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Prof. Eng. Ioan-Lucian BOLUNDUȚ Ph.D.
e-mail: ibol@upet.ro

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Editorial office address: University of Petroşani, 20 University Street, Petroşani, 332006, Romania, Phone: (40)254/542.994, 542.580, 542.581, 543.382, Fax: (40)254/543.491, 546.238, Telex: 72524 univp, E-mail: imola_driga@yahoo.com.

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ROMANIA-MOLDOVA. ECONOMIC INTERCOURSE IN THE REGIONAL CONTEXT

NICOLAE BADAN *

ABSTRACT: *The closed economic system, in which we were frozen more than 40 years, had, as an imminent effect, breaking of the old economic connections with Romania, who's constitutive part, Moldova, among other Balcanic countries, was until 1940. Evidently, the rehabilitation of these connections is very difficult, but this is the only way, for our country, to reach for Europe and to rehabilitate economy.*

KEY WORDS: *rehabilitated economy, european community, regional context*

The economic slump, that lasts already more than 15 years, has, without any doubt, among other reasons, the one that Republic of Moldova continues to keep just old economic intercourse with ex-USSR countries. Because these countries are confronting the same problems as we do, they aren't able to offer to much to us and we don't have enough potential to develop our own economy. Unfortunate the power of habit makes Russia the most important economic partner for our country, without having even a common boundary with it.

In fact, our tendency, confirmed many times by president Voronin himself, to climb European integration, requires creation of new economic connections with bordered countries from Europe. European Community is, in the first place, an entity with economic nature and not one with political nature, the way a part of Chishinau elite tends to think. In our country, despite affirmations and intentions, continues promotion of an unilateral economic politics, that could head us(and already did) to an economic and political dependence on Russia.

The closed economic system, in which we were frozen more than 40 years, had, as an imminent effect, breaking of the old economic connections with Romania, who's constitutive part, Moldova, among other Balcanic countries, was until 1940. Evidently, the rehabilitation of these connections is very difficult, but this is the only way, for our country, to reach for Europe and to rehabilitate economy.

* *Economy master, State University of Moldova, Republic of Moldavia*

Looks like it was already realized the fact that CIS was an organization that was born to fail, but in Foreign Political Conception of Republic of Moldova, keeping and developing connections with this Community is considered a top priority and above connections with Western States and Romania.

One of the psychological factors, that is foiling commercial intercourse with Romania, which is the closest country to us from geographical and cultural point of view, is the fact that quality level of moldavian products doesn't always suit requirements advanced by European Union. Moldova's big tragedy, in this case, is the fact that we rather sell our low quality production at a miserable price to CIS countries than to sell it at a decent price to Romania and Western Countries. Yet, first steps to regional economic integration and making of new economic connections with Romania, were made. We're talking about several agreements between Romanian and Moldavian Governments concerning economic collaboration and commercial exchange, and it was created even an Inter-government Committee in economic, commercial and scientific matters.

Economic intercourse with Romania have suffered in 1999, when mutual delivery level has been diminished because of the economic slump that our country was passing through, slump caused by Russian Federation, thing that demonstrates exaggerated Moldavian economic dependence on Russia. Yet in the last years, commercial exchange volume continues to grow and nothing could please us more.

Next step should take our country reality into account. According to official Romanian Embassy site, the biggest part of the export production to Romania, consists of food products. In fact, the biggest part of these products enters in Romania by smuggling, that's why exists a big request of such products. Studying this request and creating favorable conditions to export these products legal would be appropriate. Our Government, erroneously, thinks that by holding up custom dues, they will manage to gather more money into budget. It's true that 80% of budget gatherings, excuses this way of thinking, but this way the state kills small and middle business, fact that negatively reflects on the future of our country. Maybe it would be better to give up this politics, at least in commerce with border countries. This could encourage the growth of our economy.

In conclusion, in my opinion, the future of our intercourse with Romania can be just one - a continuous approaching of our countries and creation, as much as possible, of a very developed bilateral economic intercourse network.

ABOUT THE ROMANIAN TOURISM POTENTIAL: THE NATURAL STRENGTHS OF THE MAIN TOURIST DESTINATIONS (PART I)

VIRGINIA BĂLEANU, ANDREEA IONICĂ, SABINA IRIMIE [*]

ABSTRACT: *The tourism industry plays a more and more important role in the world economy, and is generally acknowledged to represent a significant source of economic growth for the European Union (EU), as well as for our country. In order to highlight the Romanian tourism potential and the necessity to turn this potential into actual sources of income for the national economy this paper presents a few aspects of the evolution's tourism in Europe and Romania, also some particularities of the main Romanian tourist destinations. The paper aims to reveal those "natural strengths" that provide the basis for both diversification and differentiation the Romanian tourism offer so as to satisfy the various requirements of the tourists and to compete successfully in the different segments of the international tourism market.*

KEY WORDS: *inbound tourism; outbound tourism; domestic tourism; tourists accommodation capacity; tourist destination*

1. INTRODUCTION

Romania can be situated between the most attractive tourist destination in Europe, due to the variety of its tourism potential, including: accessible relief forms combined harmoniously; very diversified flora and fauna; favorable climate for practicing tourism during all the year; significant base of natural resources of cure and treatment; inestimable cultural – historical and architectural patrimony. These characteristics of the national potential provide the basis for elaborating and applying both diversification and differentiation strategies related to the offer and the possibilities to penetrate almost all the segments of the tourism market.

[*] *Lecturer at the University of Petroşani, Romania*
Lecturer, Ph.D. at the University of Petroşani, Romania
Assoc.Prof.,Ph.D. at the University of Petroşani, Romania

The most important tourism areas with a great attraction of the natural landscape are the seaside of Black Sea, the Danube Delta (south-east), the Carpathian Mountains (covering almost 35% of the country area) and the hills and planes areas that have rich balneal resources. Also, on whole territory of Romania, there can be found tourism areas with very cultural – historical value as Moldova, Bucovina (north-east), Transylvania (center), Banat, Crishana (west and north-west), Muntenia (south) and Oltenia (south-west). In fact, this delimitation reflects the traditional vision over the tourism areas in Romania.

During the last period, the necessity to be aligned to the EU norms and ruled, including in the field of statistics regarding the Romanian tourism led to an alternative that delimits six main tourist destinations as: seaside, Danube Delta, mountain resorts, spas, Bucharest and county residence towns, and other localities and tourism routes. It can be noticed that, in principle, it appears also two major categories of destinations: one with dominant natural potential (the first four, same with the traditional tourism areas), respective one with dominant cultural-historical potential (the last two, through which it is regrouped in a different way the localities included traditional within the cultural-historical tourism areas).

After a succinct description of the general status of the international and domestic tourism in Europe and Romania the paper attempts to focus attention on the four above-mentioned tourist destinations with dominant natural potential. So, firstly it is presented the comparative evolution of the main indices used in the tourism statistics related to inbound tourism, outbound tourism and domestic tourism. Then, it is pointed out the structure of existing tourists accommodation capacity in Romania, also the usual indices for its utilization by the six main tourist destinations, and finally are exposed some particularities of those destinations that reveal the Romanian tourism' natural strengths.

2. THE GENERAL STATUS OF THE INTERNATIONAL AND DOMESTIC TOURISM IN EUROPE AND ROMANIA

The dynamics of the two major components of the international tourism (inbound and outbound tourism, expressed by the arrivals of foreign visitors and departures of resident visitors abroad) shows some different evolutions for Romania comparative with Europe (see table 1).

So, if the inbound and outbound tourism in Europe have a general increasingly trend before 2000 and after 2001, the arrivals of foreign visitors in Romania continuously dropped during 1990-2002 period, and then significantly increased in 2003 and 2004. As regards the departures of the Romanian visitors abroad, there is a more fluctuant evolution: a significant dropping between 1990 and 1995, followed by a rising in 2000, stagnation in 2001, a decreasing in 2002, then a consecutive increasing in 2003 and 2004.

On the other hand, it is important to notice here one specific aspect for Romania: one year before the considered period, in 1989, were recording only 0,9

millions Romanian visitors abroad and 4,9 millions foreign visitors, so that the numbers of the departures and arrivals in 1990 may be considered a record performance. But it must remember that in 1989 Romania had been isolating within the former communist bloc for many years. Thus, both for residents and nonresidents, there was a true travel motivation at that time and also the possibility to satisfy this motivation by the opening of the frontiers.

Table 1. International tourism's evolution in Europe and Romania (inbound&outbound tourism)

- Millions persons -

	1990	**1995**	**2000**	**2001**	**2002**	**2003**	**2004**
Europe*: •arrivals (inbound)	264.8	309.3	384.1	383.8	394.0	396.6	416.4
•departures (outbound)	252.5	307.2	389.5	390.4	401.6	406.7	431.3
Romania**:•arrivals (inbound)	6.5	5.4	5.3	4.9	4.8	5.6	6.6
•departures (outbound)	11.3	5.7	6.4	6.4	5.8	6.5	7.0

*Source: WTO, Tourism Highlights, 2005 Edition

**Source: National Institute of Statistics, Yearbooks, International Romania's Tourism in 2004

An other relevant aspect of the general tourism status deals with the domestic vs. inbound tourism observation, which mainly consists in comparing the residents and nonresidents' overnights in the establishments of tourists reception with functions of tourists accommodation. Table 2 shows this sort of comparative data for the domestic and inbound tourism in E.U. and Romania.

Table 2. Domestic vs. inbound tourism in EU and Romania

- Millions overnights -

	1995	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
Domestic tourism (d):									
- E.U. (25)*	608.0	642.5	631.8	640.1	777.4	767.5	752.1	738.6	713.7
- Romania **	21.7	19.6	17.1	16.1	15.1	15.5	15.7	14.7	15.2
Inbound tourism (i):									
- E.U. (25)*	523.6	530.1	553.1	570.9	623.0	640.4	597.9	578.1	516.5
- Romania **	2.4	2.3	2.6	2.2	2.0	2.1	2.4	2.5	2.8
Ratio (d/i):									
- E.U. (25)	1.2	1.2	1.1	1.1	1.2	1.2	1.3	1.3	1.4
- Romania	9.0	8.5	6.6	7.3	7.6	7.4	6.5	5.9	5.4

* Source: Eurostat yearbook 2004 (www.europa.eu.int/comm/eurostat)

** Source: National Institute of Statistics, Yearbooks, Overnights in the establishments of tourist reception with functions of tourist accommodation

This comparison allow us to find almost oppositional tendencies between E.U and Romania: if overnights related to domestic tourism in E.U. fluctuate before 1999, then continuously decrease, in Romania appears exactly the reverse situation. Also, the overnights related to inbound tourism in Romania fluctuate between 1995 and 1999, but continuously increase after 1999, while they continuously increase before 2000, and decrease after this moment, in E.U. Obviously, the calculated ratios

(domestic/inbound tourism in E.U and in Romania), reflect a similar oppositional tendency, but also an inferior position of Romania as inbound tourist destination: if each annual ratio shows that in E.U. are under 2 resident visitors to one foreign visitor, in Romania the minimum annual ratio shows over 5 resident visitors to one foreign visitor.

Because the above discussed issues referring to Romanian Tourism finally appear as a resultant of the tourists accommodation activities realized within the various establishments of tourists reception, the next section presents some of the aspects related to the tourists accommodation capacity in Romania.

3. THE TOURISTS ACCOMMODATION CAPACITY IN ROMANIA

In order to assess the tourists accommodation capacity in Romania, we present its evolution since 1990 (year of reference 1989) and/or recent situation of several indices of this capacity.

So, the evolutions of the volume indices related to the establishments of tourists reception with functions of tourists accommodation, the existing tourist accommodation capacity and the tourists accommodation capacity in function are represented in figure 1. It may remark a relatively different evolution between the number of establishments, on the one hand, and the number of bed places (existing tourists accommodation capacity) and the number of bed places-days (tourists accommodation capacity in function), on the other hand.

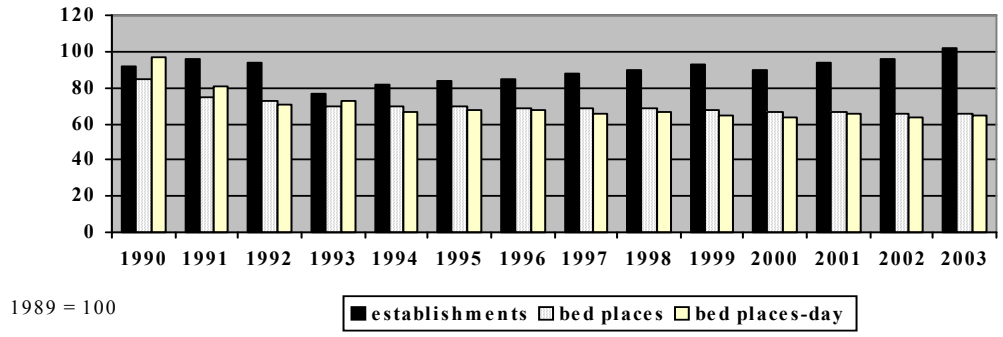

Figure 1. The evolution of the tourists accommodation capacity in Romania since 1990

That is, the number of establishments of tourists reception with functions of tourists accommodation fluctuates under the 1989' level during the considered period, but oversteps this level in the last year (2003). In return, the other two indices tend to slowly go down alongside between 1990 and 1999 (under their 1989' levels) and reach a plateau at about 60% of the 1989' levels during the last interval of the period (2000-2003).

There is a probable relation between the mentioned rising of the number of establishments (from 3490 in 1989 to 3569 in 2003), and the privatization process of

the Romanian tourist sector, which have intensified just in the last few years. Thus, in the total of 3900 establishments of tourist reception with functions of tourist accommodation existing in 2004, it was recording 3170 with private majority ownership (81.3%) and 730 (18.7%) with state majority ownership (see table 3).

Table 3. Tourists accommodation capacity, by type of ownership and type of establishments

Establishments	Total, of wich:		State majority		Private majority	
	Number	%	Number	%	Number	%
Total, of which:	3900	100	730	18.7	3170	81.3
Hotels	928	23.8	209	5.3	719	18.4
Rural tourist boarding houses*	892	22.9	6	0.2	886	22.7
Tourist villas	691	17.7	208	5.3	483	12.4
Urban tourist boarding houses	461	11.8	8	0.2	453	11.6
Bungalows	279	7.2	66	1.7	213	5.5
School camps	157	4.0	151	3.9	6	0.2
Motels	149	3.8	18	0.5	131	3.3
Tourist chalets	132	3.4	25	0.6	107	2.7
Campings	72	1.8	12	0.3	60	1.5
Houselet-type units	53	1.4	8	0.2	45	1.2
Tourist halting places	25	0.6	4	0.1	21	0.5
Hostels	21	0.5	3	0.1	18	0.5
Tourist inns	15	0.4	5	0.1	10	0.3
Ship accommodation spaces	13	0.3	4	0.1	9	0.2
Hotels for youth	10	0.3	3	0.1	7	0.2
Holiday villages	2	0.1	-	-	2	0.1

* Including the agro-tourist boarding houses

Distribution by type of establishments and type of ownership indicates that in only one of the 16 types of establishments (namely school camps) the state majority ownership is clearly dominant (96.2%), while another is entire with private majority ownership (the two holiday villages). All the others are with private majority ownership, in percents varying between a minimum of 66.7% (in the case of the tourist inns) and a maximum of 99.3% (in the case of rural tourist boarding houses).

The tourists accommodation activity's of any establishment, either private or state majority ownership, is measured by the net use of bed places indices (NUBPI) of the tourists accommodation capacity in function. In Romania, the average NUBPI decreased from 57.8% in 1990 to 34.6% in 2003, so that since 1997 the NUBPI values are under the international average values, which vary between 40% and 60%. However, there is some different situation of the NUBPI values' distribution by main Romanian tourist destinations, which we discuss together with theirs particularities in the following.

The distribution of the tourists' accommodation capacity and inbound vs. domestic tourism' indices (including NUBPI) by the six main tourist destinations in 2004 are presented in table 4.

Table 4. Distribution of tourists accommodation capacity and inbound vs. domestic tourism' indices by the six main tourist destinations in 2004

	Seaside	Spas	M.R.*	D.D.*	B&RT*	O.L.*
Number of establishments [% of total]	21.8	9.3	21.9	3.1	16.5	27.4
Existing tourists accommodation capacity (bed places) [% of total]	42.4	14.8	11.8	1.2	16.9	12.9
Tourists accommodation capacity (bed places-days) [% of total]	19.2	21.2	16.9	0.8	27.7	14.2
NUBPI [%]	41.8	48.6	22.6	28.3	32.9	19.5
Foreign tourists arrivals [% of total]	6.1	3.3	8.5	1.2	71.3	9.5
Foreign tourists overnights [% of total]	17.8	5.5	8.1	0.9	60.1	7.6
Romanian tourists arrivals [% of total]	15.7	14.9	16.8	1.3	38.7	12.6
Romanian tourists overnights [% of total]	24.7	35.4	11.8	0.7	19.2	8.2

*M.R. – Mountain resorts; D.D. – Danube Delta; B&RT – Bucharest and county residence towns; O.L. – Other localities and tourism routes

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ABOUT THE ROMANIAN TOURISM POTENTIAL: THE NATURAL STRENGTHS OF THE MAIN TOURIST DESTINATIONS (PART II)

VIRGINIA BĂLEANU, ANDREEA IONICĂ, SABINA IRIMIE [*]

ABSTRACT: *The tourism industry plays a more and more important role in the world economy, and is generally acknowledged to represent a significant source of economic growth for the European Union (EU), as well as for our country. In order to highlight the Romanian tourism potential and the necessity to turn this potential into actual sources of income for the national economy this paper presents a few aspects of the evolution's tourism in Europe and Romania, also some particularities of the main Romanian tourist destinations.*

The paper aims to reveal those "natural strengths" that provide the basis for both diversification and differentiation the Romanian tourism offer so as to satisfy the various requirements of the tourists and to compete successfully in the different segments of the international tourism market.

KEY WORDS: *inbound tourism; outbound tourism; domestic tourism; tourists accommodation capacity; tourist destination*

1. THE PARTICULARITIES: NATURAL STRENGTHS OF THE MAIN ROMANIAN TOURIST DESTINATIONS

The foreign tourists arrivals and overnights, also the Romanian tourists arrivals, by tourist destinations in 2004 reveal that the first destination is Bucharest and county residence towns, but in regard to the resident tourists overnights the spas and the seaside surpass this destination. So, the situation seems to suggest a predominant motivation for urban tourism and business travels, and may be explained by the actual concentration of the developing business organizations around these towns.

[*] *Lecturer at the University of Petroşani, Romania*
Lecturer, Ph.D. at the University of Petroşani, Romania
Assoc.Prof.,Ph.D. at the University of Petroşani, Romania

However, the different distribution of the Romanian tourists overnights deals with holiday motivation and their typical preferences for the two traditional destinations just because the particularities that we attempt to point-out in the next.

Among the general factors of influence of the tourism on the Romanian seaside can be mentioned:

- The complementarities with economical activities from other industries as the waterside ones (Constanta and Mangalia), industrial ones (Navodari), commercial ones etc.;
- The fragility of surrounding environment in comparison with other tourist areas, due mainly to erosion of the soil (for example an average retraction of the cliffs is estimated at almost a half of meter every year, this process being intermittent);
- The complementarities with balneal tourism activities, as a consequence of the presence of some natural factors for maintaining of the health, treatment and prevention of different affection (from the 11 resorts on the Romanian seaside, 5 are for the restoration and balneal treatment);
- The sezonality due to the strict dependence of climatic conditions.

The particularities of the Romanian seaside that can make a naturally differentiation of the offer on this tourism market segment, are the sea water, the beach, the sea bio-climate, the balneal resources and the specific of the flora and fauna.

The sea water, with its chemical composition, its reduced salinity comparative to the one of other seas, the thermal contrast with the air, the wave action, the presence of the aerosols resulted from braking the water waves constitute an important factor of cure in specific forms, as sea baths and wave-therapy.

Another important feature constitute the lack of some dangerous insects and animals into the sea water (in Black Sea it exists a species of shark called “sea dog”, which is harmless for the people and it never come near the beach, but which is included as a delicates into the restaurants menus. So, the seawater creates a good frame for being practices the water sports and scuba diving.

The beach is different from the offer of other countries in a series of aspects as: the orientation to the east and south-east that facilitates a long exposure to the sun (almost 10 hours every day); the climbing down into the sea with a line slope; a relative great width (of 400-500 m from Mamaia to 50-200 m in rest); the sand quality (type, purity, granulation, drying grade).

As a result, there are special conditions for a heliotherapy; from this point of view the Romanian beach has not many rivals in Europe (the south costs of Italy and the Bulgarian ones). The sea bio-climate is characterized by the air purity and modest temperatures, by thermal stability and a reduced regime of rain (as average 140 sunny days in a year), which are benefit over the human body.

Also, the lack of tide makes that the swimming to be practiced in safety conditions better than in other places of the world and that the beaches to be used in their whole capacity.

The *balneal resources* as the mineral waters and therapeutic mud assure the elements necessary for a complex treatment (prophylactic, therapeutic and recovering treatment). Finally, the attraction of the tourism offer of the Romanian seaside is increased by the neighborhoods of some tourists interest as the natural reservations (eg. Dune reservations from Agigea, Hagieni Forest, the cave from Limanu), the historical places and archeological sites (the ruins of the most older towns in Romania: Histria, Callatis, Tomis.

The Dobrogea places in which is framed this shore of Black Sea offer also other motivations adequate to the segment of thematic tourism (plants and animals specific to the region; rupestral caves and pictures; tasting the wines from the Murfatlar wine yard; a unique combination of cultural-ethnical elements, folkloric and traditional-food ones in which are combined the Romanian traditions with the Turkey, Greek and Tatar ones that had been come on these places).

As a conclusion, even only these few particularities of the Romanian seaside of the Black Sea prove its special potential for tourism, supporting the development of attractive offers and also differentiate ones, on many segment of tourism with dynamical evolutions on the international market.

The spas destination rejoins over 200 places of the whole territory of Romania, with natural resources of a great variety and therapeutic value (in present, it is known the possibility to use them in treating 14 types of affections). Among the Romanian balneal resorts there are known from the Romans time (e.g.: Herculane, Geoagiu-Bai, Ocna Sibiului, Calimanesti-Caciulata).

Starting with the eighteenth century, the capitalizing of this type of resources was extended continuously, being developed and promoted on the international level the new resorts as Sovata, Vatra Dornei, Covasna, Eforie Nord, Neptun etc. The special potential and tradition of the balneal resorts known due to their results of treating successfully different affection of human body situate Romania on the first places of the top on this segment of European tourism market.

The main features of the Romanian balneal potential, respectively *the particularities* of a great interest for tourism are as follows:

- *The presence of all types of resources from the category of mineral therapeutic substances* (mineral waters which are a thermal and thermo-mineral, volcanic lakes, salty climate and therapeutic gases). For example the Romanian mineral waters have a physical-chemical and thermal structure of a great complexity (it means that there are represented all categories of waters known all over the worlds) and there are some important reserves, concentrated especially into the mountain regions, but also into the under-Carpathians and on the fields;

- *The existence of some natural substances of this type, with character of rarities and/or uniqueness.* It is the case of the therapeutic lakes that are located in few places in Europe and whose value became known starting with the nineteenth century, after using them for the first time in Romania, at Balta Alba.

Also the features of our country are the gases of solfatara considered to be a rarity of the nature, unique on the European continent. Practically, there are few resorts in the worlds same to the Romanian ones in which the natural substances of type mofette associated with mineral waters have the qualities necessary for the treatment of a large palette of affections especially the cardio-vascular ones. The features of rarity/ uniqueness distinguish also the *therapeutic Salinas* that, through their specific climate, have a great efficacy in treating some respiratory affections and they are also pretty rare in Europe;

- *The high curative value and significant geological reserves of the Romanian balneal resources,* both by types and by categories of substances, allow to exploit them efficiently. That is their intensive use, on the one hand through all the forms specific to the balneal cures, and on the other hand through the multitude of affections that are treatable with same type of substance.

The special potential and tradition of the balneal resorts known due to their results of treating successfully different affection of human body, situate Romania on the first places of the top on this segment of European tourism market.

These above-mentioned particularities of the seaside and spas may explain also the significant values of the indices of tourists accommodation capacity at this destinations' level (represented in table 4). In particular, NUBPI exceed the national average in 2004 entering into the interval of the international average values of reference (48,6% in the case of spas and 41,8% in the case of seaside). But, even if the Danube Delta and mountain resorts as tourist destinations have lowers NUBPI (28.3% and 22.6%) they have a similar valuable potential that must be highlight.

So, the *Danube Delta* is the second delta in Europe (in size), having been composed of a dense network of channels and lakes, alternating with the beach in a special way. From its way of composing and also from the variety and originality of landscape and fauna, this destination conserves a special tourism potential, considered to be unique in Europe. This argues for the present statute of the Danube Delta, internationally recognized as a *reservation of the biosphere*, with 18 areas extended on a surface of almost 500 kmsq that represents an area strictly protected, opened only for authorized research.

Practically, certain features of the delta area are considered real records ones being nationally, and the others European (INCDT, 2005): it is the youngest unit of relief in Romania; it includes:

•the most compact bushy area (almost 240.000 ha);

•the biggest sand dunes (almost 20.000 ha)

•the bigger lake in the country (Razim – 415 kmsq);

•the biggest beach of Romanian littoral of Black Sea (almost 30 km length and 1-2 km width);

•the biggest river-sea grind (Letea – 17.000 ha);

•the most eastern town in Romania (Sulina), situated at •the smallest altitude (3,5 m);

•the richest and more diverse ornithological fauna in Europe (over 300 species);

• the biggest reservation of wet fields in Europe (2.681 kmsq).

Evidently, these features influence generally the tourism in this area, characterized particularly by the elements of great attraction that offer different motivations for same many categories of tourists. So, among the *particularities* that give special attraction to the Danube Delta can be mentioned as follows:

- *The originality and momentousness of the landscape* (aquatic surfaces combined with bushes, marsh areas and marine and river grinds with oak forests and sallow and aspen parks, the sea beach and sand dunes with arid and exotic landscapes).

Also spectaculars there are the *water mirrors* (especially the Danube arms, the channels, small and big lakes), which constitute some places for trips, recreation and sportive fishing and also it constitute the main ways of touristy access and circulation in the area;

- *The variety, wealth and specific of the flora and fauna* (over 1,150 species of plants, over 300 species of birds, different as geographic origin and of scientific, esthetic and hunting interest, depending on the case).

There are special the great reed bush areas and flouting islands, also the sallow forests, black aspens and thermo-phyla oaks with dense netting of lianas, wild grapes and clematis, which give an exotic charm of tropical and luxuriant forest for the landscape on the grind of Letea and Caraorman;

- *The specific of beaches* answers to some different touristy motivations (visiting the delta from Salina to Saint Gheorghe, heliotherapy cures, complex programs sea – delta, great activity for the tourists);

- *The climate,* benefit to practice the tourism from spring to autumn (each season offers original attraction, but the most beautiful season seams to be the autumn, the most favorite season of the hunters and fishermen and also of the landscapes lovers);

- *The cultural-historical specific* (given by many historical vestiges, original elements of ethnography, folklore and even by life style of the delta inhabitants, etc.)

In these conditions, the potential of this incredible "waters land" transforms the Danube delta in one of the most valuable and complex Romanian tourist destinations, sustaining the development and promotion of offers that can enter into different segments of international tourism market.

Finally, *the mountain resort* is represented in Romania by the Carpathians (it was talked about them as about a basic component of the relief, through its length, position, configuration, structure and altitude), these mountains being located as a coronet around a plate limited by many depressions well individualized and covered.

In comparison with other mountain chain, the Carpathians are young, of average height (peaks over 2,000 m among which 10 have over 2,500 m) and a reduced height with round peaks not more 30 km length.

The transversal dales that fragment them and also the 300 intra-mountain depression, crossings and planes facility connection with the extra-Carpathians areas. Even if they have important competitors, especially through their height and snow layer (as the Alps, Pyrenees and Tatra Mountains), the Carpathians are imposed as a tourist destination important for Romania, with some *particularities* that give them a distinct place into the hierarchy of European mountain systems, respectively:

- *Diversity of the landscape* associated to the geological structures, types of relief, and also to the alternance of mountain units with the under-mountain and depression ones (alpine and glacial landscapes into the Fagaras, Retezat, Rodna, Parang mountains; karstic landscapes into the area of the Aninei, Cernei, Bihor-Vlădeasa, Mehedinți mountains, calcareous abrupt in Piatra Craiului, the keys and defiles of Bicaz, Oltet, Olt, Jiu, Danube rivers);
- *Accessibility* due to their central position, configuration, small altitude and the fact that they are crossed by numerous valleys and river courses, which favors the easy access to the peak areas, even for the tourists who are not specially trained;
- *The rich cave potential* (the over 10,000 caves from the Carpathians situate Romania on the third place in Europe; some of them have an exceptional esthetic and/or scientific value, others have even the state of nature monuments or reservations, as for example are Topolnita, Ponor Cities, Iceberg from Scarisoara, Bears cave);
- *The complexity* is given by the variety of the relief forms, associated with the presence of a rich hydrographical network (numerous rivers, hundreds of natural glacier, tectonic or volcanic lakes and tens of accumulated lakes) and of an exceptional hunting base (the number of big carnivores is in the Carpathians of 10-20 times bigger than in the Alps, the Romanian mountains containing the greater part of wolves and brown bears of Europe).

As a result, in this area it can be found some of the most beautiful national parks and natural reservations in Europe (these reservations protect an area of 75,000 ha). Some of them, as the one from Retezat Mountain, have a statute of national parks, including some species of very rare flora and fauna.

The general image over the potential of this tourist destination can be completed by other elements of attraction as the important fish base, the opportunities of practicing the winter sports and the cultural-historical, ethnographic and folkloric specific of the human places.

All these support the promotion of vary offers, especially related to the segments of sportive, thematic and adventure tourism, also to the alpinism, trips, sky, hunting and fishing, active holydays into mountain resorts and agro-tourist boarding houses, rafting, gliding, cave studying, scientific research etc.

2. CONCLUSIONS

It is very important that by this sort of particularities, the Romanian tourism offer can be adjusted to the international tourism market demand's features for each of the ten segments considered by WTO as being the most important and/or dynamic during the last period:

- seaside,
- sports,
- adventure,
- cultural,
- urban,
- rural,
- cruises,
- theme,
- MICE (Meetings, Incentives, Conferences and Exhibition) and
- ecotourism' segments (quoted by National Institute for Tourism Research and Development, 2005: I).

But nor these natural strengths themselves, nor EU integration are not a warranty to the fact that the foreign tourists will be more attracted by the Romanian tourist destinations.

This is rather a chance that has to be capitalized. In other words, it has to be solved the present issues of the Romanian tourism through:

- Improvement of the tourist product/services quality as well as the regional infrastructure conditions;
- Construction of the image identity for the tourist destinations and their aggressive promotion on the international market;
- Diversification of the market segments that are aimed to be reached, including neighboring region (the East and Central European Country, not only the EU members).

This will require substantial investment efforts not only in "hard" components of the tourism industry (related to infrastructure) but also in the "soft" ones (such as personnel training, management and marketing), so as to attain the quality level, which is needed for successfully competing on international market.

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INCREASING OF SYSTEM'S ENTROPY ON THE EXAMPLE OF COAL MINE OPERATIONS RESEARCH

ARTEM BARDAS [*]

ABSTRACT: *The control over producing of goods and supplying of services is a difficult task even in the stable economical situation. The information about intrinsic conditions of a system, her environment and directed tasks realization is necessary for assessment of the situation and for making a correct managerial decision.*

KEY WORDS: *system's entropy, enterprise, coal mine, managerial decision*

The control over producing of goods and supplying of services is a difficult task even in the stable economical situation. The information about intrinsic conditions of a system, her environment and directed tasks realization is necessary for assessment of the situation and for making a correct managerial decision. Namely, this circumstance is a reason for importance of scientific researches, which are directed to development of economic methods of managerial control over coal mines operations on the basement of revealing the regularities and functional connections between main indicators of coal mine outcomes.

As an element of modeling process a modern enterprise is a complex structural model with numerous external and internal connections.

The level of managerial decision's efficiency and the rationality of enterprise's resources utilization depend on transparency of the internal connections' mechanism of main indexes of enterprise's outcome. The economical mechanism's transparency and reliability are defined by the quality of the gained information and the period of time, which is essential for obtaining of the information.

Problems of the estimation of the analyzed situation's expected development play its significant role in a process of making a managerial decision, because the process is always connected with manager's suppositions of the evolution of the system's internal and external conditions. So long as a managerial decision is always aimed into the future, some elements of uncertainty exist there.

[*] *Assist.Prof. at the National Mining University, Dnipropetrovsk,Ukraine*

Uncertainty does determine a measure of risk, which is a result of the accepted decision.

The higher level of uncertainty leads to the higher level of risk. In this case, the absence of information is not a problem for us; the main problem is a volume of information itself. It requires the selection of the most important information about the system conditions. Our insufficient knowledge about economical mini-system's internal elements and the measure of external situation influence on the each of them become a problem for a researcher. Therefore, the reliable information about the system's conditions in determined period of time is a factor of the economic risk control. This factor gives us a possibility to minimize probability of losses and to augment system's outcomes.

The authors [2], who have considered a coal mine as a complex economical mini-system, proved that changes in time of main indexes of coal mine activity occur by chance. It is connected with fluctuations of prices on the compound goods, equipment, materials and energy resources. Changes in legislation, in top-manager's instructions are also playing its role in this stochastic process.

As an industrial system a mine is unique because of production process organization, especially because of working places locomotion in space. The reason for the locomotion is exhausting of mineral's reserves in the process of the natural resource extraction. It complicates coal mine structure and changes for the worse her technical and economic indexes.

As it known, a mine, which operates in unstable and uncertain environment, may be considered as a "black box", i.e. the system with compound inner structure, with an "entrance" and an "exit". Resources and managerial influences come to the entrance of the system, and at the exit we have a flow of production, which changes in time. The cost of production at the exit is not equal to the cost of resources at the entrance. The production costs may be higher or lower than cost of resources. The extremely high price of produced goods serves as a reason to define an industry as insufficient and improper to the modern requirements.

Understanding the inner nature of the enterprise and bringing out connections between different indexes of its economic activity are necessary for conduction of the deeper economic analysis of its outcomes and for diminution of economical risks. The definition of narrowness connections between some indexes of mine outcomes, such as productiveness, length of mine's workings, energy consumption, the volume of coal production and some others, from the one hand, and the cost of production, from the other hand, is one of the most important tasks in the coal mine's operations research. The more information we have about the system, the more complete is our understanding of these processes, then the less important will be casual factors influence on of the coal mine effectiveness, and consequently, on its investment attractiveness.

The absence of mechanism, which can determine a measure of utility for a certain kind of production or a certain industry, is a serious lack, too. The coefficient of enterprise's economical reliability was proposed in the work [2] as a complex criterion

for estimation of conditions of mine as an economical mini-system. This coefficient permits us to research an enterprise as whole system, taking into account its economical level and technological reliability of the main production lines inside the mine as well as volumes of natural resources reserves.

Approximation of economical reliability coefficient to the minimal limit demonstrates that system is in transition to the lowest order or chaos state. In this situation costs are maximized and system becomes fully uncontrolled.

Some researches had been made, which permitted to distinguish three groups of mines.

Prospective enterprises with significant volumes of coal extraction and high indexes of economical reliability came into the first group, the second was formed by low-efficient mines, which are able to support the present level of coal extraction, and the third group includes non-prospective mines, which are to close in the nearest future after exhausting of the mineral's deposits. But there are some lacks in estimation of mining enterprises exclusively on the basement on the fixed industrial assets and outcomes. In this case we do not consider a subjective (personal) factor, which is shown in the criterion of economic reliability as a coefficient of enterprise's economical level. At the same time, the factor of managerial influence effectiveness is important for consideration of contemporary situation on the mine and prospects of its development.

Development of economical system depends on the correctness of accepted managerial decision. The coefficient of managerial influence effectiveness determines the period of time, when accepted decision is still actually for the economic system.

As a rule, for a good mine this coefficient has significant value, and its diminution is evidence of economical system depression. It permits us to consider this criterion as "negative entropy" or neg-entropy index. The increasing of the index demonstrates the higher accuracy of coal mine's outcomes forecasting, and shows the higher level of the order.

Diminution of the coefficient points out the significant dependence of system on different casual influences, which lead to negative results of economic activity.

That is why the estimation of an enterprise, taking into the account the coefficient of economic entropy (E) is more full. Economic entropy is not an absolute quantity; it is just a complex assessment, which can characterize the inner structure of the enterprise and permits us to take into consideration economical reliability, level of chaos or order in the operational system and available reserves.

In other words, economic entropy is a quantitative index, which characterizes the internal structure of economical system by measurement of connections between different indexes of the system.

Components of economic entropy are coefficient of mine's economical reliability (Ku) and coefficient of managerial influence effectiveness (k).

Consequences:

1. Consideration of these indicators gives us a possibility to estimate a level of investment attractiveness for mines of certain region, mines of the same grades of coal or for the all mines of the branch.

2. The consideration of both above mentioned criteria permits us to take into account an objective index of economic reliability, which considers the position of fixed industrial assets, as well as coefficient of managerial influence effectiveness, which considers qualification of the managers and their abilities to work in the uncertain conditions and inconstant environment.

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THE PROGRESS OF THE NEW EIGHT MEMBER STATES (NMS) IN ACCOMPLISHING THE ECONOMIC CRITERIA FOR THE EU ACCESSION

AMELIA BONCEA, DORU CÎRNU *

ABSTRACT: *The countries of Eastern Europe have been confronted for more than 14 years with a complex process consisting of internal transformations during their preparations for EU accession. On the first of May 2004, eight of those countries, Czech Republic, Slovakia, Hungary, Poland, Estonia, Latvia, Lithuania and Slovenia, have become members of European Union.*

KEY WORDS: *adhesion, integration, development, economic increase*

At the 1st of May 2004, 10 new states joined the old 15 member states of the European Union, an historical moment and a step forwards towards a future unite Europe. In the same time, the adhesion meant the peak of a whole process of economic and social transition of 8 countries from the plan economy towards a democratic, free market model associated with a modern societal development.

The economic and societal impact of the 2004 enlargement seems to be the most significant so far from all the enlargements before. The EU population grew with almost 20% reaching 460 millions inhabitants. The share of EU economy in the world economy grew as well, the contribution of the New Member States being estimated at about 10% in PPP terms.

The expectations of the experts and political decision makers concentrate on a positive development that is to take place in longer term. Even if the degree on integration between the old and the new member states was already rather high in 2004, the enlargement will have a positive impact, both through the increasing and strengthening of the Single Market and of the competitiveness of the European economy, as well as through a general development of the European multicultural area.

* *Assoc.Prof., Ph.D. at the "Constantin Brâncuşi" University of Tg.-Jiu, Romania*
Prof., Ph.D. at the "Constantin Brâncuşi" University of Tg.-Jiu, Romania

These two dimensions will be the main lines of sustainable development for the socio-economic and cultural EU. Finally, the conclusions of the study look at the effects of the integration in short, medium and long term, pointing out at the potential main macroeconomic shocks that might occur in some of the NMS as an effect of adhesion.

The build-up of the EU was a long-lasting process developed during around 50 years[1]. The enlargement in 2004 is the biggest so far, adding 10 new member countries to the union, from which 8 in the Central and East-European area. Bulgaria, Romania and Turkey hope to join the UE in 2007 or after. The cost of integration is estimated to 107 billion (cca. 67 in 2000-2005[2]), from which 15 billion will be covered by the NMS themselves[3].

The Central and East-European countries, similarly with the Southern countries that joined the EU in previous stages, have less developed economies, but lack as well a long enough democratic tradition and face specific problems and particular features of the societal dynamics. The simultaneity of these issues put the ex-communist countries under significant strain between the needs of restructuring on the basis of market economy and of those inner to a buildup of a renewed cultural and national identity.

The subsequent and often overlapping stages of this process combined with the economic and political interest on its results lead to a deepening of the debate around the transition as a part of the globalization. An unbalance between economic and social issues marks nevertheless these debates, with most of the attention being channeled towards the economic and political development, the social aspects being often. Moreover, one of the classical dilemmas of the transition is the understanding of the divergent convergence and the variety of the integration trajectories that these countries show.

Immediately after the fall of the Berlin Wall, the European Community established diplomatic relationships with Central and East European countries, followed up by commercial treaties and economic cooperation agreements. This chapter looks at the progress made by the NMS in the post-integration period according with three important groups of factors:

- the initial conditions
- the integration policies and negotiation strategies
- the horizon of prognosis and the strategy of integration into the euro zone. The economic and political impact of adhesion is significant. As a consequence of enlargement, the EU became the most important economic power, in terms of GDP.

[1] In 1957 European Community has been established having six Members, followed by enlargement rounds in 1973, 1981, 1986 and 1995. In 2003 the European Union already had 15 Members.

[2] http://news.bbc.co.uk/2/hi/world/europe/2266385.stm

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Nevertheless, is to be expected that the overall benefits of the integration would differ from one country to another or from one region to another, not only quantitatively, but as well in timing and intensity. Most of the academic studies suggest the positive effect that the eastern enlargement will have on the economic growth especially through the deepening of the competition and the intensity of the activity on the financial markets. The next step in the process will be of course the adoption of the Euro, in its turn dependent on how soon the member states will achieve the nominal convergence, according to the Maastricht criteria: price stability, level of budgetary balance, participation to the exchange rate mechanism and the long-term convergence of the interest rates. These criteria are based on the consensus at the European on the fact that the stability policies create the optimal framework for economic growth and job creation.

From a methodological point of view, we will evaluate the progress of the Central and East European countries, EU candidates, in fulfilling the economic criteria of adhesion through the evolution of macroeconomic indicators reflecting the economic stability of a country. This analysis will be made in two distinct time frames:
- *the last 5 years previous to the enlargement (1999-2003)* for which the main weaknesses and strengths in the economic development of selected NMS are to be revealed through a comparative analysis of main macroeconomic indicators in NMS8 and UE15, with a special emphasis on the last two years prior to the integration. The analysis is performed using national statistics and EUROSTAT data.
- *the first year after the adhesion (2004*), for which a detailed analysis of the indicators is performed and *2005 and 2006* providing forecast for both for the NMS8 as well as for UE25 as a whole.

For those countries, achieving economic stability and sustainable development are key factors, because the functional market economy and the ability of facing the competition on the internal market constitute an important premise of the EU accession, being the economic criterion that a candidate country must fulfill in order to become a member state (The Copenhagen Council 1993).

The first three challenges for post-Communist countries and their horizon of achievement

1. Economic stability- short term
2. Liberalization-middle term
3. Institutional reforms-long term

The progress of the eight NMS concerning the accomplishment of the economic criteria can be measured with the following economic indicators: GDP, Harmonized Index of Consumer Prices, General government financial balance. Those indicators reflect the country economic stability. The beginning of the 1990s was characterized by an international unfavorable economic environment, due to the crisis of the global economy. For the very first time after 1945, the aggregated GDP at global scale had declined with 0, 4%. The recovery has begun in Europe in 1994 and, by the end of the decade, the rate of economic growth was between 2, 5% and 3, 5%, half of the one registered in 1973. After 2000, European Union was confronted with slow

economic rise, 0, 9 - 1, 6%, and many annalists have considered that she was passing by an economic recession.

In Central and Eastern Europe the revolutionary changes which occurred in 1989 and in 1990 were followed by a powerful economic crisis, compared by some annalists with the Great Recession of the ’30, or with the damage created by WWII. The intensity and duration of each crisis varies from a country to another, being more accentuated in eastern countries (negative economic growth with two digits). For the majority of countries, the crisis lasted until 1994. Starting with this year, until the end of the 1990s, all eight candidate countries registered positive economic growth rates (with the exception of 1997 and 1998 when the effects of crisis from Asia and Russia were felt).

Real positive performances in all candidate countries starting with 2000. The year 2000 represents the beginning of the accelerated development of the Central and Eastern European countries (CEEC). The average growth rate of GDP in NMS-8 was double compared to 1999, reaching 4.7%. The highest rate of growth was registered in Estonia (6.9%), Latvia (6.6%) and Hungary (5.2%).

