orders, administration etc. By means of cost driver is eliminated the conventional allocation of indirect costs of traditional costing methods, the cost driver being a measurement unit of the activity.

The indicators working with the ABC method addresses to the entire management team of the company, being not only accounting and financial,

but also non-financial, thus being easily understood both by economists and by the technical format, regardless of hierarchical level.

### **References**

1. Briciu, S. (2006) *Contabilitate managerială*, București: Ed. Economică
2. Bouquin, H. (2004) *Contabilitate de gestiune*, traducere, Iași: TipoMoldova
3. Budugan, D. (2002) *Contabilitate și control de gestiune*, Ediția II-a, Iași: Editura Sedcom Libris
4. Caraiani, C.; Dumitrana, M. (coordonateurs) (2010) *Control de gestiune*, București: Editura Universitară
5. Cucui, I.; Horga, V.; Radu, M. (2003) *Control de gestiune*, București: Editura Niculescu
6. De Ronge, Y. ; Cerrada K. (2009), *Contrôle de gestion*, 2<sup>e</sup> édition, Paris: Pearson Education
7. Ionescu, L. (2007) *Analiza economico financiară*, Târgoviște: Editura Bibliotheca
8. Mevellec, P. (1995) *Le calcul des couts dans les organisations*, Paris: Edition LaDecouverte
9. Radu, M. (2010) *Contabilitate de gestiune*, Târgoviște: Editura Bibliotheca
10. Simionescu, A.; Bușe, F.; Bud, N.; Purcaru Stamin, I. (2006) *Control managerial*, Editura Economică, București



## **INNOVATIVE PERSPECTIVES OF A HEALTHY ECONOMY IN EUROPE**

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### **Abstract**

*Against the background of a double crisis - the short-term economic and long-term demographic crisis - European states adjust to reality embracing the various components of the welfare state, of which the health care system and the retirement system are the first. This article aims to draw attention to an immediately noticeable problem of the health system in Romania, underfunding.*

*Health, as well as defense or education, represents one of the basic sectors for life itself, in any society. Importance of health in the economy is justified by the indispensability of services they produce, the amount of used resources, the number of people it serves and numerous connections to other fields. The basis of this article assumes that economic growth is a key factor for long-term health, especially in developing economies. The analysis focused on key indicators of health system in Romania, showing the high efficiency of different attempts to apply innovation in health care and national willingness to adopt change.*

*Alignment with European Directives and the quality of the health system in other countries has spurred the phenomenon of change in the Romanian economy thereby causing an urgent need to introduce the idea of having quality healthcare services.*

**Keywords:** economic growth, indispensable services, high efficiency, healthy economy.

**JEL Codes:** P36, H75, I15.

## 1. Introduction

In the second half of the 20th century, public spending of health services grew at a rapid pace, reflecting the will of the governments to support the higher and higher level of population health. In this context, there has been development and diversification of economic approaches to health, *health economics*, becoming an applied component of economics. A characteristic of this area is specially reflected by the unitary approach, bringing together both microeconomic and macroeconomic issues, ensuring the subtle transfer from doctor-patient relationship to the relationship between healthy and economic growth. In addition, the interdisciplinary perspective: economy, medicine, and psychology and sociology offer the challenging framework of understanding human behavior and also offers its useful perspectives of health policy, as well as health services research.

Relation between health and economic context is known for many years. Rich nations generally have better health conditions than poor nations and wealthier individuals within a country have, on average, better health status than the poor. Also, fewer individuals with poor health enter the labor market, work less, and earn a lower salary, with direct consequences for them, their families, and their business.<sup>1</sup>

More broadly, the relationship between health and macroeconomic performance translates as: health is the engine of the economy. This concept shows that a healthy population leads to economic growth. The World Health Organization has supported the concept of encouraging international investment in the promotion of health services in developing countries as a means for economic growth.

The idea that greater wealth enables people to make better choices concerning health has been accepted for a long time, but the opposite is really true? Is better health leading to wealth, both individually and nationwide?

Studies of the International Health in the EU Region show that an increase in life expectancy matches perfectly the increase in economic performances of the countries. In the eastern region, the relationship is even more clear: between 1990-2003, countries that have suffered a decline in life expectancy, have suffered a decline in welfare of 16 to 31%, while those who had an increase in life expectancy have registered benefits 12-31% of GDP.

A German study of the years 1995-2005, found that an increase of 10% of health services satisfaction, to enhance women's hourly wages by about 0.14-0.47% and men by about 0.09-0.88%. A 2006 study of rich

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<sup>1</sup> Popescu C., Burghilea C., (2010). *The Health of the Economy as a Living Organism*, Theoretical and Applied Economics, București, Volume XVII, No. 2(543), pp. 79-88

countries covering the period 1960-2000, found that a 10% reduction in mortality from cardiovascular disease was associated with a rate of growth of income per capita.

## 2. Methodology for studying the presence of innovation in health

Economic growth is a major determinant of long-term health, particularly in developing economies. Higher income facilitates access to healthcare, education, nutrition and housing, and these contribute to a better health status. This relationship is stronger in emerging market economies, where an increase in income will have a greater impact on health than in developed countries. The relationship also works in the opposite direction, a state of better health in the long term contribute to an increased level of income, through labor force participation and productivity.

Analyzed through its main indicators, the health system in Romania has been increasing its efficiency during the last 40 years. Life expectancy at birth increased and maternal and infantile mortality have decreased. However, even if the health system indicators showed an upward trend in the last years, we have to consider the health status in Romania is one of the worst in the European Union (eg both infantile and maternal mortality indicators are among the first among EU countries).

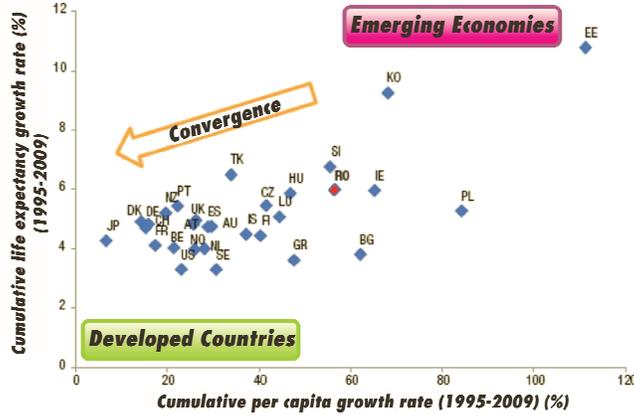
**Table 1.** Main health status indicators in Romania, 1970-2009

Indicatori	1970	1980	1990	2000	2009
Life expectancy at birth for women	70	72	73	75	77
Life expectancy at birth for men	66	67	67	68	70
Standardised Death Rate (SDR) for all causes and ages	1236	1284	1169	1098	733
Infantile Death Rate (per 1,000 live births)	49	29	27	19	10
Maternal Death Rate (per 100,000 live births)	116	132	83	33	27
Fertility rate (per woman)	-	-	1.9	1.3	1.3

Source: www.who.int, 2010

Romanian economy experienced a rapid convergence process, which was supported by foreign capital inflows - particularly since 2005 when the capital account was liberalized (see Figure 1). In this period, real GDP per capita grew at a cumulative rate of 56% and at the same time life expectancy in Romania grew by 6% or 4.16 years.

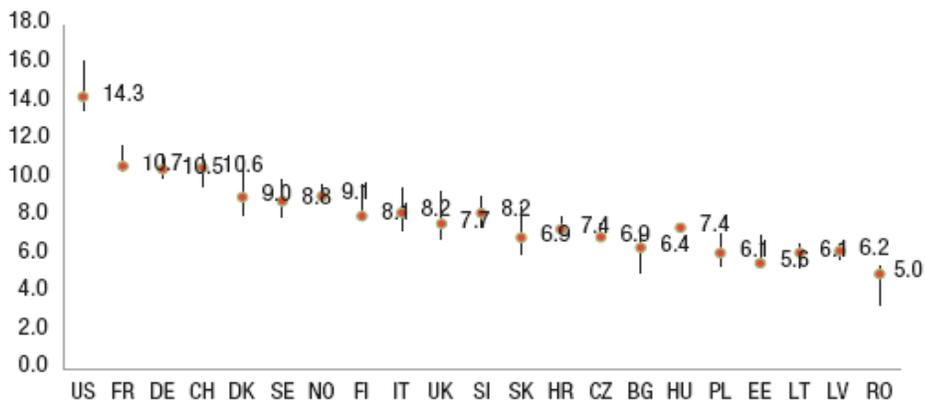
**Figure 1. Economic growth and life expectancy**



Source: www.who.int, 2010

Despite these developments, the present health status of the population in Romania remains one of the weakest in Europe. One reason for this result was the lack of public initiative in the past decade to take the necessary measures to reform the health sector. As in other CEE countries (Poland, Slovakia, Slovenia, Estonia) healthcare resources as a percentage of GDP increased in recent years, indicating that public authorities have considered the health sector as a priority for long-term growth, in Romania total expenditure on health (resulting both from the private sector and the public) as a percentage of GDP has remained relatively constant since 2000 at about 5.4% of GDP (see figure 2).

**Figure 2. Evolution of total health expenditures (% GDP), 1995 - 2009**

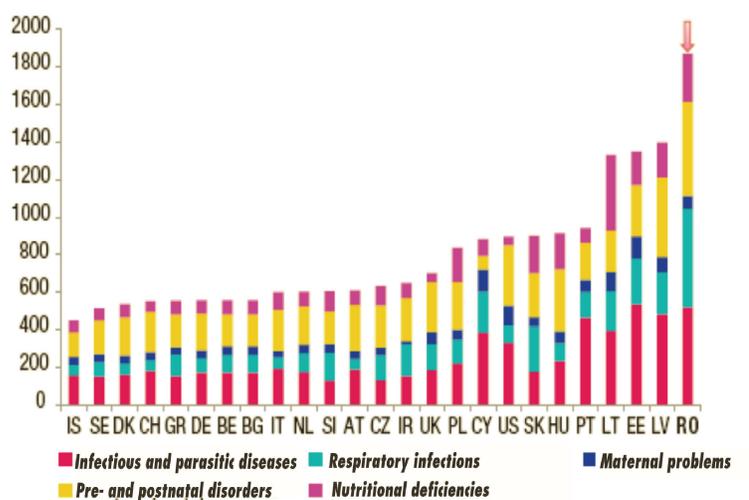


Source: www.who.int, 2010

But one of the main disadvantages of the indicator life expectancy is its inability to quantify quality of life, burden of disease, injury. The DALY indicator (Disability-Adjusted Life Year) developed by the World Health Organization, provides a measure of years of healthy life lost due to poor health. One DALY can be thought of as one lost "healthy" year of life. In fact DALY measures the gap between current health status of the population and an ideal situation where the entire population lives to an advanced age without illness or disability. In 2004, Romania had one of the highest DALYs per 100 thousand people of the CEE countries, with 15,651 DALYs. At the same time, the average was 14,586 DALY ECE while the average for developed countries was significantly lower at 10.387 DALYs. In the structure, the main factor for DALYs are non-communicable diseases accounting for over 80% of life years lost in developed economies and between 70% -80% in emerging economies. In Romania noncommunicable diseases accounted for 76% of total DALYs.

Romania recorded an unusually high DALY due to communicable diseases, maternal, perinatal and nutritional, 12% of total DALY, placing it in the last position in the EU (see Figure 3).

**Figure 3.** *DALY due to communicable, maternal, perinatal and nutritional diseases, 2009*



Source: www.who.int, 2010

For comparison, the average in developed countries was only 6%, while those of CEE averaged 7%. The burden of these diseases on the population can be relieved in the short and medium appropriate policies and

effective prevention and treatment, with a success rate higher than for non-communicable diseases because most diseases can be effectively treated today. Thus, in this context, it is questionable why the authorities have not taken effective action to date to control communicable diseases at a level comparable to that in other CEE countries. Tuberculosis and respiratory infections are the main causes of DALYs due to communicable diseases, maternal, perinatal and nutritional in Romania, accounting for 39% of all years of life lost. Perinatal conditions such as prematurity or neonatal infections also have a high incidence compared to other countries around us.

DALY can be converted into the equivalent of economic output lost in the medium and long term. The economic value of a DALY can be approximated by GDP per capita. In other words, one year of working life lost in a cycle of life by an individual can be considered equivalent to one lost year of participation in economic activity, with all the implications that derive from this (to reduce output, income, taxes, consumption, etc.).

To estimate the present value of economic output lost (OL) in the medium and long term due to the total DALY, we need population projection over the average remaining life cycle -  $P_0$  population in the base year, and  $p$  - increasing long-term population, GDP per capita in the base year, the growth rate in the medium and long term GDP per capita ( $g$ ) required rate of return in the economy ( $r$ ) and fraction the total DALY is lost in a given year ( $k$ ) of all the remaining years of life cycle ( $n$ ). Transposing in mathematical terms, the relationship is:

$$OL = DALY \cdot \sum_{k=1}^n \frac{P_o \cdot (1+p)^k \cdot GDP/capita_o \cdot (1+g)^k \cdot \gamma_k}{(1+r)^k} \quad (1)$$

where:  $\sum_{k=1}^n \gamma_k = 1$

If for simplicity we assume that the growth rate of GDP per capita is equal to the required rate of return in the economy and the total burden of disease (DALYs) is equally spread over the remaining life cycle ( $\gamma_k = 1/n$ ), the above formula reduces to:

$$OL = DALY \cdot P_o \cdot GDP/capita_o \cdot \frac{1}{n} \sum_{k=1}^n (1+p)^k \quad (2)$$

Given the current disease burden on the population as measured by DALYs, the Romanian economy loses about 18.6 billion euros (15% of GDP) in economic output in the medium and long term production compared to the situation in which the entire population would have an ideal health condition (DALY = 0). However, a more realistic exercise is to evaluate the surplus in economic output, which would be determined by an

improvement in the health of the population at a level similar to that of the EU average (see table 2). So, assuming DALY (100 thousand inhabitants) in Romania would converge from 15,651 years to the EU average, which is about 10,000 years, will determine, ceteris paribus, an increase in economic output of 6.7 billion euros (6% of GDP).