The international events in 2001 such as: the negative impact of international economic environment, the decrease with 50% of the global economic growth rate, the increase of the oil price, the impact of the 11th oh September 2001 events from the USA, have also influenced in a negative way the Eastern European economies, by slowing down the economic growth trend. However, some of the candidate countries have succeeded in limiting the impact of the international events by increasing the internal economic demand. The average economical growth percentage in 2001 was of 4.35%, with the maximum value in the Baltic States and the minimum value in Poland (1.1%), due to the lack of support from the internal economic demand.

Two years before the decision of extending the EU towards the Eastern European countries, the EU GDP increased with only 1.1%, which generated quite an unfavorable environment for general European economies. Under these circumstances, the GDP of the 8 central and eastern European countries started to increase at a slower pace. Even though in Estonia and Lithuania the economical growth was for the second consecutive time at the highest level in all Eastern European countries, this was not enough in order to compensate the unsatisfactory economic performances of the Czech Republic, Hungary and Latvia. Export and investments were the main components of economic growth for the future eight member countries.

2003 was the year when the economic growth of the 8 new member states started to increase at an accelerated pace. The average growth of GDP was of 5.2%, disregarding the economic recession from the 15 EU members’ economies. In 2003, the Baltic countries kept registering the most important economic growth rates (6.7-9.7%) of all European countries. Investments in these countries have been the most important factor of the economic growth. Domestic consumption wasn’t a key factor in determining the economic growth, due to the fact that the control of the public finances was a must of the economic policy.

Inflation. One of the most important and painful phenomena of the economic crises from Eastern and Central European Countries was the inflation, measured by the index of consumer prices. Obviously, inflation affected the life of the entire population from these countries in a negative way. Also, this negative impact was felt by the business environment and decreased the level of foreign investments.

According to the EU official reports, the inflation of the 15 member states started to continuously decrease in the beginning of the 90s, when the average index of consumer prices was 5%, reaching to 1.2-1.9% in 1999-2000. In 2001-2004, the inflation level slowly increased to 2%/year.

The EU performances with respect to the inflation control differed in the last ten years; however, the common trend was the decrease of the inflation level, compared to the 1990- 1993 results. In the past decade, the highest inflation rates were recorded in Lithuania (1161%) and Estonia (1076%) in 1992 and Bulgaria 1082% in 1997. The other candidate countries had either 2 digits inflation (between 11-18%), or 1 digit inflation, like the Czech Republic, Slovenia and Slovakia (lower than 10%). Starting with 1997, the average inflation of the eight candidate countries was lower than 10% and continued to decrease with a rate of 2.8% in 2003.

Unemployment. Unemployment was a relative new phenomenon in Central and Eastern Europe, being officially recognized as such before the 1990s only in Poland (0.1%), Hungary (0.6%) and Slovenia (2.9%). Unemployment increased faster after the 90s, reaching in some country rates between 15-19% from the total level of the active population. In the Czech Republic, Estonia and Latvia, the unemployment rate was lower than 10%, due to the very poor level of incomes. Some studies from the middle of the 1990s speak about a remarkable flexibility of the labor market, due to the fact that a lot of the employees preferred to receive low incomes rather than to loose their jobs.

The low level of unemployment can also be explained by the lack of determination in the process of changing the industry characteristics and of the delay of admitting the bankruptcy of a lot of unproductive companies. In some candidate countries, the low level of unemployment is due to the fast development of the service sector, which has attracted an important number of persons (Czech Republic).

Unemployment decreased in 2000 and 2001 in most candidate countries, except Lithuania and Poland in 2000 and Lithuania, Poland and Slovakia in 2001. It can be observed that, in these cases, the unemployment trend is the reverse of the inflation trend. It must be taken into account that these statistics referred only to the unemployed persons, which received social security aid and do not take into account the long term unemployment, outside of social security. Philips' curve (reverse correlation between unemployment and inflation) was also confirmed by the EU evolution, where, in 1999, inflation has decreased and unemployment and industrial productivity have increased. In 2001 in the EU, the unemployment has decreased, reaching the average level of 7.3% of the total active population. At the same time, inflation increased from 1.9% to 2.3%.

In 2001, however, both inflation and unemployment have decreased in Hungary, Latvia and Slovakia, which represents a different evolution from the one expressed in the economic theories, raising a question mark regarding some experts' opinions, who have sustained that inflation and unemployment cannot decrease at the same time. Comparing the eight candidate countries with EU-15, it can be stated that there is a convergent trend with respect to the unemployment evolution. In EU-15 the average unemployment rate was of 8% in 2003 and 11%in the candidate countries.

General government debt. The economic crises of 1991-1993 have determined the equilibrium break of the budgets of the majority of Eastern European countries and represented one of the constraints of their economic evolution. Since the 1994, the budget deficit started to decrease synchronously with the economic growth.

Hungary had the highest budget deficit, of 9.2% of GDP in 1994 and 7.1% of GDP in 1998. As the result of coercive economic policy, Hungary has managed to reduce the budget deficit to 2.9% of GDP. In 2000 and 2001, the budget deficit in Hungary increased again to 5% of GDP. At the same time, Poland maintained a low level of the budget deficit during 1994-1999, but the deficit increased after to 6% of GDP in 2001.

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THE DEMERITS METHOD USED FOR ASSESING THE QUALITY OF GLASS PRODUCTS

DORU CÎRNU, AMALIA VENERA TODORUŢ [*]

ABSTRACT: *Why quality? Why we all generally, and in particular everybody must to concur for quality and we must be high quality? Because she has the trend to the perfection, she makes you invincible and powerful in the world. The Quality justified being in memory, history and chart. The Quality gives you the power to be winner, give you the confidence and hope into the world with full risk and uncertainty.*

We chosen a subject attached from quality because this is a necessity, she have the inborn advent, and then impose with powerful break into all economics, politics, social and psychic media. The quality is a challenge, a permanently transformation, which bring newness, diversity, a new mentality, a new onset manner of human relations.

Estimation of finished goods quality level and this measurement perhaps realize via quality indicators and non-quality indicators which presume the demerits forfeit. The application of demerit forfeit methods at producer gives a different magnitude into the supervision of quality level into all phases of finished goods.

This study lead to conclusion: the charge for quality increment of the finished goods and services must be a high priority for all firms. The most customers not may tolerate finished goods with low and medium quality. All firms have a single possibility: to adopt the quality management systems if she wishes be profitable and remain into the competition.

KEY WORDS: *Demerit method, Quality, Total quality management, Strategy for quality, Market*

The assessment and measurement of products' quality level can be carried out by means of the non-quality indicators that imply flaws.

The choice of this category of indicators for evaluating the quality was determined by the fact that in the glass factory the flaws are so frequent that they are even accepted and prescribed given the fact that the production equipment is outdated, the raw material may leave impurities and the contribution of the human factor is overwhelming.

[*] *Prof., Ph.D. at the "Constantin Brâncuşi" University of Tg.-Jiu, Romania*
Prof. at the "Virgil Madgearu" Commercial College of Tg.-Jiu, Romania

The use of this method by the producer, both for the semi-products and for the finished products is of great importance in managing the quality level in all the phases that the product goes through

Other techniques and methods of control are also used for monitoring and controlling the quality of products.

Establishing the products' quality level after identifying the flaws is achieved through the demerits method, a method with a large scale of application in most factories.

The term "demerits" stands for *"the absence of merits in the ratio between quality and lack of quality"*. This absence of merits is caused by the flaws identified to which a number of points are applied according to how serious the flaw is.

The use of this method involves several stages:

- establishing which is the object undergoes analysis(product, set of characteristics, production lot) ;
- the correct classification and identification of the flaws which belong to a certain category. This is done taking into account severity in terms of the consequences they have on the use of the products ; the flaws won't be changed from one category to another and will remain in the same category throughout the use of the method so as to ensure a reference point for comparing the quality level from one period to another;
- applying the penalty points to each category of flaws as follows: critical flaws – 100 points, main flaws – 50 points, secondary flaws – 10 points, minor flaws – 1 point;
- setting the accepted limits for demerits according to the prescribed admissibility conditions with regard to the maximum number of flaws allowed for one product or one lot of products;
- calculating the demerits indicators. The following indicators for demerits are calculated on account of the data obtained after identifying the flaws:

1. Partial demerit (D_p) obtained by adding up the points the flaws of one category had been penalized with;

$$D_p = \sum D_i \tag{1}$$

2. The demerit index on categories (I_{Dp}) is given by the relation between the partial demerit (on categories) and the reference base that may be the partial demerit of a previous period or a demerit that is considered to be objective;

$$I_{D_p} = \frac{D_p}{D_{pr}} \tag{2}$$

3. The total demerit (D_t) comes from adding up the partial demerits on categories of flaws (D_{pi});

$$D_t = \sum D_{pi} \tag{3}$$

4. The index for total demerits (ID_t) representing the relation between the calculated total demerit and that of the previous period or a total demerit that had been prescribed but considered to be objective;

$$ID_t = \frac{D_t}{D_{tref}} \tag{4}$$

5. The global/complete index for demerits (I_g) calculated as a moderated sum of the indexes of the partial demerits of flaws of appearances (I_a) , of functionalism (I_f) , of dimensions (I_d);

$$I_g = \frac{k_1 I_a + k_2 I_f + k_3 I_d + ... + k_i I_g}{\sum K_i} \tag{5}$$

K_1= shares given to partial indexes , the sum of which could be 10 or 100.

When Ig<I – the quality of the products is better in comparison with the products belonging to the basic period or the reference periods.

When I_g>I the quality of the products is inferior to the basic period or the reference period.

6. The average demerits on a lot of checked products (D_1) represents the sum of value of the total demerits on a checked piece of product referred to the number of all checked products. n= the number of checked products in a lot.

$$\overline{D_i} = \frac{1}{n}\left(100N_C + 50N_p + 10N_S + N_m\right) \tag{6}$$

N_c, N_p, N_m- the number of products with critical, main, secondary, minor flaws.

When the level of calculated demerits goes beyond the limit of the admitted demerit the quality of the products corresponds; when the limit is exceeded mechanism comes into force and allows to analyses the possible causes for the flaws , to redo the analysis so as to find the real causes, to apply the remedied that ensue and to control the flaws.

The method of demerits offers information about the level of quality with regards to the analysed period, its evolution in time , and allows the comparison of the quality level of certain products of the same group, with the same destination.

The method of demerits has been applied to the small factories in the glass industry and the object to analyse was the product “long-stemmed glass of 4 cm on a flat support” because this kind of product holds a high percentage (about 30%) in the structure of products of the analysed firms.

Thus the flaws have been found and restricted to categories , according to severity as follows:

1.Critical flaws

A. Active insertion
B. Cracks
C. Fissures
D. Lack of stability on the support surface

2. Main flaws

E. Bubbles that burst when pressed with a pointed metal object
F. Isolated inactive insertion (at the most 2 with a maximum dimension of 1 mm).
G. Different shades of colour.
H. Grouped spots at the least 0,6 mm in dimension.

3. Secondary flaws

I. Oval Shaped
J. Incomplete polish
K. Grooves
L. Colour leak

4.Minor flaws

M. Threads
N. Streaks
O. Scratches
P. Deviations from the plan of the brim

When analysing the values of average demerits a day and the total(monthly) deviation are noticeable due to the presence of critical and main demerits or because of the great number of secondary and minor flaws.

The average monthly demerit becomes the accepted limit of the daily averages of demerits, therefore its value indicates a better quality level from one month to another.

The graphs of the demerits on one piece of product and the graph of demerits highlight even more clearly the flaws of the day.

The analysis of the total demerit index a month calculated for the four firms (S; N; E; T) is represented in Figure 1.

The graph indicates the low standard of quality at S firm, with the value of the total average demerit of 12,49 and at E firm of 11,42 as compared to T firm whose value of the total average demerit is 2,17

The bar chart taking into account the severity of the flaws is especially suggestive.

Thus one can notice the very large number of flaws representing threads, streaks, broken polish, leak of colour and no-grouped spots.

Also in the category of critical flaws predominant are active insertions and lack of stability on the support surface.

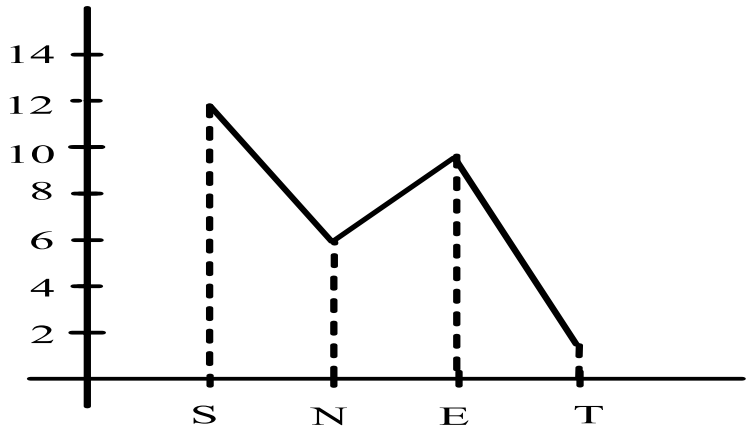

Figure 1. The analysis of the total demerit index a month calculated for the four firms

In the case of the main flaws prevalent are the isolated inactive insertions and no-group spots with a minimum dimension of 0,6 mm.

Analyzing the impact of these flaws helps us to pinpoint the causes and to adopt programmes of organizing and modernizing the process of production.

The causes that lead to these flaws are: inadequate blend of raw materials, inadequate temperature and the wrong polish.

The analysis of the flaws on categories after summing up all categories shows that the most frequent ones are the minor and the secondary ones, about 71% of the total of flaws, as well as the critical flaws that affect the performances and reduce the possibility of its use (Table 1).

Table 1. The analysis of the flaws on categories

% / Firm	Critical flaws	Main flaws	Minor flaws	Secondary flaws
(S)	8,26	19,94	35,32	36,48
(N)	12,08	24,16	30,20	33,56
(E)	11,46	18,99	32,25	37,60
(T)	11,11	16,66	33,33	38,90

The critical flaws, in spite of the fact that their amount is very small if a total of all flaws is considered, causes 75% of the total losses in quality and therefore more attention should be paid to do away with the causes that produce critical flaws.

In the case of the factories that have been analyzed , the outdated equipment, the low quality of the raw material , lack of culture and consciousness among the employees, lack of monitoring mainly in the domain of quality lead to non-quality, which costs, as Crosby asserted.

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CONSIDERATIONS REGARDING THE QUALITY COSTS OF THE PRODUCT DURING THEIR LIFE CYCLE

IOAN CONSTANTIN DIMA *

ABSTRACT: *The success of such a setting forth should be based on optimizing the global cost of the product life cycle. Such an optimization consists in choosing between the decrease of development costs in case subsequently it will be necessary to operate several changes of the product due to industrialization problems or due to a poor adaptation to the customer's demand or the decrease of production costs that might determine a series of quality and guarantee term drawbacks, and the increase of post – selling service costs (guarantee term).*

KEY WORDS: *quality costs, global cost, development costs, optimization of the global cost*

Taking into account the limitation of the life cycle of products and strategic investments that require the use of certain technologies, the decision of setting forth a new product on the market should rely upon the costs of its life cycle.

Each setting forth of a new product determines: research and development costs, equipment costs, pre – industrialization costs and implementing costs, production costs, marketing costs, logistics costs (that is costs with storage, distribution and transport), administration costs, and costs of the customer focused services, etc.

The success of such a setting forth should be based on optimizing the global cost of the product life cycle.

Such an optimization consists in choosing between the decrease of *development costs* in case subsequently it will be necessary to operate several changes of the product due to industrialization problems or due to a poor adaptation to the customer's demand or the decrease of production costs that might determine a series of quality and guarantee term drawbacks, and the increase of post – selling service costs (guarantee term).

* *Prof., Ph.D. at the "ARTIFEX"University of Bucharest, Romania*

The stages of conceiving the product, of choosing its fabrication procedure are difficult, having consequences upon the evolution of future costs, and making useless the optimization of a single stage without taking into account the impact upon the others.

Accordingly, it is necessary: to determine a cost that has in view most of the problems of the life cycle of the product (that is a global cost), and to optimize the product's conception by using the target costing technique (that is an objective costs).

In order to determine the global cost of the product's life cycle it is necessary to have in view both the drawbacks of the traditional methods as the traditional ways of determining it lead to an answer which is not adapted to the demands of the life cycle of the product as they divide time into annual exercises, connecting the costs to the period in which they have been done (research and development costs, pre-exploitation, industrial and commercial setting forth costs, as well as the other movement costs having a general character are usually registered during the period in which they have been done) and the consideration of the costs of the product's life cycle as real costs, depending on the product's success, as all the costs that are investments from an economic point of view (research, development, new technology costs) represent immobilizations and are the object of a paying off depending on the wear of the whole life cycle of the product (the costs of cycle ending are covered and the initial research costs may remain uncovered without determining incomes).

In case the product is not viable, its "life" stops at the conception stage. As the costs determined by this already dead product do not generate any income, they can be assimilated to the general costs that must be covered by the profitableness of certain products.

When the product prematurely dies, at the beginning of the exploitation stage, a cover from incomes is already present; nevertheless it is not sufficient to cover all the costs engaged (especially those that are paid off during the envisaged life cycle). The real annual cost will be superior to the estimated cost and the loss will be sustained by the product itself.

In case the product's life is prolonged (the product having a sequence with double cycle or a cycle comprising the resuming of the activity), the real costs of conceiving it as well as those included within rejects are already covered by the sales that took place during the envisaged cycle. The only costs that should be taken into account during the supplementary period are accordingly those that come out of the extension of the cycle, namely marginal costs.

The correct estimation of the life cycle (services associated to the product) is based upon its prevision calculation that requires the determination of both technological risk and of commercial risk.

Technological risk manifests itself either during the product's conception, in case the product seems to be too complex, or after the product's conception in case a new technology makes it look obsolete. The immediate consequence is that the product dies before being born, that is before being marketed.

Commercial risk appears when, despite technological success, the product does not encounter any demand or only an insignificant one. The product dies during the planning stage or, in case it has already been marketed, it dies before the envisaged date.

Once having evaluated these two types of risk, the estimation of quality costs during the life cycle of the product may be done taking into account the two possibilities of conceiving the new product:

1. ***The optimization of the global cost of the product's life cycle by comparing estimated cost to target cost.***

In order to do such an optimization it is necessary to take into account the reasoning that starts with a market research (the evolution of the needs and technologies) and with an analysis of the competitors, defining the characteristics of the product that respond the demands of the customer and determining accordingly a target price that should let the company be competitive (to conquer a certain market share).

Then, taking into account the unitary profit estimated by the company, a unitary target cost is to be determined, according to the formula:

$$Cut = Pusc - Puep \quad (1)$$

Where: Cut – represents the unitary target cost;
Pusc – the unitary target sales cost;
Puep – the estimated unitary target profit

The unitary target sales cost for this product can be determined as follows:

$$Pusc = Pus + (f1 + f2 + f3 + \ldots + fn) \quad (2)$$

Where: Pus – represents the unitary sales cost of the already existent product that resembles the best the new product;
F1, … fn – the unitary value of the functioning changes added to the new product and accepted on the market.

If the new product will be set forth on the market in a Q amount of units corresponding to a cautious prevision, then the target business figures will be determined as follows:

$$C\,tf = Pusc \times Q \quad (3)$$

Where: Ctf – represents the target business figures;
Q – the product's retail amount

The target total estimated profit will be determined as follows:

$$Ptt = Ctf \times p \quad (4)$$

Or

$$Ptt = Pusc \times Q \quad (5)$$

Where: Ptt – represents the target total profit;
P – the percent of the target profit in target business figures.

The target total cost is determined as follows:

$$Ctt = Ctf - Pt \quad (6)$$

Or

$$Ctt = Cut \times Q \quad (7)$$

Where: Ctt – represents the target total cost.

The target total cost may also be determined as follows:

$$Cut = Ctt/Q \quad (8)$$

At the same time, in order to check at the beginning whether the target cost is achievable, an estimated cost is going to be determined; it shows the whole amount of the company's costs (including its common procedures and operational abilities); it also shows whether the company is capable to set forth on the market and observe a certain conception scheme.

The target unitary cost of the new product may be determined as follows:

$$Cues = Cues0 +/- A + \ldots. Mi \quad (9)$$

Where: Cues – represents the target unitary estimated cost of the new product;
Cues0 – the unitary cost of the existent product that mostly resembles the new product
A – the variation of the cost due to the difference in the retail volume between the existent product and the new product (Q0 – Q);
Mi – the change of the cost that accompanies the change in design or in the level of comfort of the "i" part of the product.

Once this first evaluation is accomplished, we generally get only a rough sketch of the new model. The evaluation is done by conception engineers depending on the technical problems that such an achievement implies. Then, as the sketch evolves, the calculus will be progressively adjusted. Beginning with the conception stage an opinion on the supplementary investments should be formulated in order to evaluate during the first stage the supplementary debts to be included in the cost.

The comparison between the target cost (an outer point of view) and the estimated cost (an inner point of view) allows the noticing of a deviation that can be eliminated, either by acting upon the conception parameters or upon the product's functionality.

In order to watch over such technical adjustments upon subsequent commercial aspects and at the level of future quality, various stages of the estimated cost can be determined.

And, in order to assure the profitableness of the new product during its entire life cycle, one should: attach target costs to its main components; identify the administration conditions that do not accept the exceed of such target costs; establish a commonly agreed reference which guarantees that during the stages subsequent to production the real cost is going to be inferior to the target cost.

The model of evaluating the estimated cost is, at the beginning, quite approximate, taking into account the lack of experience and the necessity of not getting an excessive complexity. Accordingly, as any other instrument of simulation, it will enrich itself while gaining in experience and integrating o deeper knowledge of the companies' economic mechanisms; it will ultimately become better.

Let's take into consideration a P product that would determine during its life cycle the following costs and incomes (Table 1).

Table 1. The structure of the costs and incomes of the P product

M.U. million lei

No.	Year	Specification	Total
1.	N	Costs with the conception of the new product	80
2.	N+ 1	Cost of the market research Research and development costs The market research shows that 3,000 tons of the product (successively 500 tons, 2,000 tons, 500 tons) can be sold at a price of 1.2 million lei/ ton; direct costs with materials and labor should increase to 0.5 million lei The prevision of sales costs for 3 years The amortization of technical equipment (for 5 years)	30 10 450 600
3.	N+ 2	Setting forth commercial costs 500 tons of P products manufactured and sold	200 600
4.	N+ 3	2,000 tons of P products manufactured and sold Sales costs	2400 200
5.	N+ 4	1,000 tons of P products manufactured and sold (either 500 tons in addition to the estimated previsions) Sales costs (45 million lei in addition to the planned level due to the sales increase)	1200 95

In case the traditional method is being used, the level of the estimations according to the data in Table 1 is that contained by Table 2.

Table 2. The influence of the P product cost upon the results of the financial exercise according to the traditional method of estimation during the product's life cycle

M.U.: million lei

No.	Specification Years	N	N+1	N+2	N+3	N+4
1.	Sales incomes			600	2400	1200
2.	Conception, research & development costs	80	10			
3.	Materials and labor costs			250	1000	500
4.	Amortization of technical equipment *			120	120	120
5.	Product's abandoning costs (uncovered amortization)					240
6.	Commercial costs		30	200	200	95
7.	Financial result	-80	-40	30	1080	245
8.	Coefficient financially resulted/ incomes from sales			5%	45%	20%

The calculus of amortization has been done according to the method of lineal repartition for 5 years (600/5 = 120).

In case the method of the global costs during the product's life cycle is employed, then the results are those specified in Table 3.

Table 3. The influence of P product cost upon the results of the financial exercise according to the method of the global costs during the life cycle of the product

M.U.: million lei

No.	Specification Years	N	N+1	N+2	N+3	N+4
1.	Sales incomes			600	2400	1200
2.	Differentiated costs (1), (3)			15	60	15
3.	Materials and labor costs			250	1000	500
4.	Amortization of technical equipment (2), (3)			100	400	100
5.	Provisions (4)	80		- 80		
6.	Commercial costs (5)			800	320	125
7.	Financial results	- 80		235	620	460
8.	Coefficient financially resulted/ incomes from sales			39%	26%	32%

(1) they correspond to the whole of research and development costs (80 + 10) million lei amortized by the 3,000 tons of P products envisaged to be sold according to an established plan;
(2) the amortization of technical equipment is done according to the estimated quantity of P products sold (500 tons, 2,000 tons, 500 tons);
(3) In N + 4 the plans regarding the amortization of technical equipment and the delayed costs do not modify due to the fact that, in case the intensive production rhythm (500 tons P product in addition to the initial level) justifies a revise, it nevertheless does not affect the level of amortization previously established;
(4) They regard the first research costs as the establishment of provisions is done at the beginning as it is not sure that research generates incomes. In year N + 1 a supplemental endowment is not necessary as the market research shows product's viability; in year N + 2 the endowment is in fact a taking over when the first incomes effectively show;
(5) The estimated commercial costs (30 + 450) million lei are included in the costs to be distributed; later they are distributed according to financial exercises that generate incomes according to the envisaged level of P product (500 tons, 2,000 tons, 500 tons). In year N + 4 the marginal cost is being added (45 million lei) determining a sale of P product higher than the prefigured level.

The use of the global cost exhibits the company's activity in a realistic vision. The positive profitableness of the company obtained in year N + 2 is due to the re-employment of provisions.

In case they lack, profitableness would be:

$$(235 – 80) / 600 = 26\ \%.$$

The re-employment of provisions determines the re-compensation of the assumed risk; the profitableness of 38 % of year N + 4 is the effect of a performance superior to previsions as if real sales would have the envisaged level, then profitableness could maintain its 26 %.

2. The optimization of the global cost of the life cycle of the product starting from its utility cost for consumers, as quite useful could be the appreciation of the costs the buyer has to pay during the use of the product; also the question regarding the acceptability of such costs for the buyer may be asked.

Such estimations are going to direct conception towards products that are easily disassembled and fixed, that are rapidly adjusted, having a long life cycle, with drawbacks that comprise few components and whose elements are inter-changeable with common elements, etc.

By calculating the costs of non-quality and those regarding the quality of the product's life cycle, accounting is not only a means of analyzing but it becomes a control instrument. In such a case we propose the method for the calculus of the costs of dissatisfied customers, employed by Original Research, a counseling company in Chicago, specialized in measuring the degree of fidelity.

TOURISM – A VIABLE ALTERNATIVE OF RE-STRUCTURING MINING INDUSTRY IN THE JIU VALLEY

OANA SIMINA DOBRE – BARON *

ABSTRACT: *The beginning, in 1990, of an ample process of transition to the market economy, consisted, first of all, in economically re-structuring Romanian industry, in general, and mining industry, in particular. One of Romania's mostly affected regions has been and still is the Jiu Valley, a zone that produces the largest amount of pitcoal in the country. The above mentioned process determined the diminishing of activities within certain mines, the complete closing of others and, of course, unemployment for numberless individuals. The economic and social effects are quite evident, at a national level as well as at a local level; we also witnessed attempts of re-habilitating the region which implicitly could determine an economic growth that may be attained in the future due to tourism as we take into account the human, natural and anthropic ressources the Jiu Valley displays.*

KEY WORDS: *Jiu Valley, tourism, restructuring, mining industry*

Mining industry in Romania has a rich history, dating in the past and continuing even today. During this period, mining continually developed both in regard of finding new useful ores and of prospecting, exploring and exploiting them. Such a thing also happened during the years that elapsed, beginning with World War II until the last decade of the XXth century; nevertheless, starting with 1990, mining industry entered a period of profound changes and adaptations determined by the transition to the market economy.

Due to the new economic situation of Romania, mining industry has been assigned special tasks regarding the meeting of the needs of fuel, metal and non-metal ores and other useful ores of the national economy.

As one already knows, Romania's territory, having an area of 237500 square km, exhibits a complex geological structure. The most part of the territory belongs to the alpine orogenic region, with tertiary and actual volcanism consisting in young mountains, hills, tablelands and fields inserted within tectonic depressions containing, as a whole, rich and vast deposits of useful ores, such as: mineral fuels, precious metals

* *Assist. Prof. at the University of Petroşani, Romania*

ores, ferrous, non-ferrous, and rare metals ores, and non-metallic ores etc. The most important riches of Romanian subsoil are connected to Neozoic events and geological formations, influenced by alpine tectonics, followed by deposits connected to Pre-Hercynian and Hercynian tectonics (Paleozoic and possibly Pre-Cambrian); the least known deposits until now date from Mezozoic.

The deposits of useful ores in Romania are of small or medium sizes; large or extremely large size ores are rarely encountered, mostly in case of gem salt and useful rocks deposits.

Romania owns exploiting geological deposits that comprise: 3 billion tons of lignite and brown coal, 1 billion tons of pitcoal, 40 million tons of gold and silver ores, 90 million tons of polymetallic ores, 900 million tons of copper ores, 4 million tons of salt etc. At the same time, the country's subsoil owns important deposits of radioactive metals, rare metals, iron – manganese, bauxite and a large diversity of non-metallic ores as well as huge deposits of useful and ornamental rocks.

If one refers to the present knowledge of the country's subsoil, we can state that Romania owns over 15 billion tons of geological deposits of useful solid ores that represent a potential mining wealth of over 250 billion dollars, given by the value of the potentially used mining products after extracting and processing the ores owing to actual technologies.

If one takes into consideration actual production and registered deposits of useful ores, we can state that Romania owns the necessary inner ressources of lignite and brown coal for 100 years, of pitcoal for 250 years, of copper, gold, silver and polymetallic ores for 125 years, of salt for 1000 years etc.

The development of mining industry in Romania has been continual, beginning with its start until 1990, both from the point of view of the production per exploitation unit and of the number of production units; global production increased more than 10 times while the recorded number of employees increased 3 times.

Regarding coal production of which I would like to refer, within the policy of developing energetics, coke and chemical industries, we have witnessed an important production growth. Due to exploring works a basin of national importance has appeared, that is the pitcoal basin of the Jiu Valley as well as the lignite basin in Oltenia which own 80 % of the whole amount of lignite in the country. The other pitcoal, anthracite coal, brown coal and lignite basins, scattered throughout the country, have been and still are of regional importance.

The total production of coal in Romania has increased from 2.8 tons in 1938 to almost 23 million tons in 1970 and over 60 million tons in 1987; in 1989 o net coal production per inhabitant of 2650 kg was reached, placing Romania on the 12th place among the other coal exploiting countries in the world.

The figure below shows the variation of net pitcoal production during the period 1950 – 2000. The graph shows that the most intense activity and the maximum production of pitcoal was achieved during the period 1985 – 1990.

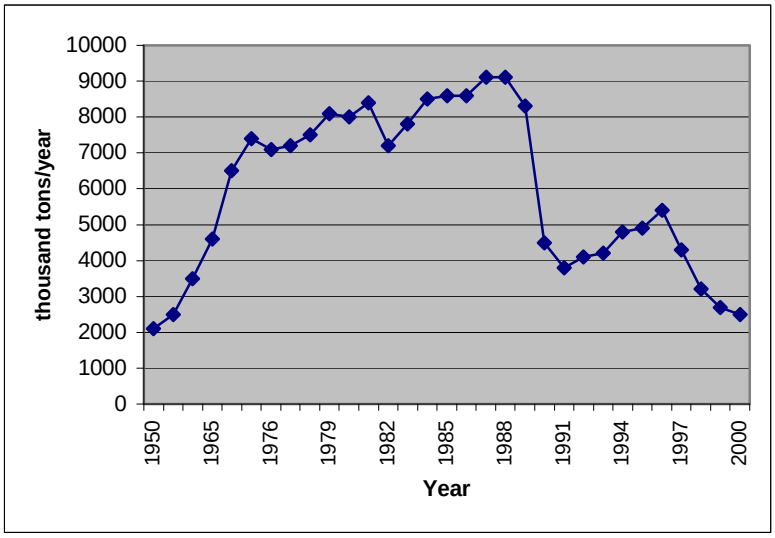

Figure 1. Net pitcoal production of Romania

Within the Jiu Valley basin, the already existing mines at Lupeni, Aninoasa, Petrila and Lonea have developed; the mines at Vulcan, Lonea I and II, and Dâlja have been re-opened and put into service; new mines have been built at Paroşeni, Uricani, Barbăteni, Livezeni and Valea de Brazi. Among them, the mines at Lupeni and Barbăteni, Uricani and Valea de Brazi produce coke coal, the others energetic and semi-coke coal.

Coal production continually increased in the Jiu Valley; a maximum of 11,195 thousand tons was attained in 1988; after that year, production extremely decreased due to re-structuring this branch of the national economy, as I am going to show further.

Table 1. Mines production within the Jiu Valley (1950 –2003)

- extracted production in tons -

Year	Production	Year	Production	Year	Production	Year	Production	Year	Production
1950	2496582	1961	4587450	1972	7797548	1983	10211949	1994	4800000
1951	2926452	1962	4993484	1973	8003309	1984	10268906	1995	4900000
1952	3052906	1963	5329466	1974	8218312	1985	10123807	1996	5300000
1953	2956293	1964	5553541	1975	8461083	1986	10732419	1997	4300000
1954	2942387	1965	5700531	1976	8348809	1987	11071970	1998	3200000
1955	3161574	1966	5972151	1977	8263486	1988	11194435	1999	2750000
1956	3266888	1967	6400065	1978	8389957	1989	10722048	2000	3040000
1957	3409034	1968	6935179	1979	8886904	1990	5238721	2001	3100000
1958	3638168	1969	7264526	1980	9272600	1991	4854061	2002	3700000
1959	3840585	1970	7816152	1981	9419960	1992	4100000	2003	3200000
1960	4189828	1971	8229112	1982	9247868	1993	4200000	-	-

We should underline the fact that the strategy of economic development promoted by the former regime, based on self –support in providing mineral ressources, determined the opening and exploitation of all known deposits, although, technically and economically, many of them were not feasible. The promotion within the economy of prices that were centrally imposed in the fields of energetics, natural gas and oil products determined a false estimation of the prices obtained in the case of mining native products as compared to the prices of foreign markets. During that period, State companies made efforts mainly with a view of increasing production irrespective of costs and the consequences upon the environment. Accordingly, such a policy created a mining branch that was more developed than necessary under the newly created conditions after 1989. This fact determined the support of the branch by the State, during the period 1990 – 2004, owing to a tremendous financial and material effort materialized in subsidies.

Table 2. Subsidies for supporting mining activity

- Billion lei -

No.	Unit	Years				
		2000	**2001**	**2002**	**2003**	**2004**
1.	CNH Petroşani	695	848	954	1196	1375
2.	CNLO Tg. Jiu	106	151	168	221	254
3.	SNC Ploieşti	185	219	243	305	351
4.	SC Banat SA Anina	25	35	51	66	76
5.	CN MINVEST Deva	477	754	1023	1263	1452
6.	CN REMIN SA Baia Mare	713	971	982	1215	1397
7.	CNU Bucureşti	126	168	178	224	258
8.	S.C. MOLDOMIN S.A. Moldova Nouă	114	171	202	250	288
Total		2441	3317	3801	4740	5451

In 1990, together with the changes undergone by the entire economy, the re-structuring of the mining field began. Consequently, the first law that brought changes to the organization of mining units was Law no. 15/07.08.1990, according to which economic units owned by the State were re-organized into autonomous administrations and companies. Autonomous administrations have been established within the strategic branches of national economy: armament industry, energetics, mining, gas, post and railway transports. There are also other branches, nominated by the Government, where autonomous administrations have been established. Autonomous administrations have been founded through government decisions – in the case of those having national importance – or through district or local decisions – in the case of those having a local importance. Autonomous administrations are juridical entities and deploy their activity according to economic administration and financial autonomy.

Besides, a series of strategic concepts regarding the inner re-structuring of mining industry have been formulated and materialized, as follows:

1. technical re-structuring and production re-structuring;
2. organization and management re-structuring;
3. staff re-structuring;
4. diminishing or closing production activities.

As an effect of geological and mining characteristics of the deposits in exploitation, due to the poor content of metals in the ore and to the increased content of ashes in the coal, as well as due to the decreased productivity of existing technological equipments, the costs of most mining products were after 1989 and still are higher than the selling prices on foreign markets; consequently, the State was forced to support pitcoal, lignite, and brown coal production, extracted through underground methods as well as that of ores containing non-ferrous and precious metals.

During the period between 1990 and 2000 the Government support for the mining industry represented about 6,000 million dollars as subsidies, budget allocations for capital costs, transfers and exploitation losses. It is true that subsidies decreased from year to year so that in 2000 the entire subsidy for the whole Romanian mining industry raised to almost 100 million dollars.

Under these circumstances, the evolution of physical production of the main useful solid ores, during the period between 1989 and 2004, is shown in the following table:

Table 3. The evolution of physical production of various useful ores

Useful ore	Years															
	1989	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**
Lignite (10^6 t)	53,2	33,7	28,6	34,3	35,5	35,7	36,2	36,5	29,1	23,0	20,1	26,0	30,0	29,3	30,3	30
Pitcoal (10^6 t)	8,3	3,9	3,8	4,1	4,2	4,8	4,9	5,3	4,3	3,2	2,75	3,04	3,1	3,7	3,02	3,5
Lead (10^3 t)	38,2	25,1	16,2	17,0	17,1	21,0	20,4	18,8	17,1	15,1	17,4	16,3	17,1	18,5	34,3	19,5
Zinc (10^3 t)	55,3	36,0	26,7	26,1	28,1	34,4	35,1	31,3	29,4	25,7	26,5	26,2	28,6	29,7	45,2	33
Copper (10^3 t)	47,5	32,0	27,0	25,6	25,4	26,2	24,3	24,5	23,6	19,6	17,2	16,1	19,1	21,7	28,8	28
Salt (10^6 t)	5,0	4,2	3,2	2,5	2,2	2,2	2,5	2,6	2,6	2,2	2,2	2,3	2,2	2,6	2,4	2,8

The re-structuring programs of mining industry approved by the Romanian government during the last years stipulate the closing of 344 mines, mining and exploitation fields, all over the country, divided into companies or firms. Institutional structures for the management and implementation of the programs have already been created together with the accomplishment of legislative frame that allows the implementation of such activities. The expenses which have been done as well as those meant for the years to come until 2010 connected to the mines closing are shown in the following table:

Table 4. Expenses connected to the preservation and closing of the mines

No.	Specification	M.U.	1998	1999	2000	2001	2002	2003	2004
1.	Preservation expenses	Billion lei	81,034	106,528	128,545	141,816	155,571	119,221	77,211
		Million $	9,13	6,948	5,926	4,878	4,706	3,591	2,326
2.	Closing costs as well as after closing costs	Billion lei	-	32,871	196,856	250,871	303,737	405,109	762,407
		Million $	-	2,144	9,075	8,631	9,189	12,202	22,964
3.	Planning costs	Billion lei	-	18,589	34,599	37,313	23,202	53,435	36,357
		Million $	-	1,212	1,595	1,284	0,702	1,609	1,095
4*.	Total costs	Billion lei	81,03	157,98	360	430	482,51	577,767	875,975
		Million $	9,13	10,303	16,594	14,792	14,597	17,402	26,385
* For the period between 2005 and 2010 they estimate a financial effort of about 135 million $									

At the level of the Ministry of Industry and Trading, of the national companies and firms dealing in the field of extractive industry, detailed programs have been drawn out, analyzed and approved; such programs stress upon the continuation of the re-structuring process and upon production supply according to the market demands under competitional circumstances.

When speaking about the Jiu Valley, we should mention that the Government Decision no. 1212/1990 stated the foundation of the Pitcoal Autonomous Administration, having its headquarters in Petroşani. According to this decision, the Pitcoal Autonomous Administration has as activity targets:

- the administration of pitcoal, shale pitcoal, brown coal, lignite and refractory clay within the mining areas under its exploitation;
- the protection of the Administration ores;
- the underground and quarry extraction of useful ores, their preparation and marketing;
- the carrying out of mining works opening, of underground preparation and quary opening;
- the carrying out of geological and technological research;
- the elaboration of studies, designs and documentations regarding the display of new deposits;
- the carrying out of works and service connected to the field of activity.

A new stage of re-organizing and re-structuring autonomous administrations began in 1997. Accordingly, the disposal no. 1062/21.08.1997 of the Ministry of Industry and Trading was issued, stipulating that the Pitcoal Autonomous Administration in Petroşani has been included in the list containing the autonomous administrations that have elaborated re-organizing and re-structuring programs in accordance with the Government Order no. 9/1997 and 30/1997.

According to the Government Order no. 30/1997, autonomous administrations either have undergone dissolution and liquidation procedures or have been re-organized as firms. Stock companies that have been established as a result of re-

organizing autonomous administrations having as object activities of national public interest have been named national companies and are going to become private properties.

At the same time, the re-organizing of the previous autonomous administrations determined huge dismissals. In order to assure the social protection of the employees whose labor agreements have come to an end – either because of collectice dismissals or on demand- the Government Order no. 9/1997, 22/1997 and 60/1997 were issued. Such acts specify compensatory payments for dismissed persons as well as the way of determining the average number of employees necessary in order to deploy the activity in the mining industry.

The Government Order no.30/1997 regarding the re-organizing of autonomous administrations establishes the re-structuring program of the Pitcoal Autonomous Administration for the period between 1997 and 2005 that stipulated among other things the diminishing of the number of employees as the following table shows:

Table 5. The evolution of mining employees within the Jiu Valley

Year	1997	1998	1999	2000	2001	2002	2003	2004
No. of persons	45.141	23.240	20.735	19.615	17.943	17.671	16.805	16.048

The economic re-structuring of the Jiu Valley primarily determined the economic decline of the region. As during the last 10 years the Jiu Valley's population has been almost the same, the number of employees decreased with over 40 %. This fact supports the idea that the attempt of economically re-generating the area has been done to the prejudice of social costs. These costs have been increased by the prominent part played by extractive industry in the area's economy as well as by the failure of the area's non-mining industry and the general context of crisis of Romanian economy, uncapable to take over the un-employed labor of the mining field.

The structural resources of the Jiu Valley are rather poor at present. Except for a natural environment that would encourage tourism, the other dimensions (jobs, dwelling places, public service, medical attendance, education, tourism – material basis and staff, culture centers, logistics infra-structure – roads, telecommunication, roads) as proved by statistics data and population opinions, show a deficit of resources when compared to the situation at the national level which is neither good.

Under negative economic circumstances and facing a dominant passive attitude of their beneficiaries, the programs of professional re-qualification that should stress professional reconversion and positively influence the process of re-structuring, have failed. The interest and trust in such programs are low, and what's even worse, those who got a job after graduating such programs are quite a few (under 15 %).

At least on short terms, within the next 10 years, any model of economic survival of the Jiu Valley is determined by the maintaining of mining activities. At present, almost half of the employees in the region work in the extractive industry; on their incomes directly depend over 40 % of the whole population of the Jiu Valley.

It is necessary to accomplish a program of strategic regional development. The insufficient local ressources connect the success of development programs to the investments made in this region.

Taking into account the less developed level of the infrastructure of mining regions as well as the poor social conditions as compared to nowadays demands, the Government decided through the Government Order no. 64/1997 the foundation of the National Agency for Developing and Implementing the Re-construction Programs within Mining Regions, having as major assignments the materialization of national programs and re-structuring objectives in the mining and geological field, the elaboration of social protection programs, of environment reconstruction and of implementing the development programs within mining regions.

The various problems that the Jiu Valley is confronted to at present exhibit three dimensions: economic, social and environmental. They are highly correlated, and in order to settle them they should be approached as a whole. It is commonly accepted that the solution of the Jiu Valley's problems is the adoption of the philosophy of enduring development that demands the harmonious joining of the needs of human society and of a proper environment protection.

As a consequence of intensive mining, the natural environment of the Jiu Valley's coal basin is hugely affected by pollution; this situation demands important investments in order to reconstruct natural environment. Such investments should also be efficient. At the same time, taking into account the fact that some mining exploitations stop their activity, the problem of their monitoring after closing is of main interest in order to control possible environment problems that might appear in the future.

Although they are serious and quite complex, the previously mentioned problems can be settled, but in order to do this the factors implied must be determined to do a sustained effort, and to prove a high professionalism; we also need a clear, well conceived and stable legislation, capable to assure the proper ground for economic, social and environment development.

When all the problems nominated above are going to be settled, or partly settled, we could discuss about the touristic development of the region.

Tourism seems to be or may be considered to be a viable alternative of re-structuring mining industry, taking into account population's receptivity, but mainly, the natural characteristics of the Jiu Valley.

Even at a national level, within the Strategy of Developing Romania during the period between 2007 and 2013, tourism plays a special part, an important increase of the already mentioned field within the general economic frame being envisaged.

For the Jiu Valley, in order to develop tourism in the future, it is very important to properly exhibit the touristic area Retezat – Paring within the region. The area includes the south third part of the district of Hunedoara, containing seven touristic areas: Retezat, Parâng, Vâlcan, Godeanu, Ţarcu, Petroşani Depression, and the central part of Şureanu mountains, the touristic center Petroşani as well as the touristic localities: Aninoasa, Vulcan, Lupeni, Câmpul lui Neag.

The compounding areas are of „huge interest" (Retezat), „great interest" (Parâng), „medium interest" (Vâlcan, Godeanu, Şureanu, Țarcu) and „small interest" (Petroşani Depression).

We deal with a mountain region having an extraordinary natural potential, with altimetric quotations that overpass 2500 m (Parângu Mare – 2519 m, Peleaga – 2509 m, Păpuşa – 2508 m), bulky massifs, steep rocks, icy formations (circuses, valleys, ridges, moraines, pillars etc.), modelling platforms (Borăscu, Râu Şes, Gornovița) that appear as real plains calling for trips. Nowhere else in Romania the greatness of alpine scenery is so impressive.

Within the limestones of the mountains of Retezat, Şureanu, Parâng and Vâlcan the rivers cut wild gorges (Buta, Western Jiu, Braia, Jieț etc.), and underground extremely beautiful caves have been formed (The Coral Cave, Zeicu Cave, Iorgovan Cave etc).

There are also attractive characteristics of the hydrography of the more than 80 glacial lakes in Retezat (among which we should mention Bucura and Zănoaga Lakes), Parâng, Godeanu and Țarcu, of the anthropic barrage accumulations on Râul Mare or the waterfalls on Retezat rivers.

The high altitude helps maintaining the snow for 5 – 6 months a year, a fact that favours winter sports. The nice weather during summer allows mountain climbing.

Vegetation is storied, one being able to see here all vegetal species characteristic to our country, starting with oak and beech forests and ending with alpine vegetation.

Fauna is rich and varied, animal world living in a real paradise. In order to protect some vegetal and animal species the National Park of Retezat have been created.

Anthropic ressources are far from competing with those of the natural anvironment. The Depression of Petroşani is the only area more intensely populated; within it one should notice the ethnographic area of the „momârlani" (native peasants).

Among anthropic objectives one should mention: the Mining Museum of Petroşani, the barrage lakes of Gura Apei, Valea de Peşti in Vâlcan Mountains.

Touristic resorts are represented by winter sports resorts of Straja (Vâlcan Mountains), Râuşor (Retezat Mountains) and the one of Parâng Mountains.

Challets are well represented, some of them having old traditions (Gura Zlata, Pietrele, Baleia), as well as farming and touristic guest houses. Access roads follow hydrographic or morphological corridors, modernized highways crossing Petroşani Depression and the Jiu Gorge and branching out towards the mountains.

The region allows the putting into practice, accordingly supported, of 10 forms of tourism: recreation, itinerant, long and short term, trip, alpinism, winter and summer sports, picnic and knowledge.

As we have already mentioned, especially for the inhabitants of the rural zone, an alternative in order to increase their incomes might be rural tourism, farming tourism and forest tourism. These forms of tourism offer the possibility of directly knowing the traditions of the Romanian people, its hospitality, and the traditional

cuisine. Mountains Law is the one that settles certain facilities for developing the system of rural tourism within the mountain zone in order to support family initiatives, as peasant homes can be authorized to offer touristic service in guest houses or farms.

As a conclusion, one can say that the re-structuring of the mining field, beginning with 1997 until now, significantly influenced social and economic development of Romania, at a general level, as well as that of the Jiu Valley, in particular, the impact being important both at a social level and at the level of related economic activities deployed in the region. The alternatives offered to those who became unemployed and to the other categories of unemployed persons have not been too many and this fact determined the decrease of the living conditions in the area. All these determined a new approach of economic and social regeneration of the Jiu Valley, among the proposed and accepted future solutions the development of a long lasting tourism being most important.

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THE ROLE OF THE BANKING SYSTEM IN THE SUSTAINABLE DEVELOPMENT OF THE ECONOMY

IMOLA DRIGĂ *

ABSTRACT: *The efficiency of the banking system and financial markets represents a determinant factor for sustainable development. Thus, banks are essential for any modern economy, not only because of their turnovers but also because they provide a number of important functions for the national economy, being the main financier.*

KEY WORDS: *the banking system, the role of banks in economy, the banking degree of the economy*

In modern sense, banks appeared and consolidated in close connection with the development of commerce and capital accumulation, being a direct consequence of production development and expansion of the entire economy. Playing a significant role in the development of trade, these banks were named commercial banks. In the process of commercial banks' emergence money changers and money lenders played a peculiar role, being the first monetary intermediaries, carrying out trade with money.

Later on, as the economy developed and the volume and structure of exchanges amplified, the place of money changers and money lenders was taken by banks which took over funds from capital holders in order to keep them safely and remunerate their owners with interest. Banks were forming deposits used to provide loans for those in need of capital. In this way, bank deposits were the base of the capital redistribution process as lending sources. Today, the role and place of banks in the economy are closely connected with their attribute of main financial intermediaries in the relation savings-investments.

Market economy requires a strong banking system that enables funds redistribution. Nowadays, banking is referred to as a service industry rather than a profession. Therefore, a bank can be associated with a financial service conglomerate able to provide basic financial services and properly function within the economic,

* *Lecturer at the University of Petroşani, Romania*

political, legal and international environment that determines its profit and expansion opportunities, interest rates, exchange rates and the particular resources a bank needs. Commercial banks are considered however not only as business organizations, but also as public institutions with a well-determined role in the economic and social field.

On short, commercial banks are profit-making organizations acting as intermediaries between borrowers and lenders attracting temporarily available resources from business and individual customers as well as granting loans for those in need of financial support. From this point of view, banks deal with money belonging to persons and other firms. Its inputs are represented by money in the form of deposits for which banks pay a certain amount as interest while its output is mostly formed by loans granted to credit applicants for which the lender is entitled to charge interest. If these activities are successful, the income of the bank is greater than its expenses and the bank earns a profit achieving its primary goal.

The efficiency of the banking system and financial markets represents a determinant factor for sustainable development. Thus, banks are essential for any modern economy, not only because of their turnovers but also because they provide a number of important functions for the national economy, being the main financier.

In order to perform their functions, commercial banks provide a tempting array of financial services to attract customers and to meet their demands.

Being at the same time borrowing and landing institutions, banks also offer other types of services, such as: payments, settlements and funds transfer, foreign exchange transactions, savings and investment services, payroll services, financial advice, investments and bill finance, safe-deposit boxes. So as to provide these financial services, commercial banks perform certain functions within the national economy:

- the function of deposit' acceptance, attracting temporarily available resources from business and individual customers;
- the *investment* function, granting loans for those in need of financial support;
- *the commercial* function that enables fund transfer between account holders determined by various activities.

The banking system, seen as a mirror of economic growth, can contribute to the economic development of the country in at least two ways: directly, through the increase of balance sheet elements and indirectly through financial services granted for clients.

By analyzing the information provided by the aggregate monetary balance sheet of banking institutions, one can observe a continuous increasing trend during the entire period 2000-2005, so that the level reached in 2005 (in amount of 130259788 thousand RON) exceed 5.6 times the level reached in 2000. With respect to banking assets, such a development is based on the increase of internal assets which were 1.13 times higher in 2005 in comparison with the end of 2000. As far as external liabilities are concerned, the growth was 20.66 regarding the same period of time (Table 1 and Figure 1).

Table 1. The evolution of bank assets and liabilities in Romania during 2000-2005

Specification / Year	Indexes with chain base					
	Assets			Liabilities		
	Total	External	Internal	Total	External	Internal
2001/2000	1,51	1,27	1,56	1,51	1,59	1,51
2002/2001	1,36	0,78	1,46	1,36	1,61	1,34
2003/2002	1,29	0,88	1,33	1,29	2,15	1,23
2004/2003	1,48	1,49	1,48	1,48	2,00	1,41
2005/2004	1,43	0,86	1,46	1,43	1,88	1,34
Specification / Year	**Indexes with fixed base**					
	Assets			Liabilities		
	Total	External	Internal	Total	External	Internal
2001/2000	1,51	1,27	1,56	1,51	1,59	1,51
2002/2000	2,06	0,99	2,28	2,06	2,55	2,03
2003/2000	2,65	0,88	3,02	2,65	5,48	2,48
2004/2000	3,93	1,31	4,47	3,93	10,98	3,50
2005/2000	5,60	1,13	6,53	5,60	20,66	4,69

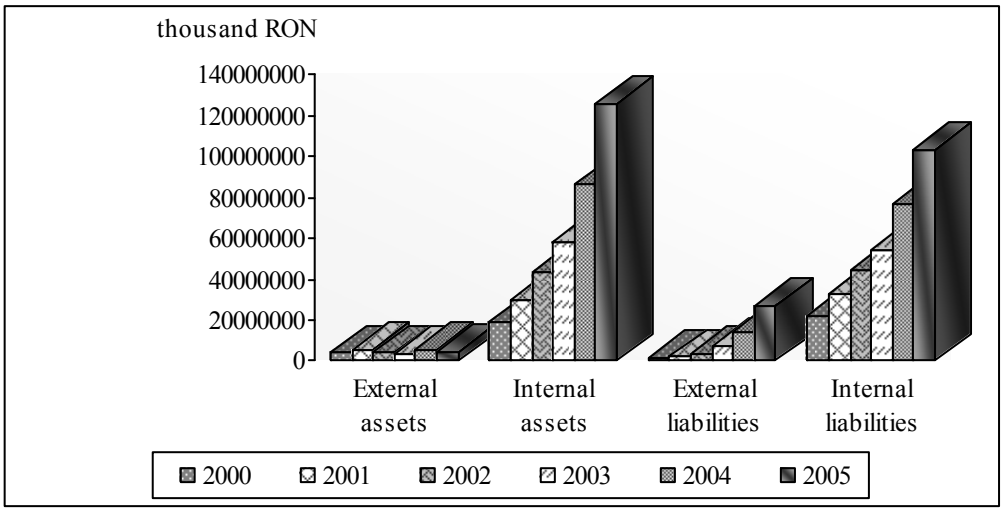

Figure 1. The evolution of bank assets and liabilities in Romania during 2000-2005

One of the most important financial services offered by commercial banks is providing loans to both individual clients and companies. Lending to individuals and firms is a vital banking function because commercial banks earn profit mostly from charged investment rates.

Generally, credit is defined as an immediate purchasing power exchanged for the promise of repaying it at a later date, paying interest for its use and protecting the pledged collateral until the loan is paid in full. A credit transaction is a business activity that involves two sides: a borrower, which generally is an individual or a firm and a lender that may be a lending institution such as a commercial bank or other intermediary involved in the purchase.

Credits are the main assets for a bank having a particular importance within the financing process of the entire economy. In order to analyze the current position of bank loans and the perspectives of the Romanian banking system, we must pursue the evolution of the banking degree of the economy, estimated both as the proportion between bank assets and GDP and as the proportion between loans and GDP (Table 2 and Figure 2).

Table 2. The evolution of the proportion between bank assets and GDP and of the proportion between loans and GDP in Romania during 2000-2004

Year	GDP (thousand RON)	Bank assets		Bank loans		
		Total (thousand RON)	% in GDP	Total (thousand RON)	% in GDP	% in assets
2000	80.377.310	23.267.362	28,95	7.500.711	9,33	32,24
2001	116.768.700	35.214.642	30,16	11.825.443	10,13	33,58
2002	151.475.090	47.819.213	31,57	17.872.797	11,80	37,38
2003	190.335.390	61.736.703	32,44	30.287.938	15,91	49,06
2004	238.791.430	91.384.458	38,27	41.762.355	17,49	45,70

During 2000-2004, the analyzed data show an increasing trend for both the proportion between bank assets and GDP and the proportion between loans and GDP, banking loans representing 49% from GDP at the end of 2004. However, by comparison with other countries, the banking degree of the Romanian economy is still low (in the Czech Republic and in Hungary it represents over 100%, in Switzerland 300% and in Great Britain 270%).

At the same time as banking products and services developed, as a consequence of increasing competition in this area and of extensions of the private sector, one of the main challenges for Romanian banks became lending profitable loans

by maintaining risks at a reduced level. In this regard, the tendency in the lending side of banking is to increase loans granted to individuals.

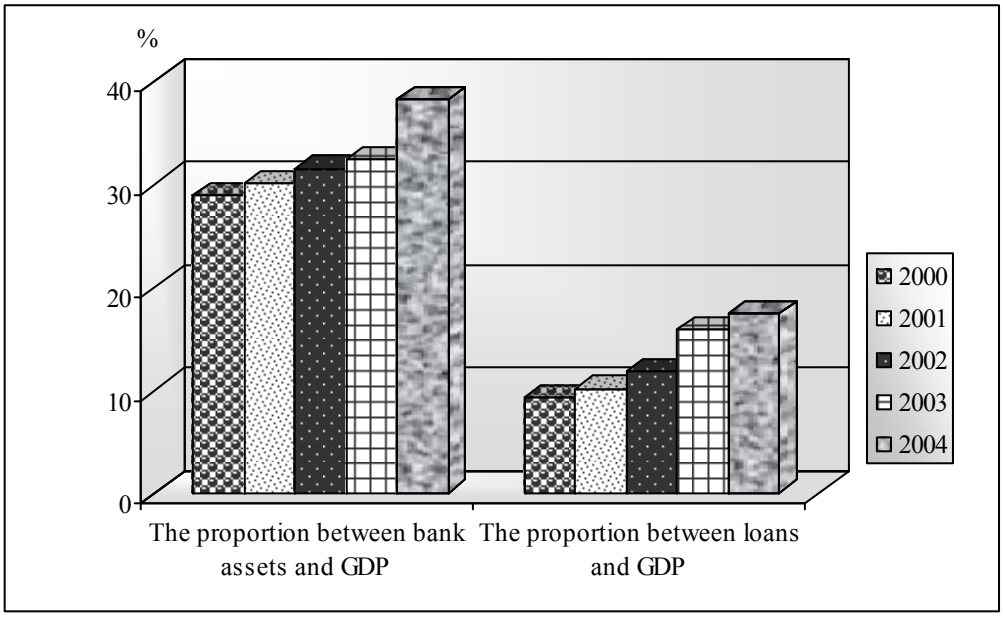

Figure 2. The evolution of the proportion between bank assets and GDP and of the proportion between loans and GDP in Romania during 2000-2004

Thus, in 2003, as inflation diminished, determining a decreasing trend for interest, loans became more approachable for individuals and as a consequences bank credits reached a level of 30287938 thousand RON, representing 15.91% in GDP, retail credits being in amount of 7501202 thousand RON, representing 24.76% from total credit granted by the banking system. In 2004, as a result of implementing a new regulation issued by the National Bank of Romania concerning credit risk limitation for consumer loans, the volume of retail credits decreased consequently.

At present, the role and place of the banking system in the economy are closely connected with their attribute of main financial intermediaries in the relation savings-investments that has a determining importance in economic growth. At the same time, banks play the role of monetary intermediaries having as basic characteristic the capacity of transforming non-monetary assets into money, simultaneously representing the main transferring channel in implementing the monetary policy of the central bank.

In terms of global economy, the increasing role of the banking system in the economy is obvious taking into consideration the fact that, as informatics and communicational systems are developing, we can assist at the arise of a financial network system world-wide composed of regional and national banking systems.

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WRITING FOR BUSINESS PURPOSES: ELEMENTS OF EMAIL ETIQUETTE

GABRIELA DUMBRAVĂ, ADRIANA KORONKA *

ABSTRACT: *Starting from the premise that electronic mail has experienced an explosive development throughout the world over the past few years, gaining substantial territory in the field of business communication, the paper focuses on the basic elements of email etiquette and on their importance in writing an effective and competitive electronic message. adapted to the context and purpose of professional writing.*

KEY WORDS: *email, etiquette, message, business writing, sender, recipient*

1. CHARACTERISTICS OF ELECTRONIC COMMUNICATION

The electronic mail is a relatively new medium of communication that is experiencing exploding growth around the world. E-mail messages can be sent across different kinds of networks, both locally and globally as, aside from the Internet, there are thousands of local area networks and wide area networks that send messages daily various kinds of transmission cable.

Due to its broadcasting speed, electronic communication is fundamentally different from paper-based communication. The first characteristic that differentiates it from traditional paper-based media is the almost instantaneous response, which brings it closer to oral communication. Therefore, if in a paper document it is absolutely essential to make everything completely clear and unambiguous because your audience may not have a chance to ask for clarification, with email documents, your recipient can ask questions immediately. However, when we write an email message, we should always keep in mind our correspondent and, according to the specific relationship with him/her, adjust our language and tone.

On the other hand, email cannot convey emotions as well as face-to-face or even telephone conversations, because it lacks vocal inflection, gestures, and a shared environment.

* *Lecturer, Ph.D. at the University of Petroşani, Romania*
Lecturer, Ph.D. at the University of Petroşani, Romania

Another difference between email and traditional media is that what the sender sees when composing a message might not look like what the reader sees, as the differences in the software and hardware used for composing, sending, storing, downloading, and reading may determine distortions in the visual qualities of the message.

Because e-mail has become a mainstream form of communication, it is not easy to switch from casual and conversational e-mail to professional e-mail, which is very different from casual electronic messages. Consequently, specialists in the field of business writing unanimously agree upon the following basic rules to be observed when writing or responding to potential employers, co-workers, colleagues, business members, and college staff or personnel:

1. In order to be taken seriously and given more credibility, the email sender should avoid such **common mistakes** as:

- using emoticons:
- being too informal:
- misspellings and poor grammar:
- no capitalization:
- spelling words the way they sound.

2. In terms of **content**, the following guidelines are indispensable:

- always introduce yourself the same way you would in a cover letter;
- make the reason of your writing obvious in the subject line: *Application for X position*;
- make sure you change the contact name and content according to the person/company to whom you are sending the message;
- when responding to an e-mail, include the original message in the reply, so the receiver can put your e-mail into the correct context. Also, respond within two business days;
- never use all capital letters. Apart from being difficult to read, receivers may think that you are screaming;
- keep your address simple, and avoid unprofessional sounding names;
- read your message carefully before you click the send button in order to eliminate any possibility of misinterpretation;
- have someone else proofread your message before you send it. The printed form also makes it easier to find errors upon review;
- do not assume that if an employer is informal you should also be;
- don't just rely on e-mail, which can be lost. Follow-ups can often be done via the telephone or regular mail.

3. Setting the **tone** in email relies on the awareness that how you say something is as important as what you say.

Therefore, we should keep in mind that tone in e-mail is so important that an inappropriate tone can cause a reader to ignore, delete, or overreact to your message. A versatile writer can write the same thing using a variety of tones, but all business

e-mail writers must be able to control the tone of their writing, so their e-mail messages will have the results they intend.

The simplest definition of tone is "the quality in your writing that reveals your attitude toward your topic and reader". Tone comes from your choice of words, the structure of your sentences, and the order of the information you present. As electronic communication is indirect, the temptation to express thoughts we would never say to an interlocutor in face – to face conversation is sometimes dangerous. Equally dangerous is the tendency of most e-mail writers to review only the content of their messages overlooking the tone, and ignoring the obvious fact that the wrong tone can damage a business partnership, as well as the progress of a company project.

Consequently, reference books on business communication basically focus on five ways of setting the right tone in email writing. The best advice in setting the tone for your business e-mail is to write in a tone that is closest to the way you would speak to your reader in person. These following steps will support the writing of e-mail in a courteous and professional tone:

a. Keep cool and use words carefully. For many reasons, it's never appropriate to lose control in e-mail:

- email is easily forwarded so the recipient can share it with lots of readers;
- if you use an angry tone in e-mail your reader will probably answer in anger. While the tone escalates, the work is delayed and you make an enemy of a colleague or client;
- remember that your employer owns your e-mail. Therefore, keep in mind that what you are writing is not private and avoid using a tone you'd be uncomfortable sharing with your boss.

It is very important to remember that well-chosen words create a personal, professional tone in e- mail. You can't rely on emoticons. Rely on words to set the tone in your e-mail because they carry meaning to all readers, some of whom may not understand emoticons or abbreviations.

b. Choose an appropriate greeting and closing. The greeting in your e-mail establishes your relationship to your reader. Most writers of business e-mail begin their messages with *Hi* or *Hello* followed by the recipient's first name: *Hello, Fred*. Some writers begin the message with the first name only. *Dear* is still an acceptable greeting in e-mail, not merely a vestige of old fashioned print culture.

If writing an e-mail message to a group, use the group name in the greeting. Don't begin your message with *Hi, guys* or *Everybody*. Though these extremely casual greetings may sound friendly, it is actually just vague. Try *Dear Leadership Team* or *Hello, Interns*, as a more specific greeting sets a focused tone to the message.

Always write a closing for your message. Beside making it easier for your reader to find the end of the message, the closing reinforces the tone and serves as a final reminder of the main point or requested outcome. Try an action-oriented closing such as *I'll call you on Tuesday to schedule the meeting*, or choose a gracious closing such as *Thanks for your help*, or *I look forward to meeting you*.

c. Use Personal Pronouns. In order to make your e-mail writing personal, address your reader directly, by using the pronoun you. Write: *You may use the Executive Health Club on weekends,* rather than: *Employees may use the Executive Health Club on weekends.*

Use the pronouns *I* and *we* when referring to yourself or your organization. Write: *I discovered that our mailroom clerks were throwing away most of the promotional fliers*, rather than: *It was discovered that most of the promotional fliers were being thrown away*. Choose: *Because you used the product incorrectly we will not refund your money*, instead of: *Mannheim Manufacturing cannot refund your money because the product was used incorrectly.*

d. Write in the active voice. Active voice makes your e-mail tone clearer and more direct. When you write in the active voice your e-mail tone won't sound bureaucratic the way passive voice does. Write in the active voice: *We will gladly provide funding and materials just as soon as the foundation accepts your proposal*, rather than: *Funding and materials will be provided promptly when the proposal has been accepted.*

e. Order information to maintain a professional tone. The beginning of an e-mail message sets the tone and emphasizes the content of the message. Set a direct tone by communicating the most important information first. Even when the main point of the message is bad news, you must begin with it. Burying the bad news in the middle or end of the message is harmful, as readers may miss it or misinterpret its importance.

We all know that the volume of e-mail we answer each day makes it difficult to write each message thoughtfully with the correct tone but, if we want our messages to achieve our goals, we must set the tone in e-mail just as we do when we speak.

Writing competitive email is essential for the development of any business but, at the same time, it is also quite difficult, having in view that what you say and how you say it matters even more than in print communication. Therefore, your misspellings and unorganized messages will call your competence into question, being very easily interpreted as disregard for customer service or business partnership.

Thus, in order to be able to observe the basic rules of business email writing and to follow the five steps that ensure an efficient business, you first need to plan your writing carefully, and then, after the message is drafted, to give it an appropriate layout.

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NEW JURIDICAL AND ECONOMICAL ELEMENTS BROUGHT BY THE INOVATING INSOLVENCY LAW

OANA-CARMEN DUMITRESCU, DORU-BOGDAN RĂVAŞ *

ABSTRACT: *Giving the facts, that Romania is following the adhering process to the E.U., one of the most important criterion which Romania has to accomplish is the economic one, which suppose the existence of a functional market economy. Even if the term of functional economy is rather ambiguous and subjective, it is unanimously accepted that between the fundamental elements of the market economy we can find the phenomenon of going out of the market; in the context of an absence of legal, political and administrative barrier which could maintain on the market unavailable companies. The process of going out of the market can be defined especially by the process of insolvency, which has an important role in the reassignment of the resources and the cleaning of business environment.*

Through the fact that Romania is making hard efforts to accomplish the demands which can provide the adhering to the E.U., the area of applying the process of insolvency should suffer an important modification by adapting a new law of insolvency which should annul the current law 64/1995.

KEY WORDS: *insolvency, bankruptcy referee, debt, secured creditors, stockholder, receiver in bankruptcy*.

The process of going out of the market can be defined especially by the process of insolvency, which has an important role in the reassignment of the resources and the cleaning of business environment.

Even if the insolvency regime is not universally recognized and so are the laws, in exchange the purposes of the insolvency are the same all over the world. The World Bank, as part of its initiatives to develop the international cooperation is the area of insolvency and to establish a series of general principles and recommendations, has been suggesting three major purposes of the insolvency.

The first purpose is to maximize the entire distributed value to the creditors, to the stockholders, to the employees and to other interested parties. The company can be

* *Assist.Prof. at the University of Petroşani, Romania*
Assist.Prof. at the University of Petroşani, Romania

rehabilitated, sold out or liquidated - any of these options can be chosen if it offers the maximum efficiency.

The second purpose is the rehabilitation of the viable business or the liquidation of the unviable. The legislation regarding the insolvency must not be to rough with the companies which can have a future and not very tolerant with the companies that have no future.

The third purpose is the priority, more simple and more predictable of the debts: the secured creditors should be the first paid. In this way it is consolidated the institution of credit and the cost of the process of the accommodation.

The main objective of this new law is to make the procedure of reorganization and insolvency more effective by:

- introduction of a simplified procedure, which can be applied to the private persons, to the companies that are not active or without any business books or to the companies which has no headquarter or does not correspond to the address that has been given to the ledger, to the defaulting debtors or to those who have introduced a petition regarding the insolvency;
- redefining the role of the bankruptcy referee;
- the organization of the insolvency sections at the commercial court;
    a) It is necessary to create a special section for the insolvency litigation at the court of law which is in the same town as The Appellation court;
    b) The organization of an unitary archive specialized in insolvency separated of the court's archive;
    c) The introduction of an informational system for an easier correction and management of the documents;
- The liquidator/ judicial administrator would have larger responsibilities, would have to respond for his actions in front of the committee of creditors;
- The committee of creditors is composed by 3 to 7 creditors named from secured creditors and simple contract creditors and it is brought together at least once a month;
- The decreasing of the accomplished terms regarding the procedural documents;
- The clearing up of the concepts meaning which are the base for the procedure established by the law concerning the insolvency;
- The simplification of the quoting, notification and communication notes, in this way an essential part is assumed by The Bulletin of the insolvency procedures the consolidation of the efficiency regarding the reorganization procedure.

The procedure stipulated by the law regarding the insolvency procedure its an instrument willing to keep the same distance between the insolvent debtor and his creditors, in order to come up with the best solution of the insolvent state of facts.

By the debtor's perspective, the purpose of the law is realized if he succeeds his rehabilitation and his return to the normal activity.

By the creditor's perspective, the purpose of the law is reached in the case of accomplishment of an equilibrium between the recovering level of the claims and the item between the opening of the procedure and the moment of distributing the

amounts. Also the creditor's interest can be represented by the keeping of business relations for the future with the insolvent debtor. By the perspective of the important business environment are: the transparency of the procedure, its predictability and the easy access to the cure provided by this.

According to The World Bank's directives regarding the insolvency procedures, there are recommended the following characteristics for the legal state of corporative insolvency:

- to benefit of a good integration in the wide frame of the commercial law from the territory they belong to;
- to ensure the maximum value for the debtor by offering reorganization possibilities;
- to ensure a careful equilibrium between reorganization and liquidation;
- to offer an equal treatment to creditors at the same level, including similar treatment for the local and foreign creditors;
- to prevent the premature initiatives of the creditors to brake and especially to sale by pieces the insolvent debtor's actives;
- to offer a transparent development background based on the free access to information for all the participants to the procedure;
- to ensure recognition of the creditor's rights and of an equitable and stable order of priorities;
- to ensure the recognition premises of the cassis that involve to exceed the bounds of the countries;

In order to be the main subject of the insolvency procedure, the debtor is necessary to find within the insolvency, the purpose of the law 85/2006 being the establishment of a collective procedure in order to cover the debtor's passive.

The law 85/2006 gives the following definition for the term "insolvency": the insolvency is that level of the debtor's patrimony which is characterized by the shortage of money funds available for the payment of the demandable debts:

- the insolvency is presumed as being obvious, when the debtor, after 30 days from the date of payment, hasn't paid his debt to one or more creditors;
- the insolvency is imminent when it is proved that the debtor won't be able to pay in time the demandable debts, with the funds available at the date of payment.

The insolvency procedure consists in an ensemble of legal documents and actions which concern: the establishment of the active and passive mass, the liquidation of the goods from the debtor's patrimony, the distribution of the amounts resulting from the good's liquidation of the debtor's patrimony, the closing up of the insolvency procedure.

The purpose of the insolvency procedure is to form the debtor's estate, which contains all the patrimony rights and goods, including the over gained during the procedure, that can serve for the specific performance according the conditions of the code of the civil law. The establishment of the active and passive mass is needed actions also in reorganization and insolvency, because they are allowing and contributing to achieving its purpose.

The liquidation of the debtor's patrimony is marked by the declaration of the bankruptcy referee concerning the beginning of the insolvency procedure, preceded by the necessary measurements in order to establish the active and passive mass.

The accounting laws take in discussion the obligatory character of bookkeeping and define the information resulting from the annual financial reports in terms of contents and from the quality point of view through the regularity, sincerity and clear representative principles.

According to art.10 from The Accounting Law nr. 82/1991 the responsibility for organizing and managing the entities accounting is entitled to the manger, to the applicant or to other person entitled to manage the institution.

The insolvency situations, the practitioner in insolvency is obliged to manage the entity in the case of insolvency. In consequence he is the one in charge of organizing and managing the accounting of entities in the stage of insolvency.

The entities organize and manage accounting often in different departments, lead by the accounting manager, chief accountant or other person empowered to fulfill this task.

In the case of joint stock companies there must be at least three censors and the same number of substitutions chosen by the main board of administration and who can act based on a legal agreement.

The entity declared as being in the state of insolvency may use independent external auditors in stead of censors also based on a legal agreement. The insolvency practitioner has the opportunity to turn in those agreements but specialists appreciate that if the insolvency situation occurs the operations should be achieved by the official receiver or by the receiver in bankruptcy under the supervision of the bankruptcy referee who should decide if the balance sheets and the profit and loss accounts are legally prepared according to the registers, it he last ones are legally kept and if the patrimony assessment has been done according to the established rules. The external auditors should express their opinion over the state of the balance sheets.

In legal terms the referee with the approval of the creditors board may appoint an expert accountant who can elaborate an opinion regarding the accounting aspects achieved by the legal supervisor or receiver in bankruptcy during the procedure in insolvency.

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THE USE OF MARKOV CHAINS IN MARKETING FORECASTING

CODRUȚA DURA *

ABSTRACT: *The Markov chains model is frequently used to describe consumers' behavior in relation to their loyalty towards a brand, a manufacturer, a product, o a chain of stores, etc. Most frequently, this model is applied in marketing for dynamic forecasts of the market quota against a background of intense rivalry between brands. In a Markov chain, the result of a trial depends on the result of the trial that directly precedes the former. If we associate the conditional probability p_{jk} (which means that if we obtain the result R_j, then the probability to reach the result R_k of the initial trial is p_{jk}) to a set of possible results (R_j, R_k) and if the probability of the result R_j of the initial state is a_j (initial distribution), then the conditional probability is, in fact, the transition probability from R_j to R_k.*

KEY WORDS: *Forecasting methods*, *Markov chains, steady state vector, transition probability matrix, the loyalty indicator*, *the persistence of the loyalty indicator, marketing quota, marketing share, sales structure.*

Marketing forecasting is a projection of the variable marketing levels in the future, based on past evolutions. Sales forecasting plays an important part as far as marketing investigations are concerned, taking into consideration that the volume of sales (the turn-over) the most representative synthetic indicator for evaluation of a company on the market. Because of the multitude and complexity of situations, the marketing forecasts have imposed, both in theory and in practice, two categories of methods: quantitative and qualitative.

Quantitative forecasting methods use available statistics from the past to estimate future sales. Although they admit to some point that marketing variables are capable of permanent modifications, such methods are based on the following principle: "future is contained in the past". Applying methods from this category implies, in fact, the quantification of the relation between the forecasting variable and the time variable or between the former and other variables.

* *Lecturer, Ph.D. at the University of Petroşani, Romania*

Complementary to quantitative methods, *qualitative forecasting methods* have proved, in the long run, to be useful in marketing decision making and they were very often the only instruments used to forecast future evolutions of the marketing variables.

Qualitative methods are mostly used to forecast very complex phenomena with limited available information which are not really precise; thus people appeal to logic, reason, experience and intuition. Here are some of the main methods from this category: analogy, conjuncture testing, PERT-derived method and Markov chains and so on.

The Markov chains model is frequently used to describe consumers' behavior in relation to their loyalty towards a brand, a manufacturer, a product, o a chain of stores, etc. Most frequently, this model is applied in marketing for dynamic forecasts of the market quota against a background of intense rivalry between brands.

A Markov chain is defined by the "steady state" vector a_j and the transition probability matrix P. The "steady state" vector represents the phenomenon which is being analyzed at some point, based on real data. The elements of a transition probability matrix are estimated, in practice, according to market researches regarding the consumers' opinion on the future periods of time. Transition probabilities are like a square matrix with non-negative elements and the sum of elements on each line equals the unit value.

If we consider a total of possible independent results R_1, R_2, ...R_3 and if each result has a probability p_k, then the probability of a sequence is given by a multiple probability: $P\{R_0, R_1, ..., R_n\} = p_0 \cdot p_1 ... \cdot p_n$.

In a Markov chain, the result of a trial depends on the result of the trial that directly precedes the former. If we associate the conditional probability p_{jk} (which means that if we obtain the result R_j, then the probability to reach the result R_k of the initial trial is p_{jk}) to a set of possible results (R_j, R_k) and if the probability of the result R_j of the initial state is a_j (initial distribution), then the conditional probability is, in fact, the transition probability from R_j to R_k.

The loyalty indicator towards a product (a brand) is given by the probability that at trial (t+1), the product purchased in the time period (t) should be identical. Practically, the loyalty degree is represented by the number of clients that purchase the same product during the following period of time.

The persistence of the loyalty indicator towards a product (a brand) shows the future purchasing cycles in which the loyal clients of a product (a brand) are involved. The constancy of a brand (a product) on the market is given by the opposite of the purchase probability in the time period (t) and, on principle, it is represented by the number of future purchasing cycles.

The application of the method is conditioned by the fulfillment of some premises which can rarely be found on a real market, but they can be simulated on a test market:

- present purchases are influenced by the latest experience based on previous acquisitions;

- there is a fixed number of products that enter into competition on the analyzed market;
- the choice for a brand (product) in the time period (t+1) depends on the brand (product) which was selected in the previous time period (t);
- during the analyzed period there are no new brands (products) on the market, nor are old products withdrawn from the market;
- the number of consumes remains unchanged (probably the dynamics of the new-comers equals the number of consumers who leave the market);
- the quantity of the purchase and the period of time between consecutive purchases are not taken into consideration.

In fact the following algorithm establishes only the structure of the demand (the market quota) and not its total volume, which can be forecasted separately through more exact methods. Let us consider a panel of 1500 consumers of three branded (symbolized A, B, C) who supplied the following structure of demand (table 1) for January (time period t).

Table 1. Demand structure in January

Brand	Number of consumers (period t)	
	Absolute	**Relative (%)**
A	720	48,00
B	350	23,30
C	430	28,70
Total	1500	100

Previous marketing researches revealed a group of loyal consumers for each of the three branded products, and the tendency of each consumer to try out the other brands as well. The loyalty coefficients (for a relatively short period of time – a month) were: 0.60 for brand A, (meaning 60% of consumers of product A continued to buy the same brand), 0.80 for brand B and 0.50 for brand C. Out of the 40% of consumers who give up brand A, 30% purchase product B and 10% purchase product C; 15% of consumers of product B purchase brand A and 5% purchase brand C; out of the most "unfaithful" consumers of product C, 10% chose brand A and 40% chose brand B.

The new problem that arouses is forecasting the changes of the market quota of the three brands in the next eight months; another problem is evaluating the life cycles of each brand. However, if the transition probability matrix is considered to be constant, one can forecast the values at which the structure of the demand will be stable.

The procedure for this method requires the following algorithm:

1. ***Estimating the transition probability matrix*** – the loyalty coefficient and the predicted "migration" of consumers are taken into consideration based on a market research carried out in two consecutive periods of time. Consumers who choose the same product during a period of time make up the "loyalty class", while the others ("the unfaithful") choose other brands.

Considering p_{jk} a transition probability from brand (j) to brand (k), than the transition probability matrix has the following general form:

$$Period\ (t) \rightarrow \begin{pmatrix} p_{AA} & p_{AB} & p_{AC} \\ p_{BA} & p_{BB} & p_{BC} \\ p_{CA} & p_{CB} & p_{CC} \end{pmatrix} \rightarrow Period\ (t+1) \tag{1}$$

In fact, p_{jk} probabilities show the number of loyal consumers of a certain brand and the number of consumers who give up the brand in favor of other competitive brands. The first line, for example, shows the percentage of loyal consumers of product A (p_{AA}) and of consumers who give up product A in favor of products B and C (p_{AB} and p_{BC}). Column A also indicates the number of loyal consumers (p_{AA}), as well as the probabilities characteristic for those who first chose other brands and are now attracted by product A (p_{BA} and p_{CA}).

As a consequence, the main diagonal of the transition probability matrix is made up of three loyalty coefficients, predicted for each brand. The figures above the main diagonal indicate the destinations and the percentage of migration towards other brands (for those who give up a certain brand). The figures below the main diagonal show the sources and the percentage of consumers of other brands who "migrated" towards another brand (those who adopt another brand).

As a result, in the case of our study, the transition probability matrix materializes into:

$$P = \begin{pmatrix} 0.60 & 0.3 & 0.10 \\ 0.15 & 0.8 & 0.05 \\ 0.10 & 0.4 & 0.50 \end{pmatrix} \tag{2}$$

2. ***Form the steady state vector*** like a line vector, the elements of which are represented by the market quota of the products (brands) in time period "zero".

$$a_j = (0.48\ \ 0.23\ \ 0.29) \tag{3}$$

3. ***The market quota is determined for the fist time period*** by the procedure shown in table 2.

As far as market quotas are concerned, the same result can be obtained by multiplying the steady state vector by the transition probability matrix.

$$(0.48\ \ 0.23\ \ 0.29) \cdot \begin{pmatrix} 0.5 & 0.4 & 0.1 \\ 0.2 & 0.6 & 0.2 \\ 0.3 & 0.3 & 0.4 \end{pmatrix} = (0.373\ \ 0.417\ \ 0.210) \tag{4}$$

Table 2. The sales structure in February

Brand	A	B	C	Total
Cluster	0,60 x 720 = 432 0,15 x 350 = 53 0,10 x 430 = 43	0,30 x 720 = 216 0,80 x 350 = 280 0,40 x 430 = 172	0,10 x 720 = 72 0,05 x 350 = 17 0,50 x 430 = 215	720 350 430
Total number of consumers	528	668	304	1500
Market quota	0,352	0,445	0,203	1,000

4. ***The market quota for the following time periods*** comes from a recurrent calculation in which the transition probability matrix from a certain state to the next state is multiplied by a previous result, and so on. However such determination is valid only for a short time period, that is to say before a new market research which experiences serious changes as far as the volume and the structure of the market shares are concerned.

The market quota and the number of consumers can be determined after 2, 3, 4, 5, 6, 7, 8, 9, 10 months according to a calculation like the one mentioned at the previous step.

Table 3. The sales structure in May (t+2)

Brand	A	B	C	Total
Cluster	0,60 x 528 = 316,8 0,15 x 668 = 100,2 0,10 x 304 = 30,4	0,30 x 528 = 158,4 0,80 x 668 = 534,4 0,40 x 304 = 121,6	0,10 x 528 = 52,8 0,05 x 668 = 33,4 0,50 x 304 = 152	528 668 304
Total number of consumers	447	815	238	1500
Market quota	0,298	0,543	0,159	1,000

Table 4. The sales structure in April (t+3)

Brand	A	B	C	Total
Cluster	0,60 x 447 = 268,2 0,15 x 815 = 122,2 0,10 x 238 = 23,8	0,30 x 447 = 134,1 0,80 x 815 = 652 0,40 x 238 = 95,2	0,10 x 447 = 44,7 0,05 x 815 = 40,7 0,50 x 238 = 110	447 815 238
Total number of consumers	414	881	205	1500
Market quota	0,276	0,587	0,136	1,000

Further on, allowing for a constant transition, the evolution of the market quota for the three brand products looks like this:

Table 5. The evolution of the market quota for the three brand products

Market quota (%)	Period								
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
A	48,00	35,2	29,8	27,6	26,7	26,4	26,3	26,2	26,2
B	23,30	44,5	54,3	58,8	60,8	61,6	62,0	62,2	62,2
C	28,70	20,3	15,9	13,6	12,5	12,0	11,7	11,6	11,6

After certain time periods, the quota of the brands on the market tends to become stable because the migration of consumers from one brand to another gets less significant. This is one of the major limits of the model taking into consideration the fact that a constant transition probability matrix will eventually lead to the same market quota, regardless of the initial shares. From a practical point of view, it is possible to correct this deficiency through a permanent control of brand switching using consumer panels.

The point of equilibrium can also be determined analytically. In the case of a permanent Markov chain, this implies solving the system:

$$\begin{cases} P \times D = 0 \\ p_1 + p_2 + p_3 = 1 \end{cases} \tag{5}$$

where: the dynamic matrix D equals matrix M minus the unit matrix M, and D-i respectively;

M is the matrix made up of elements p_{jk} which meets the conditions

$$p_{jk} > 0; \sum_{k=1}^{M} p_{jk} = 1, j, k = 1,2,..., M \tag{6}$$

As a result, the migration of consumers among the three brands becomes stable at the following shares: A-26.2%; B-62.2% and C-11.6%. This means that, in the end, the sales structure for the next time periods will remain constant if the procedure described in the previous tables continues (table 6).

Table 6. The stabilized structure of the demand in October (time period t+10)

Brand	A	B	C	Total
Cluster	0,60 x 393 = 235,8 0,15 x 934 = 140,1 0,10 x 173 = 17,3	0,30 x 393 = 117,9 0,80 x 934 = 747,2 0,40 x 173 = 69,2	0,10 x 393 = 39,3 0,05 x 934 = 46,7 0,50 x 173 = 86,5	393 934 173
Total number of consumers	393	934	17,3	1500
Market quota	0,262	0,623	0,115	1,000

5. ***Determining the equilibrium state and interpreting results***.

In order to interpret results, one must identify the time period within the life cycle of the product. Allowing for various situation, this implies exact marketing actions: intense promotion campaigns (when launching a product or in a developing phase); improving the brand image (at a maturity phase); price discounts for products which loose popularity and are on the verge of being withdrawn from the market (the decline phase), etc.

According to figure 1, the time period (t) which marks the start of the market quota calculation, show the three brands in different phases of their life cycle. Thus, brand A enter a decline phase although it registered the greatest share of sales (48%) at the beginning; its market share was reduced to 26.2% in time period (t+10). The decline of brand C is even more spectacular; by the end of the time period, its market share goes down to more than half of the initial share (the brand looses 17.2% of the market share, and thus it drops from 28.70% to 11.50%). Brand B, however, registers great development as its market share goes up from 23.30% (this is less than the initial share for product C) to no less than 62.20%. The boom recorder by brand B is possible because of the decline of the other brands A and C, and also due to the loyalty of consumers.