**Table 2.** *Estimarea producției economice pierdute datorită DALY în România*

Variable	Estimated value
<b>Life expectancy (2009)</b>	<b>74</b>
<b>Average age of the population (2010)</b>	<b>39</b>
<b>Remaining years to live (Life expectancy - Average age of the population)</b>	<b>35</b>
<b>Population (2010)</b>	<b>21.462.186</b>
<b>long-term growth rate of the population (%)</b>	<b>-0.3</b>
<b>GDP per capita (EUR) (2010)</b>	<b>5.700</b>
<b>DALY, per 100.000 population (2004)</b>	<b>15.651</b>
<b>Fraction of DALY lost in a year</b>	<b>0.03</b>
<b>Current value of lost economic potential (2010) (EUR)</b>	<b>18.620.949.722</b>
<b>Current value of lost economic potential (2010) (% 2010 GDP)</b>	<b>15%</b>

Source: www.insse.ro

The question that naturally arises now is what can public authorities do in order to reduce DALY and capitalize additional economic output that would result from improving the health of the population. Both the quality and quantity of public expenditure on health matters in order to achieve an improvement in the health of the population. Countries that spend on average more on long-term care have better outcomes than those with lower health expenditures. The relationship is more evident in the case of developing countries that have underdeveloped healthcare systems and where a marginal increase in health care costs can make a big difference in the health of the population over time. The quality and cost effectiveness of health is also an important factor in determining the state of health. Some countries spend the same amount of money on health, but the results in terms of health are different. Although there are a variety of factors explaining this difference, we believe that the efficiency of health spending is among the most important factors for developing countries.

### **3. Public health solutions in Romania**

Public expenditures on health in Romania are financed from the following categories of income: (1) National Health Fund (FNUASS) - the

main source of revenue consists of contributions from employers and employees, (2) Ministry of Health (MS) - the main categories of income are their vice tax and turnover tax, (3) budget - FNUASS deficits are covered by allocations from the state budget by transfers from the Ministry of Health.

Revenues from the public health sector have increased between 2005-2008 with a nominal annual rate of 23%, with a slightly more alert dynamics compared to that of the total government revenue of 21%. In 2008, most public health revenues were generated by employee contributions (45%) and employers (44%). In 2006-2008, the rate of employer contributions decreased faster compared to that expected from employees, which led to a reduction in the share of total income FNUASS employee contribution (see table. 3).

**Table 3.** *Evolution of FNUASS contribution rates (%)*

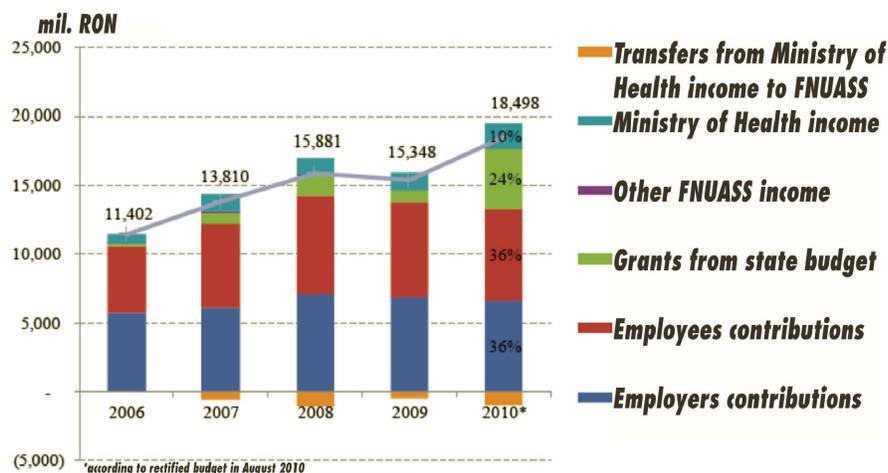
Contribution rates	2006	2007	2008	2009	2010
Employers	7.0	6.0	5.5	5.2	5.2
Employees	6.5	6.5	5.5	5.5	5.5
Total	13.5	12.5	11.0	10.7	10.7

Source: www.cnas.ro

Amid the economic crisis began - there has been recorded a decrease in financial public health revenue by 3.4%. Following the economic contraction, contributions also decrease, provided that the financing needs of the health sector has been growing, with the elimination of ceilings on compensated drugs. As a result, this has caused an increase in the CNAS debt payment terms to suppliers of medicines and accumulation of arrears.

Exceptionally significant sums were directly allocated in 2010 from the state budget through the Ministry of Health to FNUASS due to settlement and resolving outstanding financial blockage created in the private health sector as a result of accumulation of arrears (in 2009). The subsidies from the state budget accounted for 24% of total public sector health resources in 2010 (see figure 4).

**Figure 4.** *Dynamics of public health system income*

**Dynamics of public health system income**

Source: [www.mfinante.ro](http://www.mfinante.ro)

Law 95/2006 on health sector reform provides for a tax on turnover (clawback tax) of companies holding marketing authorizations of medicinal products in Romania since 2010 for specific drugs included in national health programs, for drugs administrated to ambulatory insured patients and insured patients receiving medication in hospital treatment. By law, the clawback tax revenues are revenues of the Ministry of Health. According to the law, the tax applies differently depending on sales volume, on quarterly earnings of drug manufacturers - who have marketing authorization - or companies marketing drugs which have secured marketing rights for. However, the application of this tax is not fully justified for the total sales volume of compensated drugs, as time of collection of receivables on FNUASS is very long (over 180 days). Therefore, it is right that the basis for the clawback fee to be formed of the amount of settlements made by CNAS due to drug marketing.

It would therefore make more sense clawback duty on the value settled by FNUASS because it would be more closely correlated with drug producers' cash flows. According to data from CNAS, the compensated drug value settled by FNUASS declined in 2009, although sales of compensated medicines rose. Decreased revenues from the public health sector, as a consequence of the economic crisis and increased spending led to FNUASS inability to honor its debts to the private sector - for compensated medicines - and accumulation of arrears. In such a framework, the application of clawback tax on turnover of producers would put even more pressure on

their financial position in terms of liquidity problems existing in the system and long periods of FNUASS receivable.

Another visible problem in the health sector is arrears. Solving it is to reduce or eliminate the structural gap between expenditures and revenues of the public health sector through a series of measures such as cost control and increased efficiency, improving the collection and broaden the tax base. A solution can not be achieved in sustainable subsidies from the state budget. Moreover, the fiscal strategy - medium-term budget foresees a reduction in transfers from the state budget to the Ministry of Health to a maximum of 0.86% of GDP in 2010 to 0.32% of GDP in 2013, or 0.21% of GDP in 2014 amid public health reforms (see table 4).

**Table 4. Ministry of Health expenditure budget for the period 2009-2014**

	Revenues 2009	Revenues 2010	Revenues 2011	Revenues 2012	Estimated 2013	Estimated 2014
Transfers % din GDP	0.28	0.86	0.25	0.26	0.32	0.21

Source: www.mfinante.ro

Regarding social security, budget incomes in 2009 was 9.6% of GDP, much lower than in the Czech Republic (15.4% of GDP), although statutory contribution rates were relatively similar, Estonia (13.1% of GDP) and Poland (11.3% of GDP) where statutory social contributions rates were significantly lower than in Romania (see table 5). In addition, we can observe a trend of CAS efficiency index reduction.

**Table 5.**

Country	Legal contribution rate (%)		Default taxing rate		Taxing efficiency index		Ranking 2009
	2009	2010	2009	2010	2009	2010	
Bulgaria	30.9	28.9	24.3		0.79		7
<a href="#">Czech Republic</a>	46.3	45.3	44.9		0.97		1
Estonia	35.6	37.2	34.1		0.96		2
<a href="#">Latvia</a>	33.1	33.1	21.3		0.65		9
<a href="#">Lithuania</a>	40.0	40.1	33.7		0.84		6
Hungary	49.0	48.5	36.4		0.74		8
Poland	37.4	37.4	35.4		0.95		3
Romania	44.0	44.4	28.1	25.9	0.64	0.58	10
Slovenia	38.2	38.2	32.8		0.86		5
<a href="#">Slovakia</a>	48.6	48.6	41.9		0.86		4

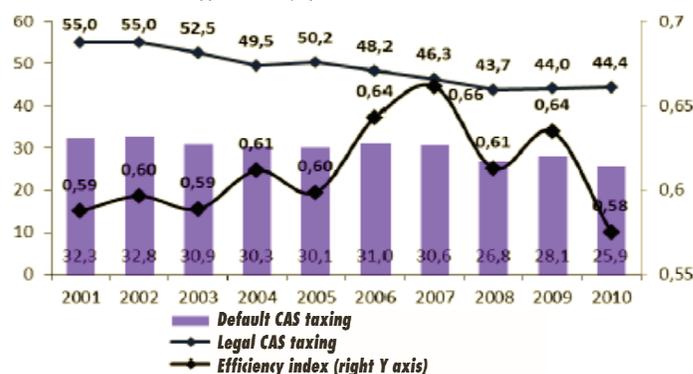
Source: ec.europa.eu/eurostat

Moreover, among the countries of Central and Eastern Europe, in 2009 Romania ranks last in terms of social security collection efficiency, although it had one of the largest legal contribution rate. (fourth position

after Slovakia, Hungary and Czech Republic. However, in terms of social contributions payable by the employer, Romania ranks sixth among the countries analyzed.)

If social contributions with a degree of efficiency of 64% and a default taxing rate of 28.1% in year 2009, Romania is the last in the group of Eastern European states. In 2010, the collection of social contributions got worse, implicit tax rate decreasing to 25.9%. The current situation indicates on the one hand reduced ability of the authorities to assess and forecast the evolution of the tax base and on the other financial deterioration and increased taxpayer undeclared work (see Figure 5).

**Figure 5.** Evolution of the default tax rate and index of collection efficiency for CAS in Romania



Source: [www.consiliulfiscal.ro](http://www.consiliulfiscal.ro)

The low collection of employees and employers contributions that led in time to the accumulation of significant delayed receivables, FNUASS recorded a balance of outstanding claims in 2009 about 5 billion RON. More than half of these debts are recorded by ten companies, mostly national, which in recent years have losses from operations. The prospect of recovery of these debts is minimal in the sense that during the restructuring process that these companies are going to follow it is likely that some of these debts are erased.

#### 4. Recommendations

Health insurance system needs reform on both the revenue and the expenditure side. Thus, the main objective is to provide quality and comprehensive medical services, increasing revenue for health and expenditure rationalization.

In September 2010, the debt exceeded 4 billion RON, of which nearly half was late. Development and approval of a payment plan are

urgently needed to pay outstanding receivables. Reducing the basic package of health services provided to policyholders, eliminating the costly inessential and distinctive indication of the uninsured services, for which private insurance can be purchased. It is also necessary to allow tax exemptions to pay private insurance.

Applying indicative limits for the values of prescriptions prescribed by general practitioners and specialists. With SIUI, county insurance houses should monitor and advise physicians that exceed these limits. Sanctions or penalties will be granted only to doctors who exceed the limits unduly. Avoiding fraud in the system - possible while lacking a control mechanism - with the introduction of electronic prescriptions and electronic health card.

National tendering for medicines and sanitary materials in national health programs - can make it possible to save the cost of goods auctioned.

Higher allocations for outpatient services as cheaper alternative to hospital care - additions should be directed to settle the medical services provided, not the number of policyholders. Subsidizing loans or providing co-financing for the purchase of equipment. The value of the service and insured points should be established to ensure the multiannual predictability. Increasing the share of the service charge for family physicians to the detriment of the number of insured persons. Linking prices established by service contracts with service quality. There are various indicators that can measure the quality of services - frequency of readmissions for patients discharged from the same hospital for the same condition, the development of post - treatment, etc.. Those hospitals that do not meet national scales regarding the quality or health will not permit contracting services at a reduced rate compared to the standard. Accreditation of hospitals - closing of inadequate hospitals or converting them into social assistance units. Reducing personnel costs of hospitals (total amounts reimbursed by CNAS and MS) to provide funds for the purchase of medicines.

Review of tariffs, so that a DRG system would be linked to the actual costs of services and payments, to reduce differences between hospitals for similar services provided. Implementation of a national health portal where data can be published on public health and health providers, contractors and their homes, and where patients can submit complaints. Also, financial statements, including debts and outstanding payments, settlement situation, indicating the sums not settled on time. Also, the publication of data on accreditation, authorization and audit reports / analysis for each service provider. Standardization of medical practices through therapeutic practice guidelines, hospital protocols and transfer, etc.. Application of budget constraints for providers: hospitals managers recording arrears to receive wage penalties, decreasing the settled charges for medical services provided by hospitals contract values systematically

exceeding top limits. Business Environment Advisory Council, CCMA would catalyze, without waiting for orders from the central level, project specific local public-private partnerships and even find solutions to their financing from European funds, all locally. It may finally provide a performance management solution for hospitals. Imagine the progress that could bring in a health institution an advisory board formed to advise businessmen such as planning, prioritization and standardization of procurement.

### **5. Conclusions**

Romania is the European Union member state that allocates the fewer funds of gross domestic product to health. The problem has become one of tradition, since 1989 all governments facing the same problem - the gap between health spending and the real needs of the population. Permanent gap widened as drug multinationals have made their presence felt in Romania, marketing and investment assuming specific medical information on current opportunities indirect population of diagnosis and treatment. Therefore, a strong pressure to increase health spending is permanently present, but a growth that no government has assumed other than strictly declarative. The health system has tried to keep up with the existing western countries by funding priority clinical hospitals and universities, and recently made investments in emergency healthcare.

In this context, liberalization of the health sector is absolutely necessary through liberalization of wages and salaries based on differentiated criteria and clarifying and assuming responsibilities that each institution carries (Ministry of Health, CNAS, county insurance houses). Also, it is absolutely necessary to prevent theft, inefficiencies and inequities in the system by increasing transparency in the medical services provided in real time, and punishments for the hospitals which do not meet the required standards.

Romania needs to shift to a new kind of health policy towards individual and community responsibility and especially health care costs. With the redefinition of basic service package and the introduction of patient co-payment, is stimulated control over the free services and over transparency of costs for the services and medicines made in the name of, and which it must pay or which has private health insurance.

### **Bibliography**

1. Abel-Smith, B., (1963), *Paying for Health Services: A Study of the Costs and Sources of Finance in Six Countries*. Public health papers no. 17. Geneva: World Health Organization.
2. Acemoglu, D., S. Johnson, (2007), *Disease and Development: The Effect of Life Expectancy on Economic Growth*, Journal of Political Economy, vol.115(6), pp.925—85.
3. Aghion, Ph., Howitt, P., Murin, F., (2010), *The Relationship between Health and Growth: When Lucas Meets Nelson-Phelps*, Bruegel Working Paper, Aprilie 2010.
4. Baldacci, E., (2008), *Social Spending, Human Capital, and Growth in Developing Countries*, World Development, Vol. 36, pp. 1317–41.
5. Cottarelli, C., (2010), *Macro-Fiscal Implications of Health Care Reform in Advanced and Emerging Economies*, Fondul Monetar Internațional, 28 Decembrie 2010.
6. Gupta, I., Trivedi, M., (2008), *Health Insurance: Beyond a Piecemeal Approach*. Economic and Political Weekly 40, pp. 2525-2528.
7. Hammer, Jh., (2001), *Kenneth Arrow and the Changing Economics of Health Care: Why Arrow? Why Now?*, Journal of Health Politics, Policy and Law, Vol. 26, No. 5, Octombrie 2001, pp. 835-849.
8. Howitt, P., (2005), *Health, Human Capital, and Economic Growth: A Schumpeterian Perspective*, Health and Economic Growth: Findings and Policy Implications, Cambridge, MA: MIT Press, 2005, pp. 19-40.
9. Miguel, E., Kremer, M., (2004), *Identifying Impacts on Education and Health in the Presence of Treatment Externalities*, Econometrica, Vol. 72, No. 1, pp 159-217.
10. Oxley, H., MacFarlan, M., (1995), *Health Care Reform: Controlling Spending and Increasing Efficiency*, OECD Economic Studies, No.24, Paris
11. Popescu C., Burghilea C., (2010), *The Health of the Economy as a Living Organism*, Theoretical and Applied Economics, București, Volume XVII, No. 2(543), pp. 79-88.
12. Rothschild, M., J.E. Stiglitz, (1976), *Equilibrium in competitive insurance markets: an essay on the economics of imperfect information*, Quarterly Journal of Economics, pp. 630-649.
13. Societatea Academică din România, (2010), *Criză și reformă în sistemul de sănătate. O radiografie la zi*, București, Decembrie 2010.
14. Weil, D. (2007). *Accounting for The Effect of Health on Economic Growth*, Quarterly Journal of Economics, vol.122 (3), pp.1265-1306.

## **CHALLENGES AND RISKS OF DEMOGRAPHIC AGING - ROMANIA IN THE EUROPEAN CONTEXT**

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### **Abstract:**

*Unprecedented demographic changes announced in the twentieth century and continues to rise in this century, are about to change profoundly the world. Extending life expectancy and falling birth rates are about to undertake major structural changes in all human societies - such as the historical phenomenon of inversion in the proportion of young people and older people. Aging her profound and lasting consequences for all countries is a phenomenon of great importance and also a challenge still inexperienced.*

*This phenomenon shows that: population ageing is unprecedented, without parallel in human history and the twenty-first century will witness even more rapid ageing than did the century just past; population ageing is pervasive, a global phenomenon affecting every man, woman and child but countries are at very different stages of the process, and the pace of change differs greatly; countries that started the process later will have less time to adjust; population ageing is enduring: we will not return to the young populations that our ancestors knew; population ageing has profound implications for many facets of human life.*

**Keyword:** Population ageing; demographic changes; life expectancy

**JEL clasification:** J10, J11, J17, J18, J24, J26.

### **1. Introduction**

Countries with a favorable age structure-those with a large proportion of working-age adults and relatively few dependents-ares generally more peaceful and democratic, allowing governments to better

meet the needs of their people. An adverse age structure is more challenging to governments, particularly when national resources are insufficient to improve economic and social welfare. Countries that progress along the demographic transition-changing from high death rates and birthrates to smaller families and longer lives-generally demonstrate more favorable age structures.

Population distribution refers to the ways in which the population of a given country is distributed into certain categories such as age, sex, occupation and geographical distribution.

This is the breakdown of the population of a country into age groups. Age distribution in economics is very important as it shows the usefulness of population and the supply of labor required in different sectors of the economy. The population of a country can be divided into the following three age groups. These are; 0-14 years, 15-59 years and 60 years and above (Table no. 1).

**Table no. 1** *Age distribution of the world, European and Romanian population*

<b>World</b>	<b>1960</b>	<b>1980</b>	<b>2000</b>	<b>2020</b>	<b>2050</b>
< 14 age	36.84	35.14	30.04	25.11	20.19
15 - 59 age	55.0	56.3	60.0	61.3	58.1
> 60 age	8.14	8.61	10.01	13.61	21.68
<b>EUROPE</b>					
< 14 age	26.71	22.18	17.53	15.02	15.02
15 - 59 age	60.2	61.8	62.2	59.1	50.5
> 60 age	13.1	16.04	20.28	25.87	34.5
<b>ROMANIA</b>					
< 14 age	28.18	26.67	18.29	14.01	13.38
15 - 59 age	61.2	60.1	62.6	62.4	49.1
> 60 age	10.6	13.26	19.07	23.56	37.57

Source: ONU - World Population Prospects 2012,  
<http://esa.un.org/unpd/wpp/Documentation/pdf/WPP2012>

From the above classification, the population within the age bracket 0-14 years includes the infants, children, pupils in nursery, primary, secondary and tertiary institutions. This age group is called dependent population because they are not economically productive as they cannot be employed in the labor market. They will need to depend on the other groups for their needs. If the population of this age group is very high, it has lots of economic implications such as putting more pressure on the working class, low savings, provision of schools and other children goods and services.

The age group 15-59 years is popularly referred to as the active population or working population or labor force. This is the economic age

bracket that is involved in productive activities or employment. Because they are the working population and depend on themselves for substance, they are collectively called independent population. If the number of people in this group is high, there will be higher supply of labor and higher standard of living.

The age group 60 years and above is the old age, just like the children (0-17 years), they do not involve themselves in productive activities hence they are also classified as dependent population. In summary, the age distribution of any given population can be grouped as follows: 0-17 years are children (dependent population) 18-60 years is adult (working population or labor force) 60 years and above: Old age (dependent populations).

#### Importance of Age distribution of Population

1. Determination of tax: With the knowledge of age distribution of the population, the expected tax can be determined based on the number of people in the working group of labor force.

2. Knowledge of dependent: The number of the dependents (0-17 years and 60 years and above) can be determined easily through age distribution in a population.

3. Size of labor force: With a good age distribution, the number of people working can easily be determined.

4. Determination of government budget: The age structure of a population will assist government to draw up its budget. If for example the population of the children (0-17 years) is very high, it means the government will need to vote a huge amount of money to provide goods and services required by this age group than for other groups.

5. Production pattern: the age distribution of the population will help the manufacturer to determine the pattern of production to meet the needs of a particular age group.

6. It determines the nature of market: The understanding of the age structure of a population will help to determine the nature of market, eg, a population with high number of children will create more market for children goods and services.

7. It determines the birth and death rates: the age structure of a population will determine the rate of birth and death, when the population of old people is higher than that of other groups, it means the death rate is going to be higher.

8. It determines the standard of living: The age structure of a given population will reveal the income per capital and standard of living. While high dependency population reduces income per capital and standard of living, high working population or labor force increases income per capital and standard of living.

## 1. Age Structure Types

Population age structures yield insights into many of the political, economic and security challenges that countries face, now and in the future. For example, when a large proportion of a country's population is passing through one of life's dependent stages, such as childhood or old age, society's resources are likely to be stretched and put under greater stress.

PAI (Population Action International) has classified current and past national populations into one of four major age structure categories: *very young*, *youthful*, *transitional* and *mature*. These four profiles represent progressive steps along the path of the demographic transition-changing from high death and birthrates, large families and short life expectancy to lower death rates and birthrates, smaller families and longer life expectancy. In the future, if fertility rates continue to fall in countries with a mature structure, a fifth type may emerge before 2025: *aged* countries.

### *Very Young*

In countries with a very young age structure, two-thirds or more of the population is typically comprised of young people under age 30, and only three to six percent of the population is above age 60. In 2005, there were 62 countries of this type, including nearly all of sub-Saharan Africa.

### *Youthful*

Countries with a youthful age structure are beginning to experience progress along the demographic transition. Growth among their youngest age groups (from birth through 29 years) is declining. In 2005, 27 countries fit this category, including almost all in Central and South Asia, North Africa, and parts of the Middle East.

### *Transitional*

Although older age groups still represent a very small share of the population in countries with a transitional structure, declining fertility rates result in a more equitable distribution among age groups younger than 40. In 2005, this category included 40 developing countries from various regions.

### *Mature*

In countries with a mature age structure, the largest age group consists of working-age adults from 30 through 59 years old, comprising 40 to 55 percent of the population. In 2005, this category included 47 countries across Europe, the former Soviet republics, and East Asia.

Romania is included in this overview facing demographic changes that have medium and long term implications. Population decreased between 1992 and 2005, with a million people and continues to decline steadily. This trend is caused by low fertility (1.3 children per woman, instead of 2.1, which would ensure population replacement) and high external migration (about 2 million Romanian is legally abroad, and the number of emigrants illegally is unknown). At the same time, however,

Romania has an average mortality rate and life expectancy increases, resulting in a significant aging population. If present, of the 21.6 million inhabitants, 10.5 million are adults, 5 million - young children and 6 million are elderly, over 50 years the picture will look completely different demographic: retirees will represent more than half of the population, will decrease the number of adults and children, and significant narrowing pyramid base (Table no.2).

**Table no. 2 Population by age group (Romania and EU-25)(%)**

	1996	1997	2000	2001	2002	2003	2004	2005	2006	2007	2010	2011
0-14 age												
UE (27)	18.1	17.9	17.3	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.6	15.6
Romania	20.5	20.0	18.8	18.3	17.7	17.0	16.4	15.9	15.5	15.4	15.1	15.0
15-24 age												
UE (27)	13.8	13.6	13.2	13.1	13	12.9	12.9	12.8	12.7	12.6	11.9	11.7
Romania	15.9	15.9	15.7	15.6	15.6	15.6	15.6	15.5	15.2	14.9	13.4	12.8
25-49 age												
UE (27)	36.7	36.8	36.7	36.7	36.6	36.6	36.6	36.5	36.4	36.3	35.6	35.4
Romania	34.9	35.2	35.9	36	36.3	36.5	36.8	36.9	37.0	37.0	37.5	38.0
50-64 age												
UE (27)	16.5	16.6	17.2	17.4	17.5	17.7	17.8	18	18.1	18.3	19.4	19.5
Romania	16.4	16.3	16.3	16.5	16.5	16.7	16.8	17	17.4	17.8	19.1	19.1
65-79 age												
UE (27)	11.4	11.6	12.3	12.3	12.4	12.4	12.5	12.6	12.6	12.6	12.7	12.9
Romania	10.2	10.5	11.6	11.8	12	12.1	12.2	12.3	12.3	12.2	11.7	11.7
80 age and more												
UE (27)	3.5	3.5	3.3	3.5	3.6	3.8	3.9	4	4.1	4.3	4.8	4.9
Romania	2.1	2	1.8	1.9	2	2.1	2.2	2.4	2.5	2.7	3.2	3.3

Source: Eurostat, <http://epp.eurostat.ec.europa.eu/t>

Accelerating the aging process, since 2010, is of major importance for the modernization of social policies and social protection. The objective is to ensure social protection prosperity in a society whose population is aging. Maintaining a high level of social protection in these circumstances is a challenge for the authorities.

The need to adapt to an older population and redevelopment involves reviewing policies and strategies. At the same time, reforms will have to consider the transfer of resources to an increasing number of older people do not create major economic or social tensions. On the other hand, older

people should not be allowed to fall into poverty. Under one form or another, transfers have always existed and will exist. Two underlying concepts will be considered: intergenerational solidarity, aimed at financing the long term and intergenerational equity that is gaining importance in current discussions. Policy makers responsible for social protection reform should take account of this size, ensuring a satisfactory balance between the opportunities to finance long-term system of solidarity and equity between generations.

The measures that the EU meet evolving challenges of population aging are mainly confined in a general component of which:

- An aging population requires a comprehensive policy approach, covering aspects related to the economy, employment, social problems. Companies must ensure not only provide an appropriate framework for older people, but also economic and social sustainability in an aging world. Policies in this area should take into account the full complexity of interactions between demography and society.

#### Structure of occupation and age categories

Labor markets in European countries have begun to adapt to profound changes the age structure of known active population. However, aging is foreseen for the coming decades may have a magnitude of which has still not be envisaged at present. It is therefore uncertain to predict that companies will face new requirements, the increasing labor market. Policies must be rethought and adapted to new realities so as to be offered this category of employees to acquire new knowledge and to upgrade, make daily powers to be able to reuse them. Following clues that are currently available, older employees, having a level of training and are regularly training and information to be updated with new discoveries and technologies are well able to pay the tasks.

At present, older employees are confronted with attitudes and policies practiced by employers in respect of: remuneration, training and recruitment. Most times these policies aimed at older workers when it comes to staff layoffs. Older employees facing unemployment inside the impossibility of finding a new job, and if ultimately succeed, it must accept most of the times, a salary below the level that I had. Given the foregoing, it can be concluded that domestic policies and attitudes of employers and labor must adapt to new realities that are emerging increasingly stronger labor market. Central Government agencies (mainly governments) must contribute and be involved in promoting educational activities designed to lead to awareness of the aging of the population by all the factors present in the labor market.