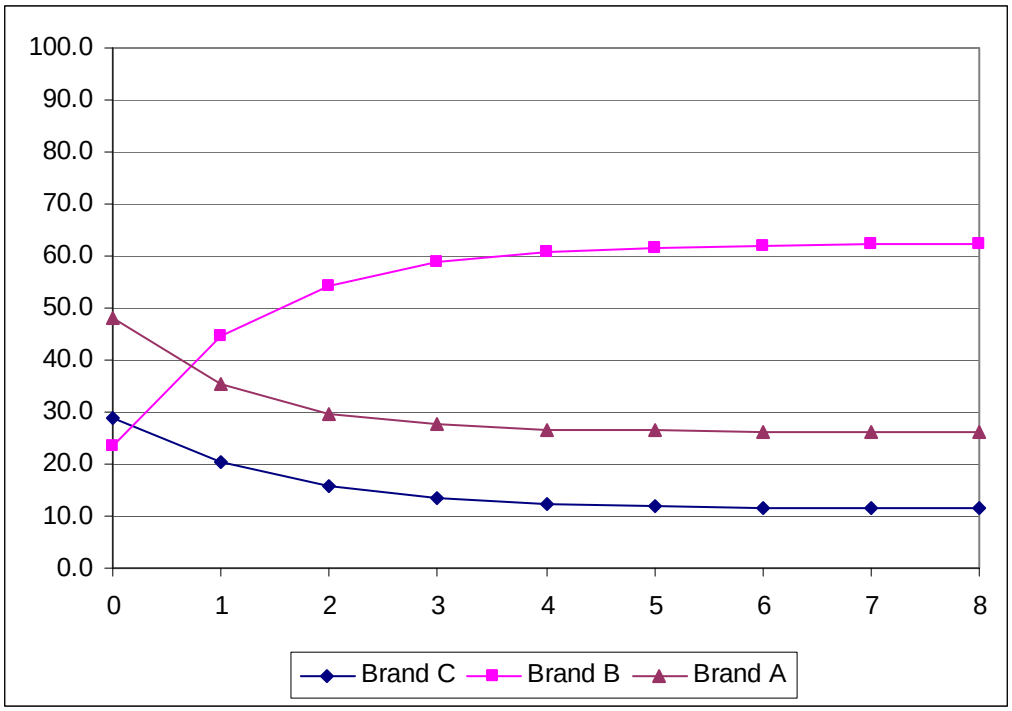

Figure 1. Forecast of market shares for brand A, B and C during the first eight months of the year

In fact, brand B is the one than registers the highest loyalty coefficient – 80% - while brands A and C have a reduced coefficient: 60% for product A and only 50% for product C. Moreover, the constancy of product B on the market $\left(= \frac{1}{1 - p_{AA}} \right)$ is of five purchasing cycles, which means that those who bought brand A will continue to purchase the same brand five more times. The persistence of brands A and C on the market, which is calculated the same way, is of 2.5 and 2 purchasing cycles respectively; this means that people who chose products A and C in time period (t) are able to buy it again only 2.5 or 2 times. Under the circumstances, the success recorded by product B can be explained again taking into consideration this coefficient.

Knowing these probable estimations is very important to marketing specialists who activate within these companies, mainly because they will be able to identify positive measures at time period "zero". Thus, if the reaction of the market is unfavorable because of the poor quality of the products, then improvement efforts are the main priority; revitalizing solution can be very appropriate as well – price discounts, brand image improvement, intense promotion campaigns, etc.

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THEORETICAL AND PRACTICAL CONSIDERATIONS ABOUT REVERSED TAX

NICOLAE ECOBICI *

ABSTRACT: *From 1st january 2005 the fiscal code inserted a simplifying measures about collecting the tax of added value for lands, buildings, waste products, woods and animals trade. The achievement way consist in enroling on the invoice the words „reversed tax", both of the trade parteners continueing to cash the debts without the relevant tax of added value. Even the method is simple the results is remarkable in tax managing and collecting and more.*

KEY WORDS: *Reversed tax: a method of simplifying the collecting and managing of the tax of added value; Tax of added value (TVA): a neutral duty on every commercial agreements and transactions; Invoice: a legal document who justify the transactions between thetrade arteners; Autoliquidate of the tax of added value: a process caused by the reversed tax method and meaning that both of the traders will cash the debts without the relevant tax of added value; Pro ratio of TVA: a percentage of the tax of added value which will be deducted from the TVA relevant for the inputs when the outputs are not only taxable in a proportional mode.*

1. THEORETICAL CONSIDERATIONS

From 1st January 2005 the companies which trade lands, buildings, waste products, woods and animals are not paying any more the tax of added value relevant to these transactions because of the simplifying methods of collecting TVA.

This is not meaning that these transactions are being excepted from the TVA calculation and payment but signify the simplifying procedure of this tax. Therefore the seller companies are not cashing the TVA enrolled on the invoice. Meanwhile they are collecting and deducting this TVA from the time that the invoice is writing down, the only condition is to enrol on the invoice the text: „***reversed tax***".

In this way, even the TVA is enrolled on the invoice, the buyer companies will pay to the seller companies only the invoice worth without the relevant TVA.

* *Lecturer, Ph.D. at the „Constantin Brâncuşi" University of Tg-Jiu, Romania*

The simplifying methods of TVA are applying only to transactions with the following goods:

- ***waste products*** and rests of iron and other metals, as well as secondary materials result from selling those, thus they are being defined by the law OUG nr. 16/2001 regarding the managing of the industrial waste products[1];

- ***lands of any type***;

- ***buildings*** of any type or parts of builings[2]. The law consider the buildings as any structure with one or many rooms which is being connected directly to the land and served to shelter the people, goods or animals;

- ***wood materials***[3];

- ***alive animals***.

The reversed tax is not applied if one of the partners are not registered as tax of added value payer, in this case they will apply the normal regime of TVA from Romania.

The autoliquidation of the tax of added value is the process caused by the reversed tax method and meaning that both of the traders will cash the debts without the relevant tax of added value, both of them recording in the account the following operation: 4426 = 4427.

For the seller company this deduction of TVA deductible from the TVA collected is similar to cashing the sum and for the buyer company as a payment of the relevant TVA.

The reversed tax can be apllyed for every phase of the economical circuit regardless of the number of links, but when one of the parteners is not registered as TVA payer the reversed tax could not be apllyed any more.

For exemple when a building is buyed by one TVA payer registered company from another TVA payer registered company, both of them are forced to apply the reversed tax, but when the building is selled after that to a physical person or to an entity unregistered as TVA payer the reversed tax could not be apllyed any more, using instead for future the normal mode of tax which means the collecting of relevant invoice TVA by the seller and cashing the whole sum, including the TVA.

For the instalment deliveries untill 31 december 2004 the relevant TVA the regulations are the following: both parteners who aplly the reversed tax will wipe out the relevant TVA for the instalments after the date 1.01.2005 who was accounted in the

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[1] The waste products mean any substance or product from iron metals and other metals which are not being used by the holder company.

[2] The simplifying measures will be appllyed only for the building or parts of building selled but could not be apllyed for the assemble and builder contracts which are considered as services. The law considers the parts of building those components from a building which fulfil the above conditions. The windows, elevators, airconditioners and others like them are not being considered parts of building.

[3] The art.2 from Annex 1 in HG nr. 427/2004 considers the wood materials the following: round or split wood for work and fire wood resulted from the forest cuts and also the raw, processed and semiprocessed wood. The Christmas trees are considered wood materials.

4428 account in correspondence with the customers and purveyors accounts (4111 and 401) and after that they will register in account the operation 4426 = 4427 for every time they accounting the payment of every instalments.

After january the first 2005 the reversed tax will be applied obligatory with the mention on the invoice for each instalment. The relevant TVA will appear in the invoice but it wont be payed to the purveyor.

Of course, the sum from the invoice will be bigger then the payment, the difference being exactly the relevant TVA.

The invoice will be registered separately in the purchase and sale journals and then in the TVA discount.

When the customers are using the mixed regime for TVA they will aplly moreover the art. 147 from the Fiscal Code after the destination of the goods buyed, respectively:

- if the goods are used only for undeductible operation then they wont deduct the relevant TVA;
- if the goods are used only for deductible operation then they will deduct the complete relevant TVA;
- if the goods are used for deductible and undeductible operations then they deduce the TVA applying the pro ratio. Therefore, the undeductible TVA resulted from the pro ratio applying will be registering on the expense accounts.

If the fisc organs find out that the tax payers fulfil the conditions of reversed tax applying but the wont apllyed it then they will force the customers to wipe out the relevant TVA in account and register the 4426 = 4427 record.

After that the customers will be forced to regulate the TVA in the TVA discount from the end of the fiscal control. If the customers above use the mixed regime for TVA they will aplly moreover the pro ratio of TVA.

2. PRACTICAL CONSIDERATIONS

To exemplify the above we will present next the principal operations referring to the reversed tax:

- S.C. Euro Ligna Gavenea S.R.L. buy from S.C. Ligna Rom S.R.L. 40 mc. beech wood as primary material on 500 lei/mc. price, the invoice having specifyed the text: „reversed tax":

301 "Primary materials"	=	401 „Purveyors" distinct analytical	20.000,00
and:			
4426 „Deductible TVA"	=	4427 „Collected TVA"	3.800,00

- Purveyors' payment:

401 „Purveyors” distinct analytical	=	5121 „ Bank accounts in lei”	20.000,00

The company processes the beech wood and obtains finished products and residual products.

- S.C. Euro Ligna Gavenea S.R.L. sell 8 mc. fir lumber as finished products on 390 lei/mc. price:

4111 „Customers” distinct analytical	=	701 „Incomes from selling the finished products”	3.120,00

and:

4426 „Deductible TVA”	=	4427 „Collected TVA”	592,80

- Cashing the customer with receipt:

5311 „Cash in lei”	=	4111 „Customers” distinct analytical	3.120,00

- Selling the fire wood to S.C. Diesel Service S.A. as residues products:

4111 „Customers” distinct analytical	=	703 „Incomes from selling the residues products”	204,00

and:

4426 „Deductible TVA”	=	4427 „Collected TVA”	38,76

- Selling the fire wood as marchandise with invoice:

4111 „Customers” distinct analytical	=	707 „Incomes from selling the marchandise”	1.300,00

and:

4426 „Deductible TVA”	=	4427 „Collected TVA”	247,00

- S.C. Euro Ligna Gavenea S.R.L. sell to a physical person oak lumber as finished products at 1.547 lei, TVA included:

4111 „Customers”	=	%	1.547,00
distinct analytical		707 „Incomes from selling the marchandise”	1.300,00
		4427 „Collected TVA”	247,00

- In this case the customer will pay all the sum of the invoice, including relevant TVA,:

5311 „Cash in lei”	=	4111 „Customers” distinct analytical	1.547,00

3. CONCLUSIONS

Introducing the reversed tax method as a simplifying measure about TVA reduced fiscaly evasion phenomenon in the tranzaction with iron and orher metals, lands, buildings and animals. This procedure is known in other countries from EU to prevent the TVA reimbursed from the state budget before these sums can be collected by it.

This measure is determined by the alarming signals from the business environment and also from the fiscal organs who requested in many times legislation measures for fighting against the fiscal evasion. Practically, these operations of trades with goods presented above remain taxable but the relevant TVA is not paid any more between the partners registered as TVA payers. In consequence the state budget doesn't receive the TVA relevant to these operations but that has no prejudice to it because that TVA would pay back to the companies as reimbursing mode.

Is well-known the fact that once the controls are being carried out to the companies that profit by the TVA reimburse it revealed that many companies who must collect the TVA for sellings are ghost companies especially created for such fiscally sketches which damage the state budget.

The advantages of this method are that exporters could not ask for reimburse the TVA relevant to transactions with waste products and animals. So this means a substantial improvement in managing and collecting the TVA through reducing the number of reimbursing requests.

Regarding the transactions with lands and buildings the reversed tax is fighting against fiscal frauds of type CARUSEL. This means that one building or land are being selled initially on very low price and then gradually the prices are growing till the last link. Then, the last link request from the state budget the TVA reimbursing. Unusual from the links some companies sink without trace and therefore the TVA relevant to the transaction accomplished gradually can not be cashed by the state budget. These frauds are damaging the state budget by paying important sums that never will be received back.

The reversed tax does not apply between a company and a final customer, meaning a physical person or an entity unregistered as TVA payer. This is fair because the TVA is supported by the last customer and the TVA principles are respected.

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GREEN CERTIFICATES – THE SYMBOL RENEWABLE ENERGY SOURCES (CLEAN ENERGY)

MIHAELA GHICAJANU *

ABSTRACT: *In this paper present one alternative solution as regards of the suplimentary power generation - renerawable energy sources. Are present a few words about renewable energy sources and green certificates; policy European Union of the renewable energy power and situation green certificates market on Romania.*

WORDS KEY: *green power, gren paper, renewable energy sources, wind, solar, geothermal, wave, tidal, hydropower, biomass and landfill gas energy, oil, natural gas, coal main objective.*

1. DECRIPTION ABOUT OF GREEN CERTIFICATES AND RENEWABLE ENERGY POWER (CLEAN ENERGY)

What is "clean energy" or "green power"? It's electricity without pollution. Electricity from renewable resources—like the wind, the sun, hydropower plants, biomass geothermal, waves.

Clean energy has environmental and health benefits. It also has economic and security benefits. Clean, homegrown energy from renewable resources reduces demand for expensive and often-imported fuels like oil and natural gas.

What is Green Certificate? – Document which proves that a certain quantity of electricity was produces from renewable energy sources.

Healthies (advantages) electricity was produces renewable energy sources for:

- *Environment*: Green power minimizes the environment impact of generating electricity.
- *Health:* Green power prevents pollution, which safeguards public health.
- *Security:* Green power harnesses domestic energy sources that will never run out.

* *Lecturer at the University of Petrosani, Romania*

2. GREEN CERTIFICATES MARKET IN EUROPA

Procentage rent increase of imports resources (oil and natural gas) for the assurance of necesity interns of electricity energy and termic in the members countries of EU, also other considerations like: climate change, liberalisation and privatisation electricity markets and create powers exchange for the physical and financial market, they induced the creation of the legislative, institutional and organisation framework for unbundling power generation and commercial electricity from renewable sources. So, for assert and for stimulate power generation from interns source, others than primary source energy (oil, natural gas, coal), like: wind, solar, geothermal, wave, tidal, hydropower, biomass and landfill gas energy, European Union elaboration a few documents:

- ***In december 1977 White Paper for of the Community Strategy and Action Plan "Power for the future: renewable sources***" is designed to kick-start implementation of the Strategy and the Campaign for Take-Off set out a framework for action to highlight investment opportunities and attract the necessary private funding which was expected to make up the lion's share of the capital required. The objective was to achieve a share of 12% of total EU energy consumption by 2010. The most important point in the White Paper was to set out a strategy to double the share of renewable energies in gross domestic energy consumption in the European Union by 2010, including a timetable of actions to achieve this objective in the form of an Action Plan.
- ***In 2000 GREEN PAPER – "A European Strategy for Sustainable, Competitive and Secure Energy"***- Europe's energy policy should have three main objectives: *Sustainability, Competitiveness and Security of supply;* This Papaer promoted of the Programme „Intelligent Energy – Europe" -is an EU programme for the promotion of energy efficiency and renewable energy sources. It helps all of us to produce and use energy in more intelligent ways and to increase the use of renewables. With a total budget of €250 million in to more than 200 European projects supported by Intelligent Energy – Europe;
- ***DIRECTIVE 2001/77/EC of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricitymarket*** -the Directive set the target that increase from 14% at 22% of renewable electricity in comparison to the overall electricity consumption should be reached by 2010;
- ***2003 - Directive restructuring the community framework for the taxation of energy products and electricity***. To foster the development of biofuels, the Council adopted in October 2003 a new fiscal directive on the taxation of energy products. This widens the scope of the EU's minimum rate system, previously limited to mineral oils, to all energy products including coal, natural gas and electricity and updates the minimum rates for mineral oils unchanged since 1992. Energy products are taxed only when used as a fuel or for heating. Among other provisions the Directive allows Member States to exempt renewable energy sources,

- including biofuels, as well as energy used for carriage of goods and passengers by train, metro, tram or trolleybus.
- ***2003 - Directive on Liquid Biofuels***. In the EU, the transport sector relies today for more than 90% of its energy on mineral oil, and a growing proportion of this will have to be imported in the future. This is unacceptable from the point of view of the future security of EU energy supply, as well as from an environmental perspective (emissions of greenhouse gases), and justifies serious efforts by all sectors of society. In May 2003, the European Parliament and the Council adopted a directive for the promotion of biofuels for transport. This was the first directive in this field; its main objective is to raise the part of biofuels used for transport purposes from the current 0,6% to 5,75% by 2010. Biofuels include bioethanol, biodiesel and any fuel for transport produced from renewable energy sources. National Governments should, according to the directive introduce measures to promote the production and use of biofuels in their territory.
- ***Ian 2006 Motion for a European Parliament resolution on the security of supply of energy in the European Union*** - Re-affirms its strong support for RES, calls on Member States to re-double efforts to achieve the targets of a 12% share of total energy consumption and 22.1% of electricity from RES by 2010 and welcomes the adoption of the Directive on electricity from RES;

In Table 1 the European target are transformed into targets for Member States.

Table 1. Power electricity from renewable resources 1997/2010

Country	1997 RES-E (TWh)	1997 RES-E (%)*	2010 RES-E (%)*
Belgium	0,86	1,1	6,0
Denmark	3,21	8,7	29,0
Germany	24,91	4,5	12,5
Greece	3,94	8,6	20,1
Spain	37,15	19,9	29,4
France	66,00	15,0	21,0
Ireland	0,84	3,6	13,2
Italy	46046	16,0	25,0
Luxembourg	0,14	2,1	5,7
Netherlands	3,45	3,5	9,0
Austria	39,05	70,0	78,1
Portugal	14,30	38,5	39,0
Finland	19,03	24,7	31,5
Sweden	72,03	49,1	60,0
United Kingdom	7,04	1,7	10,0
European Community	338,41	13,9	22,0
Romania **	16,76	29,0	32,0

*(%) – on national electricity gross consumption

**România –includ power generation in hido

The objectives of the member states are:
- to reduce the obstacles to increasing production
- to rationalise and speed up administrative procedures
- to ensure objective, transparent and non-discriminatory rules
- to take account of the characteristics of renewable technologies

3. GREEN CERTIFICATES MARKET IN ROMANIA

► **The Green Certificates Market** represents a system aimed to promote the electricity generation from renewable energy sources, system that is characterized **by fixed quotas** of electricity generated from renewable sources that must by purchased by the electricity suppliers of final consumers and by the **Green Certificates** price set up through market based mechanisms.

►**Quota Obligation System** – Mechanism used to promote the production of electricity from renewable energy sources by means of the acquisition by the suppliers of a specified quota of electricity produces from renewable energy sources in order to sell it to their consumers.

►**Renewable energy sources eligible to participate in the Green Certificates Trading System**

• Wind	• Electricity produced in hydropower plants with a capacity equal or less than 10 MW, commissioned or modernized starting with 2004. • Hydrogen produced from renewable energy sources
• Solar	• Waves
• Biomass	• Geothermal

► **Participans at green market** (Table 2)

► **The functioning of the quota obligation system to promote the electricity produces from renewable energy sources supposes the following phases:**
- ANRE - establishes a fixed quota of electricity produces from renewable energy sources which the suppliers are obliged to buy it.
- ANRE- yearly qualifies the produces of electricity from renewable energy sources in order to receive Green Certificates.
- The Producers receive for each unit of electricity delivered into the network, (1 MWh), a Green Certificate, which can be sold separately from the electricity which produced them, on the Green Certificates Market.
- In order to fulfill their obligation, the suppliers have to own a number of Green Certificates corresponding with the quota of electricity produced from renewable energy sources imposed.
- The Green Certificates value represents an *additional income* received by the producers for the "clean" energy that they deliver into the network and value is determined by means of the market mechanisms: Bilateral contracts negotiated

between producers and suppliers; On a Centralized Market organized and administrated by OPCOM ;

Table 2. Participans at green market

Participans	THE ROLE of
ANRE - Romanian Electricity and Heat Regulatory Authority	Qualify electricity producers which use RES eligible sources, to participate on the Green Certificates Market • Can modify the yearly mandatory quota in the period 2005- 2007, in the first decade of December, when the installed capacity in the power plats which use RES cannot assures the demand of Green Certificates • Controls the mandatory quota fulfillment by the suppliers • Applies penalties for quota non-fulfillment
Producers	- which own technologies that use renewable energy sources to produce electricity
OPCOM- Romanian Electricity Market Operator	- Green Certificates Market Operator – legal person which assures Green Certificates trading and determines the prices on the Centralized Green Certificates Market, performing the functions established by the Regulation for organizing and functioning of the Green Certificates Market.
Suppliers	- Suppliers are obliged to buy yearly a number of Green certificates equal with the mandatory quota multiplied with the amount of electricity *sold* yearly to their final consumers
TRANSELECTRICA Transport and System Operator - TSO	- Monthly receives from the producers and the Network Operators where the producers are connected notifications concerning the quantities of electricity from RES delivered into the network. • Monthly issues Green Certificates to producers for the quantity of E-RES produced and delivered into the network in the previous month.

- The price of Green Certificates varies in a range established by Government Decision, [Pmin ÷ Pmax]. The minimum price is imposed in order to protect the producers and the maximum price to protect the consumers.

►RESULTS

- Bucharest, November 16, 2005 - the first day of trading on the Centralized Green Certificates Market administered by OPCOM;
- Transaction results for the Centralized Market for Green Certificates in finfteen last months (Table 3):

Table 3. Transaction results for the Centralized Market for Green Certificates

Transaction month	Trade volume (Number of Green Certificates*)	Market Clearing Price (RON** /Certificate)
November 2005	289	165,00
December 2005	56	165,00
January 2006	5997	146,00
February 2006	899	165,00
March 2006	34	155,00

* 1 Green Certificate = 1Mwh (Price min = 24 Euro and Price max =42 Euro)
**1 RON = 0,2852 Euro =0,34302 Dolar (in december 2005)

►PREVISIONS

- For the period 2005-2012 the annual maximum and minimum value for Green Certificates trading is 24 Euro/certificate, respective 42 Euro/certificate, calculated at the exchange course established by the Romanian National Bank, for the last working day of the December of the previous year. ;
- Mandatory quota produced from renewable energy sources (E- RES) until 2010-2012 (table no.4) - The yearly mandatory quota is established according to the target committed by Romanian Government in negotiation process of EU accession to, namely 33% E- RES in national electricity gross consumption, by 2010-2012.

Table 4. Mandatory quota produced from renewable energy sources (E- RES) until 2010-2012

Quota applied to electricity suppliers (%)	Year
0,7	2005
2,22	2006
3,74	2007
5,26	2008
6,78	2009
8,3	2010-2012

4. CONCLUSIONS

Throughout the world, we need *every energy source we can get*. As one can see from the table 5 above, *all energy sources have BOTH advantages AND disadvantages***.** Even with conservation efforts, energy demand has been and will continue to increase. Other factors can accelerate that increase, e.g. the proposed shift to electric cars to meet environmental air quality goals. In using *each and every one* of these forms of energy production, we need to make sure we conserve as much as we can so we leave sources for future generations. Energy suppliers need to ensure that they do not contribute to short and long-term environmental problems. Governments

need to ensure energy is generated safely to that neither people nor the environment are harmed.

To ensure that energy resources will be available for future generations, we need to take actions in the following areas:

- improve home and building designs to conserve energy and take advantage of passive renewable resources
- conduct research to ultimately lead to significant cost reductions for renewable energy sources
- design industrial parks for those energy-intensive industries that take advantage of cogeneration concepts
- ensure that power plants use cogeneration methods to minimize waste heat
- develop uses for nuclear waste products
- significantly reduce use of those energy production methods that are major contributors to global warming, or develop technical solutions that curb releases of those materials that produce global warming

Every form of energy generation has advantages and disadvantages as shown in the table no.5 below.

Table 5. Advantages and disadvantages of different energy sources

Source	Advantages	Disadvantages
Coal	Inexpensive Easy to recover (in U.S. and Russia)	Requires expensive air pollution controls (e.g. mercury, sulfur dioxide) Significant contributor to acid rain and global warming Requires extensive transportation system
Nuclear	Fuel is inexpensive Energy generation is the most concentrated source Waste is more compact than any source Extensive scientific basis for the cycle Easy to transport as new fuel	Requires larger capital cost because of emergency, containment, radioactive waste and storage systems Requires resolution of the long-term high level waste storage issue in most countries Potential nuclear proliferation issue
Hydroelectric	Very inexpensive once dam is built Government has invested heavily in building dams, particularly in the Western U.S.	Very limited source since depends on water elevation Many dams available are currently exist Dam collapse usually leads to loss of life Dams have affected fish (e.g. salmon runs) Environmental damage for areas flooded (backed up) and downstream
Gas / Oil	Good distribution system for current use levels Easy to obtain Better as space heating energy source	Very limited availability as shown by shortages during winters several years ago Could be major contributor to global warming Expensive for energy generation Large price swings with supply and demand

Wind	Wind is free if available Good source for periodic water pumping demands of farms as used earlier in 1900's Generation and maintenance costs have decreased. Wind is proving to be a reasonable cost renewable source. Well suited to rural areas.	Need 3x the amount of installed generation to meet demand Limited to windy areas. Limited to small generator size; need many towers. Need expensive energy storage (e.g. batteries) Highly climate dependent - wind can damage equipment during windstorms or not turn during still summer days. Can affect endangered birds, however tower design can reduce impact.
Solar	Sunlight is free when available	Limited to southern areas of U.S. and other sunny areas throughout the world Does require special materials for mirrors/panels that can affect environment Current technology requires large amounts of land for small amounts of energy generation
Biomass	Industry in its infancy Could create jobs because smaller plants would be used	Inefficient if small plants are used Could be significant contributor to global warming because fuel has low heat content
Refuse Based Fuel	Fuel can have low cost Could create jobs because smaller plants would be used Low sulfur dioxide emissions	Inefficient if small plants are used Could be significant contributor to global warming because fuel has low heat content Flyash can contain metals as cadmium and lead Contain dioxins and furans in air and ash releases
Hydrogen	Combines easily with oxygen to produce water and energy	Very costly to produce Takes more energy to produce hydrogen then energy that could be recovered.
Fusion	Hydrogen and tritium could be used as fuel source Higher energy output per unit mass than fission Low radiation levels associated with process than fission-based reactors	Breakeven point has not been reached after ~40 years of expensive research and commercially available plants not expected for at least 35 years.

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EUROPEAN INTEGRATION – MACROECONOMIC COORDINATION RISKS

DANIELA GIURESCU, LAURA GIURCA VASILESCU *

ABSTRACT: *The microeconomic gains and the macroeconomic losses of the European Monetary Union creation have been greatly exaggerated, given the fact that the necessary preconditions of an optimum currency area lack. In this context, the EMU member's vulnerability to economic shocks is increased and their ability to deal with them is decreased. The insufficient coordination of the economic policies is another macroeconomic risk factor of the european integration. It consists in the heterogeneity of member states' economies, the taxation strategies and the insufficient coordination between the budget policies and the monetary policy.*

KEY WORDS: *optimum currency area, economic policies coordination, fiscal harmonization, tax federalism, tax coordination, expansionist budget policy.*

Public officials have reached a near consensus that economic and political gains will outweigh any loss of national macroeconomic independence. The most authoritative statement of this position has come from the Commission of the European Community itself. According to the Commission Report *One Market, One Money,* and other analyses, a single currency is expected to produce the following benefits:

- the elimination of foreign exchange transactions within the single market reduces transaction costs;
- the single currency reduces the uncertainty of exchange rates and thereby leads to gains in efficiency for trade and capital movements;
- the single currency provides monetary stability, stabilizes prices, and hence constitutes a strong defense against inflation;
- the single currency strengthen the European Unions' negotiating position against the United States and also makes the EU a better economic partner;

* *Lecturer, PhD. at the University of Craiova, Romania*
Lecturer, PhD. at the University of Craiova, Romania

- the single currency eliminates the risk of competitive devaluations and increases transparency in economic transactions, thus encouraging a decline in prices;
- the single currency encourages corporate restructuring and the creation of large European firms with the resources and economies of scale to compete in the international system.

At the macroeconomic level, a single market requires a single currency to ensure monetary stability.

A system of fixed rates among the member countries of the EU (such as the Exchange Rate Mechanism) was considered potentially unstable because it lacked an adequate mechanism to unify EU members' decision-making on monetary policy. In addition, fixed rates would be difficult to maintain without capital controls.

However, there was a price to be paid for the European Monetary Union. To reach an integrated regional economy, the member governments have to recognize that not all the desired objectives could be attained simultaneously:

- *fixed exchange rates*
- *freedom of capital movements*
- *national autonomy in monetary policy.*

European Union members chose protection against both inflation and exchange-rate instability but surrendered the possibility of maintaining independent monetary policies.

The critics of the European Monetary Union argued that the benefits of a single currency have been greatly exaggerated and the costs, significantly underappreciated. It was pointed out that:

- supposedly "negative" effects of multiple currencies as transactions costs and the impact of exchange-rate risk on trade and investment are minimal

- a single currency is not essential either to achieve a single market or even gain greater political unity; if the international economy gets along moderately well with many currencies, why should not the European economy do well also?

1. THE EUROPEAN MONETARY UNION – AN OPTIMUM CURRENCY AREA?

The principal criticism of a common currency is based on the argument that *the European Union does not constitute an optimum currency area.*

The theory of an optimum currency area, formulated by Robert Mundell (1961) and Peter Kenen (1969), asserts that two or more countries constitute an optimum currency area only when setting the nominal exchange rate between their currencies does not impose real costs on their economies.

More specifically, an optimum currency area exists when *one or two conditions prevail:*

- if prices and wages in both countries are perfectly flexible – that is, if prices and wages in both countries rise and fall together in response to a change in economic conditions – then, if country A were to reduce its prices and wages, country B would

respond in such a way that the real exchange rate between the two countries would not change.

Or, if labor and capital were perfectly mobile between the two countries, then a change in demand away from the exports of country A toward the exports of country B would be offset by the migration of labor and capital from country A to country B. Because the Euro area is not an optimal currency area, the members' vulnerability to economic shocks is increased and their ability to deal with such shocks is decreased.

Indeed, the European Union lacks *both of the necessary preconditions of an optimal currency area*, thus:

- *prices and wages* in the members countries are *insufficiently flexible*, and, since wages do not drop when unemployment increases, wages are quite inflexible;
- *nor do labor and capital move freely from country to country* within the Union in response to changes in demand; on the contrary, despite talk of an integrated European labor market, labor within the European Union is highly immobile and is likely to remain so into the twenty-first century.

In this context, an economic shock to a particular region inside the euro area – a sudden and drastic change in demand or supply that would plunge a particular region into a recession – could easily have a devastating economic and political impact not only on the immediate area but also possibly on the European Union as a whole.

Because *Euro-zone members are not allowed to use independent monetary policies* to pull themselves out of a shock-induced recession, they would normally utilize such a fiscal policy as tax cuts or public works to stimulate demand. The European Union itself could have a fiscal policy to distribute financial resources to a depressed area to stimulate demand.

Although it is unclear whether or not member states will retain some fiscal powers, the Stability Pact suggests that members' fiscal powers will be greatly restricted.

The extent to which the European Union would be empowered to take actions to benefit an affected region is not determined. The problem of moral hazard and the fear that the stronger economies would have to bail out the weaker ones make it doubtful that a federal authority will make a fiscal response to members in trouble. In that case, the affected region probably would suffer declining wages, higher unemployment and disturbing political developments.

With national fiscal responses unlikely, adjustment to a demand shock would be a slow and painful process; unemployment would surely rise.

Therefore, critics of a single currency fear that such a shock would lead to a prolonged and painful recession in the affected region. Weak peripheral members, such as Greece, Spain or southern Italy, would be particularly vulnerable to such an eventuality.

Having given up the option of an expansionary monetary policy, a government could be helpless to respond to a drop in demand and would have to stand aside until market forces caused wages to fall to the point where the supply and demand for labor returned to an equilibrium. It is highly unlikely that citizens will accept the exercise of such patience in the interest of greater European unity.

The fact that the European Union is not an optimum currency area may raise the costs of a single currency, but it does not mean that the project is inefficient, considering that the both the microeconomic gains and the macroeconomic losses have been greatly exaggerated.

2. THE INSUFFICIENT COORDINATION OF THE ECONOMIC POLICIES

The international investors also try to consider the long-term resistance of the economy of the institutions of the Euro-zone. The traditional organization in the field of the choices of economic policy can worry them for three reasons, which we will evoke:

- the heterogeneity of the zone imposes, if the monetary policy is common, a diversified reaction and co-ordinate of the budget policies;
- the tax strategies in the long run cannot be independently decided by the Member States of a monetary union;
- the coordination of the budget policies and the monetary policy is insufficient.

2.1. HETEROGENEITY AND BUDGET POLICIES

The economic literature showed for a long time that the monetary unions are badly armed for resist with the asymmetrical shocks. One also knows that heterogeneity comes from the economic situations:

- the sectorial structure of the countries is different
- the transmission channels of the monetary policies are not the same ones
- the labor market is differently organized
- the degree of opening outside varies from one country to another.

The Euro-zone is indeed heterogeneous. This heterogeneity is, as it is systematic in a Monetary Union, increased by the monetary policy, since the countries where inflation is stronger have also lower real interest rates.

The only possible answer is a budget policy, country-by-country, very contracyclic, what is not the case since on the contrary the budget policies are very similar, except with regard to Ireland and Finland.

This similarity of the budget policies is a heritage of *the period of convergence*, during which it was necessary to satisfy the criteria of Maastricht, which preceded the unification. However, it could also be one of the effects of the

institutional constraints: the Pact of Stability limits the public deficits to 3% of the GIP for each country of the euro zone.

If a country were in a difficult economic situation, in the current institutional organization it could not support much its activity by an expansionist budget policy; it would not receive either the assistance of the other countries, since there are not practically automatic transfers between the countries of the Euro-zone, with the difference of what normally last at the interior of a Monetary Union or a federation.

For a long time economists informed dangers that this situation in the Euro-zone presents:

- if a small country returned in recession, naturally the monetary policy of the Euro-zone would vary little,
- moreover, its budget policy could not become expansionist and it would not receive assistance coming from other countries.

Since the European budget is very small compared to the budget of the countries, there is not in the Euro-zone of tax federalism, i.e. of automatic offsetting by the taxation, welfare transfers and variations of economic trend.

On the other hand, one can replace *the tax federalism* by *tax coordination*. If a country is in recession, it strongly increases its deficit, and the other countries reduce it not to worsen the overall deficit of the Euro-zone.

So the investors worry about the risk of strong tension or even explosion, in the event of strong divergence of the situations of the countries.

2.2. FISCAL HARMONIZATION

The countries of the EU endeavour to set up the harmonization of certain tax rates. The Commission Report on the Public Finance underlined the bias of the European taxation on the labor factor: this factor being less mobile than the capital, the states are tempted to tax it more to ensure their fiscal receipts while attracting the foreign capital, by taxing them relatively less.

However, co-operation, who could limit this tax competition, does not make the play of the small member sates of the European Union. But the rule of the unanimity for the adoption of this type of reforms within the Union supports these countries.

The debate on tax competition is important. Some wish it, as means of pushing with the fall the tax pressure in the whole of the European countries. Others think that it will lead to as much inefficiency as former competition by the rates of exchange.

It is seen besides that, if tax competition is not moderated by coordination, one would lead to an unbearable tax system, where there would be no tax on the mobile factors (qualified work, capital, companies).

Though it is, a factor of mistrust with respect to Europe is the observation that the European countries persist (even when they have the same currency) with not coordinate their budget policies, and in particular to set up measurements that cause distortions of cost and competitiveness, what one should not see in a Monetary Union.

2.3. COORDINATION BETWEEN BUDGET POLICIES ANDMONETARY POLICY

The risks associated with insufficient coordination between budget policies and monetary in the Euro-zone are complex. In the context of an economic deceleration the coordinated reaction of the economic policies consists with render more expansionist at the same time the budget policies and the monetary policy.

However, one can be in a situation where the governments, which choose the budget policies, do not take into account the reaction of the European Central Bank, and pass to a very expansionist budget policy.

If the European Central Bank has aversion for the public deficits, instead of lowering the interest rates, it will still increase them, from where in reaction a new fall of the deficits.

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CRISIS COMMUNICATION

ANCA JARMILA GUȚĂ *

ABSTRACT: *The paper presents the manner in which the crisis of different types can disturb the normal activity of an organization and also the modalities by which the communication in this situation can solve or attenuate the negative effects of a crisis.*

KEY WORDS: *crisis, crisis communication, organization, management, valuation, planning, plan of crisis communication, crisis management plan.*

The crisis are complex phenomena which can affect either whole social ensemble or certain domains of this ensemble (the economic life, the political system, the international relations, the financial and banking systems, the social structure, the education and culture institutions). Therefore, they determinate the interest of the economists, of the sociologists, of the anthropologists, of the psychologists, of the historians, and, implicitly, of the public relations theoreticians and practitioners.

The researches devoted to the crisis can be grouped into three categories: *Psychological prospect* (interested in the research of clinical cases); *Economic and political prospect* (preoccupied by the indentification of structural features of the crisis and the defining of some techniques of their administration); *Sociological prospect* (dominated by the researchs devoted to the collective reactions in disaster situations).

From the point of view of the economists, the crisis is synonymous with an interruption of the rhythm of economic growth either by report with the previous growth or by report with the calculated growth.

The specialists and the experts in political sciences divide the crisis into three big categories: crises of systems, governmental crises of the taking of the decisions and crises of international confrontation. They consider that any crisis is defined through the combinations among a strong menace in the measure to affect the basic aims of the political leaders, a very short time before that the situation evolve into an undesirable by them and the effect of surprise put under the doubt the values and the reports between the generations or between the social groups.

* *Assist.Prof. at the University of Petroşani, Romania*

From the psychological prospect, the crises can be moments of the life which "join in the natural evolution of human being, corresponding to the stages and phases of his genetic development" or moments "connected with social events a little or not at all anticipated, which turn upside–down the modes of adaptation, being able to destroy the personality and to ask an effort of reconstruction, frequently impossible".

In the papers devoted to the management of the crisis is considered that it appears at a time when" the whole system is affected, such in the kind that its physical being is menaced; in addition the basic values of the system members are menaced in a such measure, that the individuals are compelled either to realize the erroneous character of these values, or to develop mechanisms of defense against these values". Thus the distinction is done between *incidents* (which affect physically only one system of the organization), *accidents* (which affect physically the whole organization), *conflicts* (which affect symbolically a subsystem) and *crisis* (which affect symbolically the whole organization). From this management prospect, the risis is the result "of the menaces from the environment correlated with the weakness from inside the organization; it appears when the menaces from the environment interacts with the weakness from inside of the organization".

The crisis communication is the communication between the organization and its publics during and after the negative events. This communication is so projected that it reduces the dangerous elements which could affect the image of the organization. The area of the crisis communication involves numerous activities with strategical and tactical contents. In some specialized papers, these appear undiversified, merged with the specific activities of the crises management; in others papers they are personalized, as a sum of communication techniques specific to the sphere of public relations. The crisis communication involves 4 types of activities: the valuation of risks, the planning of crisis communication, the answer and organization rebuilding.

1. THE VALUATION OF THE RISKS

This activity is based on the identification of different menaces existing in the environment in which the organization works. With that end in view it is possible to make an appeal to the consultants from specialized firms or to the organization experts; these make up into a crisis planning team. The plan includes a very rich list, from the impact of climatic conditions to one of political agitation, from the possible labour accidents to the reactions of different religious or civic organizations, from the actions of some illwilled groups to the own conceiving or production errors, etc. With that end in view a planning team will be organized, who is made up of the management of the organization, the heaqd of public relations department and the leaders of the other departments (which could be involved in crisis) within the frame of the organization, such as: technical director, head of the human resources department, jurist, the head with the security of organization, etc. They will identify the possible disasters or conflicts that the organization might face. They will also analyse the crises, the organization went through and they will try to imagine the worst things that could befall.

A diagram of the crises could be worked out on two axes: the crisis impact value and the factor of the crisis probability. On the first axis the amplitude of the crisis is determined with the help of five questions: If a crisis risks increasing in intensity, how great is this intensity and how quickly the increase can occur? To what extent the crisis will enter in the interest sphere of the public involved? To what extent the crisis will modify the ordinary activities of the organization? To what extent is the organization guilty of the crisis outbreak? To what extent is the organization affected by this crisis?

In the second axis the probability of the crisis is determined on a scale from 0 to 10, where 0 represents the zero probability of a crisis to occur, and 10 the certainty of a occurrence of a crisis. The two axes which are each divided in ten units form by their intersection a "barometer of crises": the square on the right above where the maximum values are grouped (the "red zone") represents the crises extremely dangerous potential, while one on the left above (the "yellow zone") and the one on the left below (the "green zone") indicate crises of a lesser destructive potential, and the square on the right below refers to less menacing crises.

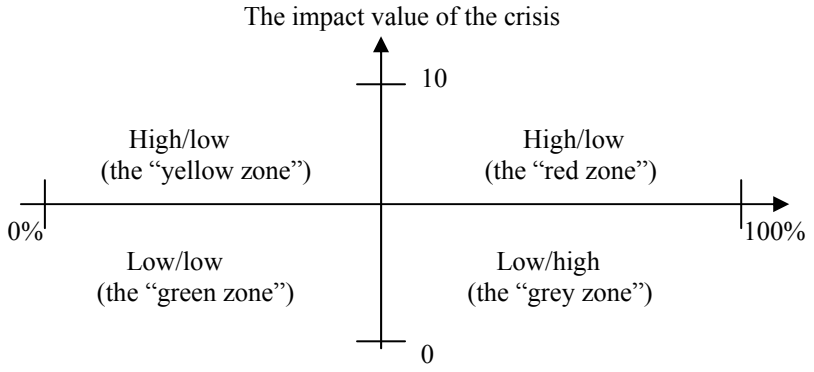

Figure 1. A crisis valuation grid

2. THE PLANNING OF THE CRISIS COMMUNICATION

The second stage, maybe the most important, is mainly concerned with the activities of working out a *Plan of Crisis Communication* (PCC). Most of the specialists who have studied the crises and written about the administration of the crisis have shown that *for an efficient management of the crisis it is necessary to draw up a plan of the crisis communication* (PCC), starting even in periods of calm. This is achieved by specialists in public relations who, according to all the authors in the crisis management domain, must be involved in all the stages and the events associated with a crisis. Usually, the PCC has the form of a folder with instructions; it must be so organized that the relations specialists may find the specific sections easily; also it must deal with unforeseen situations of some crises–therefore we don't recommend its exclusive preservation on computer, under the conditions in which it could be affected by fires, earthquake or the simple electricity cuts-off.

The Plan of Crisis Communication is meant for the same audiences of an organization who are also involved in the usual communication campaigns. An organization should be able to have many PCC s adjusted to the different types of crises analysed; a PCC for a fire is different from one for a shoddy product: the audiences are (can be) different, the mass-media targeted are (can be) different, the messages transmitted are (can be) different. These plans facilitate the communication with various types of audiences; but they are not the magic formulae which ensure success without any doubt, just a flexible action guide, which organizes the actions and the forms of communication. Such a plan it must contain:

The cover. This contains the plan title and the date when it was drawn up or revised; on the cover it is specified the fact that this document is of internal (con1fidential) use and its unauthorized printing and spreading is forbidden.

The introduction. This document must be written by one of the organization's leaders; it underlines the importance of PCC, it points out the estimated results and draws attention on the compulsory observance of the plan.

Aims and objectives. They express the principles of action of the organization under the crisis circumstances and the policies to be followed to attain these principles; we can also point out the informations and policies, which from reasons differing from one organization to another, can't be made public.

The Component of crisis cell. This document contains the name of the cell members, their area of competence, and their mission within the framework of the cell, the addresses and the telephone numbers; to this list another one can be added, containing the consultants and outside specialists we can resort to. Crisis cell is a transversal and functional group, which contains those persons designed to deal with any kind of crisis. It has three great tasks: To conceive a Crisis Management Plan (CMP) - a CMP must anticipate and answer most crises types the respective organization is confronted with; To apply this plan - first of all, the application of CMP is done in the crises simulations and after that in the confrontation with the real crises; To react efficiently to the unforeseen problems which are not included in CMP - no plan can anticipate all the crisis details; that's why the crisis cell must be able to offer solutions for those problems which were not foreseen in CMP, but which can interfere in a real crisis anytime.

The crisis cell is led by a crisis manager (usually, the head of the public relations departement) who collaborates with the management of the organization, coordinates the activity of the other team members and takes the decisions, conceives, sketches and verifies the texts that have to be transmitted; the crisis cell includes an assistant of the manager, a coordinator of a crisis control centre, other specialists in public relations with various responsabilities. Obviously, this team structure will be different from one event to another; besides the persons mentionated above, depending on the nature of the crisis, others could be included: technical director, the head of the marketing department, the head of the human resources, the heafd of the financial department, the solicitor and other specialists with competence in the crisis sphere. The list also contains the tasks of each member of the team during the crisis (during the crisis period, those teams members will be relieved of their current responsabilities).