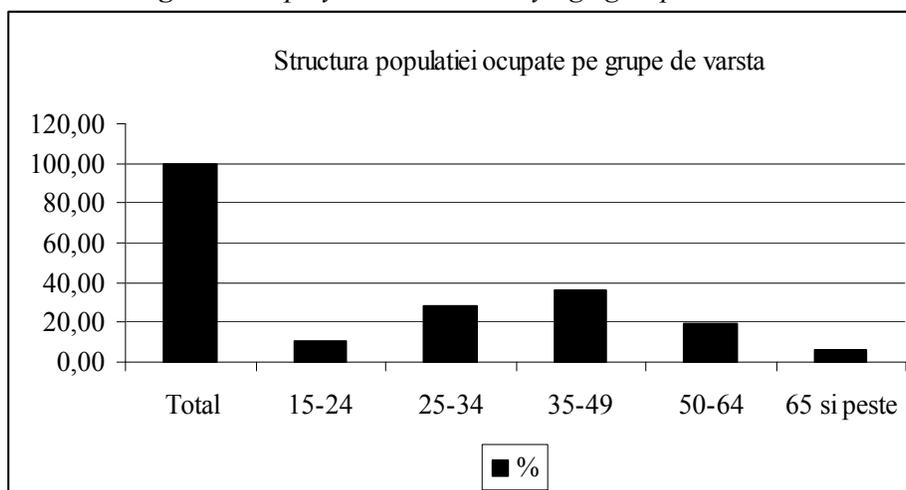
**Occupational Structure:**

1. Primary activities: includes agriculture, hunting, forestry and fishing
2. Secondary activities: includes manufacturing and power,
3. Tertiary activities: includes transport, communication and other services,
4. Quaternary activities: includes more intellectual occupation whose task is to think, research and development ideas.

An "attractive" low enough for young people seem to show health and education sectors and social assistance. Although the negative demographic trends make the number of students are becoming less and, consequently, the number of departments and teachers to continuously reduce the fact that a significant proportion of the teaching staff is older or threshold retirement, and young people are increasingly less willing to choose a career in education can lead to a serious shortage of teachers with an appropriate level of professionalism in all regions of the country (especially in rural areas), so the absolute level and specialization. A similar situation is recorded in the health and welfare and the implications on the quality and availability of those services in all areas of the country can be very serious because an aging population in general led to a significant increase in demand for these services.

For industry, developments were different in the case of mining and energy industry and the manufacturing industry. The first two branches, subject to a strict process of restructuring and liquidation of enterprises or the restructuring process is carried out, privatization, modernization and improvement in order to operate in market conditions in most regions recorded a subunit ratio of employment to young oldest. In addition to these factors, however, be taken into account the need to ensure adequate professional skills in sensitive and strategic sectors, which may explain in part the bigger share of the employed population in age groups with more professional experience.

Areas where the ratio of the employed population and the older woman is biased in favor of the first in all regions are in general service sectors (particularly trade, hotels and restaurants, real estate and other services). Although these sectors is clearly a trend of development and the availability of jobs is expected to increase the attractiveness of lower wages, increased job insecurity, seasonality may result in lower employment of young people, which combined with the aging of the labor existing work in these sectors makes a certain time horizon appear shortage of qualified personnel in a sector or another or a particular region.

**Figure 1** Employment structure by age groups in 2010

Source: Romanian Statistical Yearbook 2011, National Institute of Statistics

Developments in the structure of employment by activity, however, are even more dramatic. Thus, regardless of the method, in agriculture, hunting and forestry, electricity, gas and water, education and health and social relationship between groups of population employed "young" and older is less in almost all regions and for almost all the analyzed period. Furthermore, agriculture is also encountered a rather large percentage (even if the slight decrease) of population employed in the age group over 65 years (Figure 1): 16.8% of total employment in 2011 in North-Eastern region, 13.3 % in South-Eastern region, 16.9% in the South region, 18.2% in the South-West (the worst situation in this case), 10.6% in Western region, 13.4% in North-West, 9.1% in the Central region and 8.4% in the Bucharest-Ilfov. Even if the trend of employment in agriculture is a clear decline, low growth and low productivity of the branch, very low level of income obtainable, fragmentation and low socio-economic development in rural areas will remain as attractive to industry be very low among young people, and the possible migration and emigration among agricultural workers and farmers are still high, leading to worsening problems facing rural and elderly population in its level.

### 1. Conclusions

For the industrialized world, aging is the same explanation: population developed societies tend to have increasingly fewer children. Women postpone pregnancy for the benefit of creating a career, or simply give up the idea of having children. The birth rate is becoming smaller as

the generations of women are younger and at the same time, decreases inversely with the level of education.

Unfortunately for Europe, the solutions are limited: the acceptance of immigrants, increasing population (solution increasingly unlikely in conditions of genuine nationalist wave - France, Germany) or gradual loss of influence in the world. But even accepting immigrants is a solution that will lead, in time, all the demographic imbalance conditions, in order to compensate for very low birth rate, Europe should accept a million immigrants per year, which is considered be unacceptable to most Europeans.

However, demographic projections are difficult because it is difficult to predict whether the birth rate will remain constant or increase (which has happened in recent years in France and Romania). Indeed, a higher birth rate, combined with immigration, and can stop the aging European population decline. But for this, we need coherent social policies and more interest and concern of the governments concerned.

#### Selective bibliography:

1. Albu I.L., Bălan-Nicolae M., (2009), „*Analize prospective. Propuneri. Recomandări și mixuri de politici pro-dezvoltare durabilă a României*”, Editura Expert;
2. Bălașa A., (2005), *Îmbătrânirea populației: provocări și răspunsuri ale Europei* Revista „Calitatea Vieții”, XVI, nr. 3–4, 2005;
3. Dobres., Pensiile S., (2007), *Un caritas asaltat de politicieni - SAR POLICY BRIEF No. 24*, Iunie 2007;
4. Gérard - François Dumont, (1996), *Les spécificités démographiques des régions et l'aménagement du territoires*, Paris, <http://www.persee.fr/web/revues/home/prescript/article;>
5. Gérard - François Dumont, (2005), *Vieillesse et territoires a l'horizon 2030*, Université de Paris, [http://www.datar.gouv.fr/sites/default/files/datar/prospective-info-demographie-et-vieillesse-des-territoires.pdf;](http://www.datar.gouv.fr/sites/default/files/datar/prospective-info-demographie-et-vieillesse-des-territoires.pdf)
6. Ghețău V., (2000), *Populație și societate*, București, Editura Expert;
- 7, Marin Balaci, (2003), *Demografia vârstei a treia*, Editura Medicală, București, ISBN 973-39-0343-4
8. Sora, Hristache, Mihăescu, (1996), *Demografie și Statistică Socială*, Editura Economică, București, ISBN 973-9198-31-7;
9. Petru Mureșan, (1996), *Natalitatea și fertilitatea în România în contextul european*, București, Working Paper, <http://www.econis.eu/PPNSET?PPN=258248238;>

- \*\*\* *ONU, Données sur le vieillissement de la population, Assemblée mondiale sur le vieillissement, Madrid, 2002, <http://www.un.org/french/ageing/chap1.pdf>;*
- \*\*\* *ONU, World Population Prospects: The 2004 Revision Population Database, 16 martie 2012, [http://esa.un.org/unpd/wpp/Documentation/pdf/WPP2012](http://esa.un.org/unpd/wpp/Documentation/pdf/WPP2012;);*
- \*\*\* *Population & Avenir, Revue des questions démographiques, Université de Paris, 2004, [http://www.population-demographie.org/pdf/Conf\\_%20pop\\_mondiale\\_GFD\\_24\\_09\\_2004.pdf](http://www.population-demographie.org/pdf/Conf_%20pop_mondiale_GFD_24_09_2004.pdf)*
- \*\*\* *Romanian Statistical Yearbook 2011, National Institute of Statistics.*

## **ROMANIA ACHIEVING THE EUROPE 2020 STRATEGIES**

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### **Abstract:**

*The shift from physical capital growth based on endogenous growth (based on human capital, knowledge and innovation, R&D) is one of the solutions to increase the economic performance of Romania and the countries of the European Union. Therefore, Romania should promote overall 2020 strategy targets and national development targets subsumed European document. I believe that Romania's economy has not reached its potential, is poorly structured and application of pro-cyclical policies have deepened the country's gap with the EU average. This article has as main objective the education system compatible with the labor market, thus showing how that can reduce the dropout rate, this resulting in sustainable economic growth based and higher education levels.*

*Another problem of the Romanian economy treated in this article, is the solution to combating poverty and this can be achieved by the state providing a minimum pension, in case of pensioners and developing those areas that can generate jobs.*

**Keywords:** Europe 2020 sustainable growth, combating poverty, social exclusion.

**JEL classification:** F43, O47, Q56, R11.

## **1. Introduction**

Romania as EU member assumed overall 2020 strategy targets and national development targets subsumed European document. Thus, although we have a new strategy, a new document on which to base public policy, it is important to analyze the situation of Romania at the moment we are in and also its ability to schedule domestic policy agenda and context on which 2020 strategy should be applied.

Perhaps the biggest challenges are the prioritization process, the correlation of which assume that the priorities for allocating resources. This process is deficient in the context in which Romania has to fulfill some clear targets and budgeting is done in a more traditional manner, based on allocations from the previous year, without discussion or debate on the importance of policy interventions planned the requested resources.

With the economic crisis, decisions are usually short-term effect of the system, especially in Romania, requiring a quick response from the Government to the changing situations. Although we are at a turning point in which the constraints are clear, precisely in this period should be considered medium-term impact, so that interventions implemented does not lead to irreversible harm to compromise the objectives of the 2020 Strategy undertaken by Romania.

Planning national policies still tend to be autistic Romania to the European context we belong, we schedule the internal politics without policy coordination mechanism integrating with European relevance. In reality, at this point, the differences between the "National Agenda" and "European Agenda" are invisible and commitments that take the state in relation to the European Union should be incorporated into national policies to ensure their implementation.

Europe 2020 represent growth strategy proposed by the EU for the next 10 years (proposed in 2010) establishing as priorities obtaining the highest level of labor employment, productivity and social cohesion. For this were established five major objectives: employment (75% of the population aged 20-60 years) research and development (3%), climate change and energy (a 20% reduction in emissions of greenhouse gas emissions compared to 1990, increasing the share of renewable energy and energy efficiency by 20%), education (reducing drop to below 10%, increasing the share to over 40% of graduates for those aged 30-34 years) and social exclusion (reduced by at least 20 million people suffer from poverty and social exclusion).

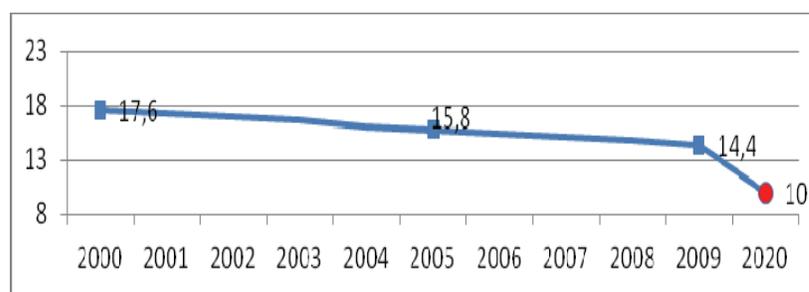
Romania has taken this strategy, making these some national targets so that is desired employment rate of 70%, accounting for 2% of GDP to be paid to research and development, reducing carbon dioxide emissions up to

19%, 10% energy efficiency, reducing the share drop to 11.3% and a reduction in population at risk of poverty or social exclusion by 580 000.

## 2. The methodology used to achieve the national strategy to reduce dropout rate

Educational objective at EU level is to reduce early school leavers from 15%, as it is currently to 10% and increasing the share of the population aged between 30 and 34 years to graduate from 31% to at least 40 % (see fig. 1).

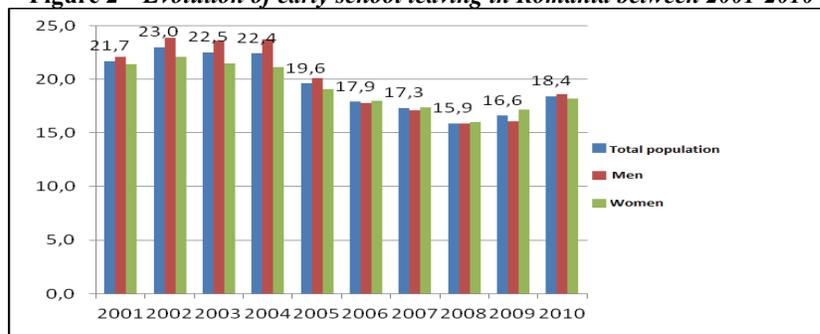
**Figure 1 – Early dropout rate in EU27**



Source: data gathered by authors (www.eurostat.ro)

Early dropout rate has a downward slope during the years 2000-2009, ranging from 17.6% in 2000 and 15.8% in 2005 to a value of 14.4% in 2009 (see fig. 2).

**Figure 2 – Evolution of early school leaving in Romania between 2001-2010**



Source: data gathered by authors (www.eurostat.ro)

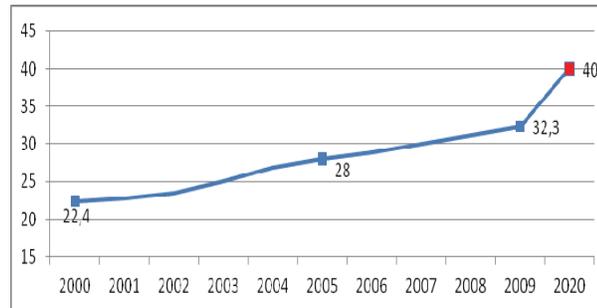
Early school leaving rate is calculated as the share of population aged 18-24 years, which followed more than lower secondary education and not included in any form of education or training, the total population aged

18-24 years, the indicator expressing the proportion of population with low levels of education and training.

Early school leaving rate recorded during 2001-2009 a significant decrease of about 5% compared to 2001, with an average annual decrease of 2.3%. Compared to 2002, when it recorded the highest rate of early school leaving, the indicator was reduced in 2010 by 4.6 percentage points.

Regarding the rate of people with postgraduate studies at European level it is observed an increase from 22.4% in 2000 to a rate of 32.3% in 2009, then an increase of about 1% per year which shows that it is easy to achieve the 40% target for 2020 (see fig. 3).

**Figure 3 – Evolution of tertiary education in EU**



Source: data gathered by authors (www.eurostat.ro)

Romania is not in a very good situation regarding this indicator. Despite continued growth, it stands at less than half the amount proposed at European level in Europe 2020. In the future it is expected that after making arrangements regarding compatibility term "tertiary education" to improve the situation (see Table 1).

**Table 1 Comparative RO-EU regarding 30-34 age population with tertiary education**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
UE 30-34	22,8	23,5	25,0	26,9	28,0	28,9	30,0	31,1	32,3	33,6
Romania 30-34	8,8	9,1	8,9	10,3	11,4	12,4	13,9	16,0	16,8	18,1

Source: data gathered by authors (www.eurostat.ro)

The national target for the share of R&D expenditure in GDP is about 67% of the Europe 2020 target. Given the starting point and the

economic, institutional and cultural field, assumed target is ambitious but hardly feasible (see Table 2).

Although the national target is very optimistic view of the situation before the adoption of this target in Romania, even in the optimistic scenario it also reaches about 73% of the European average target.

**Table 2. R&D expenditure share in GDP**

	2010	2013	2015	2020	Total relative variation	Average annual rate
<b>Pessimistic scenario</b>	0,49	0,7	1	1,8	1,31	13,9
<b>Realistic scenario</b>	0,49	0,85	1,3	2	1,51	15,1
<b>Optimistic scenario</b>	0,49	0,9	1,45	2,2	1,71	16,2

Source: data gathered by authors (www.eurostat.ro)

The Memorandum approved by the Government on the share of R&D expenditure in GDP, we opted for a realistic strategy, or 2% of GDP, compared to an average of 3% of GDP set in the 2020 strategy.

It would thus share R&D spending in GDP to grow 4 times, with an average annual rate of between 13.9 and 16.2 depending on the scenario where we fit. This is an important effort that involves not only the figures for the volume of public and private spending, but also the quality regarding structure of expenditures.

Despite considerable gap between Romania and the EU in this respect, our country has set an ambitious target for 2011-2020 as being included among Member States in the state of catching up. The speed at which they produce recovery process innovation offsets modest place occupied by Romania between Member States in this respect.

In this context of rapid recovery and character falls ambitious national target for the share of R&D expenditure in GDP during the period covered by the Europe 2020 strategy.

For faster accumulation of human capital, linking education level and demographic trends, sustained investment is needed to increase rapidly as the share of higher secondary education in the 20-24 age groups.

Also, increasing the rate of participation in higher education and the enrollment rate of adults in lifelong learning programs can compensate for shortages of skilled labor for a competitive knowledge-based economy and sustainable. In addition, in terms of quality, it is imperative to improve the quality of compulsory education.

Coordinating the orientation of the target on education returned the Ministry of Education, Youth and Sports. Working group for setting

objectives (GSLO-4) were part of the institutions and public authorities involved in the development and administration of policies and strategies that are associated substantiation and achieve the target of reducing the rate of early school leaving or increase graduation rate of higher education.

Goal programmed path to achieve the scenarios is given in the table below (see Table 3).

**Table 3. National goal for early school leaving**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Absolute variation	Relative variation	Average annual relative rate
Pessimistic scenario	17,3	16,9	16,5	16,1	15,7	15,3	14,9	14,5	14,1	13,7	13,4	-3,9	-22,54	-2,52
Realistic scenario	16,3	15,8	15,3	14,8	14,3	13,8	13,3	12,8	12,3	11,8	11,3	-5	-30,67	-3,60
Optimistic scenario	16	15,4	14,8	14,2	13,6	13	12,4	11,8	11,2	10,6	10	-6	-37,5	-4,59

Source: data gathered by authors ([www.dae.gov.ro](http://www.dae.gov.ro), document GSLO-4, p.7.)

The national target reaches Europe 2020 values only optimistic scenario. Based on realistic scenarios in 2020 is expected to reduce early school leaving rate up to 11.3%, so the fulfillment of national goal as 87% to Europe.

Romania aims to be as close as possible to the nominal value set by Europe 2020 taking into account the relatively small gap, so easily removed, which in 2009 was 2.2 percentage points between Romania and EU27. In 2010 the gap had more than doubled to 4.3 percentage points, but given the fact that the indicator could be decreased in the past 10 years by more than 6 percentage points in the next decade will not be very difficult to recover about 7 percentage points if the effort will be considerably greater than in the past.

Goal for the share of population in the 30-34 age groups with tertiary education in the total population in the group referred to by GSLO-4 was based on three scenarios.

On this indicator, even in an optimistic scenario, the nominal national target will be only 75% of the target set for the EU average. Thus, the established and approved national target in a realistic scenario represents about 67% of the Europe 2020 target, as shown in the table below (see table 4).

**Table 4. National target for the share of population in the 30-34 age groups with tertiary education**

	2010	2020	Absolute variation	Relative variation
<b>Pessimistic scenario</b>	17,33	24,6	7,27	41,95
<b>Realistic scenario</b>	17,61	26,74	9,13	51,85
<b>Optimistic scenario</b>	17,88	29,93	12,05	67,39

Source: data gathered by authors (www.dae.gov.ro, document GSLO-4, p.6.)

Reaching a share of only 67% of the target set in the European strategy is a completely bad situation and makes Romania to make a modest contribution to this goal.

However, Romania will be able to improve the situation expected if regulatory instability in education will be removed shortly, this is the main problem that causes the growth strategies of the output quality of education is still fragile.

The problem of tertiary education as well as relative poverty reduction is one dimensional, so that the program will achieve the target values depend not only on measures taken strictly educational services but also the measures taken in other economic and social areas.

Coordinating the foundation for poverty reduction target is assigned to Ministry of Labor, Family and Social Protection. Possible developments of poverty reduction in the period 2011-2020 were based on three scenarios in which the poverty rate projections had the waypoints years 2013 and 2015.

If we refer to the 2010 data, the performance realistic scenario is not sufficient to meet the target assumed by Romania in the poverty rate. The estimated number of people living in poverty will be reduced by 677,000 people by 2020 compared to 2010, representing a decrease of 14.83% of the number of people living in poverty compared to 2010; this reduction is still far below the average of 25% at EU level (see Table 5).

**Table 5. National target on relative poverty reduction**

Scenario	Optimistic scenario		Realistic scenario		Pessimistic scenario	
	2010	2020	2010	2020	2010	2020
Year	2010	2020	2010	2020	2010	2020
Total population	21435	20800	21435	20800	21435	20800
Poverty population	3901	3120	3901	3224	3923	3328
Relative poverty rate	18,2	15	18,2	15,5	18,3	16

Source: data gathered by authors (www.dae.gov.ro, document GSLO-4, p.7-8.)

As the Europe 2020 target of reducing poverty by 25% relative to the number of people who fall into relative poverty that Romania, even the optimistic scenario, in which they propose a reduction of 20%, which means in absolute terms, a reduction by 781,000 persons compared to 3.901 million people in 2010, not within the strategic objective of the European Union.

In the pessimistic scenario, the estimated number of people living in poverty will be reduced by 595,000 people by 2020 compared to 2010, representing a decrease of 12.56% of the number of people living in poverty than in 2010.

### 3. Recommendations

Educational objective is another major risk of jams in both reducing dropout and increasing population aged 30-34 with tertiary education. On the one hand, due to the high degree of poverty, young people aged 18-24 are taken away from instruction and is oriented towards economic activities on the other hand those in rural areas who would like to continue studies do not have the necessary school infrastructure. To a great extent these blockages can occur even in the second sub-objective. A huge number of people giving up further tertiary education because of inhomogeneous distribution of educational institutions in the territory, but also the weakness of the educational system in terms of skills training for the labor market. Most weaknesses in the education system are of an institutional nature. The disincentives pay teachers significantly reduce both professional performance and their stability. Under these conditions, especially in rural areas there is amateurism phenomenon by substituting teachers. Failure rapidly increasing standard of living in families that are at risk of early school leaving is one of the major uncertainties in achieving this. In this case the state should intervene more actively in keeping young people in the educational activity. In terms of population aged 30-34 with tertiary education, the lack of a clear economic and social model of Romania for the period 2012-2020 is reflected in the lack of a clear and general predictions

of higher education, which may lead to less graduates. However, the effects of investment in school infrastructure and the effects of income growth on growth opportunities in tertiary education enrollment are other issues that may delay the performance of these goals and hence the assumed objective of Romania.

Major bottlenecks to reduce the poverty rate are objective and aims to maintain disparities between urban and rural areas on the one hand and between central and peripheral urban on the other. A blockage that we already face in this objective is the high percentage of Rroms people in the absolutely poor, although strategies are ongoing dedicated social inclusion of Rroms. In the reduction of the poverty rate must avoid confusion with social inclusion. Social support should be seen only as a temporary solution and local as preliminary step to achieve social inclusion. Another vulnerability is the inadequacy of initial and vocational training to labor market needs. To avoid this vulnerability, we need to develop the capacity of the initial educational and training appropriate to meet labor market needs. Achieving this goal is uncertain given that the absorption capacity of structural funds likely to develop social infrastructure is low and the aging population is growing. To remove this uncertainty, institutions absorption of structural funds should be restructured immediately to a radical measure. At the same time be restructured and the social security system so that it can effectively meet the social welfare needs institutionalized elderly without family support.

#### **4. Conclusions**

Romania is interested that Europe 2020 strategy to become a successful example of EU action. In the current context marked by economic and financial difficulties, the strategy provides relevant solutions for growth. Lines of development and the assessment provided by it can promote further integration of European economies.

The problem of reducing the number of people in a state of relative poverty is a cross-sectional problem, just not enough social or institutional support measures, but it takes a set of measures come from several sectors such as educational measures (leading to increased proficiency), such as fiscal measures (tax deductibility or tax systems differentiated), labor market measures (leading to flexicurity) and social assistance (which lead to better focus State support for people who are in real need of this support).

Without these measures belong to several government policies, Romania will fail to meet even pessimistic scenario corresponding value in reducing the population is below the poverty level.

## References

1. Ardelean, A., *Evaluarea activității de cercetare Științifică*, Editura C.H.Beck, București, 2006
2. Băcescu, M., Băcescu-Carbutaru, A., Dumitrescu, F., Condruz-Băcescu, M., *Politici macroeconomice de integrare a României în Uniunea Europeană*, Editura Economică, 2008
3. Dinu, D., *Strategia 2020 în România – chiar o implementăm sau încă un document de sertar?*, Policy Brief nr. 5, 2010, disponibil la [http://www.crpe.ro/library/files/policy\\_brief\\_5\\_ro.pdf](http://www.crpe.ro/library/files/policy_brief_5_ro.pdf)
4. Ene, D., Băltărețu, C., Prelipcean, G., *Noua Strategie Europeană pentru creștere economică și ocuparea forței de muncă (Europa 2020): obiective, instrumente de monitorizare a implementării, resurse instituționale, recomandări de implementare*, Institutul European din România, 2010, Studii de strategie și politici nr. 2, disponibil la <http://www.ier.ro/documente/>
5. Grigorescu, A., Rădulescu, C., R., Dumitrescu, A., *Europa 2020*, Editura Economică, București, 2013
6. Kant, I., *Critica rațiunii pure*, Editura Univers, București, 2009
7. Panaitescu, I., *Cooperare și competiție în cercetarea științifică fundamentală*, Editura Expert, București, 2002
8. Popescu, C., *Metodologia cercetării științifice*, Editura ASE, București, 2006
9. Popescu, C., *Respiritualizare. Învăță să fii om*, Editura ASE, București, 2009
10. Popescu, D., I., Meghea, A., Pincovschi, E., *De la strategia Lisabona la Europa 2020*, Editura Agir, București, 2010
11. Smith, A., *Avuția națiunilor*, Editura Bucovina, București, 1934
12. Szent, A., G., *Pledoarie pentru viață*, Editura Politica, București, 1981
13. Selye, H., *Știință și viață*, Editura Politica, București, 1984

## **CORPORATE GOVERNANCE AND AGENCY THEORY HOW TO CONTROL AGENCY COSTS**

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### **Abstract:**

*Agency theory is considered as the main theory in business world separating ownership from management, which makes conflicts called “agency problems” as a result of interest conflicts between managers and shareholders. These problems are costs on a company to encourage high performance of managers, need to be monitored and minimized to protect the company from bankruptcy. Agency theory grants to manager a huge margin allowing them to use free cash and getting more benefits returned to their own behalf. This relationship is needed to be discussed highlighting on the possibility of controlling and avoiding such as issues can lead the company to unpleasant situation and force managers to lose their positions.*

**Key words:** agency theory, agency costs, corporate governance, managerial incentives

**JEL classification:** G38, Q 56

### **1. Introduction**

Starting with last century management thinking has been developed massively. Organizations required important changes of theories; strategic management has shared its duties with board of directors presenting the main attention of massive developing. That could be happened with significant developing of financial and operating managements with showing slightly some changes in board of director’s roles. However, twenty century concerned on management developments among huge concerning on corporate governance started with twenty first century to be highlighted in academic researches attracting attentions of international institutions and organizations pushing them to update and develop corporate governance theories and principles. Economic growth enacted to improve

the framework of corporate governance theoretically and practically facing economic challenges to reach mature level of what corporate governance is now.

Economic entities have been thirsty for revolution in corporate governance to solve the issues between board of directors and other members of a company. That creates relationships with others; internal / external members of a company, which need to be managed by corporate governance. The different between management and corporate governance is that management runs company's activities and governance ensures these activities are managed and done well and correctly. For that directors gain this title from directing and supervising the activities of their companies.

Governance as an idea is from past, but the phrase of corporate governance is started in 1980s to be adopted widely in business world. The agency theory has brought significant challenges in modern regulations of enterprise nowadays.