The crises management is the activity of a team, in which the crucial decisions are taken collectively. Therefore, the knowledge, the abilities and the traits of character of the cell crisis members have to correspond to these responsabilities. Choosing of the members of cell crisis will be done depending on the tasks which they have to accomplish: to act as a team to facilitate the attainment of the cell crisis objectives; to conceive and apply the CMP, so as efficient organizational responses should be embraced; to adopt collectively the necessary decisions for the efficient solution of the problems the cell crisis is confronted with; to listen to other opinions in order to gather as much information as possible.

The declarations. The cell crisis members and the organization management sign them to show they have taken knowledge of and are committed to observe the provisions of the crisis management plans and crisis communication. This fact increases the team and management responsibility regarding these plans provisions.

The calendar of crises simulation. The actions and the techniques foreseen for the most probable crises have to be simulated at least once a year, or more frequently; even if during a real crisis some different action ways can appear, these simulations allow the verification of the crisis cell preparation and the reaction capacity of the other organization members.

The list of involved audiences. This document contains the internal and external public with whom we have to communicate during the crisis. The Board of Administration members, the shareholders, the suppliers, the fionancial partners, the investors, the customers, the employees, the community leaders where the organization works, the organizations of same profile, mass-media, the trade-unions, the governmental officials, etc.

The information means of involved audiences and of the other audience categories. In order to ensure the efficient transmission of the information it is necessary to prepare in due time the specific system of information, with the proper technical support of transmission, which must be done for each type of audience (the telephone for the management team; the meetings and the posters for the employees; the fax, e–mail, or the telephone for the mass–media).

The spokesman of the crisis period. That person, who is in charge of this task, has the mission to supervise the consistency and the accuracy of the messages which the organization conveys to its audiences. He must be a good communicator both within the organization and the team where he works and in the relations with the newspapermen (the capacity to listen and answer adequately). The spokesman has to be selected with great care because he represents the organization or company for the audience. He will be part of the crisis team; he should be a member of the organization management team, because this way he will perceived as a person who expresses an official viewpoint. Also, he has to know all the crisis aspects, to understand all its implications, to have the responsibility and the authority to speak for the organization. He has to appear as a rational person, preoccupied with the organization problems, sensitive to the cares of the persons affected by the crisis, determined to contribute to the solution of the situation arisen.

It is very important that during the crisis there should be one spokesman who can express a unique viewpoint. This thing must be known by the other members of the crisis team and of the organization: this way their contradictory and confuse declarations will be avoided, declarations which could give the impression that inside of the organization there is chaos and that the events aren't under control and are not monitored coherently. Certainly, he will be helped by other specialists, who can replace him sometimes for press communication actions of lesser importance.

Because he is the key–man in the relations with the whole press, it is necessary that he should have the necessary knowledge and abilities for an efficient communication with the newspapermen. The spokesman must have several specific qualities, which correspond to the main tasks he has to carry out in such instances, namely: - he must present in accessible way the information about crisis: therefore he must be able to make himself understood, to speak flexibly (to avoid jargon) and to understand the newspapermen or the audience expectations so as to structure the answers accordingly; - he must answer the questions convincingly: therefore he should master all the crisis data and must find quickly the information required (a wrong or incomplete piece of information will aggravate the crisis the organization is confronted with by giving rise to a negative public opinion; etc.); - he must offer a convincing image of the organization, conveying the idea that it has the whole control over this situation, and has an understanding attitude towards person or institution affected by the crisis; therefore he must have a style which combines "control and compassion" in his language and attitude; he must be a good looking man on TV having a pleasant voice and a good diction, master his gestures and mimicry, to underline his ideas, he should be a communicative person appealing to the others; - he must master the difficult questions; for this reason he must be able to identify the dangerous questions, to have tact and to be able to explain why certain information can't be offered for publication, to know how to ask the newspapermen for a clarification of the question, to be able to decide quickly which of the elements of some compound question is more important and in what order must be approached and developed the other of the answer elements, to know how to correct his mistakes that appear in the press.

The control centre of the crisis.This is the place where the crisis management team will carry on their activity. Some organizations prefer to establish a centre (apart from the usual press centre) devoted only to the crisis communication activities. This centre is made up of at least two rooms, one large enough to be turned into a conference room and another for the work of the crisis cell if necessary for individual interviews. These rooms must be adequately fitted and operational: they must have enough tables and chairs, xerox, direct telephones, telefax, audio and video, internet PC, maps, directories, pens, pencils, paper, etc. Moreover there should be updated folders containing documentary material about the organization, statistics, etc. Also, the net can simplify the search of information and also can increase the access speed to the data banks; moreover, setting up a site about the respective crisis where there is relevant and actual information enables the public involved and other categories of public to have a rapid access to these data and lends to the organization credibility.

List of persons to step in. In a crisis there appear different emergency situations that require the involment of some specialists from different activity areas. This kind of lists will contain : phone numbers and addresses and names of officials from the fireman system, ambulance service, hospital, police, the magistracy, the administration of waters, electricity, etc.; also, it is useful to have the data of governmental representatives and of the local administration.

The crisis folders. After officials, the journalists are the following public which must be informed about the crisis situation. Any department of public relations or any press office of an organization must have folders of updated press. In the crisis situations these materials are the more important the more critical is the respective event. Thus sometimes it is necessary that in one or two hours urgent press communicates should be sent or a press conference organized. Without these updated folders complete and well structured none of these important communication forms with the mass–media will be implemented. Also, the documentation about the organization must be collected in time and reactualized, this documentation will be made available to newspapermen as an information source, immediately after the crisis outbreak.

Data banks. Under the pressure of the crisis it is difficult to obtain statistical data or archives; for this reason it is advisable that all these data should already gathered in the documentary folders. To this category belong such materials as annual reports, procedures and books about assuring quality or security, the organization history and their maps data about the number of employees and organization structure, etc. At the same time schemes of the press releases could be prepared for each type of the crisis in the process of risk valuation.

Messages. For each category of audience a specific message has to be produced, depending on the interests or the implication level of each audience in the organization life. Moreover, a common declaration for all the audiences has to be provided, where the crisis naturewill be shown, data about it, the measures for handling and limiting the crisis, the losses, the casualties or affected persons, the impact on the environment or on other organizations. In this declaration the organization must assume the responsibility (if the crisis situation was started because of it) and it shouldn't blame others, if their guilt is not evident.

The Plan of Crisis Communication must be seen and approved by the management and by various specialists in the different departments of the organization activity. After all the necessary modifications were made, the PCC will be finalized and delivered to the other organization members, who could be involved in the crisis situations. The PCC must be periodically revised and improved.

3. THE ANSWER

The third stage is represented by the Plan of Crisis Communication application. If it was well made up, the correct decisions have been taken, in agreement with the established strategies of PCC, the organization will be repaied by having the

negative effects of the crisis limited and by keeping the key-public trust. In these instances it is necessary that the organization should react quickly and send to the all affected or interested audiences about the crisis an initial answer: this is usually represented by the first declaration of the spokesman. Any crisis unleashes a hunger of information, expressed first of all by the mass–media requests. If the organization doesn't respond quickly to these needs, then another group will deliver the information, and this can be incomplete or wrong. The answer should be not only quick but also consistent: it must contain strict, noncontradictory information (that is why the organization should express itself only through its spokesman), the information should be of a practical character (the real consequences of the crisis and the immediate measures of the organization should be shown); moreover it must show the organization responsibility, its sympathy for the people who were involved in the crisis, their efforts for solving and limiting the crisis effects. To this end several Crisis Communication Strategies are used. Nevertheless, we mustn't forget that the PCC is a guide which shows us the major actions; it isn't a unique, rigid and restrictive recipe. In any crisis unforeseeable factors occur; some elements of the crisis couldn't be foreseen, some less important audiences on the organization could be brought into the foreground by the crisis situation, some answer mechanisms could be severely affected by the crises arising from natural disasters or accidents (in 1989 after the earthquake in San Francisco, the main and the second spokesman of the Pacific Gas and Electric couldn't reach the crisis control centre and another member of the public relations department had to be appealed to).

4. THE ORGANIZATION REBUILDING

First of all, the last stage is marked by the quality valuation of the answer applied. In this case the organization has to answer some *major questions*: Did the actions during the crisis agree with the organization values and principles?; What aspects of the crisis have been anticipated by PCC?; What conclusions can be drawn from these successes?; What aspects haven't been anticipated and consequently what changes must be made in the communication plan?; How did the members of the organization behave?; Have they been properly trained to handle thr crisis?; What kind of measures must be taken?; How do the publics involved regard the organization changes brought about in the crisis situation?; What actions can be started to take advantage of the opportunities arising from solving the crisis?

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FORMS OF MANAGERIAL COMMUNICATION

LAVINIA HULEA [*]

ABSTRACT: *From the point of view of organizational communication, three kinds of problems are likely to be encountered: problems connected to the inner activity of the organization (tasks, crisis situations, etc.), problems connected to inter-human relationships (within the different hierarchical levels, within the work group or within the relations with external partners, etc.), problems connected to the organizational relations "upstream" and "downstream (beneficiaries, partners, etc.). According to the nature of the problems that may appear within managerial activity, three characteristic forms of managerial communication can be identified: internal organizational communication, interpersonal communication, and external organizational communication.*

KEY WORDS: *organizational and managerial communication, internal communication, interpersonal communication, external communication.*

1. MANAGERIAL COMMUNICATION

The analysis of the situation that precedes the process of communication should start from the existence of a real or hypothetical problem, implying a certain degree of risk, and the identification of an efficient solution. The term "problem" must be understood in its broad meaning as "something" that acts as a stimulus for the emitter and the receiver implied in the process of communication. From the point of view of managerial communication, the "problem" is exactly the difference between what 'something" is and what "something" should be. Consequently, it will be necessary to transform a vague intention into a precise purpose, determining the reason of communication, its purpose and the means of communication.

Taking into account such facts, one should notice that a problem implies an accurate knowledge of time, space and context conditions that co-exist at a certain moment as well as of the causes, effects, final goals, and ways of reaching such goals.

The final goals once achieved become results.

[*] *Assist.Prof. at the University of Petroşani, Romania*

The specific problems of managerial activity – connected to the inner activity of the organization, to the inter-human relationships or to the "upstream" and "downstream" organizational relations - can be settled owing to managerial communication that consequently becomes a problem-settling means capable of determining the attainment of the organization's goals. Accordingly, three types of managerial communication have been identified:

- internal organizational communication,
- interpersonal communication,
- external organizational communication.

2. INTERNAL ORGANIZATIONAL COMMUNICATION

The problems connected to the activity of each organization are mainly determined by the necessity of accomplishing the short, medium, and long term goals. In order to carry on its activity and to attain its goals, an organization should distribute certain responsibilities to each of its employees, according to the assignments specified by job records. A performing managerial activity requires the complete achievement of the purposes to be attained. With this in view, a series of steps must be undertaken:

- The specification of organizational goals, purposes, and policies.
- The activity of an organization has as a main goal the achievement of a certain profit as a result of turning to good account of the products and services it offers. Accordingly, the communication process implies certain demands that should be satisfied by all employees: they must have a clear opinion upon the specific influence their work exerts on the activity of the organization so that the final purposes might be attained; at the same time, employees should be conscious that they take part, to a certain extent, in the achievement of the organization's profit.
- The monitoring of achieving the organizational goals, purposes, and policies.
- Such a task implies a very good co-ordination of the activities of all departments of the organization. The efficient co-ordination of the activities is possible owing to a performing communication, inside the organization, both vertically and horizontally, according to the sending and receiving information, under certain circumstances of time, space, and context.
- The quantification of results.

The evaluation of the results implies the ascendant transmission of information, starting with the level of each department and reaching the top management of the organization where data are processed and changed into indices proving the efficiency of the activity. The processing of information consists in comparing the results obtained with the purposes attained and the anticipated goals. At the same time, the results should be quantified by employing standard measuring units.

3. INTERPERSONAL COMMUNICATION

At the level of the organization, interpersonal communication is carried on according to the hierarchical relations of the jobs specified by the organizational scheme. The following types of interpersonal communication may be subsequently identified:

- Horizontal communication among the different departments or persons situated on the same hierarchical level.
- Ascendant vertical communication, starting with the level of ordinary employees to the top of the hierarchical pyramid, is a type of communication that enables the managers to have a specific knowledge of the activities carried on within various hierarchical levels, and that provides the managers the informational flux necessary in order to take decisions. The main drawback of ascendant vertical communication is that, due to informational junctions, managers may exploit information in their own interest.
- Descendant vertical communication, starting with the top of the hierarchical pyramid to its basement, has as a main purpose the transmitting of orders, suggestions, responsibilities or instructions from a superior hierarchical level to an inferior one.
- Star – like communication implies a department manager and a manager situated in an inferior hierarchical position and belonging to another department or vice-versa. The advantage of this type of communication resides in the fact that it shortens hierarchical circuits, yet it may determine incomplete informational fluxes at the level of managers that might generate certain tensional situations within the organization.
- Non-formal communication does not observe the formal structure of the organization, implying employees and managers of different departments and hierarchies.

4. EXTERNAL ORGANIZATIONAL COMMUNICATION

In order to achieve its goals and, implicitly, to carry on its activity, any organization has various relations with different partners. According to the type of partners, the following forms of external organizational communication can be noticed:

- "Upstream – downstream" communication that implies the exchange of messages/items of information between the organization and the beneficiaries of its products or services (downstream) or the partners (upstream) that supply the organization with products or services, as well as those companies providing the conditions necessary to carry on the organization's activity and even the competing organizations. Communication may be direct or through advertisements.
- Communication with non-governmental organizations has in view the obtainment and spread of certain information about such organizations carry on, information that may be of interest for the organization's purposes.

The means of communication can be direct, through certain publications or may resort to mutual meetings.

- Communication with government institutions implies the informational exchange between the organization and the government institutions and enables the organization to observe the regulations and standards established at the level of the government. Moreover, this type of communication particularly regards governmental agencies that supervise employment practices, payment and salary policies, employees' health conditions and labor protection.

An increasingly complex approach of communication determines the strengthening of an organization's position within the market it carries on its activity. In order to be competitive an organization should create a competitive product and moreover should let the others know such a thing. From this point of view, communication is essential in ensuring the survival of an organization. Without a process of communication in its most broaden meaning, having both an external and an internal orientation, the activity of an organization is exposed to high risks. An organizational frame capable of facilitating internal organizational communication, interpersonal communication, and external organizational communication represent efficient means capable of positively exploiting competitive advantages.

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LABOUR MARKET IN CHANGE

SABINA IRIMIE *

ABSTRACT: *Worldwide, the approach related to the occupational policy needs radical changes. In this spirit, the measures taken by governments shall aim an increase of the employment level of the economically active population, with a diminution of the unemployment rate. The inefficient use of the unemployment funds and of other resources is due to a much too high variety of passive measures, here being including the extremely high implementation costs. Consequently, the active measures shall have to weight more in the future. Training, re-training and re-orientation of the labor force shall have to represent proactive measures and shall be carried out in relation to the current demands on the labor market.*

KEY WORDS: *labour market, tendencies, objectives, occupational policies, unemployment*

1. INTRODUCTION

The new world economy has given birth to a new pattern regarding the manner how both the employees and the employers deal with the issues related to human resources. The real everyday facts show that the entities involved in the drawing up the state policy, private companies and each individual has to tailor to the alterations occurring worldwide, in Europe or at national level, depending on each one's purpose. This is how the labor market suffers continuous alterations.

Theories on labor market – more exactly on employment, unemployment or on salary issues are far from being unitary. The labor market represents the place where the labor force is being sold – bought within an organized structure. It is defined as an economic area where the capital owners (i.e. the buyers) and the labor force offers (i.e. the offer providers) meet and negotiate freely on the labor force market. To put in other words, the labor market covers all the relations between the demand and the offer of labor resources in relation to the salary and its oscillations and form the basis for the employment of the economically active populations, depending on the size, the structure and the quality demands on the market (Irimie & Munteanu, 2004).

* *Assoc.Prof., Ph.D. at University of Petroşani, Romania*

At present, the labor market displays a new content, both the demand and the offer as main components of the structure, don't go down anymore to individuals, but to each large social group – economic units and working teams with skilled personnel. The type of organization is improved and the abilities to negotiate the conditions and the working relations have increased; there have been created new structures which defend the interests of the parties concerned - trade unions and the employer (the state). So, legally, man has got the power to decide freely on his labor force. This paper shows some of the present trends registered on the labor market in the USA, Europe and Romania, which prove once more the major changing occurring on these markets.

2. AMERICAN LABOR MARKET TRENDS

The trends registered on the labor market can provide a lot of information on the views and concerns of both the employers and of employees related to labor, labor market and to the government policy.

In this respect, in America we have five major issues dealing with the above said aspects after analyzing the results of several polls carried out in some American universities (Horn, 2006) on about 15.000 employees:

1. The American employee is worried. Today, the employees are worried, uncertain and stressed about their working places and about how safe their job might be. This uncertainly is brought by fear and by the bad experiences gained during dismissals, because of the lack of trust in employers, worries related to the retirement and how safe the pension money are; also this uncertainly emerges due to the problems in maintaining a balance among the time assigned for work, the time assigned to be spent with the family and the time assigned for professional training.

2. *Knowledge, study and attitude are what matter the must*. All the employees know that they have to get several capabilities and reference letters so as to be successful on the today's labor market. They value education and professional training a lot because for them they are tools which can be used to improve their everyday work. Also, all these qualifications are a kind of protective shield in case of economic disasters, in spite of the fact that they are aware that they can't do much to prevent dismissal. They are willing to improve their education and professional training but in most of the situations they don't know what to learn on how to get best training possible.

3. The employers want well-trained workers but they are difficult to be found. The employers need more skillful employees but most of them are not willing to pay for the education or for the professional training of their works.

4. A retirement after a lifetime of work. People wish and have to work more and harder than before. The traditional idea of retirement, i.e. when most of the people gave up working and spent their time together with their family and friends, is obsolete.

5. Few companies or individuals understand the complex public system of the labor force on know how to use it efficient manner. A large number of Americans have

taken advantage of the programs included in this system, but few know something about the tax exempts and the about the range of available services. Both the employees and the employers see the government as an institution where to go for help when the improvement of the labor force skills needed. The persons involved in the drawing up of the government policy for this field of activity are far behind the people in the street with respect to the new dynamics registered on the American labor market.

This study shows the need for a new approach regarding the policy and the skills improvement of the labor force and regarding the human resources; people shall have to accept and understand the new economic trends where the stress is being put on acquiring a lot of information and skills and on leaving behind the static version of the 20th century economy, i.e. permanent and stable jobs, early training, stable careers and business, retirement with no risks and with no need for extra work afterwards. The American workers handle these economic changes not so good. The public policy led for this field of activity and most private companies haven't kept up with new reality.

3. ALTERATIONS OF THE EMPLOYMENT POLICY LED IN EUROPE

In Europe, the basic purposes of the European Union (EU) are the following ones: an increment of the living standard and of life quality for all the European citizens; sustainable development of the economic performances gained in the European Union; full employment; improving labor productivity and labor quality; a stimulation of the social cohesion and of inclusion.

As regards the employment of the labor force, the European efforts focus on three meetings of the leaders of the member states: Maastricht Treaty in 1991, The Treaty of Amsterdam in 1997 and the summit of Luxemburg held in November 1997. The Maastricht Treaty, 1991, forecasts the goals stated in the future European Employment Strategy of the Labor Force and traces out the general framework necessary to develop a joint social policy in Europe in the field of labor force. According to the article 136 of the Maastricht Treaty 1991, also known under the name of the Treaty of European Union: "The Community and the Member States (…) shall have as their objectives the promotion of employment, improvement is being maintained, proper social protection, dialogue between management and labor, development of human resources with a view to tasting high employment and the combating of exclusion". On June 1997, when the Treaty of Amsterdam was signed, a whole chapter on employment was added to the treaty.

For the first time, the employment policy has been considered a common European task and the unemployment is considered "a problem of general concern" for Europe and a top item for all the member states.

The European strategy regarding the employment defined by the Treaty of Amsterdam requires the Member States to coordinate their policies on employment around four pillars, focusing on top priority actions on target groups that have been clearly defined and objective. The *four main pillars* are: an improved employment rate, promoting new ideas and the entrepreneurial spirit, encouraging adaptability between

the active economic sectors and their workers and strengthening the policy to promote equal rights between men and women (Vonica Radutiu, 2002, p.6). The extraordinary European Council on employment organized in Luxembourg on November 1997 adopted the *European Employment Strategy*.

The Treaty of Amsterdam strengthened the European efforts aiming at the creation of new working places and it is important because it has enlarged the issues on employment and on social policy. Starting with the '90s, most measures regarding the European social policy relied on the social policy agreement enclosed as a protocol to the Treaty of the European Union signed in 1992 and to the Chart of the Fundamental Social Rights of Workers, adopted by the state and government leaders in 1989. The fundamental rights for workers asked for safety and social protection at work, equal treatment and training both for men and women.

Even if the Chart was not a mandatory legal document, the social policy agreement assured the fact that the EU could take actions under the cover of the Chart. Nevertheless, the United Kingdom of Great Britain signed neither the Chart nor the Social Policy Agreement. Consequently, some laws of the European Union dealing with social policy have been implemented only in 14 of the 15 member states. The treaty of Amsterdam put an end to this heterogeneous development of social policies inside the European Union. At present this agreement is an integrant part of the Treaty and its provisions are being complemented in all the number states with no discrimination whatsoever. Now, all the citizens of the European Union can rely on the social policy legislation which has been adopted by the European Union starting wish the '90s; it was also implemented retroactively in the UK.

4. THE EUROPEAN LABOR MARKET - AIMS, ACCOMPLISHMENTS AND TRENDS.

The European Union is the main economic block in the today's world. With only 6% of the world population, the EU creates over 20% of the total output. As it has numerous top priorities, the present Europe hasn't succeeded to solve one of its main aims: i.e. to create new working opportunities for everybody.

There are two main reasons which have led to the present situation regarding the employment market of the labor force. The first reason is represented by the problems raised by the macroeconomic shocks. During the last 25 years, the unemployment rate has increased because of the two oil crises in 1970 and 1980 and because of the economic disturbances recorded at the begging of the '90s. Europe couldn't stop the diminutions of the working places triggered by this crisis. There were no well coordinated policies, orientated towards an economic development and to reach a suitable level of steadiness. At present, Europe has got the same advantages (a unique market and a unique currency) as the ones which have helped the economy of the United States to become on of the best in the world.

The second reason is represented by the problems connected to the inability to handle the present alterations occurring on the labor market. The malfunctions of the

policies working on the labor market and of the systems for social protection have increased the unemployment rate. The Member States own a good system of social protection providing an income all through the period of unemployment but there is a tendency to offer a passive income and to let people wait, reaching a long term unemployment before someone does something for them. It is imperative to create a spring-board to re-launch new capabilities and new working places.

A lot of unemployment people are hindered back from getting a new job because of their low training or because of their skills which have been worn out so a lot of them cannot handle the available jobs.

On the other hand, Europe has registered a diminished "adjustment" rate, to the new technology. This aspect is mirrored by how labor is being organized and by the lack of opportunities (both for workers and for these unemployed) to reveal on to renew their capabilities all through their active working period. The answer of Europe given to the second problem is covered in the European Employment Strategy whose main purpose is to support the Member States and the social partners in their effort for modernization and harmonization with the present demands on the labor market.

During the summit held in Lisbon on March 2000, the European Commission presented a series of documents on the current social and economic situation in the European Union. As a conclusion we may say that progress has been made in supporting the creation of new working places. But, at the same time there have been identified the main shortages related to the unemployment in the European Union. These are: the trap of services (the European Union has a much lower level of employment in the tertiary sector compared to the one in the USA); the trap of discrimination (only half of the women in the EU got a job compared to 2/3 in the USA); the trap of the age (the employment rate of the age range 55 – 65 is lower); the trap of the capabilities (the skills required in the EU don't match the current the technical support); long term structural unemployment (almost half of the unemployed persons are in this for more than one year); an unbalanced regional market both in Europe and in the member States (the unemployment can be found mainly in the southern Italy, Spain and Greece. The rate of unemployment is the highest in the less developed regions, bordering regions and the areas with industrial decline).

One aim said on the agenda of the Lisbon summit is the improvement of employment and the quality of work. This aim involves several directions:

- increasing the number of the high standards working places (a full employment in Europe means almost 70% people employed until 2010 and increasing the number of employed women to more than 60% in 2010);
- an anticipation and an adapting to the new working environment (the idea is to find a positive and a proactive approach by promoting the information suitable both for companies and for their employees);
- by addressing to those issues raised by the labor force and to the social consequences of the labor force and to the integrated market and by a suitable harmonization of the labor conditions and of the contract relations with the new economy for the view to supporting re-launch of the balance between knowledge and flexibility;

- a suitable exploitation of the economic opportunities based on knowledge (the main goal is to develop an economy based on knowledge with the view to creating more jobs in Europe) by promoting mobility (by providing those measures which assure a free move of workers, i.e. measure to remove the obstacles for a free involves a continuous monitoring of the level of implementation of the Community Regulations on the free move of workers; an examination of the need for specific measures in those domains which represent the core of an economy based on knowledge and development of the supporting mechanisms with the view to easing the mobility level, including the use of new technologies).

5. PRESENT TRENDS IN ROMANIA

Following the decision taken by the EU Council at Helsinki in 1999, i.e. to open negotiations for integration, Romania faces new and complex challenges in the economic and social fields for being able to meet the Conditions necessary to become a state member of the EU in 2007. In this spirit Romania has to do every effort to speed up the economic, social and political harmonization with the structures currently existing in the EU and to adjust, change and improve the legislative and institutional framework. The Romanian government has drawn up global and sectorial strategies additionally to a continuous monitoring process both at national level and at the EU Council. The integration in the EU structures has had a significant impact on the whole economic and social life. As it has been said in the previous chapters, in addition to the necessary sartorial adjustments, Romania has to implement a complex mechanism able to meet one of the most important UE goals: economic and social cohesion. This is because the social and economic cohesion represents the second domain if taking into consideration the budget expenses (Pascariu, 2002, p.19).

The transition in Romania is closely connected to the issues of the labor market. The continuous operation and improvement of the labor market represents a top priority of the transition towards the market economy. This target involves an adequate institutional framework to support the evolution of the national economy as a whole. The main expert institution is the National Employment Agency and the Country Employment Agencies which started its operation on January the 1st, 1999 and whose main purpose is the training of the unemployed people.

After an analysis of the Romanian labor market in these transition years, the following conclusions can be drawn out:

1. The structure of the labor market has been marked by the continuous pressure of the labor force over the demands; it has been continuously fed by the natural progress of the labor resources and by the proper operation of the labor market. Obviously, this occurrence is not linear and displays a series of territorial particular aspects, depending on the economic structure, economic development as well on the current education level. The labor force has been suffering a continuous diminution because of the increased number of retired people and because the number of young people has diminished a lot.

2. The employed workers have diminished in all the Romanian counties, especially in the field of the processing industry, followed by construction industry, transportation and tourism. It is envisaged that after adheration, Romania shall have around 50,000 working places available in these industries. The structural changes in these industries have been triggered by the application of the Land Law, by privatization and the creation of new working places in the private sector, especially in commerce and service delivery, with the diminution of activities in the industrial state-owned companies. A high rate of employment was recorded in the following domains: commerce, public administration, finance and banking, service delivered to population. The private sector has brought an important contribution to the alteration of the employment structure, this sector being the only employer. Most of the working places have been created by plc.

3. With respect to the salary, as an important factor which plays an influence an the resilience of the labor force demand on the labor market, the net average revenue situated between USD 62 (minimum value) in 1992 and over USD 200 (maximum value) in 2005.

4. The unemployment rate has kept a linear evolution, sometimes with peaks, as a result of the quantitative and of the qualitative unbalance between demand and offer for work.

The unemployment rate has had different values, ranging between 3% in 1991 and 11.8% in 1999. Table 1 shows the number of the unemployed workers valid for the whole country (according to the data provided by the National Employment Agency).

Table 1. The number of the unemployed workers [10]

Year	Unemploy-ment rate [%]	No. of officially recorded unemployed workers
1991	3	185052
1992	8,2	605350
1993	10,4	1047260
1994	10,9	1229748
1995	9,5	1111327
1996	6,6	814292
1997	8,9	748982
1998	10,4	917069
1999	11,8	1118877
2000	10,5	1067206
2001	8,8	866498
2002	8,4	954546
2003	7,4	689531
2004	6,3	607192
2005	5,9	513721

Although unemployment touched all the categories, some have proved to be more sensitive, other tougher. After the analysis of the unemployed workers with the consideration a series of demographic characteristic features (sex, age, education, residence) and economic characteristic features (reasons for the unemployment, length of unemployment) a series of findings have been revealed, useful to trace the future policies on employment and fight against unemployment.

The most vulnerable category of labor force is the women – with an average of 47.0% of the total number of unemployed persons. There are several causes: some of them are related to the training level, some are connected to the attitude displayed by the managers of undertakings, and other causes are related to the high rigidity displayed by women compared to men labor force.

By analyzing the age structure of the unemployed people, the following conclusions may be drawn out: - young people until their 30s represent the category with the highest unemployment rate. They come from among young graduates, persons which have been dismissed by state owned trading companies based on lesser professional experience or from among young men who couldn't find another job after they completed their military service; - there is a high rate of unemployment among people older than 50 years, less willing to change their profession or residence, staying unemployed after the payment period is due.

In Romania, the *significant aspects* of the labor market are the following ones: the labor market is in formation, with unbalances which result in an high unemployment rate and also the labor force is being used in an inefficient manner; a decreasing of the labor productivity and as a consequence: lower salaries; a large part of the population capable to work is not present on the labor market.

As a conclusion, all the institution which have a certain relation with the labor market have to cooperate with one another for the view to diminishing the unemployment rate and increase employment, to changing information and to cooperating for the benefit of the whole community. It is imperiously necessary to create a common plan regarding the development of the new labor force generation and the development of a suitable policy for improving the skills of the workers. Both the government and the institutions involved have to consider the major challenges related to the training of the people so as to get better paid jobs which need high skills and, at the same, challenges related to those left behind because of the rapid economic changes. As right rate employment represents the key component of the Lisbon agenda, Romania has also to take info consideration this aspect with a lot of implications in the social and economic life of the country.

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BAR CODES – A TECHNOLOGICAL REVOLUTION IN COMMERCE

ALIN ISAC [*]

ABSTRACT: *Generally, the bar code represents the total of conventional rules used to express information through symbolic elements, susceptible of having a physical interpretation. The bar code is a graphic representation of numeric or alphanumeric characters through the alternation of black bars and white spaces of defined widths.*

KEY WORDS: *bar codes, symbolic elements, alpha-numeric discontinuous, linear bar codes, quiet zone, scanner commercial*

Commerce is an instrumental factor for the people's welfare, due to its place in economy, to its social and economic functions and due to its importance as an instrument used for local developing and social cohesion. At the same time, in a competitive economy, marketing must be regarded as an efficient controlling instrument of some important economic mechanisms, which activates the competition between supply and demand, and thus it ensures its materialization through bargain-and-sell contracts.

The technological revolution continually modernizes economic activities and marketing, implicitly. Thus, the first step that was taken in order to improve marketing was the use of commercial data processing, and the second step was the use of bar codes, which identified the categories of goods.

Generally, the bar code represents the total of conventional rules used to express information through symbolic elements, susceptible of having a physical interpretation. The bar code is a graphic representation of numeric or alphanumeric characters through the alternation of black bars and white spaces of defined widths.

The bar code technology is based on a system that recognizes these combinations of black bars and white spaces using specialized data processing equipment. This technology made its first appearance in 1952 when the American Joe Woodland invented the bar code; the patent for the bar code was issued in the same

[*] *Assist.Prof. at the University of Petroşani, Romania*

year. The first important application of the bar code was registered only in 1960, when it was used to automatically identify railway wagons.

Further on, the interest for the bar code increased significantly, especially in the retail trade, food stuff trade and in the case of some consumer's goods. During the 1990s, this technology met a spectacular development; therefore it is now used in almost all fields of economic activities.

This process developed easily because of the rapid modernization of hardware and especially because of the progresses made by software. Several bar code systems were created during five decades, systems which assign bar codes to goods and process the data contained by the codes. The most important ones are:

- The card code system used between 1965-1973 had a disadvantage: for labeling the cards a multitude of operations was necessary and the process also required a certain efficiency;
- The optical reading which appeared at the beginning of the '70s and promoted the labeling of goods with a special data system or with data written in magnetic ink on a normal paper;
- The scanner system which scanned commercial information regarding the goods. It developed rapidly because this method of symbolizing codes, as well as the simple elements that make up the symbols, was considered the main step towards the informational revolution in marketing.

Regardless of the progresses made by the bar code system, its basic element remained unchanged. These components are: the symbol (the type of code), the imprint method, the equipment used for imprinting, the optical reader and the decoder.

1. TYPES OF CODES

According to the methods that are used to create bar codes, there are several types of codes. In order to define them, the word "symbols" is being used by the Romanian standards. In economy there are relatively few symbols, although their number amounts to 225.

The European standard Bar Codes EN 796, elaborated by the European Committee for Standardization (CEN) provides 18 symbols (types of codes), each with its own symbol identifier. Up to the present, the following types of codes have been standardized: Code 39, Code 128, Code EAN-UPC, Interleaved 2 of % and Codabar/MarcuL, 1998/. All these have been taken up by the Technical Committee CT300 Bar Codes as Romanian standards.

According to encoding systems, there are two categories of bar codes:

- Linear bar codes – the information is usually encoded horizontally;
- Two-dimensional bar codes - the information is encoded both horizontally and vertically.

Two-dimensional bar codes can encode more information than the linear ones. However they are not widely spread yet in marketing, but it is hoped that in the near

future, the interest for 2D bar codes will grow, especially for the matrix code. This is by far the most efficient. In fact, in the United States, a 2D matrix bar code is already being used and it is called Maxi Code.

The types of codes mentioned above are linear codes; according to the characteristics of the strings of characters it encodes, there are several types of such codes:

- Numeric codes, which represent only numbers (e.g. EAN and UPC Codes);
- Alphanumeric codes, which represent both numbers and letters (e.g. Code 128 and Code 39);
- Fixed length codes, which represent a string with a fixed number of characters (e.g. EAN code, which is a string of only 8 (eight) or 13 (thirteen) elements);
- Codes with variable length, which can represent strings containing a variable number of characters (e.g. Code 128 and Code 39).

Regardless of their types, linear codes have the same general structure, characterized by the following elements:

- Width (the module) represents the width of the black bar of the white space. It is a very important characteristic of the symbology because the length of the bar code and the decoding depends on it, and sometimes the height of the code also depend on it;
- The quiet zone is represented by the leading and trailing margins that are left unprinted; for most of the bar codes it has a width of minimum ten times the width of the bar code. It ensure a correct reading of the bar code, avoiding errors caused by signs or characters that can be found near the code;
- Start and stop patterns are in fact specific combinations of bars and white spaces which start and end the bar code. These allow the bar code reader to identify the beginning and the end of the code, as well as the reading direction;
- A data character (the line of interpretation) is the actual code, made up of readable characters. This code must always be found below the bar code because it allows people to introduce the code of the product manually in the computer, in case the code cannot be read by the scanner for various reasons;
- The check digit lets the scanner determine if it scanned the number correctly or not and it is based on a specific algorithm for each type of code. In some cases, knowing this digit, one can reconstruct the altered code.

2. PRINTING AND READING BAR CODES

The printing method is very important if we want the bar code to maintain its characteristics in every environmental condition – transportation or depositing conditions of the products. At present, there are being elaborated European standards referring to the following aspects: bar code printing technologies, the ink the colors used, the material the labels are made of, the position of the label on the product. Bar codes can be printed:

- on the package;
- on labels, which are then applied on the package;
- through marking when wrapping the product.

Bar codes can be read with optical equipment, which measures the intensity of light reflected back by the bar code and transforms the information into signals that can be processed by a decoder. At present, two types of bar code readers are used:

- Optical pen readers – the clerk drags the tip of the pen across the bar code in a steady even motion;
- Laser scanners – the scanning process does not depend on the speed and continuity of the motion when the bar code is being scanned. These can be fixed or portable devices. The fixed ones are connected to cash registers at check-out points.

Starting with the 1970s the process of standardizing the product encoding systems in factories has been intensified. In France, for example, the Gencod system was implemented to identify products and manufacturers, while in Germany the national encoding BAN-L system was improved.

In the year 1974, representatives of producers and distributors decided to set up a coucil that would analyze the possibility of introducing a new European uniform encoding system for products. After the systems which already existed at that time (UPC, Gencod and BAN-L) had been examined, the new European Article Numbering system (EAN) was elaborated. This system had to be compatible with the UPC and it had to include the systems used in France and Germany.

The EAN system is based on a UPC 12-digit code with the following meaning: the fist two digits stand for the country of origin (e.g. Belgium = 54, France = 30-37, Germany = 40-42, Japan = 49, England = 50, the Netherlands = 87, etc); the following five digits are a manufacturer's code and the next five digits are used to identify a specific product. The last digit is the check digit.

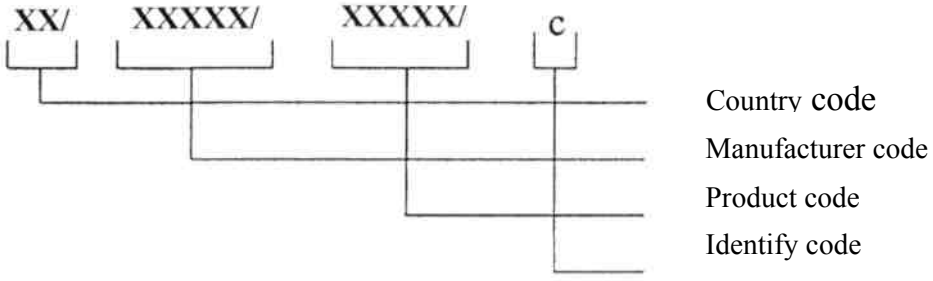

Figure 1. The structure of an EAN code

In order to control the application of the EAN system the European Article Numbering Association was formed in 1977; initially it grouped together representatives of producers and manufacturers from England, Belgium, Denmark, Switzerland, Finland, France, Germany, Italy, United Kingdom, Norway, the Netherlands and Sweden. This association, which was named "*The International*

Article Numbering Association EAN" starting with the year 1981, follows some basic principles in order to ensure compatibility of national product encoding systems.

Using an easy numbering system, the EAN system is very flexible and with a large capacity (it can encode approximately 10 billion products). The EAN system spread quickly in many countries, not only in Europe but on other continents as well (Canada, Japan, Australia, New Zeeland, etc), due to this advantage.

As an efficient solution to the manufacturers' technological needs to use a machine-readable code, the in-store marking scheme was implemented, without changing the EAN system.

Thus, an international convention allows that some numbers used to identify the country, that is to say numbers between 20 and 29, should be attributed to a certain country or region for the needs of local manufacturers. These digits are used to encode their own products or products that had not been encoded by manufacturers. In this case the bar code is 8 digits long, with the possibility to extend it to no more than13 digits, according to EAN 13. Therefore, the code of the product can be a significant code, according to a systematic classification of the products.

The use of the EAN system has a series of advantages both for manufacturers and for traders and consumers as it helps stores speed up the checkout process and keep better track of inventory.

Through this system, producers can keep informed about the changes regarding the sales, and thus they can easily meet the consumers' requests (reducing or extending the sales for a certain type of product, withdrawing an unsuccessful product from the market, etc.).

For traders, the EAN systems helps keep better track of inventory as it tells you at any time the stock for each product, so that you can supplement it in time.

In the case of cash registers which have an optical EAN bar code reading device, the checkout process is done more quickly and without errors. One can also place order using a computer interconnected to the supplier's computer. Promotions can also be managed in a better way.

For the client, the use of the EAN system reduces the period of time they have to wait on check out. After the cash register reads the bar codes, the client gets a cash bill which clearly writes the name of the product, the price for each product, thus leaving no room for errors (if the bar code was printed correctly).

Nowadays the EAN system can be applied in various fields of activity like: administration, banking, etc. The EAN 13 also includes ISBN and ISSN codes for books and periodicals.

Besides EAN and UPC systems, there are other bar code systems used in marketing which encode numeric or alphanumeric information. They can be grouped into continuous or discontinuous symbologies:

- Code 39, the first alpha-numeric discontinuous symbology; each character is made up of nine elements (bars and white spaces), three of them being wider. This code is widely used in industry and professional associations to meet specific needs.

- Code 93 is a continuous symbology; each character set is represented by two modules containing three bars and spaces. It has two check characters (C and K) and produces a denser code. Code 39 can represent the full ASCII character set (128 characters).

The acknowledged organization which elaborates standards can be national, regional or international. This acknowledgement can be done by public authorities (through a contact o a set of regulations) or by economic partners.

All the parties concerned must take part in the standardization process because standardization committees, which elaborate standard projects, are open to all partners (manufacturers, distributors, consumers and public administration).

Since the standard is destined in continuous or repeated applications, it is different from ordinary documents, which set certain rules accepted for only one use.

The standardization process means to guarantee an optimum level for the community, since the standards facilitate commercial transactions – they make it easier to identify products and compare them.

Allowing for the importance of the standardization process in the present economic context, more and more countries have already taken steps, at a governmental level, which stimulate these activities nationally and make countries take part in the regional and international standardization activity.

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COMPARATIVE ANALYSIS OF THE SOCIAL INSURANCE SYSTEMS IN USA, SWEDEN AND GERMANY

CLAUDIA ISAC *

ABSTRACT: *In every developed country social insurance and protection systems have been formed to protect the population against the risks that appear in everyday life at job and risks regarding health. In order to develop these systems have followed origina, administrative, associative and mutual paths that are different from the classic financial means.*

KEY WORDS: *social insurance, protection systems, social assistance programs*

The need to organize social insurance and protection in most of the countries arose together with the development of production forces, which is mainly determined by the development of industry. In the long run, especially in the western countries with a market economy, the mobilized resources that are used in specialized institutions have increased more and more, and this is why the social insurance system plays a very important part in the economy. The social protection systems in western countries with a market economy can take several levels: the first level is a conceptual one, and the second refers to organization forms. The first level sets the social security systems, in which everyone is, in turn, susceptible of giving and receiving against the social assistance systems in which the collectivity helps the minorities who lack resources. Social security implies a financial re-assignment which means fund absorption, on the one hand and fund distribution, on the other hand. The second level is applicable within the same social security system and refers to the "esprit de corps" concept, according to which a person has no other right than to claim the money he earns by working and to the national solidarity concept.

According to Europeans and from the national social insurance system point of view, the United States has often been looked upon as a "delayed country". Its main characteristic is the lack of a centralized protection and insurance system and the lack of a powerful motive based on the complex relations between federal and governmental politics.

* *Lecturer, Ph.D. at the University of Petroşani, Romania*

The comparative studies made by several specialists, have changed the Americans' opinion towards social insurances. The development of systematic comparisons and the Esping-Andersen typology reorganized the social insurance system, which tends to have other characteristics than the European ones, because of a reduced number of trade unionisms and social or social-democrat parties. At the same time, the development of the labour protection system made the United States "be in limelight" more often mainly because of the political conflicts and not because of the country's prosperous future.

The American residualism is revealed by programs that are not part of the social politics and it is characterized by two comprehensive insurance schemes: old age and heir insurance and unemployment insurance.

a) The old age and heir insurance covers more than 90% of the number of people employed and almost 60% of the people over the age of 65 use this system to cover have of their incomes.
b) Unemployment insurances are compulsory; the system is organized according to a global legislation which controls all occupational politics on the entire American territory, although there might be some differences among several American states. In general, the maximum period for granting unemployment benefit is six months, but if the unemployment rate in that particular state is higher than the country's medium unemployment rate, this period of six months can be extended.

Thus, the United States' financial assistance is different from the financial assistance of OECD countries (Organization for Economic Co-operation and Development), as the latter does not use national social assistance programs and presents the following protection levels: Families with dependent children receive an allowance if the potential financial provider is unemployed; Old people with no income turn to the Supplementary Security Income System (SSI) for help; The equivalent value of the hospital and home care is covered by medical care programs and sick payments are covered by supplementary costs; The private medical insurance system is continuously developing.

In conclusion, the United States does not apply a public contributive and compulsory social insurance system nor does it apply a system that helps public employment politics develop according to market changes.

The analysis of the European social insurance model shows that European companies use the same techniques to implement social politics. A comparison of the European insurance systems reveals numerous differences among the activities regarding decision centralization and the involvement of governmental or non-governmental institutions in the social process.