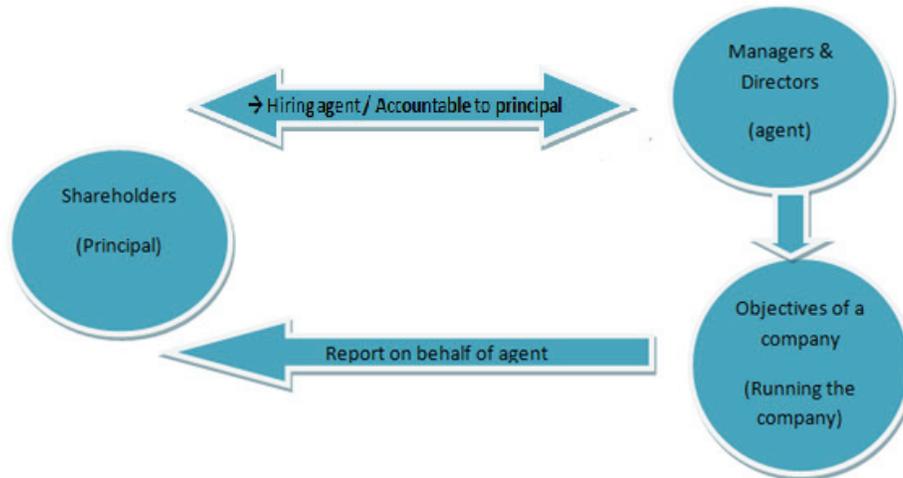
Middle ages of Europe each trading were standards and regulations for participants, which was formulated by guild charters meeting states' regulations nowadays. The charters consisted of trade masters. Three century back the competition between European empires was culmination and companies were created by states or king led by charters. Queen Elizabeth named a charter in 1600 for *East India Company* to handle all trades between England and Asia to join stock market and elected board of government directors. In 1602 Western part of India was controlled by Dutch East India managing trades between Asia and Netherlands. In this period there were not real and special expectations leading these companies to be defrauded and collapsed leading to financial crisis similar with current financial crisis. In nineteenth century Limited Liability Company Law has taken place encouraging people to engage in business those days asked people to be attentive to achieve a great economic growth to create first Incorporation Company. Incorporation - Limited Liability Company was firstly created in France with a condition that directors disclosed the debts of their companies among English law, which was not limited on directors to include all shareholders even if they are not part of the management. The concept considered the company as an independent entity separated from owners introduction first tries of agency theory. That mean debts' responsibilities are transferred from shareholders properties to be limited on company's properties even though shareholders are the main power since board of directors are elected by them owing duties of reporting and stewardship. Till nowadays shareholders' rights are main part of any law even of their difficulties. The experience of limited liabilities companies were limited on small and medium sizes to be large and more complicated by twentieth century appointing the advantages of industrial revolution

especially in United Kingdom and United States of America making shareholders widely internationally. That requests to separate between ownership and operations of a company. All public companies have started to be listed in stock market pushing step by step to give an agency theory its own role in running companies (Means and Berlet 1932), and previously dialogue can be dropped on corporate governance. Board of directors duties has transferred to challenged level to make important decisions mostly presented as an advice's resource for the chairman of the company in case of resigning because of bad performance. All academic literatures handle the function of board of directors classically covering three significant points: (1) strategies, objectives and policies of board of directors, (2) putting intelligent questions, (3) and choosing the chairman.

## **2. What are the agency costs?**

Ownership has been separated from management since agency theory is applied making conflicts based on interests between different parties of contracts (Jensen & Meckling 1976). These parties are presented by shareholders, managers and debtors as the main business drivers according to classic approach. Researchers have passed huge progress to explain means and natures of these conflicts to determine the possibilities of solving these conflicts. Agency relationship is described as that contract between principal giving agent the right to make decisions and take the responsibilities of these decisions (Jesen & Meckling 1976). Classic view of owner-manager problem proposes that managers presume the essential role of agent of acting on behalf of shareholders. The basic problem is shown up as result of the separating between decision making and residual risk carried by shareholders. The agency problem is related to difficulties confronted by moneymen in assuring there is no expropriating or wasting for their money (Shleifer & Vishny 1997). That mean shareholders are expecting to obtain financial benefits of holding financial equity. Agency problem can costly controlled due to impossibility of perfect performance of agent in decision-making to affect both agent and principal benefits (Brennan 1995). There is an argument that incomplete contracts between principal and agent is feasible; shareholders must apportion residual monitoring rights to managers of a company (Shleifer & Vishny 1997), caused of that managers monitor the company and have the ability to determine individual benefits of monitoring, which are inaccessible to shareholders. The inefficiency of managers are reduces with increasing managerial bonuses to maximize decision-value. Agency cost has been suggested by academic writers to attract managers to act according to maximum benefits of shareholders through providing certain benefits to managers. Like other cost agency cost is recognized in share price of a company. The researchers have categorized

agency cost to two different types: First type led by Jensen and Meckling (1976).

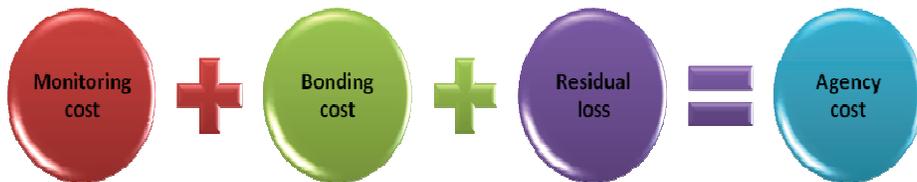


**Monitoring cost:** Monitoring and understanding of management actions are behind agency cost, judging managers' performance is based on maximizing wealth of shareholders. Monitoring costs are these expenditures paid for controlling, rewarding and measuring managers' behaviors. There is possibility to add auditing cost, hiring and training costs for top-management. At the beginning these costs are paid by shareholders, but at the end are covered by managers since their recompense is based to cover these costs (Jensen & Fama 1983). As well these costs are affected by regulations and governance codes; Combine code (2008) in United Kingdom requests from companies to provide abidance statements as a result of Cadbury code, Hampel code and Higgs code. Governance codes ensure monitoring function of control systems used to reduce conflicts of interests between principal and agent and in meanwhile excluded behaviors of abidance statements must be explicated and disclosed, which are considered as part of control system. That present the possibility of strict monitoring for certain groups as feature of effective control system (Denis & Sarin 1997), and that request expert monitors have necessary skills and financial knowledge to control and threat believably managers to provide a credible report of control system and management performance. Strict view on monitoring has been presented to restrain management behavior and to sustain company's activities to reduce judging margin for managers. That mean external shareholders do not have human capital to determine opportunities confronting the company making monitoring cost high (Gromb, Panunzi and Burkart 1997). There was an important discussion on

publishing governance codes in United Kingdom leads to increase monitoring cost with providing credible presentation of company’s activities and management’s performance (Hull, Short, Wright and Keasey 1999). Therefore, best level of monitoring can be concentrating on contracting environment of a company (Hubbard, Himmelberg and Palia 1999).

**Bonding costs:** Holding monitoring cost by managers pushes them to construct their acts upon to shareholders’ interests otherwise they are going to pay for it. The cost of setting up and working according to monitoring system is called bonding cost (Meckling & Jensen 1976). Bonding cost is generated by managers with having possibility of financial and non-financial such as guarantee offering from agent, wearing a uniform and maintain good reputation. Also attempts of providing information to external shareholders accurately and timely. Managers can limit carrying bonding cost through managerial balancing; decreasing in monitoring cost is equal to increasing in bonding cost. Solving conflict of interests between shareholders and managers can be solved through contracts bonding managers to act exactly according to shareholders’ interests in any circumstance facing the company (Denis 2001).

**Residual loss:** Contempt of monitoring cost and bonding cost. The difficulty of gathering interests of shareholders and managers will continue existing to be added to other differences between managers’ decisions and decision maximizing benefits of shareholders. That generates agency loss gets up from conflicts of interests, which is known as residual loss. This loss is not assessed upon to shareholders’ expectations, or to high-level of managers’ performance. Hence maximizing managers’ role will attempt to minimize agency costs (monitoring cost, bonding cost, residual loss) to promote an idea of giving bonuses for managers to sign contracts appropriating imposing costs (monitoring cost and bonding cost) making differential cost equal to differential benefits to cut down residual loss.



### **3. What are the agency conflicts?**

Different interests of principal and agent are behind agency conflicts. The natures of these interests are limitless pushing academic researches and professional institutions to study the reasons of these differences. In 1976 Jensen and Meckling define these reasons by: moral-hazard, earning retention, time-horizon and managerial risk aversion.

- **Moral-hazard conflicts:** The first proposal to explain agency conflicts. Jensen and Meckling (theory of the firm, 1976) assumed that a manager owns the company to develop a specific model by motivations instead of investing in Net-Present-Value of projects of that company to increase manager's stake in descent of a company. That can be easily applied when the structure of ownership is various and the majority of shares are not controlled by managers, which is not matching with British companies' situation for an example. That can be instead of not investing, because managers are toward investments, which match their skills. Some investments of managers may increase the value of a certain manager with increasing the cost of substituting. That allows managers to obtain more bonuses from their companies (Shleifer & Vishny 1989). The possibility for moral hazard issues of having superior power and influences are high in multinational companies (Jensen 1993). In these companies external auditing and complexity of contract blow up exponentially leading to increase agency costs. The solution of moral-hazard has been related to present the need of pay-performance sensitivities for Chief of Executive Manager CEO (Murphy & Canyon 2000). Moreover, in large size companies the problems of cash flow highlight produced difficulties by moral-hazard (Jensen 1986). High free-cash in large companies makes hard to know where cash are utilized by managers. Managerial exertion is also related to moral-hazard since managerial exertion lack might lead to management problems with difficult evaluating fiddled responsibilities by managers. The share price of the company is positively related to meeting between managers and board of directors proofing that company value is affected by managerial exertion (Wyatt & Rosenstein 1994).
- **Earning retention conflicts:** oversimplifies agency problems as an effort of antipathy (Brennan b 1995). Grandiose imaginations of management with distributing cash on shareholders can be over attention than declining investments and providing luxury offers to certain employees. The structure of compensation has a role on

management's rewards affecting size function of a company (Jensen & Murphy 1990 and Conyon & Murphy 2000) pushing management to concentrate on growth size instead of concentrating on growth returns on shareholders. That explain why management tends toward retain earning among trending of shareholders to distributing cash particularly when possibility of positive invest inside the company is low (Jensen 1986). Managers obtain high benefits from retain earning giving greater cachet and image with high bonuses in front of board of directors (Jensen 1986, 1993). That cuts down a specific risk inside the company imposing for strengthening security of executive jobs. Nevertheless, finance theory prescribes that diversified portfolios must be hold by investors to reduce risks by investing in variety of assets, which leads to block any cooperating of diversification by managers since that is not meeting their individual interests. That is proofed by empirical studies ensuring this strategy of managers is harming shareholders' wealth strongly to reduce company's value (Stulz & Lang 1994). Retain earning reduces the need for external financing in case that it is used in investing projects by managers. Nevertheless, the cost of increasing capital from financial market leads to a practicable controlling function on unnecessary managerial investments (Easterbrook 1984). In this case managers will try to reduce retain earning escaping from this external controlling function.

- Time Horizon conflicts: cash flow timing creates an agency problem between managers and shareholders. The time of cash flow is demanded by shareholders significantly as part of future definition of a company. Nevertheless, managers' concerns on cash flow may be related to their individual interests generating negative influences in short-term on the company to give birth to top-executive approach concentrating on leave-payment of managers with proofing that research and development expenses reduce these negative influences of top-executive approach in short-term (Sloan & Dechow 1991). There is possibility that management uses certain accounting tactic to use retain earning before they leave their positions to maximize their leave-payments (Healy 1985). In 1988 Weisbach proofed that retain earning is higher in previous year of leaving managers and chief executive officers to give them a role in manipulating cash flow problems.
- Managerial risk aversion conflicts: managerial income raises this agency conflict. Financial investors hope to spread their control by

shareholders with minimum cost among managers who hope to increase their individual control. The majority human resource directors are connected strongly to their companies depending upon companies' performance leading to reduce risk of their companies in financial market (Denis 2001). Thus, these directors may reduce risk by encouraging diversifying investments and invalidate investing decision making investing risk high (Jensen 1986). The risk of investing decision might increase the possibility of bankruptcy, even the reputation of managers is harmed, but it is still hard to replace them (Lehn & Demsetz 1985). That means this agency problem has its impacts on financial policy of the company since debt increasing considered as a solution to reduce managerial risk aversion (Jensen 1986) and to increase tax shields (Sendbet & Haugen 1986). Nevertheless, there is an argument that risk may enforce managers to choose financing by equity instead of financing by debts avoiding bankruptcy and failure possibilities (Brenna 1995b).

#### **4. How to control problems of agency theory?**

In spite of pervious discussion of agency problems, interests' conflicts are continuing to increase in modern companies between external investors and managers (Jensen 1993). That can be assigned strongly to developments in monitoring process internally and externally serving at managing agency problems. Companies incline to alternate different mechanisms based on economic features of contractual environment (Himmelberg et al 1999). Subsequently, contracting link has been changed dramatically from a company to another without ignoring an assumption that it is optimum for a company but not necessary to others. Accordingly, a certain mechanism is employed to a little degree in a certain company it can be employed more in another company generating same good performances in these different companies (Knoeber & Agrawal 1996). There conditions are requested to achieve an efficient mechanism of corporate governance (Denis 2001); first condition is that device works to reduce the conflict area between managers and shareholders' interests; second condition is that selected mechanism has an important effect on value and performance of a company. In 2001 Denis pointed out that if governance mechanisms are respected there is no significant link between individual mechanism of mangers and their companies' performance.

##### **First option: Managerial labor market**

Managers will adjust their behaviors accordingly to market evaluation for the goodness of their acts toward shareholders' interests. Those depend on pervious performance reports of their companies (Fama

1980). Labor market practices external monitoring with demanding conditions:

- I. Talents and excellence of managers must be seeable through pervious performance reports of their companies. These talents and excellence of managers should be changed from report to other. The main issue is moral-hazard problem of agency theory were analyzed by Meckling and Jensen in 1976. Nevertheless, simply analysis has been done by Fama 1980 treating agency problems assuring other agency problems; earning retention, time horizon and risk aversion problems.
- II. Efficient process of information by labor market into evaluating management performance. The cost of gathering information will be presented through having different information by various parties.
- III. The process of revising salary must be enough to solve managerial incentives' problems in a perfect market where managers' acts serve the achievement of shareholders' interests (Fama 1980). That means labor market is practicing external monitoring through several punishment on poor managerial performance (Murphy & Jensen 1990).

Solving agency problems and reducing agency cost can be done through managerial labor market. And to solve the problem of ownership separation must be an effective factor enforces managers to act toward shareholders' interests through providing stimulus to encourage managers.

This factor is presented in managerial labor market according to researchers in corporate governance; poor managerial performance leads to managerial replacement. That is happened only in a real poor performance of manager sustained in long-term (Warner et al 1988 & Weisbach 1988). Managerial labor market uses pervious performance reports of managers to determine opportunities of a company and bonuses for its manager (Gilson 1989). Managerial labor market can be maximize a role of managers in shareholders' value, but in real that is limited only to reduce poor managerial performance (Murphy & Jensen 1990, Kaplan & Relishes 1990).

### **Second option: Corporate boards**

Theoretically shareholders elect the members of board of directors during annual meeting, which means simply directors must maximize the value of shareholders. Board of directors has cooperated with market to solve agency problems inside a company (Weisbach & Hermalin 2001).

Effectual board of directors in a certain company can affect strongly other independent directors to hold a well position in management of other

company, and to differentiate between management decision problems and control decision problems (Jensen & Fama 1983). There is possibility that managers and chief of executive officer can control board of directors, but that will be difficult to dominate managerial and control decisions, because that does not serve shareholders' value and leads to disaster situation to whole the company subsequently. External directors have the ability of controlling decisions with separating from managerial decision, which can be supported by incentives provided by shareholders. Board of directors must involve effectively in monitoring management performance, and solve agency problems even it requests to replace management. Greenbury report (UK, 1995) recommends that remuneration should be high for board of directors to encourage professional behave of them toward management.

Good corporate governance requests from board of directors to check all information offered from management and to behave professionally with all information offered from financial market. External directors in respect the separation between tasks have a positive role to eliminate poor performance of managers (Weisbach 1988), and to reduce the ability of top-management corruption (Cotter et al 1997 & Mehran 1995). Sustainable poor managerial performance contributes top-management to have short incumbency (Wruck & Watts 1987). That important role of board of directors and external directors particularly; is active with governance mechanism affecting positively on value of a company turning to increase shareholders' value (Knoeber & Agrawal 1996), but that is request other monitoring mechanism on external boards according to US companies' report, even there are researchers deny this relationship between external boards and shareholders' value (Weisbach & Hermalin 1991). Highlighting this important role has been done by Denis in 2001 focusing on positive role of board during crisis time with mentioning on the difficulty of running business daily is caused of agency problems.

Moreover, this important role is reflected in stock market through changes in share price of a company (Wyatt & Rosenstein 1990, Villalonga & Demsetz 2001, Weisbach & Hermalin 2001).

That presents the issue of board size and the argument that chief of executive officers would like to control board of directors attracting to individual interests (Mace 1986). The size of board of directors can lead to inefficient decisions caused by losing ability to determining and controlling their operations (Jensen 1993). That was proofed through empirical studies done by Eisenberg and Yermack in 1996, and Wells and Sundgren in 1998 through connecting between the company-value and the size of board of director. In United Kingdom, studies distinguished between external and internal members of board of directors; Lasfer and Faccio in 1999 argued in

their study that there is no significant connection between company-value and size of board of directors among Jensen (1993) argument that mini board of directors has more ability to make effective and quick decisions.

External directors are effective in certain decisions such as reducing poor performance of chief of executive officer, and they can be less effective for unobservable tasks to econometricians (Black & Bhagat 1999).

Thus, performances of external directors are worse than mixed board between external and internal directors. The previous performances of independent directors of a company board and chief of executive officer with balancing their power are not less important than other factors affect on decision-making quality (Weisbach & Hermalin 2001).

### **Third option: Corporate financial policy**

Agency problem control is affected by financial policy of a company since free cash is handled by managers, which has direct implications on financial structure. Increasing company's debt increases internal ownership level with cutting down equity's amount (Meckling & Jensen 1976). These debts in financial structure of a certain company present a monitoring mechanism on managers; managers are forced to pay back the debts contractually in away from cutting down dividends (Jensen 1986). That pushes managers to improve their financial performance and to adopt effective strategy with bonding maximization of personal interests in order to escape from bankruptcy (Easterbrook 1984). This mechanism is important to a company in order to increase cash flow with reducing growth of a company that is also proofed by a reverse relation between leverage and growth percentages of Low Tobin's Q done by Stulz, Ofek and Lang in 1996. That study said poor performances of managers and poor invest opportunities pointed that debts act as an important function to discipline company's performance. Therefore, there is a positive relationship between high levels of debts and decision of liquidation (Brennan 1995b), that is related to high value of a company (Raviv & Harris 1991). That mean leverage increases related risks of having debts leading to increase agency cost (Raviv & Harris 1991). In optimal capital, there must be equality between managerial costs and benefits of having debt in order to maximize the value of the company (Myers 1984). That means debts in optimal structure of the company capital increase the risk of agency cost and reduce the value of the company (Stulz 1990). Also using dividends reduces agency cost of using free cash by managers caused of obligatory level of dividends among debts (Jensen 1986). Over all, an inefficient using of free cash by managers creates a problem in financing investments and increases the need of having debts (Raviv & Harris 1991).

**Forth option: Block holders and institutional investors**

The idea is that atomistic shareholders have the smallest part of the whole shares of a certain company meaning that they cannot monitor all managers' performance, which is not really considered as a high priority for a part of them among others who gain benefits from practicing this right.

Therefore, block holders might troubleshoot this issue by requesting high financial skills and time to solve this issue and to monitor managers' performance. Block holders can join board of directors after being elected by shareholders. That encourages chief of executive officer to share more effective information to reduce the cost of monitoring managers' performance. Board of directors considered as part of governance mechanism works affectively under the pressure of external controls of financial market meaning that external shareholders – block holders push governance mechanism to operate expeditiously leading to effective monitoring on managers' performance (Sarin & Denis 1997). That means block holders reduce none value strategies of management, which is using free cash of a company to reduce invest risk of external shareholders.

**Fifth option: The market for corporate control**

Breaking down internal monitoring system of a company can be behind interests' conflict between managers and shareholders with contributing of availability of free cash and useless policies wastes company's resources (Jensen 1986). In short run, corporate control by market can be switched from monitoring company's assets to monitor managers' performance efficiently. The mechanism is shown when managers use free cash in wealthy investments protecting themselves from being fire, which is active strongly after failure period (Titman & Safieddine 1999). The motivations behind this mechanism are to reduce and control poor performance of managers and to achieve gains enabling a company to keep an average position in the market comparing with similar companies (McConnell & Martin 1991). The mechanism of market for corporate control is just active in recession period encouraging managers to act professionally to keep their positions (Partch & Mikkelson 1997). This option is not common and used only in a real poor performance of managers because of high cost of applying (Ruback & Jensen 1983, and Kruse & Denis 2000).

**Sixth option: Managerial remuneration**

The contracts between shareholders and managers return positively on managers such as salaries, bonuses and percentage of profit, which encourage them to act in high level of professionalism increasing the company value (Meckling & Jensen 1976).

Salaries are determined by worker force market with taking in considerations other important factors such as experience and academic level. That depends also on the size of the company and the need for certain skills. Labor market has a significant role in avoiding high salaries for poor performance of managers (Murphy & Jensen 1990). Salaries' mechanism is ineffective when managers receive high salaries to increase the value of their companies (the value increased by a certain amount of money e.g. 100 Pounds leads to small changes in managers' salaries e.g. 1 cents).

Bonuses present an effective mechanism to encourage professional acts of managers to increase the value of their companies (Potter & Lee 1996). Thus, bonuses are considered as expenses in short-term, but as investments in managers in long-term which have a positive relationship with a company's value (Healy 1985, and Murphy & Jensen 1990).

Giving shares to managers is one of workable methods to bring managers and shareholders to same area and to have common interests reducing interests' conflicts to minimum level. Managers become real partners to shareholders leading to increase a company's value dramatically through investing free cash in profitable investments instead of serving individual interests of managers (Mandelker & Agrawal 1987). This mechanism of giving shares leads to repurchase shares in high level by shareholders (Liang & Fenn 2000). Operating performances in a certain company are increased significantly after including managers in ownership by limit level (Kaplan 1989). Expanding management-ownership leads to a negative relationship between with financial market acts on equity shares (Mazachek & Hull 2001). Management-ownership must be controlled before managers enable to control their whole companies not just as managers but as owners as well. That avoids external shareholders, which is a tool of monitoring managers' performance (Stulz 1988).

## **5. Conclusion**

Historically, Agency theory – separating between ownership and management has been created to protect shareholders' interest, but that has interrupted with individual interests of managers. Interests' conflicts have been developed to generate cost affecting on a company, which can threat shareholders' rights and benefits leading to bankruptcy and close their company. That creates the need of control these agency problems presented in different possibilities to encourage managers to move toward shareholders' interests and to avoid poor performance. These solutions are based on materialism through providing incentives, which are affectively in different levels based on the size of the company and managerial skills.

Recently, two active methods of controlling agency costs to meet financial crisis are managerial-ownership and external shareholders. These

two methods are adopted widely in such as countries suffer from economic crisis such as Cyprus, where banks allow external shareholders and manager to be part of ownership structure leading to transfer clients to be shareholders presenting an effective way to control top-management performance. The main issue of current financial crisis is that managers are using free cash of their company to serve their own interest instead of using it in profitable investments reducing the value of the company. All options of controlling agency cost must be applied with a good governance system, where ethics codes are active with well understanding of a new consumption called stakeholders.

### **References**

1. Ahmed Nacin; Corporate governance Around the World; ISSN10:0-415-42874-2 (hbk), Routledge Studies in Corporate Governance, 2008.
2. Bob Tricker; Corporate Governance: Principles, Policies and Practices; second edition ISSN 978-0-19-960796-9, Oxford, 2012.
3. H.Kent Baker, Ronald Anderson, Corporate Governance: A Synthesis of Theory, Research and Practice, Wiley, 2010.
4. Patrick McColgan, Agency theory and corporate governance: a review of the literature from UK perspective, University of Strathclyde, Glasgow, United Kingdom, 2001.

## **CHINA STRATEGIC MANAGEMENT ON ECONOMY DEVELOPMENT**

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### **Abstract**

*China is an important emerging country; has transferred from planned economy to market economy after strong and strict experience of communism, which is still reforming Chinese public companies. After 1979 China applied reform and open policy and become half communist and half capital society, since that time several decades of development China has achieved through making great successful on economy development, replied on strategic management. In this paper we will present briefly historical view on Chinese Strategic Management, which is considered as a significant realistic example for former communist countries around the world and certainly in Europe such countries as Romania.*

**Keywords:** China, Strategic Management, Knowhow

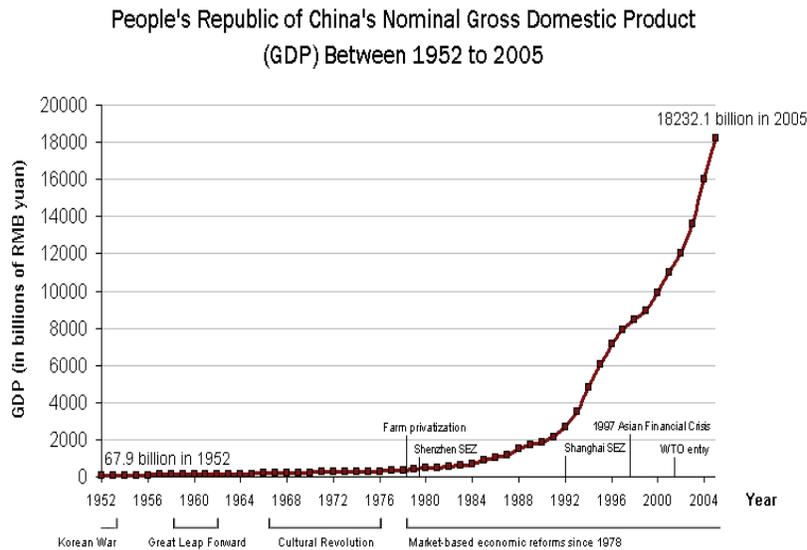
**JEL Codes:** F20, M10, O10

### **1. Introduction**

More than 30 years China's sustained high growth thanks to "elements of dividend, the market reform dividends and dividend" globalization of huge contribution. Along with the gradual attenuation of the three big bonuses, however, China relies mainly on the high-speed growth of low-cost advantage to return to normal gradually, the cycle of "big into a" development mode also seems to be coming to an end. In 2011, is the beginning of China's new "five-year plan", is also the fork in the road of

China's economic transformation, potential for China's economic development over the next five years, what advantage can dig the most important strategic issues of economic development. The change of the current global economic pattern let us review and adjust the road to future growth. Monetary easing from the external development environment, the global economy, the government, overdraw, structural imbalance, the dollar, commodity prices, inflation and deflation, a variety of factors such as capital flows, this will make the future more complicated situation to the global economy, especially in the major developed economies rely heavily on policy stimulus, and there is no effective follow-up to promote the structural adjustment of medium-term growth and long-term follow-up policy under the premise of the future of the global economy is still difficult to get rid of the low speed growth track, China still suffer from external impact and challenges. But in terms of the opportunities brought about by the crisis, the financial crisis in China, in addition to the adjustment of economic structure, development of engine, but also from the global economy and ecological reconstruction in the process of China's economy, is currently China's economic development strategy of thldl.org.cn outside-in three important adjustment and change the important opportunity.China's economy since 1952. In the past 30 years, China becomes the worlds's fasting-growing major economy, with average growth rates of 10%. Shows as chart 1 below:

**Chart 1: China GDP development change from 1952 to 2005**



All these developments affect importantly on corporate governance situation. The transferring from a planned economy to a market economy has reformed public firms structures. That gives SOE an important role of economic growth in China. That leads to separate ownership from controlling system with granting control right to executives. Pre-reform period between 1949-1983 public companies were dominating Chinese economy with absenting any shape of western corporate governance style.

Later between 1984 and 1993 the separation between state and firms started to take place in Chinese economy indicating the beginning of reforming Chinese firms. But these changes limited on efficiency of SEO enabling firms to make their decisions individually. The new model – management contract defines the rules of profit-sharing by negotiations between governmental presenters and management team increasing margin profit during 1980s. In August 1984, Shanghai Government issued the first provincial level regulation on securities and SEO followed the changing waves. As result, China Security Regulatory Commission was issuing main regulations of stock market. That means there were noteworthy steps for Chinese corporate governance. The modern shape of firms is formed between 1994 and 2005 allowing comprehensives regulations to highlight company's responsibilities. The modern corporate law has influenced governance system and economy as well. Even so, overwhelming favoritism is considered as the main challenge for Chinese companies. The mature level has started in 2006 through issuing regulations of balancing power between public and individual shareholders. Economic and governance growth has been continued in this period.