Scandinavian countries (Norway, Sweden and Denmark) have a certain characteristic in the analysis of the social insurance system. This represent a typical model – also defined by specialists as a utopian model of harmony and stability – in which the board committees take counsel with trade unions and with employees' representatives when it comes to making major decisions as far as social insurance and protection are concerned. Unlike the United States, Scandinavian countries have a

tradition regarding the social insurances and this represents a "trump card" for the development of the present system which is dominated and influenced by social democrat governances. The Swedish social protection and insurance system grants a basic income through a universal benefit system; the most important ones are children's allowances, universal benefits with a constant value for old age people and for medical care. In Sweden, the universal retirement money ensures a minimum income for the citizens and it is looked upon as a replacement of the income the persons had when he/she was employed.

The retiring pension system. For the basic retiring pension, the quantum is given to all inhabitants and it does not depend on the previous income from employment as it does not require any contribution. In 1948, after the abolition of any conditions referring to incomes, the Swedish retiring system became universal. All citizens have the right to retirement pension which can reach the maximum level of 3.434 Euros/year (1996). Under certain circumstance, this pension is supplemented by an extra pension, which is calculated according to the income in the best 15 years, without exceeding the maximum established limit.

The result is due to the quick development of the private retiring funds, which increased the old people's income. The development of the private funds also increases the pressure that is acted upon the public universal system. The social democrat movement feared that the evolution of the private and employment plans will affect the "esprit de corps" principle and the universalism, which will influence in its turn, the public resources. As a consequence, in 1959 a second system was created; according to this system, for a complete retirement pension, one must be employed for 30 years, and the pension depends on the best 15 years.

Besides the retiring pension system, the Swedish model of social insurance offers several social insurance instruments like:

a). Social protection of the unemployed and the social security benefit. The social protection of the unemployed can be achieved in two ways: unemployment insurance and unemployment benefit. The unemployment insurance is financed by the employer, its contribution amounting to 4.32%. The period for granting this benefit is of 300 days up to the age of 55, and of 450 days for people over this age. In case of re-employment, one is entitled to a new benefit period;

b). People between the age of 20 – 64 who are not insured, get an *unemployment benefit* from the sate, which draws its resources from taxes and duties. This benefit is a fixed one, because the basis of calculation does not consider the tariff salary. The period for granting this benefit is of 150 days up to the age of 55, and 300 days for people over this age;

c). The social security benefit (*Social Bidrag*) is a non-contributive income that covers the living costs of some people who have no other income. The fixed benefit sum is established by local authorities according to the standard values communicated by the Government, to the social and financial state of the solicitor. The social security benefit is granted for an unlimited period of time, or until the situation of the person has

improved; the financial state of the person can be cumulated with the family allowance (state allowance for children) and with the house allowance;
d). The medical care is mainly financed by the state, while sick payments are given mostly by employers; the employee does not have to have any contribution, but he has to cover 3% of the medical services and medicine costs; The medical care system is controlled by decentralized structures; the Ministry of Health and Social Affairs has the role to plan and define the fundamental principles of sanitary management. The period for granting medical assistance is unlimited or until the health condition of the patient has improved;
e). Sick payments are granted through the medical insurance system; the contribution of employers to this system is major (6.23% of the salary fund) and is supplemented by a general contribution of 2.95%. If the patient's state of health does not improve during this period, the sick payment can be transformed into a disability pension.

At the same time, there is a series of mechanisms that ensures an increased degree of contribution of women to the labour market. During the first year of child raise, parents benefit by a financial support that covers 90% of the previous income. This is granted by the health insurance fund, out of which 9.5% represents the employer's contribution, unlike in Germany where employers must contribute directly to the child raise allowance. In the second place, the labour market management is more active in the OECD countries and it has promoted an explicit employment politics. By the beginning of 2000, Sweden could pride on the lowest unemployment rate; this performance was achieved through high budgetary expenses that supported the pensions, manpower mobility, unemployment protection and the jobs.

The reconstruction process of the social insurance system into the modern conservative German model was less intense than the liberal or the social democrat one. This is not surprising because the German social insurance system dated back in 1950 and they were well developed and mature. On the one hand, social protection was ensured by modern social insurance schemes, which replaced the traditional ones, and on the other hand, social protection was ensured by a social assistance system destined to those who somehow "escaped" insurances, for various reasons.

The social protection system implemented in the social market economy of Germany is one of the most generous systems in the world, and it draws its finances on equal contributions both from employers and employees.

The main characteristic elements of the German social insurance model are:
1. The unemployment benefit. All employees who work at least 18 hours a week must contribute to the unemployment fund. The unemployment benefit is 67% of the last income in the case of employees with children and 60% in the case of employees without children; this benefit is granted for a period of 180 – 960 days, according to age and to the contribution period.;
2. Health insurance. As a result of the regulations adopted in 1994, regarding long term assistance, the level of contribution of both employers and employees increased from 6.15% to 6.9% . This share is not to be paid by employees with an income which is under 630 Euros a month. In case an employee falls ill, the employer must pay

him/her a full salary for six weeks. Only after this period has elapsed, does the health insurance system takeover the payment which represents 70% of the gross income for a period of up to 78 weeks. The unemployed members of his/her family are automatically included in the medical insurance system, without any additional contributions;

3. Accident insurance. All employees must be insured against industrial injuries and accidents at the expense of the employer. For this insurance fund, companies must contribute with 1.4% of the salary fund (according to the law passed in 1996 regarding industrial accidents). In case of a fatal accident, descendants get a fixed amount of money of 7500 Euros and 20% of the insurant's income for each orphan child under the age of 18 and up to the age of 25 for students;

4. The holiday allowance. In 1990, the medium number of vacation days was established to be 30 working days (six weeks). The employee is entitled to a full salary during the holiday. According to labour contracts, some employees also get "holiday bonuses" for festive seasons/days;

5. The retiring pension system. As far as the retiring pension system is concerned, the calculating formula includes incomes from the active period and the years of contribution. For an integral retiring pension, the employees should have contributed 45 years, whereas for a minimum pension there are necessary 25 years of contribution. This system is more restrictive than in the United States where the minimum contribution period is 10 years. The retiring age is usually 65, but in certain cases, it can be reduced to 63 or 60. Some employees can turn to supplementary retiring pension systems which are constituted by contributions to insurance companies.

In Germany, the gross replacement rate for a pensioner is of 55% for an employee with a medium salary and of 40% for an employee with a double salary. In Sweden the rate decreased from 80% to 60%, while in the United States it dropped from 40% to 27%. As a consequence, for people with high incomes, the German system promotes a better rate of income replacement compared to America, but a more reduced one compared to Sweden.

Just like the retiring pensions, the rights ensured by the unemployment insurance system, depend on the working background and the age of the solicitor. People who do not get the unemployment benefit (as a result of insurance) can apply for unemployment assistance. The basic income for health, are often associated with employment and employers have to cover the expenses during the sick leave. The health insurance funds, which are due to compulsory contributions, can finance a part of the medical care costs and they also reimburse part of the sick payments to employers. For the welfare of the country, Germany develops a real social protection system for employees. This explains why the private sector regarding social insurances has not developed that much.

In conclusion, here is a comparative synthesis of the three insurance models (Table 1).

If we concentrate only on the differences between the three models, we cannot miss important aspects related to similarities and convergent tendencies. Sweden has

started a movement towards Germany since 1960, that is to say that it develops a second pillar, employment pensions, which has more financial power than the universal system. The German model intended to introduce a guaranteed basic income, partially developing on the one hand the social assistance system and on the other hand, introducing minimum facilities regarding retiring and unemployment benefits, just like the Scandinavian model. Even if the American model has been applying the Social Security Act since 1935, there can be found German influences in the insurance system, and later between 1960 and 1970 there is a tendency towards the Swedish model, which emphasizes the importance of citizenship, especially when it comes to ensuring medical assistance to the poor and old-aged people and to offering supplementary pensions.

Table 1. Important characteristics of the insurance model in developed countries

	United States	**Germany**	**Sweden**
The organization principle	Insurances and assistance	Social insurances	Social insurances and citizenship
Administration	Local-federal mix and major market	Corporate and limited auto governing	State
Services	Limited	Limited	Major
Employment politics	Minor	Limited	Major
Re-distribution	Low	Medium	Major
Poverty	Strong	Moderate	Weak

In the development of these countries, we can say that they have some elements which are common to all of them. When "the need and the job" are called the basic point in the American model, it does not mean that the other two do not apply this principle in order to offer social services.

Another dimension of the comparative analysis refers to private insurances/private clauses. There are three major contractual types: the fist one refers to individual insurances (e.g. life insurances); the second is a group of insurances based on employment plans (health insurance institutions and employment pensions); the third one refers to the voluntary sector (charity organizations). From a financial point of view, the second type can represent the common factor of the OECD countries. In the United States, employment pension plans represent 80% of the total of private pension expenses (Esping-Andersen, 1990) and approximately 4/5 of the private health insurances come from people who work on a labour contract.

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ASPECTS REGARDING THE METHODS OF ACCOUNTS CONSOLIDATION AND THE ELABORATION OF CONSOLIDATED FINANCIAL REPORTS

MARIANA MAN, LORIANA ZAMFIR [*]

ABSTRACT: *Consolidated financial reports should provide a clear and accurate image of the assets, debts, financial situation, profit and loss of the companies comprised within the consolidation process as a whole. They should specify the accounting policies adopted while determining the sums corresponding to the balance sheet posts or the group's profit and loss. In order to consolidate the accounts it is necessary to study the group that is going to be consolidated according to the inter-links among component companies as well as the control types, that is the influence the main company has upon each other constituent company*.

KEY WORDS: *group, branch, mutual control, significant influence, combination of companies, acquisition, date of acquisition, consolidation, consolidated accounts, consolidation perimeter, associate company, the method of equivalence, proportional consolidation, minor interest, participation interest, fair value*.

1. THE NEED OF CONSOLIDATED ACCOUNTS

Due to the economic development of companies and to their expansion, both within the countries of origin and abroad, to the phenomenon of economic concentration and re-grouping of companies, to the financial market and the prevailing financing of companies by financial institutions as well as to the growing pressure and demands of the users in order to get supplementary items of information that financial accounting was not able to provide, accounting research tries to give a pertinent answer to the users' demands and to the reflection of reality.

Both the shareholders and the group's managers, the financial analysts, the stock exchange environment, the banks, and the trade unions are interested in getting a general view of the patrimony and the results of a group of companies as if they deal with a single company. Those interested do not belong only to the company's origin

[*] *Prof., Ph.D. at the University of Petrosani, Romania*
Student at the University of Petrosani, Romania

country; they are from all over the world and that's why it is necessary to use a common accounting language that may be understood and analyzed everywhere.

Communication according to a single language determines a deeper confidence and leads to the increase of the possibilities of access on the capital market. Also, it allows multinational groups to apply common accounting principles within all branches, a fact that may improve inner communication as well as the quality of reporting to the management. At the same time, the application of common standards may facilitate the processes of buying and selling due to a higher level of confidence, relevance, and consistency of accounting interpretation.

The obligation of elaborating consolidated accounts is incumbent on a company, irrespective of the form of property, starting with the moment when it exerts, directly or indirectly, an exclusive or a common control or a significant influence over one or several companies.

The date of a company's entering the consolidation perimeter is: the date of titles acquiring; the date of taking over the control or the significant influence, in case the buying has taken place during several stages; the date stipulated by the contract, in case it stipulates the transfer of the control at a different date from the one of titles transfer.

The consolidation is going to be accomplished in case a group exceeds, during all financial exercises, the following levels or several of the following criteria: *aggregate business figure x lei (9.6 million euro); total assets x lei (4.8 million euro); average number of employees x (250)*

2. DELIMITATIONS REGARDING THE CONSOLIDATION OF ACCOUNTS

The economic doctrine mentions three types of groups (financial groups, personal groups, contractual groups) determined by three main categories of links (juridical and financial links, personal links, technical and trading links, either contractual or non-contractual).

Financial groups are based on juridical and financial links, control being exercised by the main company, as a result of owning (directly or indirectly) a part of the shares of the other companies within the group.

Two conditions should be achieved within financial groups: the existence of a unit of decision and management; the owning of a certain percentage of the shares of the companies under control. *Contractual groups* control is exercised, this time, owing to the existence of a statutory clause or as a consequence of the existence of a contract of exclusiveness, concession or sub-processing. *Personal groups* are characterized by a unitary management, that is, one person controls two or more companies which do not have links from the point of view of their capital.

Among the three types of groups, only financial groups have to draw and publish the consolidated accounts and to exhibit cetain information about their branches and their shares.

The definition of financial groups according to the French laws (Law 85-11 / 03.01.1985) is the following: "The group is a set of firms exclusively or commonly controlled by a company or upon which the company has an important influence."

From an economic point of view, a group is made of several companies that depend on a unique decisional centre: the main company.

A scheme of the economic group emphasizes the component companies as well as the links among them (their degree of dependence) (figure no. 1).

The main company (or the consolidated company) has a certain control or influence upon the other companies within the group.

Control means the "capacity of managing (elaborating and putting into practice) the financial and operational policies of a company, with a view of getting advantages from its activities". It is the result of the links of dependence of the controlled companies on the main company.

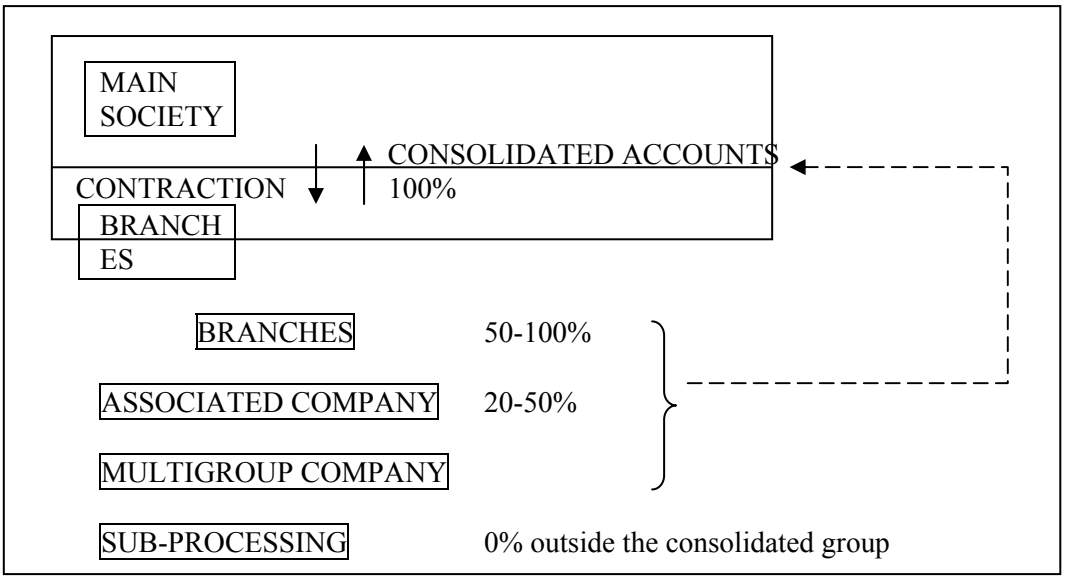

Figure 1. The company's members of the economic group and the links among them

When consolidating the accounts, we are going to maintain within the consolidation perimeter only the companies which the main company controlls or mainly influences from the point of view of their economic and financial activity.

The types of control exercised by the main company in order to make the other companies dependent on it are the following: a) – *exclussive control;* b) – *concomitant control (common);* c) – *main influence.*

Figure 2 schematically exhibits the three types of control.

In order to give an exemple, we are going to consider a group made of the following companies:

- ALFA SA – main company;
- BETA SA – a branch of ALFA company where the last one owns 100% of the shares;
- GAMA SA – where ALFA company owns 49% of the shares.

At the beginning of the financial exercise, ALFA SA aquires 25 of the shares owned by OMEGA SA at a price of 250.000.000 lei, accordingly gaining an important influence.

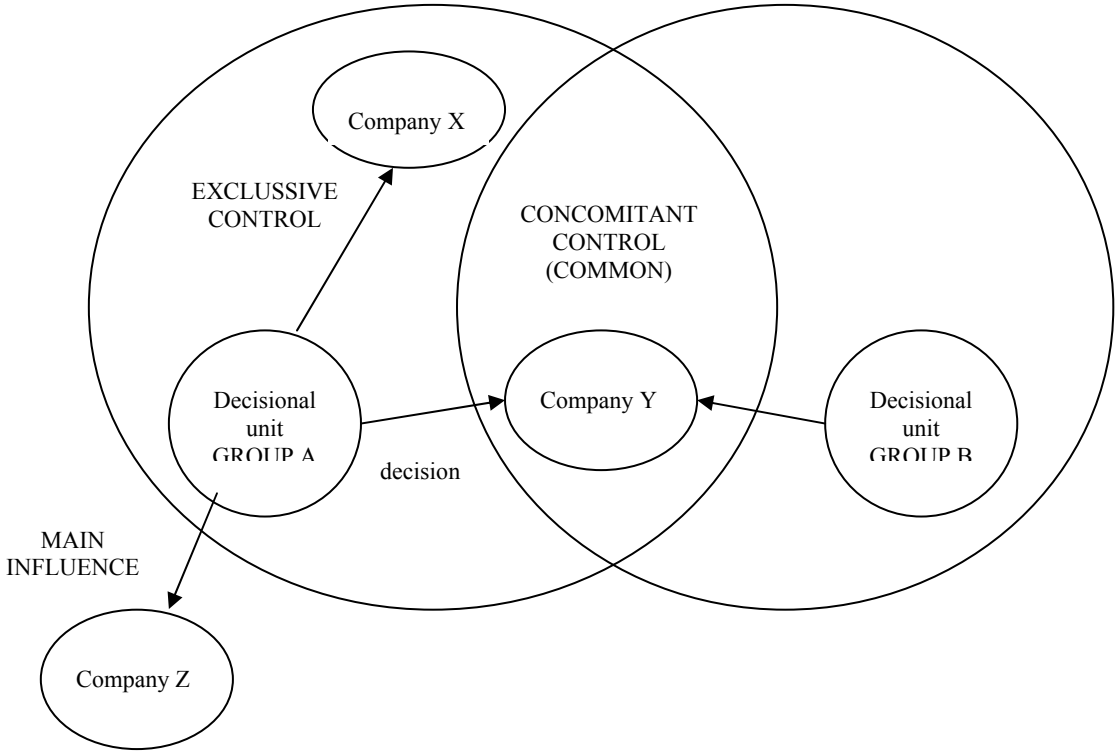

Figure 2. The types of control at a multi-group level

3. THE STAGES OF THE CONSOLIDATION PROCESS

The stages of a consolidation process are the following:

1. *The determination of the consolidation perimeter* – it is made of the set of companies that are considered with a view of establishing the consolidated accounts. According to the above example, the consolidated perimeter is exhibited in figure 3.

Between the main company ALFA SA and the three branches there are direct links.

According to the control percentages owned by the main company at the level of the branches, control is exercised as follows:
- for BETA SA- exclusive control (EC);
- for GAMA SA – concomitant control (CC);
- for OMEGA SA – main influence (MI).

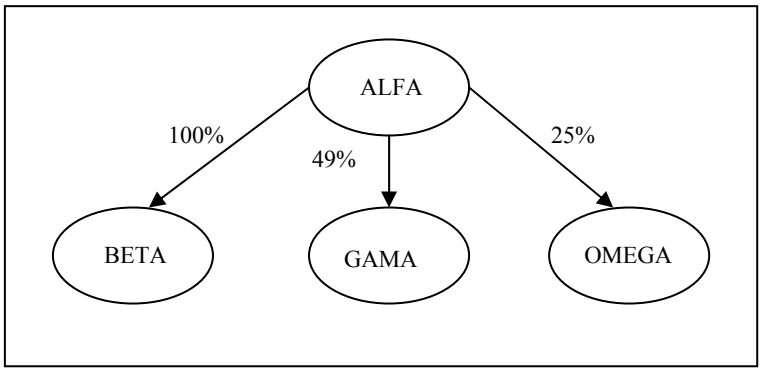

Figure 3. Group and interest percentages

2. *The drawing out of consolidation methods* – consolidation methods are chosen according to the control percentage which at its turn determines the type of control; the methods of consolidation are: global integration, proportional integration or equivalence, after possible re-negotiations in order to harmonize them with the principles and the rules of consolidation.

As regards the group in our example, the proceeding of direct consolidation is going to be employed; the methods of consolidation are used as follows:

- for BETA SA- the method of global integration;
- for GAMA SA – the method of proportional integration;
- for OMEGA SA – the equivalence method

3. *The re-negotiation of annual individual accounts of the companies to be consolidated, before their consolidation, in order to make them fit the methods of evaluation of the consolidated accounts* – while elaborating consolidated accounts we are going to employ uniform methods and the process will fit the stipulations of Chapter I, Volume I of the Accounting Settlements in agreement with the IVth direction of the European Economic Communities (EEC) and to the International Accounting Standards.

4. *The leveling of the display of individual accounts of the companies to be consolidated* - it refers to the putting into practice of homogenous evaluation methods regarding: the evaluation of buying and production costs for fixed assets and stocks; the plans of amortization; the determination of provisions; the methods of calculation and administration regarding the stocks.

The group in our example exhibits the following final balances and final profit and loss account. In order to save space, they are exhibited in two tables for each financial situation (Table 1, 2).

Table 1. Final balances

- Million lei -

Exercise closed on 31.12.	Final balances		
	ALFA SA	BETA SA	GAMA SA
1	2	3	4
Fixed assets	7200	1250	312
Tangible assets	2800	700	179,6
Intangible assets	200	100	20,4
Investments within association in participation	1000	50	13
Quick assets	3200	400	99
Stocks	2000	300	75
Debentures	1000	90	22
Cash and bank accounts	200	10	2
Creditors: term of payment under 1 year	100	360	1
Quick assets minus current debts	3100	40	98
Total assets minus current debts	10300	1290	410
Creditors: term of payment over 1 year	2300	425	0
Net assets	8000	865	410
Capital and reserves	8000	865	410
Social capital	6000	642	300
Emission primes	1000	0	0
Result	1000	223	110

Table 2. Final profit and loss account

- Million lei -

Exercise closed on 31.12.	Final balances Profit and loss account		
	ALFA SA	BETA SA	GAMA SA
1	2	3	4
Exploitation incomes	1300	650	350
Exploitation costs	600	400	230
Financial incomes	600	23	1
Financial costs	300	50	11
Outstanding incomes	0	0	0
Outstanding costs	0	0	0
Results	1000	223	110

We know the following data concerning OMEGA SA:

- Social capital: 100.000.000 lei.
- Result: 700.000.000 lei
- Investment in OMEGA SA by ALFA SA: 250.000.000 lei
- Trading fund: 50.000.000 lei

5. *The adjustment of mutual funds*. The consolidated accounts are going to exhibit the assets, the debts, the financial statute, the profit or the loss of the companies included within consolidation as if they form a single entity. The debts and the debentures among the companies included within consolidation as well as the incomes and the costs of the transactions among the consolidated companies will be eliminated during the process of elaborating the consolidated accounts.

When the profit and the loss resulting from the transactions among the companies included within consolidation are part of the accounting value of the assets then during the process of elaborating the consolidated accounts these results will be eliminated while they appear.

6. The conversion of the foreign companies that are going to be consolidated. The accounts of the companies that are not resident will be converted according to the closing exchange course method.

7. *The sum of re-negotiated converted individual accounts*- this stage includes the opening of consolidated accounting owing to: the all-inclusive taking over of re-negotiated accounts from the main company, branches and sub-branches, globally integrated; the taking over of the accounts of proportionally integrated companies corresponding to the interest percentage.

The accounts of the equivalent companies are not taken over. A "Register" as well as the "large book" will be filled in order to show the consolidation operations.

8. *The elimination of the effects of the transactions among the companies within the group, of inner dividends, of depreciation provisions and of risk provisions as well as costs of the consolidated companies.* Within consolidated accounting one should eliminate the inner operations among the group, such as: buying/selling; customers/suppliers; granted loans/ received loans as well as the results determined by these operations.

9. *The elimination of the occurrence of registrations made in order to apply fiscal laws regarding derogatory amortizements, statutory provisions, subsidies for investments*. During this stage we eliminate the effects of the registrations made in order to apply fiscal laws regarding derogatory amortizations, stipulated provisions, subsidies for investments in agreement with the Accounting Settlements harmonized with the IVth Direction of the European Economic Communities (EEC) and with the International Accounting Standards.

10. *The elimination of participation titles and of the capitals owned by the consolidated companies.* The accounts consolidation is made, mainly, by compensating the buying cost of the participation titles owned by the consolidated company with the corresponding part of such titles within the value of the capitals owned by the consolidated companies. In case the participation titles are successively bought in order to establish the trading fund we are going to consider the date of buying of the first lot that determines control or a significant influence. The next buying generates, as a rule, new trading funds. When the group subscribes to a capital increase within an already consolidated company the trading fund is determined on the basis of the variation of the group's participation within their own capitals after the increase of capital.

In case a company is already globally integrated and the consolidated company increases its exclusive control percentage owing to complementary aquisitions of titles that determine a negative trading fund, after its imputation over the assets of the consolidated company, the remaining difference is beared by the possible trading fund obtained on the occasion of the first consolidation through global integration. Consequently, the balance sheet contains only the balance that results after such an operation.

The cumulative value of the trading fund during the current financial exercise as well as during the previous ones should be adjusted according to each trading fund that can be attributed to the sold branches before the drawing out of the balance sheet.

11. *The elaboration of consolidated accounts* – takes place after registering all specific operations and after closing the accounts.

In our example we are going to globally integrate BETA SA, proportionally integrate GAMA SA; the equivalence of OMEGA SA is going to be made separately.

Calculation record:

1) In order to achieve the consolidated balance sheet (Table 3).

Table 3. Calculation in order to achieve the consolidated balance sheet

- Million lei -

Balance sheet Exercise closed on 31.12.	**ALFA**	**BETA 100%**	**GAMA 49%**	**Adjustments**	**Cumulating**
1	2	3	4	5	6 (2+3+4+5)
Fixed assets	7.200	1.250	152,880	-44,445	8.558,435
Tangible assets	2.800	700	88,000		3.588,000
Intangible assets	200	100	10,000		310,000
Investments within association in participation	1.000	50	6,370	-642,000 -147,000	267,370
Circulating assets	3.200	400	48,510		3.648,510
Stocks	2.000	300	36,750	40,833 -40,833	2.336,750
Debentures	1.000	90	10,780	-350,000	750,780
Cash and bank accounts	200	10	0,980		210,980
Creditors: term under 1 year	100	360	0,490	-350,000	110,490
Circulating assets minus current debts	3.100	40	48,020		3.188,020
Total assets minus current debts	10.300	1.290	200,900		11.790,900
Creditors: term over 1 year	2.300	425	0,000		2.725,000
Netto assets	8.000	865	200,900		9.065,900
Capital and reserves	8.000	865	200,900		9.065,900
Social capital	6.000	642	147,000	-642,000 -147,000	6.000,000
Emission primes	1.000	0	0		1.000,000
Result	1.000	223	53,900	-44,445	1.232,455

2) In order to achieve the consolidated profit and loss account (Table 4).

Table 4. Calculation in order to achieve the consolidated profit and loss account

- Million lei -

The account of profit and loss Exercise closed on 31.12	**ALFA**	**BETA 100%**	**GAMA 49%**	**Adjustments**	**Cumulating**
1	2	3	4	5	6 (2+3+4+5)
Exploitation incomes	1.300	650	171,50	-50,000 -315,000	1.756,500
Exploitation costs	600	400	112,70	-5,555 -315,000	792,145
Financial incomes	600	23	0,49		623,490
Foinancial costs	300	50	5,39		355,390
Oustanding incomes			0,00		0
Outstanding costs			0,00		0
Result	1.000	223	53,90	-44,445	1.232,455

3) Equivalating the titles of OMEGA SA

Table 5. OMEGA SA

- Million lei -

	OMEGA SA 25%
1	2
Social capital	25
Result	175
Trading fund	50
Investment in OMEGA SA	-250

4) Then comes the drawing out of the consolidated annual financial reports

Table 6. The consolidated balance sheet

- Thousand lei -

Consolidated Balance Sheet on 31.12.	**Sums**
1	2
A. Fixed assets	8.558.435
I. Intangible assets	310.000
II. Tangible assets	3.588.000
III. Financial intangibles	267.370
IV. Titles in equivalence	25.000
B. Quick assets	3.648.510
I. Stocks	2.336.750
II. Debentures	750.780

III. Financial investments	250.000
IV. Cash and bank accounts	210.980
C. Regular accounts	50.000
D. Debts that should be paid within a year	110.490
E. Circulating assets, netto current obligations	3.188.020
F. Total assets minus current obligations	11.790.900
Debts that should be paid within more than a year	2.725.000
G. Provisions for risks and costs	0
H. Regular accounts	0
I. Negative trading fund	0
K. Capital and reserves	9.065.000
I. Capital	6.000.000
II. Primes connected to the capital	1.000.000
III. Reserves from re-evaluation	0
IV. Reserves	0
V. Conversion differences	0
VI. Reported result	0
VII. The result of the exercise	1.333.000
1. Group result	1.232.455
2. Result of minoritary participations	56.100
L Minoritary participations	175.000

Table 7. The consolidated account of profit and loss

- Thousand lei -

The consolidated account of profit and loss on 31.12.N	**Sums**
1	2
Exploitation incomes	1.756.500
Exploitation costs	792.145
Financial incomes	623.490
Financial costs	355.390
Outstanding incomes	0
Outstanding costs	0
Result of integrated companies	1.333.000
Result of associated companies	175.000
Result of the consolidated set	1.508.000
Result of minoritary participations	56.100
Group result	1.451.900

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CONSIDERATIONS REGARDING THE EVOLUTION OF PRODUCTION SYSTEMS IN ENGINEERING

DORINA NIȚĂ [*]

ABSTRACT*: Nowadays, developed countries undergo a slow evolution of the traditional system of production towards a higher form of the operational management based on advanced production systems – a synthesis of the manufacturing and mechanic systems. The new strategy is the consequence of the acceleration at the present day technological progress, through the massive introduction of information technology and electronics in the field of the management of production process.*

KEY WORDS: *engineering, production system, strategy, development*, *technical progress*

Dynamic and unpredictable, contemporary strategies have gone into the melting pot, especially in the last decades, therefore the complexity and discontinuity of changes dominate the background against which companies develop in present days. This is the result of the new and often cross-correlated trends and phenomena that came out to challenge companies in this third millennium.

There are some things that must be considered:

- the globalization tendency of the market;
- accelerated internationalization and globalization of economies, which suggest the emergence of an interconnected economy in progress in a boundless world;
- the importance of technical and technological changes;
- the information outbreak;
- the intensification of international competition together with the shifting of emphasis from price factors upon technical quality factors;
- the diversification and gradation of requests together with "the personalization of commodities";

[*] *Lecturer at the University of Petroşani, Romania*

- limited resources and requirements regarding environment protection and ecologic equilibrium,
- high costs and mobility of capitals, and so on.

Such changes as those mentioned above do not only generate problems but also have the ability, on the other hand, to break the ground for companies and managers who are creative and flexible enough when conceiving strategies.

The development of the production system in engineering implies a relatively short period of time starting at the end of the 19th century and the beginning of the 20th century, as it is highly dependent on the economic and social changes. At the beginning of industrial activities, the systems of production were part of a "manufactory system", the so-called "*craftsmanship system"*. Within the system, the human factor played an important part in designing, producing, verifying the quality of products and selling them using less complex working aids.

Afterwards, the increasing number of inquiries for products in a certain branch of manufacture laid manufacturing plants under the obligation to simultaneously turn out more products per each operation, anticipating, thus, serial production. Hard as it might have tried to improve, craftsmanship systems faced the problem of extremely high costs (even though the volume of production was increasing) and of poor quality products from the following points of view: maintainability and operation safety.

The need to eliminate these deficiencies led to the implementation of a new production strategy between 1900-1950, relying on *computer assisted production systems* (also called conventional systems) and completely different from the manufactory system.

The theory of this new type of production was based on Taylor's scientific management (in "*Principles of Scientific Management*") and on his general administrative theory (in "*General and Industrial Administration*"). In accordance with Taylor's and his followers' analyses (Frank and Lillian Gilberth, Henry Gantt, H.B. Maynard, and so on) operation management has improved significantly. The manufacturing process has been divided into partial operations, phases and procedures while manual workers have specialized in certain procedures and they now carry out only a limited number of partial operations.

According to new organization principles, production systems have been organized into specialized departments with specific tasks. Carrying on Taylor's theory, the American manager Henry Ford introduced "assembly lines" in 1913, which led to job breakdown (an individual task took around 30 sec. And it was carried out almost 1000 times during a shift).

Undoubtedly one of the most remarkable strategies in the field of manufacturing, Ford's assembly line tripled the volume of production from 76150 cars to 264972 cars between 1912 and 1914. Four years later, Ford's company turned out more than 2 million cars a year on condition that cost, quality and productivity indicators kept growing in a spectacularly rhythm.

Henry Ford's mass production allowed production to be lotted while manufacturing plants were organized into production equipment groups, which is still the case for most part of machine industry both in our country and in the West.

Despite remarkable performances, machine-based production systems infect the creativeness of the human factor (people are just performers of some routine operations) and they are added to organizational problems generated by uncorrelated activity of specialized departments (design office, supply stations, production departments, checking stations, and so on.)

While manual workers were able to manufacture products to order but at high costs and in small quantities, conventional systems equipped with automatic machines are characterized by low unit costs and increased output in the case of standard production.

However, it is this production homogeneity that represents "*Achilles' heel*" in the case of conventional systems, because completely or partially replacing specialized equipment to turn out new products is a very expensive and lasting procedure. In conclusion, the flexibility of production is minimum when conventional systems turn out large quantities of the same product.

Irrefutable successes of the companies that had implemented mass production led to the development of this production type in all the countries in the world and within all industrial branches. However, the disadvantages mentioned above, have connected traditional mass production to the trajectory of a slow evolution towards the so-called "fordism" or "neofordism".

Numerous statistics show that a high percentage of the companies that use the neofordist production system are highly efficient. The main reason might be the fact that this system implies very low unit prime costs because of the large volume of products and it turns to profit the resources it uses.

It is worth mentioning that between the '60s and '90s mass production became a dominant manufacturing strategy of computer assisted production systems. Although the number of companies that used manual workers was decreasing, such companies have survived due to segmentation strategies (conceived for limited volume of production).

Under the impact of the technical-scientific revolution, strategies based on craftsmanship systems have changed radically. Thus, the so-called "*computer-assisted craftsmanship*" uses modern information technology and automatic equipment for high quality and low price piece production (according to consumers' requirements) over short periods of time.

The best tools and equipment, computers and non-conventional materials can be found within the companies that come into line with this strategy (most of them are automobile companies: Rolls-Royce, Jaguar, Porsche, Ferrari, and so on), but just like in the past, the human factor plays a decisive part in production (hence it results the originality of the denomination: "*computer-assisted craftsmanship")*. Though scarce,

craftsmanship strategies and conventional strategies coexist within companies in the field of machine industry.

At present, in developed countries we meet with a slow evolution of traditional production systems towards a superior form of management based on advanced production systems – a synthesis of craftsmanship and machine systems. The new strategy represents the acceleration of the contemporary technical progress, materialized through an intense introduction of computers and electronics in the field of production management.

"*The step forward*" implies quick adaptation to the changes within the business environment and to the variety of requests from consumers. This tendency has been anticipated ever since 1981 by an American futurologist Alvin Toffler who states "*while some industries shift from mass production to small-lot production, others have overcome it and they are now making their way towards continuous-line piece production".*

The same author also asserts that this new "craftsmanship" has a "*cerebral*" dimension based on information and super-technology since finished products are not made up of the million standardized identical pieces any more but of goods and services adapted to customers' orders.

Advanced production systems (APS) have broken through in economically developed countries (Japan, USA, France) but they can only anticipate radical changes almost similar in magnitude as the ones that took place in mid 20th century, following the transition to automatic systems. *Advanced production systems are forms of modern production based on computer integrated manufacturing, on equal organization of human abilities and on adapted technology.*

This concept aims for the development of a flexible, innovative and efficient work and for a more complex industrial manufacturing process, which includes research, development, marketing and services. The research made by "EC Monitor – FAST Program – Forecasting and Assessment in Science and Technology" regarding advanced production systems has led to the conclusion that mere technical ingredients do not place companies in the top of competitive and productivity hierarchies, it is the diversity of specific advanced technologies combined with an efficient work and capability organization.

Advanced production systems concentrate the previous systems of production in the following respects:

- the part played by the human factor goes beyond the traditional tayloristic paradigm (men can make the most of their creativity, knowledge, innovation and experience, and thus doing more than just carrying out routine operations);
- high production equipment flexibility tends to the success of piece production at costs that can easily be compared to those turned out on a repetitive manufacturing line;

- operating process management and coordination uses highly advanced computer technology; systemic approach of the manufacturing process enables the integration of structural components, which are subject to the same strategic objectives.

As a matter of fact, the experience accumulated so far in using advanced production systems –although it is relatively poor - reveals their main advantage: competitiveness backed up by a quasitotal adaptability to environmental changes. Because of the competition in these days, similar products are most of the times the result of totally different manufacturing processes; therefore new competitive advantages are made available for managers to profit by. Manufacturing strategies are very important and efforts to improve and develop manufacturing processes reflect on products competitiveness.

The beginning of the '80s, a turning point in competition, has been identified with information technology, based on new policies in the field of manufacturing: the use of robots, computer integrated manufacturing (CIM), flexible automatic manufacturing systems (FMS). Computer integrated manufacturing (CIM) is an automatic manufacturing system within which the management of production processes – design, supply orders, production, commercialization of finished products - is assisted by computers.

CIM first came into vocabulary in 1970. According to SME (Society Manufacturing Engineers), CIM designates a concept or a methodology and a system that can be updated, thus it enables to use one of the most appropriate methods to completely automate the company. Later on, CIM was considered the most important technologic concept of the pilot project conceived to introduce computer-assisted manufacturing in USA's ammunition industry.

In 1987, CIM referred to integrated technology and included research and development, production and marketing as managerial strategies. In conclusion, CIM, which was initially considered the company's information network, has later developed into a data processing system, which incorporates computer-aided design and manufacturing (CAD/CAM), production management computers and other controllers used in workshops and offices.

The most significant difference between traditional manufacturing and integrated manufacturing lies in the fact that in the case of the latter apparently opposite and discrepant objectives (efficiency, effectiveness, quality, flexibility, volume, variety, innovation) coexist. Owing to the possibility to instantaneously change the type of products manufactured in the case of mass production, CIM turns out products that satisfy the clients' requests. On principle, CIM can be structured in relation to the company's main activities: Computer-Aided Design (CAD), Computer-Aided Planning (CAP), Computer-Aided Manufacturing (CAM), Computer-Aided Quality Assurance (CAQA), Computer-Aided Logistics (CAL) and Computer Financial Planning (CFP).

If we compared advanced production systems to a human body, we could say that CIM represents "*the nervous system*" that equally controls and correlates the complex system of production, whereas CAM, the subsystem of production is the "*heart*" of any production system. By incorporating CIM with FMS, the implementation of advanced production systems proves to be more efficient; this new automatic system that breaks through uses programmes and techniques, which are part of the CAM subsystem.

As a rule CAM can be designed to suit any production system, but the use of flexible ones is much more convenient, at least from some points of view: organic intercorrelation of several activities like CAD, CAL, and so on. CAM enables FMS-s to satisfy various requests by simply modifying the existing software, thus there's no need to re-design the equipment.

In accordance with the definition given by UNO Committee for Europe, "*a Flexible Manufacturing System is a computer controlled integrated system, which consists of machines with keyboards, automatic equipment to shape raw material and to handle tools, automatic quality assurance equipment because it takes less time and less human effort to carry out production procedures and it can finish, to the best of its abilities, any product in a series of products according to a pre-established manufacturing programme.*"

Although present-day FMS-s are the result of an evolution that spreads over 100 years, the first officially registered FMS dates back to 1968 and was implemented by Cincinnati Milling as the "*variable mission manufacturing*".

The new system introduced innovative concepts for that period of time, concepts that are now used on a large scale in engineering:

- automatic tool control equipment;
- automatic change of blades and heads;
- machines and conveyors connected to a main computer server;
- various products (produced by a certain group of machines) are automatically worked on at random;
- flexibility to turn out a range of products by small lots;
- a short period of time is needed to shift to a new type of product or to re-examine the models.

During the breakthrough years words like "*computer manufacturing system*" and "*variable mission manufacturing*" were used as synonyms for FMS. Nowadays there are other meanings for FMS (some of the more or less concurrent); the major differences between them are not functional, they refer to complexity and coverage. Therefore, researches carried out by UNO Committees can identify three FMS stages:

- *Flexible processing unit*, which is a complex machine (a processing service) assisted by robots and equipped with keyboards.

- *Flexible manufacturing cell*, which consists of a machine and tool layout and of other equipment needed to provide appropriate working conditions in order to turn out products, unfinished products or similar components. The most common manufacturing cell consists of a manual processing unit, while the sophisticated one has several processing units with keyboards, grouped around one or more machine-tool controllers.
- *Flexible manufacturing system* includes two or more interconnected flexible cells (common or complex) using automatic controllers and carriers (automatic vehicles controlled by computers), which move and off-load blades, components and tools. Thus, FMS is under direct control of a central or local computer, which controls measuring and testing equipment and automatic machine tools, as well.

The major differences between flexible and rigid manufacturing systems are:

- adaptability to the shifting from one product to another (this implies only a software restoring and not an equipment re-adjusting);
- integrability (it makes CIM more efficient);
- the possibility to finish unfinished products at random;
- the use of hi-tech equipment - computers, robots, automatic controllers and carriers and so on.

Nowadays, most of active FMS-s are used in mechanical working processes, but it is estimated that in the near future even more sophisticated systems will appear and these will be able to finish and assemble products (they will be under CIM's control).The development of flexible systems on the American market (nearly 27% during 1989-1998) shows people's great interest in implementing FMS-s.

Advanced production systems represent the natural response of contemporary management to the changes in the competitive business environment. They cannot possibly be considered a "*momentary trend*", although they are not keenly assimilated.

Undoubtedly, this will make the strategic decision of the new millennium (2000-2010) and it will be the turning point in the slow transition towards a new production system characteristic for industry, especially for engineering. The magnitude of such change can be compared, from historic point of view, to the "*industrial revolution*" which renewed not very efficient workshops.

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EFFICIENT UTILIZATION OF HIGHER TECHENOLOGIES AND PROFESSIONAL CULTURE OF THE ENGINEER

STANISLAV PAZANICI, ALEXANDR PONOMAREV, ALEXANDR ROMANOVSKIY *

ABSTRACT: *In the beginning of the third millennia , contradictions between scientific and technological progress achievements and its inauspicious action on natural environment, between spreading of possibilities opened by global development and the necessity to keep cultural and historical national traditions, between material improvements of life conditions and visible debasement of moral and spiritual principles. The purpose, the nature and material production technologies have radically changed.*

KEY WORDS: *human nature, engineer's education, higher techenologies*

In the beginning of the third millennia, contradictions between scientific and technological progress achievements and its inauspicious action on natural environment, between spreading of possibilities opened by global development and the necessity to keep cultural and historical national traditions, between material improvements of life conditions and visible debasement of moral and spiritual principles. The purpose, the nature and material production technologies have radically changed.

In our days, production is based on large utilization of higher technologies that can encourage gradual outrunning of mentioned contradictions. Only higher technology, in our opinion, is capable of assuring intercourse harmony in the system "man- society- nature- technology". But, in order to achieve this possibility, a new organization of the professional education of experts in the engineer's educational system, needs to be done.

* *Prof., Ph.D. at the National Technical University of Kharkov, Ukraine*
Prof., Ph.D. at the National Technical University of Kharkov, Ukraine
Prof., Ph.D. at the National Technical University of Kharkov, Ukraine

Contradictory human nature, the most complex biological, social, psychological and cultural phenomenon, have determined most of these contradictions. Considerable achievements of human brains have ensured material and spiritual living conditions that were inconceivable a century or two ago. In the same time, these achievements have brought humanity at the edge of a global ecological catastrophe. Because of the senseless tendency of the humanity to meet all its necessities, many species of animals and plants have disappeared, the environment is dangerously polluted and irreversible climatic changes took place. Although, minerals are being extracted in big quantities, actually, only 3-5% of this volume is being used, the rest is barren rock, that pollutes soil surface, atmosphere and ground waters.

We think that one of the reasons for this situation is the fact that traditional educational system is neglecting forming and development problems of student's professional and all-round education and unsatisfactory moral and ecological education.

Technical and technological orientation to raw material production and manufacturing, in order to obtain incomings and meet human necessities, have reflected itself in purposes selection and engineer's vocational education. But, possible negative consequences of their activity, especially indirect ones, were overlooked.

Higher technologies development, doesn't change just nature of the production, but is creating real premises for changing our natural environment's situation. Of course, population's living standards, reached in advanced industrial countries, can't be diminished. More than that, it is being used as an example for other countries population. That's why, science men are intensively searching for solutions for these contradictions. One of the results of these searches is the stable development concept [1-2].

But, in order to successfully materialize this concept, it is necessary to review purposes and engineer's professional education content. It should be ensured development possibilities for such a professional structure of the professional competence of the engineer, that would include not just a volume of knowledge and skills level in the adequate area, but even a professional and all-round education of the engineer, value understanding of his activity, precise world outlook, moral principles and convictions, life purposes.

Traditional understanding of the expert professional competence's nature and structure doesn't suit modern social requirements any more. It isn't capable of overcoming mentioned contradictions and isn't propitious for solving difficult problems that are standing in Global Community's way in this critical period. XXI-st century's engineer can materialize his mission only if his professional background will be changed on a new educational philosophy. Basic elements of this philosophy shouldn't rely just on knowledge, working and personal orientation of the didactic and educational process. And these certain understandings are more specific for present day pedagogic system.

The new philosophy of the engineer's education has to result from the following basic elements.

In the first place, it is necessary to be done the synthesis of higher mentioned elements, that is, efficient pedagogic system of engineer's training should be, in the same time oriented to knowledge, activity and personality.

In the second place, under the conditions of continuous and dizzily growing scientific and technical information volume, the most important problem of the educational philosophy, as well as of the didactic and educational organization process itself, has to be student's training in understanding necessity of permanent self education and self perfection all his active professional life and learning of the adequate skills.

In the third place, quick changing of things generation, as well as technology, that helps to produce them, is essentially increasing the role of engineer's fundamental education. It becomes not only base for engineer's professional skills training, but the premise for innovative activities in efficient elaboration and utilization of higher technologies.

In the fourth place, professional training has to be based on the necessity of the modern engineer to form the systematic way of thinking. In a diversity of processes he has to be able to distinguish decisive tendencies of his branch, to suggest new possibilities of efficient utilization of higher technologies and neutralizing measures for their negative action on the environment.

In the fifth place, man's high professional and social versatility, that becomes more and more characteristic to our times, needs considerable increasing of man's erudition, consolidation of his professional and all-round education's role. That's why education has to be analyzed as the most important element of the professional competence of modern engineer. This can assure the possibility to successfully pass from one activity to another, from one professional area to another.

In the sixth place, social expectations, including the ones related with efficacious creation and utilization of higher technologies, are imposing new requirements for higher education. They consist, especially, of the necessity to form professional competence of the engineer, as well as of the spirituality, precise moral principles and ideals, of consolidating self responsibility feeling for present and future generations, for the nature and possible results of his activity. Feeling, that has to carry out the role of some sort of an internal limit that would put morality before any kind of technical or economic reasoning.

Analyzed philosophy elements of engineer's education, in essence, are orientating higher education activity, to the creation of a new kind of engineer that would be both a great specialist and personality. For this, it has to be revised both purpose and content of the didactic process and the paradigm of used pedagogic methods.

Didactic-educational process, in higher education, represents itself as an unique aspect of human activity. Here can be found social requirements regarding vocational education and self development quality of the expert, their preparation for life and activity in real society. That's why, professor is showing himself as an authoritative pedagogue, teacher and leader. In the same time, he has to master

pedagogic skills and all-round education. The professor, in a large measure, is determining student's life conception, is favoring forming and development of his spirituality, life values and moral-ethical paradigm.

Higher mentioned professor's duties and aspects of his activity are making him the most important factor in expert's education and professional culture, in accordance with postindustrial society's requirements. The basic features that characterize postindustrial stage, in the history of human civilization development are:

In the first place, significant growth of human factor's importance in the production process and society's agreement on this.

In the second place, the radical changing of purpose and nature of production and its orientation to human interests and necessities and development based on higher technologies.

In the third place, the utilization of informational technologies, on a large scale, in all areas of life and social activity.

These circumstances, in a large measure, find themselves in the new spiritual values, ideals and moral-ethical paradigm. They need to be deeply understood and to be putted adequate issues in front of pedagogic theory and practice in expert's education.

Education is the most important social institution and cultural-historical phenomenon. That's why, it has to reflect and to count in those essential changes, that are being made in production and respectively in material and spiritual life conditions of the man. Vocational education, and especially engineering, has to be very sensitive to these changes, because today, for the first time in history of the humanity, material things generations are changing faster than human generations. Because of that, technology is changing as well, process accelerated by scientific and technological progress. Thing that is involving the necessity to elaborate new educational philosophy, to revise its purpose and content.

One of the trials to elaborate such a philosophy, is the concept of forming a national elite with humanitarian-technical and administrative nature, elaborated by National Technic University “Politechnic Institute of Harkov”(Ukraine). It's main characteristic is the fact that “the content and essence of the concept and term “humanitarian- technical elite” reflects its orientation not to teach only a certain part of the students mass -- elite of the society, but its tendency to drag all this mass to the top, to the elite.[3, pag.19]. The essence of this concept is “the necessity to solve engineer's education present problems, by pointing out world-wide tendency to develop production technology, changes that are taking place in the nature and organization of the production and taking control over them, new society's requirements regarding professional competence, moral and ethical principles, ideals and values, as well as necessary qualities for an engineer in the postindustrial period of the human civilization history.

The issue of the preparation of such experts seems to be present not just in Ukraine or other post-socialist countries. This suits tendencies of the global development of engineering education that, in everyone’s opinion, is passing through a

serious crisis today. This crisis, in a large measure, is determined by continuously growing technical and technological possibilities of the man, on one side, and the fact that man is morally unready to use them, on the other side. This is being reflected very well in N.Iliash and I.Andrash [4], N.H.Shapiro [5] paper works, as well as in many other researchers' works from different countries of the world.

Human nature is contradictory. Being, in the same time, the most complex living being from biological, social and psychological point of view, he is, compared to other living beings, a creative and cultural phenomenon. This is determining, in a large measure, that totality of contradictions, that man had to confront at the historic border of the millennia. Unique achievements of human brain, have insured material and spiritual living conditions and possibilities that were inconceivable a century or two ago. These, in the same time, have brought humanity at the edge of a global ecological catastrophe. Human necessities are growing constantly and the tendency to satisfy them is in contradiction with limited nature of the natural resources. In consequence, a big part of these resources is very close to total exhaustion.

Man's reckless administration, have brought to the extinction of many species of animals and plants. Unusual dangerous pollution level of our natural environment, have brought about unfavorable and irreversible climatic changes. Their direct results are often calamities with catastrophic consequences. One of the causes of this situation, in our opinion, is the negligence of the traditional educational system regarding student's forming and development problems of his professional and all-round education, especially, insufficient ethic and ecological education. It is now the time to change educational paradigm, from the one based on human factor, on one based on ecological factor.

The lack of proper utilization knowledge, have caused the fact that technology is in conflict with nature, with human real necessities and interests. The more powerful, from the point of view of its influence on the environment, technology is becoming, the better advanced requirements over moral and professional qualities of the man should be bigger. The appearance of higher technologies is changing the conception of "professionalism", because security guarantee will be high professional education level. And, the more expert has a higher position in the professional pyramid, the better he must take more responsible decisions. Only professional competence is not enough, it is being needed social competence as well. And this means that one must have professional and all-round education, moral paradigm. One's social competence is being determined, first of all, by value orientation.

Such an understanding of the problem and solving approaches allow us to talk about the opportunity to put the problem of professional culture of the engineer, as a basic premise for successful elaboration and efficient utilization of higher technologies, as well as the unique real possibility to harmonize intercourse in the system "human-society- nature- technology". Professional culture should include by all means human high competence in the wanted area, without this, one simply can not be named "expert". Besides, a compulsory element of his professional culture is the fact that he must look at this certain activity as if it was the most important value of his life.

Through this kind of approach of the professional culture, self educational and self perfection continuous requirements all the way of human life are becoming not just an obligation, but a conscious necessity and one of the most important values in his life.

Inseparable elements of professional culture of the engineer are the same with his moral principles and beliefs, his vision over world, his high social competence and responsibility for possible results of his professional activity. In this case, scientific discoveries and inventive researches will be oriented to constructive and not destructive purposes. More than that, high professional culture of the engineer, that includes forming of the innovative way of thinking and its systematic nature, will insure higher technologies searching and rational areas to use them more efficient in technical-economic intercourse, as well as in the ethic-ecological ones.

In this situation, that threatens even human existence as biological species, forming of the engineer's professional culture is not just necessary, but urgent. Because nature, and first of all biosphere, is representing an unique spring of resources for all life processes and normal human activity insurance. But precisely biosphere is the most vulnerable and less insured in front of growing human action on natural environment.

Russian researchers V.I.Danilov and K.S.Losev have mentioned that "biosphere is not adapting to changes caused by man to our environment because of the enormous difference between biological evolution rhythm and technical and scientific progress rhythm. The difference of 1:3 between these processes is impossible to outrun. Because of this, biosphere's recovering and radical changes of the environment, under too big human action, that outruns biosphere's volume, will continue as long as the source of these actions will exist – human civilization ,in its nature-destructive aspect".[2,pag.167-168]

In this case, only oriented elaboration and efficient utilization of higher technologies that would be based on professional culture of the engineer, is capable of helping humanity to keep material welfare of the population reached in developed countries. Only this will allow other countries to tend to rich the same level and this way to outrun poverty and backwardness and, in the same time, to remove ecological dangers and other global dangers. Besides that, an important element of this problem becomes the increasing of spirituality and all-round education of the population, forming of the moral paradigm of the postindustrial society, the basic element of which has to be tolerance.

Active participation of the authors in the concept of forming a national humanitarian-technical elite and of the innovative pedagogic system, their realization in National Technic University "Politechnic Institute of Harkov"(Ukraine), allow us to make next conclusions.

In the first place, integrity insurance of the educational-didactic process and its orientation to forming student's professional and all-round education, is encouraging the tendency of continuous increasing of professional knowledge, is stimulating creative way of thinking.

In the second place, by increasing student's professional and all-round education, are being created premises for growing their knowledge horizon and forming the systematic way of thinking. This encourages a new approaching of the elaboration and rational utilization of higher technologies, including in branches that they weren't originally made for.

In the third place, these processes are developing innovative way of thinking of the future engineers, their preparation and tendency to continuous changes, to high technology elaboration and improvement and their efficient utilization in society and natural environment's advantage.

In the fourth place, student is realizing the value of knowledge, continuous preparation for self perfection and self improvement. This is creating real premises for them to become active participants and creators in the scientific, technical and social progress is encouraging understanding of their creative potential.

And in the fifth place, is realizing his role in this world, his mission and possibility to become part of the national, humanitarian-technical elite, is forming, at the most of them, the tendency for moral self perfection, is creating the sense of responsibility for their country's fate, for the political, economic, scientific and cultural further development.

Social and pedagogic researches, conversations with student, are proving that they, in a large measure, agree with basic elements of the concept, are making the difference between its purposes and are tending to be an active part of the realization process. Indeed, in the University is increasing considerably scientific, technical and creative level of student's paper works, most of them are containing their own scientific researching activity results. In the same time, these researches are concerning, first of all, higher technologies perspective area. It becomes more and more characteristic that students understand not just utilitarian role of knowledge and vocational education, but, as well, their valuable aspect.

It is visible the tendency of students to participate in scientific conferences, in scientific papers contests and different kind of Olympiads, and not just in their domain, but in basic and humanitarian and social sciences ones, as well. It is being noticed the step by step outrunning of, till not so far widespread , tendency to take a job in foreign enterprises, forming of patriotic feelings and understanding of their necessity for people and the possibility to materialize themselves in their own country.

In their integrity and unity, the sum of analyzed qualities are forming professional culture phenomenon. That's why, analyzed circumstances allow us to assert that forming of the National humanitarian- technical and administrative elite, is insuring our student's prosper development of their professional and all-round education, is creating premises for their active participation in the process social, economic and spiritual revival of Ukraine, based on efficient utilization of higher technologies.

Another important conclusion that is resulting from researches made by authors in professional culture area, basic factors and pedagogic forming conditions is that, in order to successfully consolidate student’s professional and all-round

education, it is necessary for University's scientific and pedagogic personnel to have a high culture and especially for professors from special departments. They usually have the role of the professional and moral authoritative character for students and are being an example for them. That's why successful settlement of higher mentioned problem, needs didactic and educational integrity, unity and coordination of efforts of social, humanitarian, basic and special sciences professors.

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ASPECTS CONCERNING THE ACQUIS IN THE TAXATION AREA WITHIN THE CONTEXT OF ROMANIA'S ADHESION TO EUROPEAN UNION

VASILE POPEANGĂ, TEODORA VĂTUIU [*]

ABSTRACT: *The administrative capacity of the whole Romanian fiscal administration has to be improved significantly. Though a number of activities have been done for improving the collecting rate while this raised, the level of taxes in Romania is yet unacceptable low whereas the control capacity is also very diminished, especially that with view to AVT.*

KEY WORDS: *Romanian fiscal administration, local taxes and duties, Chapter 10 – Taxation, fiscal policies*

1. GENERAL CONSIDERATIONS

The National Agency of Fiscal Administration (ANAF) has in present the general accountability for collecting all the incomes at the reinforced budget of the state except for AVT for imports and excises paid at the customs offices, which are collected by the National Authority of Customs (ANAF at the moment). The administrative capacity of the whole Romanian fiscal administration has to be improved significantly.

Though a number of activities have been done for improving the collecting rate while this raised, the level of taxes in Romania is yet unacceptable low whereas the control capacity is also very diminished, especially that with view to AVT. The great taxpayers raise the rates of collecting ATV, while a great number of small and medium enterprises avoid taxation. As for the excises, the administrative capacity of collecting and control is very weak, especially in the domain of alcoholic drinks. It seems that roughly 50% of alcoholic consumption is not at the moment taxable and this situation is likely to get worse after the adhesion.

[*] *Prof., Ph.D. at the at "Constantin Brâncuşi" University of Tg-Jiu, Romania*
Assoc.Prof., Ph.D. at "Constantin Brâncuşi" University of Tg-Jiu, Romania

2. THE MOST IMPORTANT FISCAL PROVISIONS PLANNED FOR 2006

The Ministry of Exchequer will try to obtain a series of fiscal facilities for some major investments, which have already started or will begin this year but for licensing them the permission of European Commission is needed.

The most important fiscal provisions planned for 2006 are:

- **In the domain of profit tax** the following will be aimed at:
- Extension the number of taxpayers;
- Extension of the taxable basis through:
- Diminishing the categories of deductible stocks at the calculus of the profit taxable in the case of banking societies and ensuring ones as well as the energetic sector, petrol by eliminating those specific comparatively to the other categories of taxpayers;
- Eliminating some fiscal facilities comprised in normative acts considered not to be in conformity with the principles of European Union.
- **In the domain of gains tax** the following aspects are covet:
- Applying the unique rate of 16% upon the earnings from the transfer of gilt securities during the year with the optional possibility of completion at the end of the year of the tax applying the share of 16% upon the net earnings;
- Giving up the facility of non-taxing the earnings from the transfer of estate properties gained through heritage or exchange.
- **Starting with 1 January 2006 in conformity with the legislation already adopted, for the incomes realized by natural persons and legal persons who do not reside in Romania**, it will be applied the unique rate of 16%, except for the incomes obtained from gambling fro which the rate is of 20%. Thus the rates of taxation are joined in the case of non-residents raising from 10% or 15% to 16% except for gambling where it remains constant.
- **In the domain of local taxes and duties** the following provisions are aimed at:
- In case of the buildings used as houses the due taxation will be raised;
- The tax upon means of transportation will be raised as a consequence of the alteration of the calculus way of the duty;
- The increase of the tax owed for yachts;
- Giving up the exemption from inheritance tax, if the completion of the procedure took place within a year from the decease date of the owners of goods. Through Law no. 247/ 2005 with respect to the domains of property and justice reform as well as some adjoining measures, Law no. 571/ 2003 with respect to Fiscal Code was modified concerning the increase, starting with 1 January 2006, of the present levels of taxation for the land for surfaces situated outside cities/ towns, from 1.1lei/ ha at levels including between 9 lei/ha and 40 lei/ha depending on the using categories of lands and their quality classes and at the same time passing this tax from local budget to state budget with view to ensuring the necessary funds for life rent payment.

➢ **In the domain of added value tax**, starting with 1 January 2006 the following measures are covet:

- Putting into practice the national legislation of the Guideline 2003/ 92/EC referring to the place of delivering natural gas and electricity;
- Provisions for controlling the evasion: admission of responsibility in private and solidity for the tax payment, extension of application the measures for simplifying and for textile, paper and plastic waste;
- Specific provisions for creating an information basis necessary for the calculus of the own basis of AVT for the contribution, which Romania has to pay to European Union after the adhesion date;
- Specific provisions to ensure passing from the present ceiling of exemption of 200 000 lei to 35, 000 euros negotiated by the European Union from the adhesion date.

➢ **In the domain of excises the following are aimed at:**

- Going on the process of compatibility of the legislation with the European Guidelines;
- Gradual increase of the excises for the main products subject to this regulation in conformity with the calendar included in the Document of taking up the position due to *Chapter 10* – Taxation;
- Complementary measures to the so-called taxation through excises:

✓ Insertion in the application area of excises of all the products resulted from petrol processing;
✓ Instituting the system of granting the excise for all the stamps and strips required by the warehouse owners;
✓ Abrogation of the facilities connected with the payment of customs duties for the import of sports equipment and sports materials, installations and specific devices necessary for the activity of training, representation and participation of sportspeople at different sports competitions, instituted by art. 76 of Physical Education and Sports Law, no. 69/ instituting the system of recording the tobaccos retailers.

➢ **In the domain of customs duty,** the objectives aimed for 2006 have in view the requirements imposed by the process of EU adhesion and they lie in:

- 2000 with further alterations and supplements;
- Abrogation of the facilities connected by the exemption for the payment of customs taxes for the equipments imported as a result of some direct investments with significant impetus upon the economy having a value, which overcomes the equivalent of 1 million USA dollars, instituted through the article 12. let. a) Law no. 332/ 2001 with respect to promoting the direct investments with significant impetus upon the economy.

The incomes of the general budget consolidated for 2006 are estimated to100, 836.9 million lei (31.13% of GIP – gross national product), increasing with 0.3 percentage points comparatively to 2005.

On categories the share of the gross national product of the main taxes will evolve as it follows:

- ✓ **Gains and wage tax** will increase with 0.5 percentage points, determined by the increase of the gross medium salary with 12.5% in 2006 comparatively to 2005 and the average number of employees with 2.1%;
- ✓ **Contributions of social insurances** goes on having the highest share in gross national product, registering an easy increase (from 9.5 in 2005 to 9.3 in 2006) taking into account that they are proposed to be diminished with two percentage points for the employer;
- ✓ Increasing with 0.7 percentage points of the **added value tax** (from 7.3% in 2005 to 8.0 % in 2006, **as a consequence of increasing the economic activity and collecting degree;**
- ✓ An easy decrease of the share of **excises** in gross national product (from 3.4% in 2005 to 3.3 % in 2006 **and of foreign exchange tax and international transactions** (from 0.7 in 2005 to 0.6 in 2006) determined mainly by the national currency appreciation and a smaller estimation of the imports increase comparatively to 2005;
- ✓ Profit tax will decrease with 0.3 percentage points as a result of the measures of fiscal relaxation.

In the field of local budgets of the authorities of local public administration, they took into account ensuring the conditions of operating for the local public administration for the corresponding exertion of the attribution with which these authorities are invested in the general process of economic and social reform, which has to answer the requirements of the actual stage.

The broad process of decentralization of the public services and of strengthening the local autonomy, of restructuring the mechanisms of social protection for the disfavored segments and harmonizing the governmental and sectors policies with the local ones have determined the betterment of the system of ensuring the financing resources of the local public administration linked with the transferred responsibilities. The total gains of the local budgets on 2006 are estimated at roughly 21,661.2 million lei, respectively 6.7% of the gross national product in increase with roughly 18.3% comparatively to 2005.

The own gains of the local budgets (consisted of duties, taxes, other gains and quotas deducted from the gains tax) estimated at roughly 11,209.0 million lei, represents 51.7 from the total of these budgets, in increase with 33.3% comparatively to those in 2005.

Out of the total of the own gains, 6,912.0 million lei represent quotas deducted from gains tax, respectively 61.7% of the total sum comparatively to 2005 when it represented 4,798.9 million lei, respectively 57.1% of the total sum.

In the period 1 January – 30 September 2005 the sums due for the deducted quotas from the gains tax remaining at the disposal of the units administrative and territorial were of 3,815.5 million lei in increase with 593.2 million lei (18.4%)

comparatively to the sums collected in the same period of the year 2004, determined both by the overcoming of estimations in the case of gains tax in 2005 and the increase of the quotas which fall within the authorities of local public administration (from 63% to 83% as a consequence of the diminishing of gains tax by insertion of unique quota of taxation). We mention that through the Government Extraordinary Order no. 9/ 2005 for the alteration of the Government Extraordinary Order no. 45/ 2003 linked with the local public finances approved by the Law no. 114/2005 the quotas deducted from the gains tax were altered, which remain at the level of the administrative and territorial units, at 82% comparatively to 63% in 2004, in order to cover the deficit of gains of the local budgets determined by insertion of unique quota of taxation. The quotas deducted by 82% from the gains tax are distributed as it follows for the counties:

- 47% to the local budgets of the villages, towns and municipal towns;
- 13% for the own budget of the county;
- 22% at the disposal of the County Council for balancing the village, towns, municipal towns and county budgets;

For the municipal town Bucharest the quota of 82% is distributed as it follows:

- 23% for the own budget of the municipal town Bucharest;
- 47.5 % for the local budgets of the sectors of the capital;
- 11% at the disposal of the General Council of the municipal town Bucharest for balancing the local budgets of the sectors and Bucharest.

For completion of the own local budgets, through the Draft Bill for the State budget for the year 2006, it is proposed the allocation of 10,452.2 million lei from the state budget and the budget for unemployment ensuring, of which:

• 9,689.0 million lei **sums deducted from the added value tax** for:

- *Financing the expenditure decentralized at the level of the counties and for the municipal town Bucharest (1,056.8 million lei)* of which intended to financing:

a) The system of child protection;
b) Centers for social security for the disabled persons;
c) The rights concerning the distribution for dairy and bakery wares for the pupils in I-Iv forms in the state education and for the preschool children in the state kindergartens with a normal schedule of 4 hours;
d) Expenditure due to special education;
e) The decentralized cultural institutions starting with 2002;
f) For the payment of the contributions for the non-clerical staff employed in religious units;
g) The community public services for record of the persons under the authority of the county councils and the General Council of the Municipal Town Bucharest;
h) Helpings for the state regional given on the ground of the Law no. 84/ 1992 concerning the free areas policy, for the administration of free areas under the control of the county councils;

- *Financing the decentralized expenditure at the level of villages, towns municipal towns and the sectors of Bucharest (6,096.9 million lei)* of which intended to financing:

a) Expenditure for staff, scholarship and inventory objects in state pre-academic education units;
b) The rights for the personal assistants of the persons with a serious disability;
c) Social aid and the aid for wood, coal and oil fuels heating of households;
d) Community public services of record for the persons under the authority of villages, towns and municipal towns local councils;
e) Helpings for the state regional given on the ground of the Law no. 84/ 1992 concerning the free areas policy, for the administration of free areas under the control of the county councils;
f) Nurseries expenditure;

- *Subvention for the thermical energy delivered to the population* (252.1 million lei);
- *Re-technologization, modernization and developing* the centralized systems for producing and distribution of thermo energy (490,4 million lei);
- *Financing of roads* (350.0 million lei);
- *Balancing of local budgets* 1,442.8 million lei);

• 694.1 million lei **subventions from the state budget** of which mainly for:

a) Financing the rights accorded to the persons with disabilities (512.0 million lei;
b) Partially financed investments from external loans (70.0 million lei)
c) Financing the metalling of villages roads and water supply of the villages and dwellings (77.5 million lei);
d) The streets which will be made up in the areas intended to neighborhoods of new dwellings both in rural and urban environment (10.0 million lei);
e) Re-technologization of the thermo and electrical plants transferred to public administration authorities (3.0 million lei);

• 69.1 million lei **subventions from the budget of unemployment insurances** towards local budgets in respect of financing the programs for temporary employment.

For 2006 the criteria used for distributing the deducted sums from gains tax on counties for balancing the local budgets, are *the financial capacity calculated depending on the income per capita in a ratio of 70% of the deducted sums and the surface of the county by 30% of the deducted sums,* criteria approved by the Government Extraordinary Order concerning the local public finances, no.45/ 2003, approved with alterations and completed by the Law no. 108/ 2003. In the succeeding period, for implementing the Governing Program for the period 2005-2008, approved by the Decision of Romania's Parliament no. 24/ 2004, as well as the increase of transparency in allocation of funds from the state budget to the local budgets and to eliminate some non-functionalities observed in the application period of the Governmental Extraordinary Order no.45/2003 concerning the local public finances, no.45/ 2003, approved with alterations and completed by the Law

no. 108/ 2003, the partial revision of this act is necessary, in the sense of alterations of some texts as well as insertion of some provisions.

3. FISCAL POLICIES

In the Governing Program, chapter 10, point 2 "Fiscal Policies", it is stipulated the alteration of the legislation concerning the local public finances, in order to regulate the way of distributing the sums deducted of some gains of the state budget for balancing the local budgets directly towards the localities, by eliminating the county councils with intermediate links.

This measure was determined by the fact that not in all the cases the distribution of balancing sums on administrative and territorial units within the county has been done by complying the distribution criteria provide by the law, existing situations when the political criteria prevailed.

Also in conformity with the present legislation, each administrative and territorial unit within the county benefits from the deducted sums for balancing, including the developed ones, existing high discrepancies among the localities in the same county.

Subsequently, through the alteration and completing the Government Extraordinary Order no. 45/ 2003 concerning the local public finances the following will be given attention:

- The distribution within the counties and the municipal town of the sums deducted of some gains of the state budget, both for balancing the local budgets and for the financing of some public expenditure, as a consequence of the decentralizing of some activities, by some general lines of the public finances based on obvious, transparent criteria;
- Applying the principle of *exclusion* for distributing the balancing sums on each administrative and territorial unit within the county, being put into practice their distribution in stages, respectively at the level of the duty for the medium income per capital on the whole county.

4. CONCLUSIONS

The most important taxes, which the taxpayers pay toward the state budget, are divided into two categories: direct taxes, profit tax and gains tax and the indirect ones (AVT, excises and customs duty). There are also the contributions to the social budgets. After these there are the wide range of duties and local taxes, some of them regulated through the Fiscal Code and many others invented by the rich imagination of each mayor. There are then the stamp taxes and other tariffs collected by the state for different services as the exam for the driving license or issuing a certificate by the Financial Administration.

Whether three years ago we paid 224 taxes, a year ago 330, at a recent stocktaking 420 taxes and duties were found. They are far too many and we may say that we have the most numerous taxes in Europe; the specialists estimate the taxation degree at over 45% of PIB.

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ASPECTS CONCERNING THE ALTERATION OF FISCAL CODE WITHIN THE CONTEXT OF ROMANIA'S ADHESION TO EUROPEAN UNION

VASILE POPEANGĂ, TEODORA VĂTUIU [*]

ABSTRACT: *The main budgetary resources necessary for Romania as a country member of the EU at 1st January 2007 will result after some modifications in the fiscal code. The modification of imposable values during the year, although minor – with the exception of arable lands of the 5th category, which will rise with 50% - affects the stability of the Fiscal Code.*

KEY WORDS: *budgetary resources, fiscal code, Community aquis*

1. GENERAL CONSIDERATIONS

The budget of the credit chief accountants involved in the process of adhesion comprises as an annex **The Memorandum Slip of European Adhesion,** a slip containing the assumed commitments in the process of preparing Romania's adhesion to European Union, specifying their stage and the expected results.

Also the financing resources of these commitments are presented, deducted from credits of commitment and budget credit in the period 2004-2009, thus quantifying the budgetary impact of the adhesion process.

From the analysis of the assumed commitments, the following result was obtained: *The Ministry of the Exchequer* – 42 commitments (roughly 250 million lei) of which: harmonizing of legislation in the field of AVT; ensuring the compatibility of the existent and future legislation with the principles of The Conduct Code concerning the Duty upon Business; the increase of the level of tax collecting through improving the voluntary conformity of the taxpayers and arrangement of the education campaign; the betterment of the arranging and performing of the public accounting system.

[*] *Prof., Ph.D. at the at "Constantin Brâncuşi" University of Tg-Jiu, Romania*
Assoc.Prof., Ph.D. at "Constantin Brâncuşi" University of Tg-Jiu, Romania

2. ALTERATION OF FISCAL CODE

Soon the new Fiscal Code will be published in Official Monitor, after which it is to be in force on 1 January 2007. The draft bill concerning the alteration of the Fiscal Code was advanced to the Government in the first week of March and subsequently will be subject of the Parliament's approval. The Government wants this draft adopted through a law and not through extraordinary order.

The Governments providing of altering the Fiscal Code in full financial year, dissatisfy the specialists, which draws attention upon affecting the fiscal stability.

We have to remind that the duty for the lands situated outside cities will be calculated on the basis of a new procedure where the area and the zone of that land are taken into account whereas the due amounts are transferred to the local budgets, not to state budget, as it is the case. The new provisions are regulated through an extraordinary order approved by the Government altering the Law concerning the Fiscal Code and the Law 247/ 2005 referring to the reform in the property field. The duties on the lands in the outside of cities cashed for 2006 until the date when the extraordinary order comes into force, remain established in conformity with the imposing decisions issued by the exchequer.

The most important alteration refers to eliminating the last category of lands, which in the case of the arable lands pertaining to the present 5th category, with a duty of 20 new lei will lead to an increase of 50% to 30 new lei. A stable economic environment is an environment based on a system of laws as stable as possible, but at the same time has the capacity of adapting the emerging alterations without questioning upon the fiscal stability because of this initiative. The alteration of taxable values in the course of the year, even if minor – except the arable lands of 5th category, rising with 50% - affects the stability of the Fiscal Code.

This is in total contradiction with the minister of the exchequer and prime minister's all public statements and promises for a legislative stability. It is also possible that, after applying all these alterations, the collected amounts for the budget may be lower than those obtained in case the alteration did not occur. Given these conditions it is difficult to understand why this alteration was necessary.

The instability was the characteristics for 2005, it is still valid for 2006 and it appears to be also for 2007. The issue here is that the Government keeps announcing the alterations periodically and instability will go on until the big question has an answer: will 16%, AVT or anything else be altered? The alteration at the level of taxation is not very broad. Instead it would have been correctly the rule not to be altered during the game, while the new duties should have been applied starting with the future fiscal exercise.

Increasing the duties for the lands outside cities seem to be illogical since the destination of money has been also changed; a justification would have existed if the money had gone to the state budget. In 2006 the Added Value Tax will not be increased, but an increase of the main tax should not be excluded since 1 January 2007. They stated that the Government's promise not to increase the main taxes in 2006

would be kept. At the moment, at national level, a campaign linked of collecting the gains considered as taxes takes place for increasing the budgetary cashing. The Government takes also into account a possible increase of the main tax, starting with 1 January 2007, in case the adhesion to European Union requires supplementary funds, both for the contribution payment and for co-financing the projects. The main budgetary resources to cover Romania's needs as a Member State of EU at 1 January will be the result of some alteration of the Fiscal Code; id est. the micro-enterprise policy will disappear, which generates further gains, environment taxes, royalties, property taxes, which in some cases are diminished.

The excise or the vice tax collected for products not necessarily useful and cause serous health damages.

The foreign firms, which act in the field of services should give a stimulus through state aids, so that they find a stable place in Romania not in another EU country ready to offer them these incentives. It is not advisable that Romania lost its investors for the reason we cannot offer them incentives as Czech Republic or Lithuania can. We must find the appropriate solutions acceptable at Bucharest and Brussels to offer the legal persons types of incentives able to determine them to invest in Romanian economy. The minister's problem does not concern the funds, since it has got the necessary funds but of a technical and legal possibility to do so.

3. EUROPEAN COMMISSION'S RECOMMENDATIONS CONCERNING THE DUTIES

A series of experts of the European Commission recommended Romania that, starting with 2007, should increase AVT or the unique quota, al the more expressing their doubt that broadening the taxation basis would ensure Romania a level of cashing, which complied with the budgetary requirements for 2007. It was highly probable for some duties to increase in such an extent so that we were not able to keep pace with the budgetary challenges of 2007. The betterment of collecting is a duration process, which cannot bring spectacular results on short term. The European auditor for Economic and Financial Business, stated that duties reduction was not a good solution. He appreciated that Romania would meet difficulties unless the collecting level and the taxes one were not tallied with the gains outfit for the budget and recommended the authorities to make allowance for the increase of taxes in such an extent that they ensured Romania a higher level of gains at the state budget.

These statements came one day after the denial of the possibility of increasing any main tax. The Government tries to find solutions for increasing the non-fiscal public gains (environment taxes, those referring to property, royalties) and not for increasing the main taxes. The possibility of increasing the unique quota or AVT starting with 2007 is connected with Romania's adhesion to European Union that will require supplementary funds both for the contribution and co-financing of projects.

On the other hand, **the laws for privatization and investments** will be altered to include schemes of state aids compatible with the European arrangements so that the

authorities not to notify the European Commission about any emerging case. The drafts are at work and the new laws will comprise schemes of state aid intended to be approved by the European Commission and to ensure the fulfillment of all the requirements of the Community aquis. The new regulations will offer the Romanian authorities the possibility of allowing facilities without being necessary for them to go to Brussels.

Once Romania integrated into European Commission all the state aids will be approved directly by the European Commission; at the moment the Competition Council in Bucharest will require the approval to the European institution for each file.

4. PLANNED EVOLUTIONS IN THE FISCAL FIELD

In the period 2007-2009, **the fiscal policy** will have the following characteristics:

- *In the field of the gains tax,* starting with 2008 it is provided that the gains tax should be paid annually with anticipatory payments representing ¼ of the previous annual duty. This measure is taken in order to simplify the calculus system and profit tax payment. Also some calculus deductions will be allowed for the taxable gains calculus in order to give a stimulus to investments in human capital and in medical infrastructure;
- *In the field of micro-enterprises taxation,* starting with the adhesion date the micro-enterprises gains tax will be eliminated instead the profit tax will be paid;
- *In the field of non-resident individuals taxation,* the exemption of tax gains come from interest realized in Romania by natural persons resident in the Member States of the European Union in conformity with the Guideline no. 48/ 2003/ CE of the European Union;
- Also the Guidelines of the Council no.79/1072/CE concerning AVT reimbursement for the taxable individuals no-resident in Romania and no 86/560/ CEE referring to AVT reimbursement in the case of the taxable individuals non-resident in the Community;
- *In the field of local duties and taxes* it is provided that a new taxation system were introduced for the estate properties for their better reflecting of the market value;
- *In respect of added value tax,* at Romania's adhesion date for the European Union, title VI of the Fiscal Code will be replaced with the legislation harmonized in the field of the added value tax, that is putting into practice the national legislation of the Community aquis in the field. All the more the exemption from AVT payment will be eliminated for a series of activities and other exemptions will be introduced, which are not applied at the moment;
- *The harmonization of the excises levels will be continued* in conformity with the Document of taking up this position concerning Chapter 10 – Taxes – in Romania's negotiations with European Union. Also the policy of revising authorizing the fiscal repository;

- *In the field of customs duty,* starting with 2007, Romania will adopt the common Customs Tariff and Customs Code, customs duties collected on the territory of our country, which are to come an income for the Community budget.

In order to attain the objective of broadening the taxation basis, a special importance is given to **fiscal administration.** Thus the period 2007-2009 will be characterized through the implementation of the second phase of the fiscal administration reform, which will be focused on: developing of institutional capacity; increasing the taxpayers comfort by easing the payment procedures of duties and taxes; betterment of the management for the human resources; developing an integrated information system in respect to growing efficiency of gains collecting; framing a procedure for the risk analysis concerning the register of intra-community operators and information exchange.

5. CONCLUSIONS

In the field of Romania's contribution to the Community budget, the Ministry of Public Finances works together with other involve institutions to calculating, collecting, monitoring and accurate payment of the respective amounts to the EU budget. The actions and provisions undertaken in respect to the preparation for adhesion to European Union, for the *Chapter 29 – Financial and Budgetary Provisions*, focus mainly on accomplishing the established measures in *Plan for Priority Measures for Adhesion to European Union.*

In this respect the activities concerning the betterment of AVT calculation, of simulating the monitoring procedures of collecting capacity and control upon ATV for the own Community resources were continued. We may underline the fact that for the first time the calculation of the mean levelheaded rate of AVT was simulated, for the year 2004 (when two AVT rate existed), using real figures in conformity with the Community aquis requirements and also a lump rate of farmers, considered very complex and difficult exercises for all the Member States. Also the inventory and framing the proposals of completion and/ or alteration of the legislation concerning the implementation of Community aquis in the field of own resources, as well as the handbook of work procedures necessary for the Community own resources administration are about to be completed. The handbook is to be approved as secondary legislation necessary for the applying the work procedures and instructions in the domain of own resources in conformity with the Community aquis.

Generally speaking Romania accomplishes the undertakings and requirements resulted from the negotiations of adhesion, in the field of AVT, **of excises and direct taxation** (except for those concerning IT), as well as the legislative alignment, so that on the date of adhesion the aquis in this field may be implemented. In order to complete the preparations for becoming a Member State, Romania should complete the legislative alignment in a series of fields (adapting the threshold for registering and exemption of AVT, adopting the legislative framework for the transitory arrangements allowed concerning the excise rates in the case of some energetic products, completing

the applying of the Guidelines regarding the indirect duties for capital increase, holding company – underlying company, interests and royalties and savings).

However there are serious reasons of concern regarding the **administrative co-operation and mutual assistance**, being necessary to bring into attention the approach of taking slow steps in implementing the IT systems inter-operable concerning duties. Although recently a series of progress has been seen, the calendar of developing is extremely tight and actions to ensure the completion in due time for adhesion are necessary. Steady efforts are necessary concerning the implementation structures, especially regarding the present curtailed level of collecting rates for AVT and excises. In this respect, Romania should undertake a reform in modernizing the fiscal administration concerning the provision of integrity and approaching the lack of resources and conflicts of interests, which at the moment impede the capacity of supplying the conformity of taxpayers and their collecting.

The European Commission fosters Romania financially speaking in its preparations for adhesion, focusing on the eliminating the identified deficiencies after the monitoring. The total amount of the assistance for Romania's pre-adhesion is substantial. The EU budget is of 1.023 milliards/ billion euros in 2006, which is to be used for the pre-adhesion programs.

The Adhesion Treaty provides Romania's adhesion in January 1st 2007. This includes a number of provisions in conformity with which the Union may take measures in order to foresee serious encroachments in functioning of internal market or settlement of deficiencies in the field of judicial cooperation. Other safety measures concern the field of Community aquis. If there is certain evidence that the stage of preparation regarding the adopting and implementing the Community aquis in Romania they are as such because there is also a serious risk for Romania not be prepared for complying with the adhesion requirements in a number of key domains as the 11 are: Justice, Home Affairs, Competition, then Romania's adhesion could be a year postponed.

The Commission is to continue monitoring Romania's preparations and is to encourage our country on the way of reform in the period before the adhesion in order to supply Romania's integration in EU without any kind of difficulties.

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RUSSIA IN THE WORLD OF MINING BUSINESS

LEV ALEXANDROVICI PUCICOV [*]

ABSTRACT: *The results of the statistical analysis of development of mining business in the world and Russia are given.*

KEY WORDS: *extracted minerals, iron and ferrous alloys, non-ferrous metals, noble metals, industrial minerals, energetic minerals*

This paper work brings to light statistical analysis of mining branches of Russian industry. Final purpose of such an analysis is to determine Russia's place in modern world of mining extraction, to point out some tendencies of mining global development in the world.

Although the necessity of such an analysis is obvious, in Russia, centralized approach of this particular development aspect of our civilization such as mining, is missing, that's why, a big number of parameters, that are reflecting mining conditions and development, aren't always correct and with real values.

Causes of such a phenomenon are multiple. As such, mining isn't being presented as an independent business, but is representing development base for other industry branches, such as energetic, metallurgy, chemistry, construction, etc. Because of this, statistical administration in mining is being presented as an integral part of other branches administration. From here - the absence of a unique data base, methodological base, organizations or responsible people groups.

In the Mining Research Center of Moscow State Mining University (MSNU) is being putted the issue of organizing mining development statistical analysis in Russia and in the world. Such an analysis, in essence, has a strategic nature, because it is determining base tendencies of future mining development and gives mining contractors the possibility to direct themselves correctly to definite extraction development directions of one or another minerals product. Without no doubt, such an analysis is giving the possibility to determine economic development of the country.

Here, in this pare work are brought to light some analysis results.

[*] *Academician Prof.Eng., Ph.D., Rector of the Moscow State University, Russia*

First of all, we'll mention some methods to solve this problem. Starting from general conditions, mining can be defined as the engineering activity of the man in terrestrial crust [1]. But, this definition is too large and can include petroleum extraction, underground construction and many other kinds of human activities in the terrestrial crust. Without further development, we're going to mention just the fact that, in world statistics, particular examination of the extraction of solid ore – on one side, and fluid and gaseous – on the other side, doesn't exist [2,3]. And the reasons for this are obvious: examination, for example, of energetic minerals: coal, petroleum, gas, uranium doesn't make sense. That's why, in our analysis, we are following world statistics laws. What are the parameters that characterize mining extraction – the volume of extraction, quantity of extracted minerals product, number of people involved in production process, costs of extracted products? The answer to all these questions is obvious – all these parameters and, actually, the group of these parameters, in order to have more exact answers, have to be broadened. This is just a desire, because in the world, and especially in Russia, doesn't exist a methodological and statistical base for such an approach.

In the world, very important are the following aspects: what countries, economic communities, geographical regions and how much minerals product do they extract, what are the incoming material tides of minerals, how guided is the distribution system of minerals product in the world.

When we talk about methodology of the statistical analysis of mining, we have to consider following characteristics:

- *the large spectrum of extracted mineral products:* in the world[2,3], now, according to statistics, are extracted 56 minerals, among them 10 – iron and ferrous alloys, 16 – non-ferrous metals, 3 - noble metals, 22 - non-metallic minerals and 6 - energetic minerals.
- *the big difference between volumes of extracted minerals* – from a few(Gallium, Germanium) to billions (coal, petroleum) tons a year [2].
- the same thing with *costs differences* – from 20-30$ to 200 thousand $ for a ton.

Introducing these data in parameters of mining fully, form methodological point of view is difficult and it is needed to work with a group of parameters.

Estimation methods of mining business, accepted at this moment in the world, can not be named perfect – in some approaches it is being reflected the influence of a number of factors, the most important of them, in our opinion, is being the geographical one, and often the numbers are resulting from geographical reasons.

Mathematical part of the calculations isn't perfect, as well as the information of groups of experts in analysis. But, in this stage of the researches, we haven't putted to ourselves the problem to improve methodology of the statistical analysis of mining, considering the fact that the task of practice calculations doesn't has to be complicated.

Considering given circumstances, we're going to show the results of the analysis. First thing that has to be mentioned – is the fact that the most important parameter, that is determining the state of mining business of a country, economic

community or geographical region is the spectrum, that is the quantity of extracted minerals.