## **2. New management model – knowhow**

Managers of Chinese companies wake up from deep comfortable sleep of planned economy to face challenges of uncertainty as main feature of modern economies about how to obtain a maximum benefit of gained cope and autonomy with high competition. Chinese manager have searched desperately to new concepts of management meet market economy needs.

They are eager to learn fast the new model of management knowhow from West with paying strong attention on new approaches. But the heavy heritage of long strict experience of communism cannot be changed easily in short time. Strategic management and marketing are significant objectives for Chinese companies since managers do not have knowledge of marketing plus operating experience in high competitive atmosphere is absent (Chen; 1993). Plus a huge shortage of educated marketers and missing training programs make the situation worse (Zhou; 1991, Siu; 1994).

That set a need of enforcing managers to attend special training programs of knowhow management model to cover the huge gap created by

transition movement (Marketing Herald; 1994). This model is simplified by three points; philosophy and thinking of management, models and theories, and techniques and analyzing methods.

The first question must be asked; if knowhow western model can be transferred to China. There are some sensitive points must be considered in this transferability. Full adopting of western model can reflect negatively on Chinese economic growth. The idea of just transferring returns nothing on Chinese managers' experiences. China called modernization in the middle of 1970s limited at the beginning on importing advanced technology from industrial countries such as United States of America to include later management knowhow model. That creates a relaxed situation for Chinese politicians leading to get full approval on the attitude of western knowhow model. Moreover, this model creates great possibilities to attract foreign investments. At first stage, not all elements of western model are transferrable due to their compatibility and relevance to Chinese context assuring the differences between China and Western industrial countries;

Western markets are well prepared, developed and full mechanisms, China is missing all making post-industrial model is not suitable for Chinese companies. Thus, Chinese management need is "*appropriate*" knowhow: *useful, acceptable and affordable* (Terpstra; 1991). There are available resources of knowhow model for Chinese management are Western, Japanese, or overseas Chinese companies. Over Chinese companies has a significant role in adopting knowhow in China since important factors are common such as cultural roots, management style and language. But the challenge was that these overseas companies have a lack in all features of modern management (Hofstede; 1993, Redding, 1990), and their SEO act differently because ownership structure is structured on family businesses – weak at marketing making Chinese companies weak in international markets in high competition atmosphere. Adding to that the definitions of tangible and intangible assets is different between local and overseas companies (Hofstede; 1980, Yau; 1988). So the question here, Japanese management model is relevant to Chinese management or not. Japanese knowhow model is popular in China since 1980s due to some similarities of culture and economic impacts, which offer Chinese government a different and desirable way to modernization rather than western model through emphasizing economic growth and reducing the emphasis of democracy (Lewis & Sun; 1994). But that works for a while, there are some characteristics of SEO are same as names but the main features are absolutely different, which is making programmatically problems to Chinese management (Redding & Pugh; 1986). As result; Chinese management is forced to adopt different knowhow model to reformulate it

meeting the specialty of Chinese companies.

**China's economic development strategy should be implemented outside-in 3 big change**

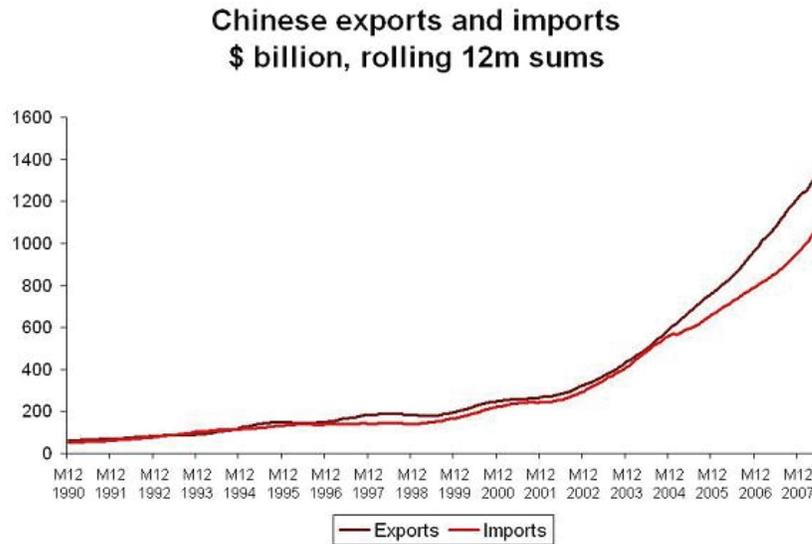
**1) Economic development strategic shift, from the epitaxial growth to the connotation of transformation of economic growth.**

From low cost era, means that China rely too much on increase of production factor inputs such as labor, capital growth mode has been unsustainable, China needs through the upgrade of industrial structure, accelerate human capital formation, technological progress and institutional reform spillover effect on economic growth, by Smith of extensive growth to the connotation of schumpeter type growth.

Worth pointing out here is, for the "lewis turning point" brought about by the "demographic dividend" attenuation problem, in addition to increase human capital investment in order to improve population quality, promote the industrial transfer, the structural optimization and industrial upgrading, also should pay attention to the shortage of migrant workers "defects" factors, improve the efficiency of labor resource allocation to prevent the occurrence of similar phenomenon such as the shortage of migrant workers and the impact of, and to upgrade the industrial structure adjustment and optimization, to provide human resources, promote the benign interaction of industry structure and employment structure.

**2) From the export-oriented economic development strategic to domestic consumption growth.**

The current global division of the world on supply and demand structure system is facing the huge imbalance of international payments system. Global imbalances in the system, "China, U.S. consumer savings", should be in the balanced development of their own internal implementation under the impetus of the economic globalization, is according to their comparative advantage, the production, consumption, investment, link in the global scope has carried on the reorganization. Now, as the main suppliers of the world economy, China is facing the external demand of the market atrophy; And depending on the consumer credit relieve the contradictions of economic developed countries lead to excessive consumption because of debts unsustainable model, China's economy will further external demand constraint, this trend will be reversed transmission development drive towards domestic demand, China now manufactured by China, the United States consumption becomes by the Chinese themselves instead of exports, replace the consumer! It is XiaoFeiQuan part of developed countries to developing countries. We can see the rapid growth on Chinese exports and imports from following chart 2:

**Chart 2: Chinese export and imports from 1990 to 2007**

### **3) Economic development strategic change, from mainly relying on the international capital to foster stronger local capital.**

It should be said that the international capital accumulation ability of formation, and the use of a large number of international capital in China, is China quickens the process of industrialization and market, the important reason for the rapid integration into the global economy. 30 years ago began opening to the outside world, from labor-intensive products processing trade, foreign capital introduction, resource development, compensation trade and so on. The way from the Chinese low development level of the realistic and the most effective strategic choice of economic development, it was also at that time, China's lack of capital, advanced technology and integration into the global economy's ability to stage characteristics, based on the low-level resources determines that China took to the road elements senior to attract foreign capital, but it also determines the distribution of interests in international capital flows, high-end developed countries can be achieved by capital output, most interests through direct investment and indirect investment.

#### **China needs to rely on strategic management to keep economic development**

Since reform and opening up, the essence of strategic management has become China's economic development. Strategic management requires leadership for formulating a series of policies, the economic situation for the sustained economic development continuously provide new direction and

motivation. Today, China's leadership will focus on implementing dominated by consumption, with emphasis on the rapid growth of service industry reform. Consumption and services, leading the growth model not only help the economy sustainable development and green development, but also will provide vast opportunities for all countries in the world.

For a long time, China is good at applying strategic thinking to the design of economic policy. Since the late 1970s reform and opening up, in recent years to determine a set of widely dominated by consumption of economic "rebalancing", the essence of the strategy has been the development of Chinese modern miracle.

China's leadership will focus on the implementation of a wide range of the reform of the dominated by consumption. These reforms include making service sector development blueprint, funding for social safety nets, content of reform of state-owned enterprises, etc.

Now, China's external environment has been unable to support the export-led growth model. In 2012, in Europe, the economic situation is not optimistic. China's main export market hit, the next few years still faces severe challenges. Therefore, is necessary more and more urgent for China to rely on domestic demand, especially private consumption.

Promote the economic reform of dominated by consumption. A balance of China's economy will provide great opportunities for China itself and the world. From the Chinese point of view, to a more by leading the growth pattern of consumption and services, create a new growth to slow slightly but a new era of more sustainable. Equal output of labour-intensive services created more jobs than in manufacturing and construction 35%, therefore, the future China's gross domestic product (GDP) growth even down to about 7%, will not endanger the whole country to absorb labor force employment and poverty reduction goals. Also, by the growth of the service industry leading consumes less resources, emit less carbon dioxide, will push China on a more "light-duty", more green, more clean and more sustainable growth and development track. The miracle of the development has been in the fourth decade. China has a better future. But only if China return to its strengths, namely with the attitude of a strategic managers to manage their own special economic, the miracle will continue. It also asked China to turn to "rebalancing" and reform agenda.

➤ **Long-term strategy-system integration and sustainable development**

The Chinese governments are aware that Chinese economic growth is not sustainable in long term. In earlier of 2007, Chinese premier pointed out "the biggest problem with China's economy is that the growth is unstable, unbalanced, uncoordinated and unsustainable". Consequently, many areas require rebalancing measures have been determined, including:

- I. Extending the net of social safety and increasing incomes.
- II. Eliminating disfigurements in relative prices – basically in exchange rate and input cost to obtain advantages and strength sustainability.
- III. Reducing governmental intervention in resources' allocation.
- IV. Doing more steps to liberalize Chinese financial system, which allows for more effective saving intermediation.

The twelfth Five Year Plan was approved in 2011, and it seems to have furnished the needed reforms with right direction, even though concreteness might be still missed in some areas. Chinese authorities should do more efforts into improvements of services sector and consumption rate of investing and manufacturing. In table no.1 it is explained several rebalancing areas:

**Table no. 1: Measures to rebalance China's economy**

	In process	Reversed	To be done
<i>Strengthen private domestic demand boost private consumption</i>			
Household and rural incomes			
<b>Implementation of labour law and increasing minimum wages</b>	X		
<b>Labour mobility “hokou”</b>			X
<b>Social housing subsidies</b>	X		
<b>Agricultural subsidies</b>	X		
<b>Income tax reform</b>			X
<b>Consumption subsidies (cars and durable goods)</b>	X		
<b>Reduce precautionary saving via enhanced welfare</b>		X	
<b>Rural and urban pensions reform</b>	X		
<b>Education</b>	X		
<b>Health care (subsidies and infrastructure)</b>	X		
<b>Reduction of inequality</b>			X
<i>Boost private investment</i>			
<b>Crowding out from public investment stimuli 2008-2010</b>		X	
<b>Financial sector reform</b>			X
Export-led model discontinuation/private sector promotion			
<b>Exchange rate reform</b>	X		
<b>Export tax rebate system</b>		X (07/08-06/10)	
<b>Input costs</b>			X
<b>Manufacturing sector's domestic value added technological upgrading</b>		X	
<b>Service sector development</b>			X
<b>Inland regions development</b>	x		

Created by: E. Dorruci & G. Pula & D. Santabarbara; 2013

### **Conclusion**

China is forced to adopt new management model to sustain its economic growth, which is affected dramatically by external impacts of economic environment such as global economy changes, Chinese government plans, overdraw, structural imbalance, the dollar, commodity prices and inflation and deflation. The new model is based on Western culture specially in developed industrial countries and Japan allowing China to develop later its own model matching with its needs and specialty, Knowhow model helps China to content all negative impacts of long and strict experience of communism without real changing in the main structure of the country. That affect naturally on corporate governance, which is enforced by governmental regulations. Thus, that is one reason behind successful mixing of communism and capitalism; planned market and economy market with taking in consideration Chinese economic is based on exports; external markets have their own touches in Chinese growth. To sustain economic growth in China in this tough period of world economy China must care on labor market; low cost is a strategic management, and it can be developed when new technologies and educated labors are hired.

Also China must turn back to domestic market since internal debts model is not sustainable, replacing consumers can save Chinese economy in long term with needs government's support to strengthen local capital reflecting an increase purchasing power regionally. Chinese government has started a rebalancing program in its economy to sustain its growth in long term through several step explained above in table no.1

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**References**

1. Y.Fan; 1998, The Transfer of Western Management to China: Context, Content and Constraints available at: <http://v-scheiner.brunel.ac.uk/bitstream/2438/1305/3/TRANSFER.pdf>
2. Y .He; 2011, Corporate Governance in China; International Business and Logistics available at: [http://theseus.fi/bitstream/handle/10024/38604/HE\\_YAN.pdf?sequence=1](http://theseus.fi/bitstream/handle/10024/38604/HE_YAN.pdf?sequence=1)
3. E. Dorruci & G. Pula & D. Santabarbara; 2013; China's Economic Growth and Rebalancing; European Central Banks, occasional paper series No:142, February 2013 available at: <http://www.ecb.europa.eu/pub/pdf/scpops/ecbocp142.pdf>
4. U.S.–China Strategic and Economic Dialogue: America Must Lead by Example,By Derek Scissors, Ph.D.at <http://www.heritage.org/research/reports/2010/05/us-china-strategic-and-economic-dialogue-america-must-lead-by-example>
5. China is a good place to know Posted by Johnny Zhang ,at <http://yingjohnnyzhang.blogspot.ro/2010/12/economy-of-china.html>
6. What export slowdown? by Brad Setser August 11, 2008 at <http://blogs.cfr.org/setser/2008/08/11/what-export-slowdown/>
7. The Chinese Economic Reform by Juan Antonio Fernández,at <http://www.ceibs.edu/ase/Documents/reform.htm>
8. Surprise Jump in China Exports By RICHARD SILK , Nov. 7, 2013<http://online.wsj.com/news/articles/SB10001424052702303309504579184672844996500>

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