In all, in the world there are 166 countries that are extracting minerals. Among them, 107 are extracting 1 to 10 minerals, 18 are extracting one mineral, 35 countries are extracting 10 to 20 minerals, 7 – 20 to 30 minerals and 3 countries – more than 40 minerals (*fig.1*)

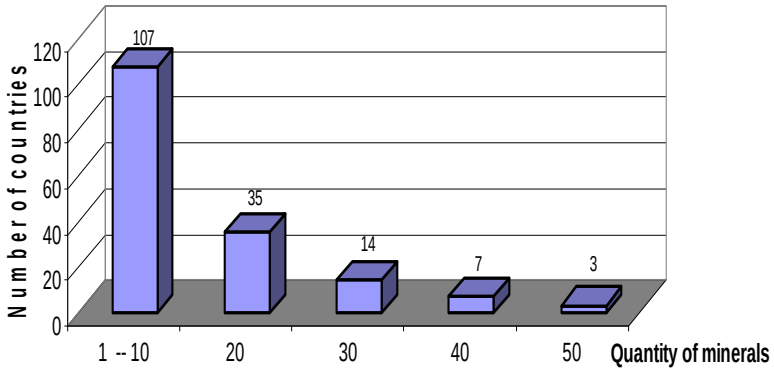

Figure 1. Distribution of countries in accordance with quantity of extracted minerals

It can be noticed the fact that, in the world, the extractive power is concentrating in accordance with the spectrum of extracted minerals. In the world, we have to analyze according to this parameter, the group of countries that lead in this category, that are extracting more than 30 minerals each, than we would find out that there are only 10 such countries in the world. The statistical arrangement of these is shown in *fig.2.*

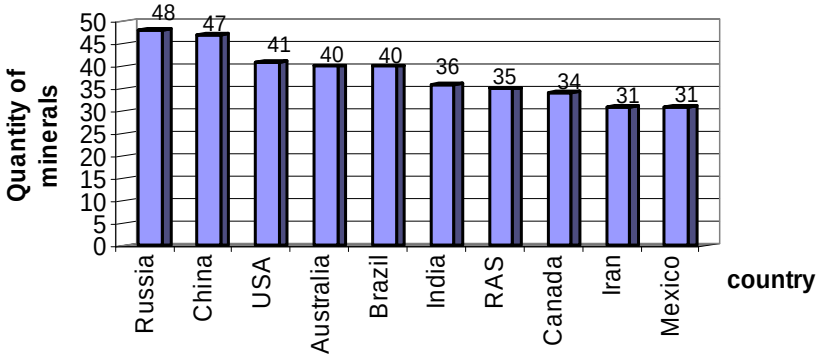

Figure 2. Distribution of the most important countries in accordance with quantity of extracted minerals

From mining practice, is well known the fact that spectrum of extracted minerals is characterizing mining business in the totality of its aspects, because almost every extracted mineral has its own characteristic – in structure of the deposit, mining equipment.

In figures 3-7 is being presented number distribution of countries that are extracting following groups of minerals:

- iron and ferrous alloys;
- non-ferrous metals;
  - noble metals;
  - industrial minerals;
  - energetic minerals.

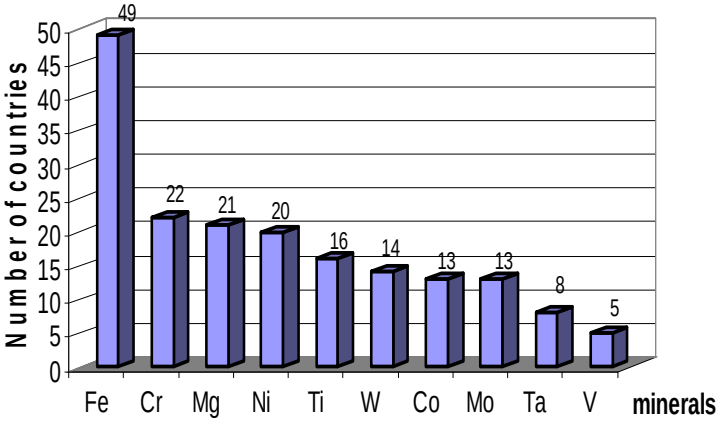

Figure 3. Number of countries that are extracting iron and ferrous alloys

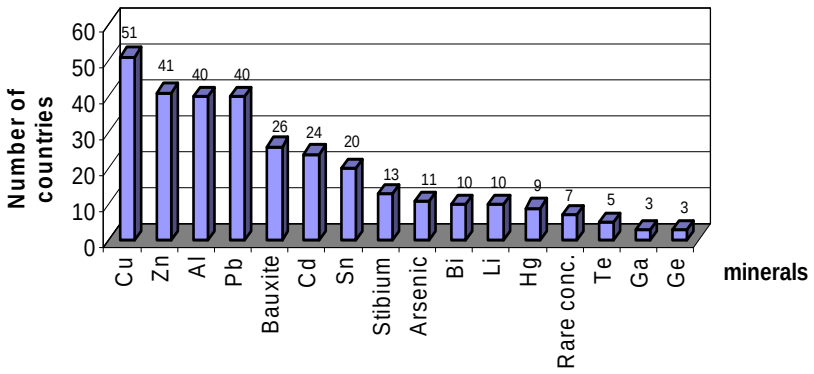

Figure 4. Number of countries that are extracting non-ferrous metals.

It can be noticed the fact that metals like iron, copper, zinc, aluminum, lead, gold, silver are being extracted in more than 40 countries each, but tantalum, vanadium, bismuth, lithium, mercury, gallium, germanium, platinum in less than 10 countries each.

These disproportions, of course, are related to a big number of factors and their analysis can go way off limits of the actual research, and initial orientation in these distributions is very important.

It is possible that, more important than distribution of countries according to extracted minerals, it is their distribution according to volumes of extracted minerals.

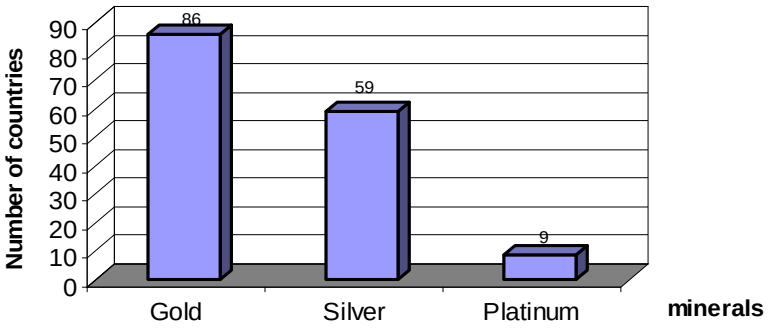

Figure 5. Number of countries that are extracting industrial minerals

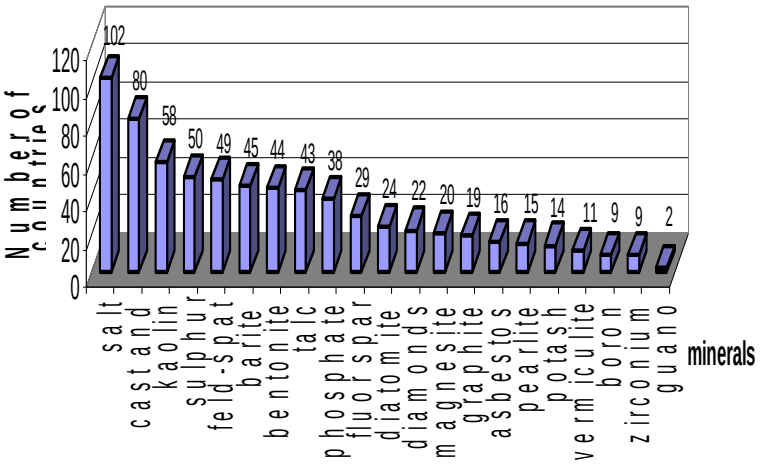

Figure 6. Number of countries that are extracting industrial minerals

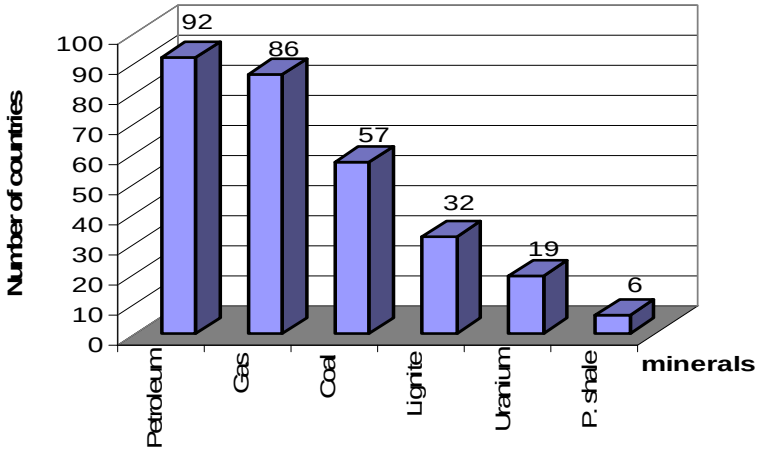

Figure 7. World extraction volumes in accordance with groups of minerals

In *fig.8*, are shown distributions of the volumes of extracted minerals, on group of minerals. It can be seen that total volume of extracted minerals yearly in the world is approximate 12 billions tons. It is known that energetic minerals are essential for mining business, as a result of the presence of energy in all areas of life and modern civilization development.

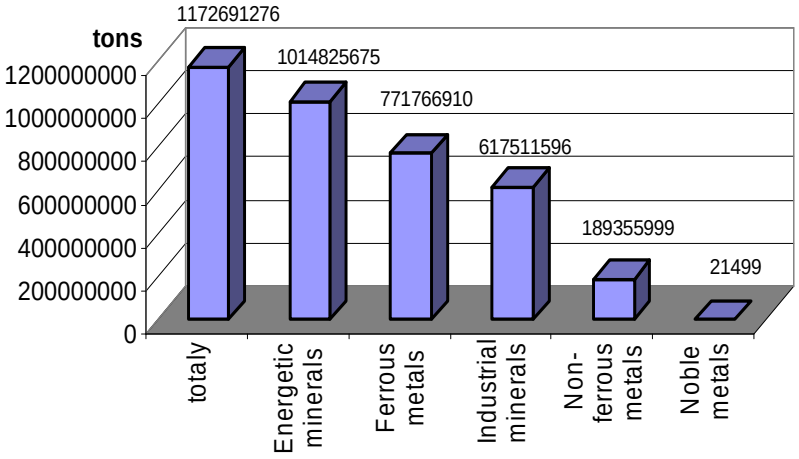

Figure 8. World extraction volume in accordance with groups of minerals

But, in this situation, when specific volume of the extraction of energetic minerals is more then 86.5% of the world total extraction volume of all minerals, fact that is telling us that, according to extraction rhythm, energetic minerals are outrunning

substantially other branches of the mineral industry, are showing not just large possibilities of the economic development of Russia, but, as well, serious dangers that involves possession in gigantic quantities of energetic resources in present period of civilization development. Elaboration and achievement of a mineral strategy of Russia in the system "resources – extraction – consumption", remains to be a complicate and unsolved problem for Russia, that is capable to influence Russia's further development.

In *fig.8* are being presented percentage volumes of mineral extraction in accordance with higher presented groups. It is interesting to follow the way is correlated volume with quantity of minerals in different countries, and especially, in that 10 higher mentioned countries that are leading according to quantity of extracted minerals.

In *fig.9* is being presented the distribution of the 10 countries in accordance with extracted volumes of minerals. It can be noticed that some countries are distributed even in the 3 leading countries in mining business: USA, China and Russia. These countries are extracting approximately 41% of total extraction volume of the world. In all, first 10 countries are extracting 63.7% of total extraction volume of the world; among them: 87.1% -- iron and ferrous alloys(*fig.10*), where Brazil is leading with 28.9%; 61.1% -- non-ferrous metals (*fig.11*), where Australia is leading with 31%; 43.7% -- noble metals (*fig.12*), where Australia is leading with 11%; 61.8% -- industrial minerals (*fig.13*), where China is leading with 15.9%; 62% -- energetic minerals (*fig.14*), where USA is leading with 17%.

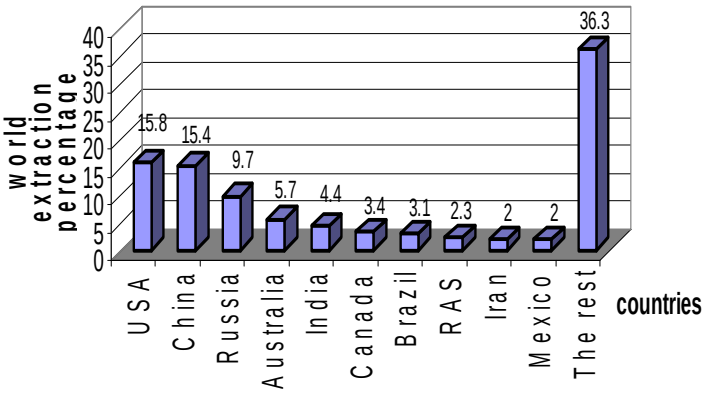

Figure 9. Specific volumes of minerals product extraction in the most important countries of the world

This way, we can ascertain that Russia's place in the world of mining extraction is very powerful and stable. With its 9.5% of world production of solid, liquid and gaseous minerals, Russia even today is capable of insuring the higher level

of its economy. But, in comparison with Western Europe countries and Japan, that have the highest mineral consumption and therefore are insuring the highest level of their economy and population living standards, practically, under the circumstances of not having a mineral base, and therefore of production that is being used in different areas of economy and life. This situation, of course, is well known by state's supreme management, but no serious economic politics that would be oriented to the development of manufacturing branches of economy, exists in Russia.

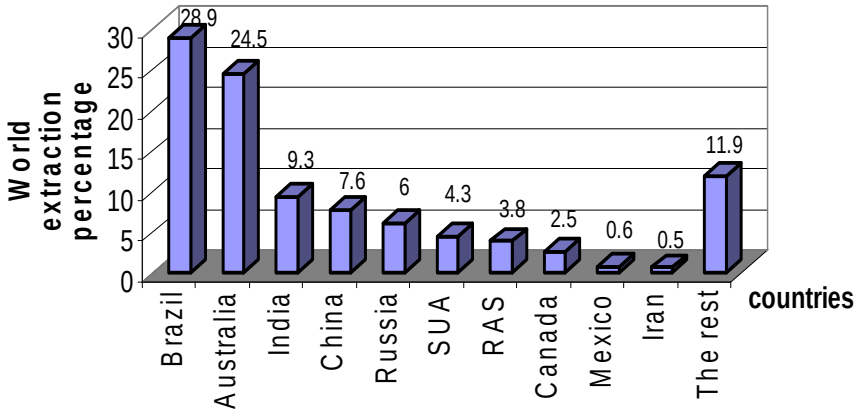

Figure 10. Specific volumes of the extraction of iron and ferrous alloys in the most important countries of the world

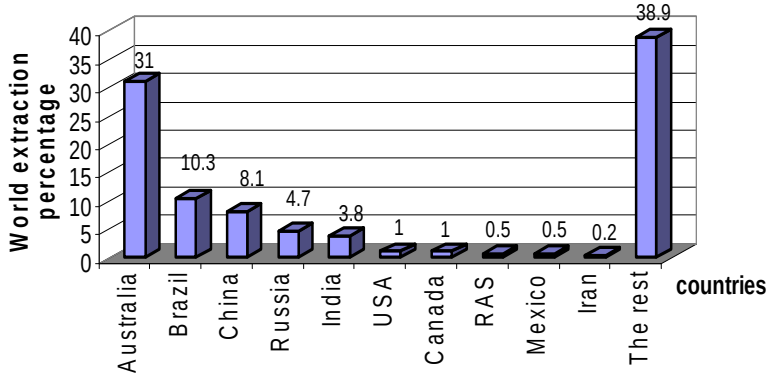

Figure 11. Specific volumes of the extraction of non-ferrous metals in the most important countries of the world

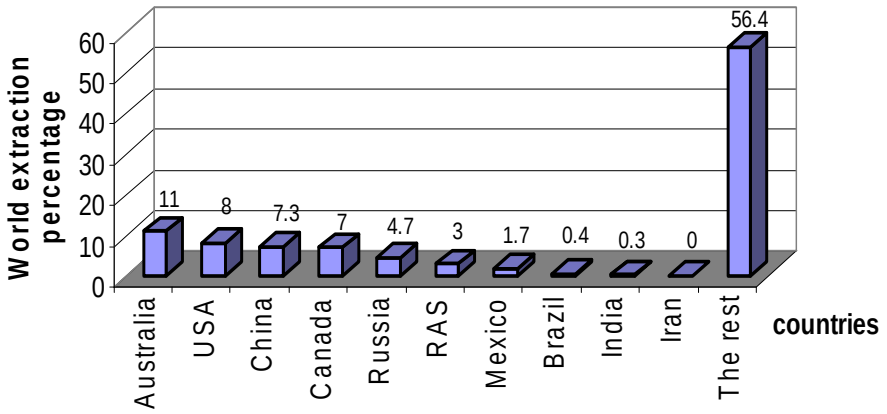

Figure 12. Specific volumes of the extraction of noble metals in the most important countries of the world

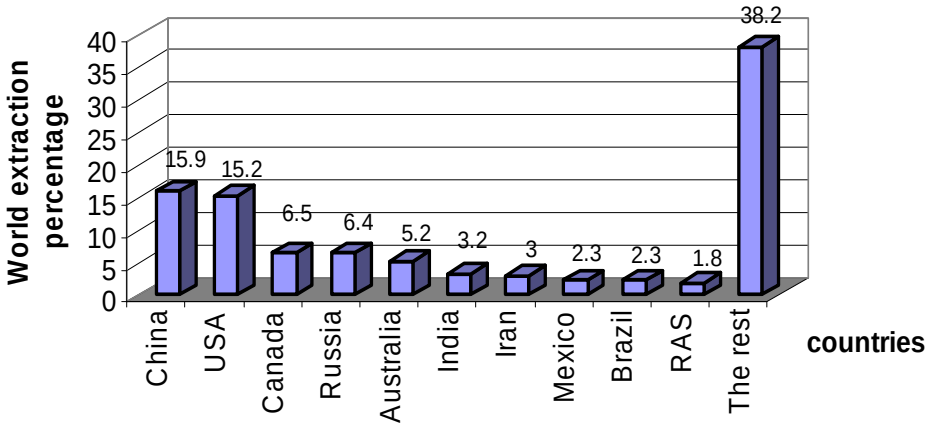

Figure 13. Specific volumes of the extraction of industrial minerals in the most important countries of the world

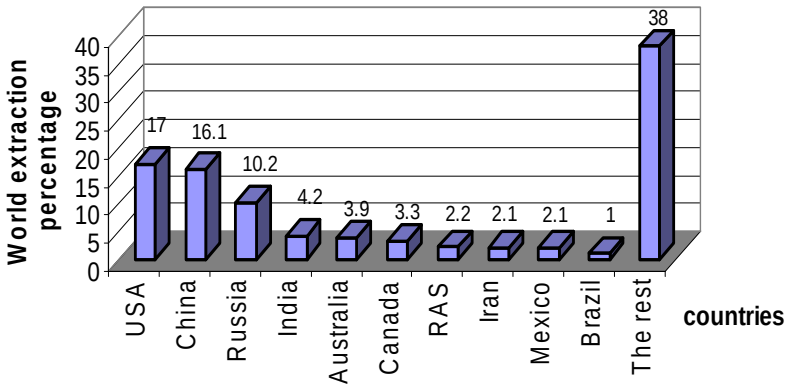

Figure 14. Specific volumes of the extraction of energetic minerals in the most important countries of the world

In the mean time, tendencies in global development dynamics, are demanding constantly an economic politics, that would be oriented to an accelerate development of manufacturing industries and, this purpose has to be related with exported minerals nature. In other words, the biggest part of resources, obtained from the export of minerals product, has to be turned to account in manufacturing branches of the industry of a country.

In order to appreciate Russia's position in the world of mining business, we don't have to forget the circumstance that, in the world, it is being noticed a diminution of mineral extraction per capita: in 1985 were being extracted 2038 tons of different minerals per capita, and in 2002 – only 1872 tons. This situation, along with big disproportions of minerals consumption, represents the most important reason for unstable development of the world.

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THE ROLE OF SYNERGETIC APPROACH IN THE EDUCATIONAL SYSTEM IMPROVEMENT

ALEXANDR ROMANOVSKIY *

ABSTRACT: *We will consider synergy in the context of scientific knowledge self-organization and development, analyzing genesis of transformation, formation of certain empiric discoveries and obtained results in the sphere of fundamental sciences.*

Scientific outlook, penetrated by natural science and mathematics, is the greatest force not only of the present but of the future too.

V. Vernadskiy

KEY WORDS: *synergy, scientific knowledge, development, educational system*

Lately synergy has become rather popular German Haken was first to apply this term. He was German physicist-theorist who created laser theory. German Haken was interested in the appearance of new qualities during co-operation of separate parts that is the effect of self-organization in different systems. The word "synergy" was borrowed from the Greek language and defines science about collaboration or co-operation. The question, whether there are any general laws and principles seemed to be rather surprising and perhaps quite shocking, because it was assumed that the parts of the system can be of absolutely different character, in a range, say, from molecules in a liquid to the human individuals in society [1].

The fact that synergy deals with open self-regulated systems (they can be found in any data domain) that influence the object changing its structure according to certain conformities and co-operating with an outer world is borrowed from synergy first of all. Classic thermodynamic and new informational systems can be classified as these ones [2].

We will consider synergy in the context of scientific knowledge self-organization and development, analyzing genesis of transformation, formation of certain empiric discoveries and obtained results in the sphere of fundamental sciences.

* *Prof., Ph.D. at the National Technical University of Kharkov, Ukraine*

Historically a bloom and expansion of science were connected with the achievements of classic mechanics of New Time (Galiley, Newton, Laplac and others), which elaborated specific conceptions of matter, motion, space, time, causality etc.

For example, mathematical knowledge, being unregulated and disjoined, were structured and formed a clear base (primary axioms and laws, and also logical postulates – lems, theorems etc) by means of system analysis and improvement of calculating apparatus structure. As a result of such self-organization, synergy and deduction, mathematics as a discipline was formed and different applied directions appeared in future.

Such development and transformation of scientific knowledge concerns not only fundamental, ancient sciences, but also innovative directions of contemporaneity. Genesis of scientific knowledge shows the conduct that is characteristic for the definition of synergy. New directions, concepts, elements and specializations are consolidated with the help of external influence on the process of social and scientific experience transmission using the volume of the accumulated knowledge and methods of their processing [2].

On the other hand, the concept of synergy is used when modelling different biological, economic, chemical and physical systems. German Haken asserted that synergy can be considered as the most developed theory of self-organization, that can be applied to the wide range of different phenomena, found in biological systems, phenomena, related to the different types of brain activity, behaviour and cognitive activity, in particular [3]. The developments of neuron networks that have functions similar to the work man's cerebrum are considered to be a new trend in this sphere. «Genetic algorithms» that allow to increase exactness and research speed are used in the methods of different functions optimization. Presently, medicine needs the help of mathematical apparatus in order to solve very important problems of cellular level. So it comes to the fact that under the modern conditions it is impossible to develop within a single direction. The effect from the joint work of many directions of science and different approaches application help to multiply an output-input ratio.

In economics on the example of many companies it is possible to notice synergetic effect. There are many marketing technologies that use a motto: «whole is more than a sum of its separate parts» or «1+1=3». Brainstorming that gives a much greater result than an individual work on the problem is an example of synergetic effect. Thus, all great causes are created on the edge of phenomena that seem to be non-comparable at a glance. All discoveries occur on the basis of vital or scientific experience and situation, i.e. consciousness and sub-consciousness on edge of theory and practice.

I'd like to touch upon the question of synergetic paradigm application in pedagogy, because this question is very urgent. On the present stage in the world this situation makes the problem of new educational paradigm search actual because the possibility of society steady development, successful overcoming of global problems, regional and national conflicts characteristic for the present civilization development are closely connected with educational level of all society members.

But the system of education is always based on the certain scientific understanding of world and man that determines aims and tasks of education, its contents, principles and methods. Absolutization of mechanics laws resulted in the creation of world picture according to which universe is a closed mechanical system that consists of unchanging elements, motion of which submits to the laws of classic mechanics. These laws are considered to be universal and spread on all types of matter motion. All connections and relations were considered as mechanical, i.e. having strict synonymous character. There was no place for chance in such world, and it was accepted to bind irreversibility and probability to incompleteness of knowledge. In this case every phenomenon has a reason and is simultaneously the reason of other phenomena. A reason and action form a chain that comes from the past, pierces the present and vanishes in the future. It meant that all processes that take place in the world are fated and stipulated the search of initial elements, which discovery will allow predicting the future [4].

That's why such world outlook and methodological principles, as rationalism, determinism, mechinicism and reductionism that had determining influence on the system of education too: on the forms of knowledge mastering and its statement began to prevail in scientific cognition. Methodology of teaching gradually takes a man out of the limits of nature, spirituality and art. No doubt, that priority of technical orientation must prevail in teaching, especially as demand on technical specialties has risen lately. But, we should not forget about personality formation, we must prepare a man, not a machine. For the sake of this we live and work: not only for the sake of specialists' preparation that are able to master any science, develop any technology, but people, who, first of all, can save our civilization and go out on a finish line to Truth!

The integration of different ways of world mastering by the man, the development of humane processes in science, philosophy and practice did not found its necessary reflection in modern education until now. It adversely affects further subject differentiation of scientific knowledge as a means of teaching efficiency achievement. Now the system of education blindly copies growing differentiation of science, trying to fill boundless. Narrow specialization and professionalisation resulted in the partial, torn knowledge that is alienated from a man. Mastering prepared differentiated knowledge the student masters reproductive character of thinking and this does not develop personality creative potential.

Today the necessity of introducing spiritual, moral, ethics and even aesthetic categories characteristic for ancient traditions of the West and East in experience of unity of man with nature and God into the sphere of science becomes obvious. Man's wealth is not in a reason, but in a soul. Reason can bring material wealth. Soul brings spiritual wealth that is far more considerable. The level of human personality is determined by the sum of sizes of soul and reason. Only in the union of reason and soul man is capable on great causes.

Those who study and teach the humanities should not reject, but re-comprehend the row of the truths accumulated before, make an effort to explain the

laws of harmony using more universal language, than the language of subjective-emotional feelings [5].

It is necessary to form students' integral idea of world, synthesizing wisdom of ancient civilizations, humanitarian and natural knowledge, spiritual and aesthetic development, using the newest technologies, applying scientific and technical progress and priceless contribution of engineering sciences. Many-sided personality has a more complete idea of knowledge of different directions, that's why it is easier for him to choose an application area for the creative developments of his activity.

The more genius the man is, the more often the impacts of incompatible and perhaps opposite phenomena, professions and types of life activity occur in his creative life. For example: Skovoroda Grigoriy, Leonardo da Vinci, V. Dal, M. Lomonosov, Aristotel, D. Mendeleev. All these great people combined qualities of the comprehensively developed personalities, were professionals in different spheres of scientific and professional activity. Being engaged in natural sciences, art, aesthetics and culture, these personalities achieved unbelievable success that can exemplify synergetic effect in different spheres of human activity.

Therefore, in my opinion, a new direction in pedagogy can be effective for student's personality developed and creative capabilities preparation, exposure and formation.

When studying features that ingenious personalities had, one can notice that they are inclined to visualize and use all senses, to form synergetic connections between feelings, i.e. synthesize humanitarian and technical features. This ability returns us to the sources of perception incident to the children, to the sources of concepts formation. Einstein's theory of relativity is actually the description of different prospects co-operation. The search of the details that do not fit in the usual world pictures and finding a new point of view are general strategy of personages.

Personages possess ability to be identified with different positions of perception: the first one is I, my point of view, my senses; the second one is other, research object, his point of view and senses and the third one is the position of strange observer the co-operation of our "I" and object. This ability is a psychological feature that relates to the humanitarian type of education.

From the other side, forequoted non-standard personalities were able to work with little things ("Little things create perfection, and perfection is not a little thing", – Mikelangelo) and simultaneously did not sink in details; they could see the whole picture, keeping eye on tiny components, they possessed a unique ability to find an equilibrium between large and small. An ability to analyze, to line up a hierarchy and systematize material is the merit of technical orientation in teaching.

Thus, it is possible to draw a conclusion, that there should not be only humanitarian or only technical direction in education. When teaching students, future managers of our country, we must form harmonious, many-sided personality which will skillfully unite technical and humanitarian knowledge. Consequently, it is necessary to apply a synergetic effect in personality education in society.

Preparing a future specialist-leader, education must form, foremost, personality. Besides specialized knowledge, he should necessarily be acquainted with culture, art, morality; we must develop spirituality and form humanistic appearance of human essence.

«Education always, somehow or other, executed two basic functions: the first one was to prepare a man for a life; and the second one –to teach him to live with dignity, performing human duty. In the new century the purpose of education is to teach people to live reasonably, to act, create, using natural resources rationally and with care, to fill up them permanently. To teach to live in friendship with other countries and peoples, to remove war, enmity and murders from life for good » [6, p. 49, p. 85]. Besides strong educational basis, it is necessary to develop students' creative inclinations. [7].

A teacher is a major link between generations; he sets a tendency and the direction of development. Every generation has its features, and the task of teachers and states consists in creation of such psychological and pedagogical synergetic preparation, which will allow symbiosis between generations, to carry out smooth transition to new trends of development. In fact, not only personality formation but also state formation as a whole depends on a teacher.

Direct perception of art, connected with emotional feeling, in the best case followed with shock, ennobles a man, generates «kind senses» in his soul, prepare the future reader of verses, listener of music, theatrical spectator, i.e. man of culture, man inspired. Such man, as I see, will be able to manage global problems; will be able to live in harmony with nature and society. Certainly, when addressing to the art the certain moral and taste orientation, the choice of art in space of good and beauty, the choice of wonderful, is a very essential point. This choice is conditioned by the personality of that bearer of culture, who brings it in an educational establishment. But this problem will always exist, because personality of teacher, finally, determines everything [8].

Presently the contradictions between scientific and technical progress and nature, not only development but simply existence of society show up sharply. Social conflicts and man-caused catastrophes, compelling us to reflect about primary causes of these contradictions and ways of their decision occur very often. That's why psychological and pedagogical preparation of engineers in the National technical university «Kharkiv polytechnic institute» sees one of its tasks in the formation of future leaders of production and leaders of collective, managers of any social systems of society and, foremost, in formation of personalities, whose professional and spiritual potential will correspond to the level of the most complicated problems which the laws of nature and society development put.

Our University was only one among technical institutes of Ukraine to develop the conception of social systems managers' personality formation by means of psychological and pedagogical and modern administrative preparation. We solve a pedagogical task on man teaching and education [9, 10]. Pedagogical activity and

psychological and pedagogical preparation is managing other man's activity, supplying his teaching, education, which provide man's development and formation as individual, personality, manager. Therefore, it is necessary to move further in this direction, developing a new method of educational process.

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SYNERGETIC EFFECT AS A BASIS OF TEACHER'S PERSONALITY FORMATION

ALEXANDR ROMANOVSKIY, N. USYK [*]

ABSTRACT: *The article is developed by propblems of contemporary educational system. In work was considering the concept "synergetic effect", his using in forming of well-known figure of students. Also, the important role of humanitarian and technical education, role of spirituality and culture were analysing. The necessity of unification and cooperation in differents scientific efforts were appreciating.*

Science is single and inseparable. It is impossible to care about development of some scientific disciplines and disregard others. It is impossible to pay attention only to those, the application to life of which became clear, and to disregard those, the value of which is not realized and is not understood by humanity.

V. Vernadskiy

KEY WORDS: *science, educational system, synergetic effect*

1. ACTUALITY OF THE ARTICLE

World existence is impossible without harmony, i.e. world is synergetic by its nature. During interference and pluralism, cyclic social-and cultural processes and man-caused civilization development the process of new informational society self-organization becomes very actual, it is characterized by a crisis, both of personality self-identification and relations of man and nature, natural, humanitarian and technical culture.

Crisis, conditioned by the hard pragmatic options oriented on narrow-disciplined approach without horizontal connections, overtook the system of education too. Hard differentiations of humanitarian and natural disciplines are used, that leads to deformation of vision of complete reality of moral norms deformation, instability of political and economic situations.

[*] *Prof., Ph.D. at the National Technical University of Kharkov, Ukraine*
Prof., Ph.D. at the National Technical University of Kharkov, Ukraine

Thus, reform of education at school, both higher and of general education, can not come to the cosmetic measures. It must be related to cardinal expansion of concept of education fundamentality, giving the integral vision of nature, man and society, in the context of interdisciplinarydialogue, one of the greatest problems of which is the problem of mutual understanding of natural scientists, those who study technical sciences and those who study the humanities [1]. Therefore there is a necessity to apply synergetic approach to this problem.

In translation from the Greek language the word of "synergy" (*sinergia*) means "united action, assistance". Well-known physicist-theorist German Haken applied this term to name the science, which began to study patterns of self-organization in complicated open physical and chemical systems, lying in the states distant from an equilibrium (unstable).

I. Prygozhyn called this science the theory of the dissipative systems [2]. He proved, that some patterns, inherent to these systems, were fundamental, or such, which spread on many other complicated open systems, including biological and social. Thus these patterns began to play that general methodological part in science, which, as the majority of synergetists think, has a major value in the development of interdisciplinary researches. The last relates to the solution of the sharpest modern global problems.

Mathematicians explain the sense of concept "synergy" through the formula "1+1=3". Sociologists, speaking about synergy, usually mean interpersonality co-operation. In the theory of management "synergy" means the increase of company efficiency appearing after the amalgamation of a few firms, as compared to total efficiency of its parts before the amalgamation.

This function of synergy is on the initial stage of formation and has a large potential.

A great contribution to the development of a new theory of development of philosophy of science was made by scientists in the sphere of physics and chemistry I. Prygozhyn and G. Haken due to the use of different directions in science and culture [2]. There is possibility to improve the important spheres of man's life activity with the help of a synergetic effect.

The more genius the man is, the more often the impacts of incompatible and perhaps opposite phenomena, professions and types of life activity occur in his creative life. For example:Leonardo da Vinci, V. Dal, M. Lomonosov, Aristotel. All these great people combined qualities of the comprehensively developed personalities, were professionals in different spheres of scientific and professional activity. Being engaged in natural sciences, art, aesthetics and culture, these personalities achieved unbelievable success that can exemplify synergetic effect in different spheres of human activity.

Therefore, in our opinion, this new direction in pedagogy can be used for student's personality developed and creative capabilities preparation, exposure and formation.

2. ANALYSIS OF BIBLIOGRAPHY

As a rule, term "synergy" and "synergetic effect " are used in the articles scientific works of technical orientation: in mathematics, physics, chemistry, economics, marketing etc. But there are philosophical works which use these terms. In V. Kudin's books the question about human destiny, development and purposefulness is risen [3, 4].

Different points of view on the peculiarities of personality formation and the achievement of aims put by are examined in joint works with V. Mikhailichenko [5]. In our opinion, one of synergetic approaches is the conception of humanitarian-and-technical elite formation, developed together with L. Tovazhnyanskiy and A. Ponomaryov, which is oriented on synergetic personality development [6]. Development and introduction of the effective generalized teaching has a large prospect of revisions and improvement. The methodologies used for introduction of this conception in the sphere of pedagogy are not enough explored and developed.

3. THE PURPOSE OF THE WORK

The purpose of this work is:

- to analyze possible integration of different directions in education, "synergetic effect" of humanitarian and technical sciences in order to improve educational process in higher educational establishments;
- to determine the place and role of "synergetic effect" in the system of innovative pedagogical technologies, taking into account engineering orientation of our university;
- a necessity of reformation of the system of engineers-leaders preparation from the point of view of spiritual, cultural and aesthetic aspects of personality development;
- to analyze the management of "synergetic effect" in the personality formation of professional in any sphere of activity.

4. THE STATEMENT OF BASIC MATERIAL

On the modern stage of development, under the conditions of democracy and globalization, and informational revolution there is a sharp necessity in the reform in the sphere of education. The prospect of intensive growth of scientific activity is due to the fact that progress attained the level, when the development is impossible within the limits of one science and only in symbiosis of directions it is possible to move in step with time. Ukrainian education has a bilateral orientation: technical and humanitarian, thereby limiting the sphere of graduated specialists' competence.

Analyzing the examples of personages, it is possible to notice that there is no clear divisions in the directions of their activity, we can trace the association of many-sided interests.

Let's consider the basic features of ingenious personalities:

1. *well developed capacity for visualization.*

Sight was the basic "navigation" instrument of genii. "Thinking think forms in images", Aristotel said.

Visualization, creative thinking are the most basic features, which must be inherent to the specialists in the spheres, connected with mechanical engineering, automation, mechanics, instrument-making. All these branches use knowledge of descriptive geometry.

2. *creation and use of plural connections between organs of sense (synesthesia).*

Ingenious personalities are inclined to use all other senses and form *synesthetic* connections between feelings. This ability returns us to the sources of perception, incident to the children, to the sources of concepts formation.

3. *use of multiplicity of prospects.*

Einstein's theory of relativity is actually the description of different prospects co-operation. The search of the details that do not fit in the usual world pictures and finding a new point of view are general strategy of personages. This, in its turn, confirms confluence and indissolubility of technical and humanitarian directions.

4. *highly developed ability to switch overconstantly from one position of perception to other.*

Personages possess ability to be identified with different positions of perception: the first one is I, my point of view, my senses; the second one is other, research object, his point of view and senses and the third one is the position of strange observer the co-operation of our "I" and object. This ability is a psychological feature that relates to the humanitarian type of education.

5. *ability to move from one level of thinking on the other and use the "pieces of information" of a different size.*

Ingenious personalities were able to work with little things ("Little things create perfection, and perfection is not a little thing", – Micelangelo) and simultaneously did not sink in details; they could see the whole picture, keeping eye on tiny components, they possessed a unique ability to find an equilibrium between large and small. An ability to analyze, to line up a hierarchy and systematize material is the merit of technical orientation in teaching.

6. *Maintenance of feed-back between abstract and concrete.*

Non-standard personalities form the strong and dynamic loop of feed-back between abstract images and their real expression, that allows to correct and improve constantly the first and the second. According to Einstein, the "measure of review of the experience got from our organs of sense which we can achieve with its help" is unique justification of the theory.

Perception at the level of senses and emotions develops due to the humanitarian orientation of teaching.

7. fundamental questions raising.

Genii can attach greater significance to the questions, than to the answers. The key description of all ingenious people is their indomitable curiosity and exaltation. That is humanitarian description. Genius sets more direct questions, than searches "right" answers. A failure is a springboard for the successful solution.

8. use of metaphors and analogies.

Prominent figures of science constantly use metaphors and lateral, or nonlinear strategies of thinking. A metaphor or analogy lie in the basis of every of genius action. Einstein widely used metaphorical constructions: flat world of two-dimensional creatures, beetle creeping on a ball etc. In other words, ingenious man must be able to write and express his thoughts. As they say: "He expresses clearly, who thinks clearly". And this is, surely, a merit of humanitarian type of education.

9. balance of cogitative functions: dreamer, realist, critic.

For example, Leonardo da Vinci not only possessed the developed ability to dream but also had capabilities and abilities to incarnate the dreams in concrete forms and critically estimate own ideas and their embodiments. Nicola Tesla asserted, that ability to be a "careful" dreamer had facilitated the realization of ideas and inventions.

10. destiny besides own personality (mission).

All personages can be united under the fact that they perceive their own work as a service to something greater, than they are. In the introduction to his work "Anatomy" of Leonardo and Vinchi noticed: "I want to perform miracles…, even if I have less rest in my life, than other people, and I have to live in extreme poverty for a long time". About the reasons of his study of physics Einstein wrote: "I want to know God's thoughts, the rest is details".

Thus, it is possible to draw a conclusion, that there should not be only humanitarian or only technical direction in education. When teaching students, future managers of our country, we must form harmonious, many-sided personality which will skillfully unite technical and humanitarian knowledge. Consequently, it is necessary to apply a synergetic effect in personality education in society.

Preparing a future specialist-leader, education must form, foremost, personality. Besides specialized knowledge, he should necessarily be acquainted with culture, art, morality; we must develop spirituality and form humanistic appearance of human essence.

«Education always, somehow or other, executed two basic functions: the first one was to prepare a man for a life; and the second one –to teach him to live with dignity, performing human duty. In the new century the purpose of education is to teach people to live reasonably, to act, create, using natural resources rationally and

with care, to fill up them permanently. To teach to live in friendship with other countries and peoples, to remove war, enmity and murders from life for good » [6, p. 49, p. 85]. Besides strong educational basis, it is necessary to develop students' creative inclinations. Only senses help to sense real; only senses can enlighten mind in the search for truth [4].

A teacher is a major link between generations; he sets a tendency and the direction of development. Every generation has its features, and the task of teachers and states consists in creation of such psychological and pedagogical synergetic preparation, which will allow symbiosis between generations, to carry out smooth transition to new trends of development. In fact, not only personality formation but also state formation as a whole depends on a teacher.

Direct perception of art, connected with emotional feeling, in the best case followed with shock, ennobles a man, generates «kind senses» in his soul, prepare the future reader of verses, listener of music, theatrical spectator, i.e. man of culture, man inspired. Such man, as we see, will be able to manage global problems; will be able to live in harmony with nature and society. Certainly, when addressing to the art the certain moral and taste orientation, the choice of art in space of good and beauty, the choice of wonderful, is a very essential point. This choice is conditioned by the personality of that bearer of culture, who brings it in an educational establishment. But this problem will always exist, because personality of teacher, finally, determines everything [8].

Education, in its turn, must always be "on the crest of wave", have intuition in the questions of change of vector of new ideas and technologies. It requires a new level of perception and understanding of realities of outward things and ourselves, exceptional motivation for overcoming inevitable painful processes which accompany teaching and every sort of change. It is also necessary to conduct the permanent analysis of the skills and changes of cultural ideas of society got in the process of teaching, to be able to reform and quickly react on external factors.

It is impossible to impose teaching and change of world outlook. People always execute the work they dislike with reluctance. It is necessary to interest and convince people, to attract them otherwise it will be impossible to diagnose what is going on, it will be impossible to move further. It is simpler to attract and interest people, by influencing on their emotional qualities.

The more turbulent and not uncontrolled the society becomes, the more members of social education must participate in the process of teaching. If modern leaders want to create the organizational structures more inclined to teaching, they must give example and begin an educational process from themselves, and then engage others in it [7]. It is needed to understand itself, to understand outward things.

In the creation of "synergetic effect" spirituality is a very important aspect, factor. Art and culture, as well as knowledge are the kernel of synergey in pedagogy. But it is impossible to manage without spirituality and morality. Till recently society tried to destroy a church and religious influence on people, but the absence of

spirituality converts a man into a callous machine ready to go to the purpose put by, without thinking about global consequences, without estimating own acts from the outside. It is easier to manage such man. Therefore, the primary concern of educational process is renewal and increase of level of knowledge and personality spiritual and moral culture.

Let's imagine that man will live only in his pleasure. Then no experience will accumulate, scientific and technical progress will stop. But we deal not only with scientific sphere. Analyzing evolution of human race, man always addressed to religion, felt a necessity in a faith. Faith gives internal force, because it is, according to Bible, a "realization of expected and confidence in invisible".

It means that man, putting before himself some aims, on the early stage is already sure, that he will achieve them. And confidence in himself is one of the most important features of a leader. It is a leader who is a "guide", "commander-in-chief" in the development of history.

Talented and prominent person is a leader by nature. Therefore, leading people, he performs the global purpose given to him by God – to hand on obtained knowledge to others, amending this knowledge accordingly to time, which he lives in.

A man participates in the relay race of life, accepting and handing on knowledge and culture, transforming and skipping them through himself. If there is no a transition link from generation to generation, the chainlet of integration of humanity and its development will be torn.

Besides without knowledge of history, the past, it is impossible to build the future. A teacher, putting his philosophical, historical and spiritual seeing of world in a student, develops in him the ideas of freedom as spiritual, moral description which distinguishes a man from animals and makes him dominant above them.

Also due to an aggregate of religion and history the idea of equality (difference) of all people between themselves is passed, regardless of their ethnic and status belonging.

Spirituality develops man's understanding of the idea of integrity of historical motion of time (in different religions accordingly forward, cyclic or descending). And it is very important, that a student felt a necessity in the individual development through non-acceptance of evil, fight against it by self-perfection, submission of corporal to spiritual and joining up with like-minded persons.

Education of a new generation and its study to not only practical knowledge but also spiritual, moral aspects is a necessary part of our duty here, on our planet, in that span of time, which we live in.

If we consider religious world outlook in its widest meaning, as one of basic methods of history understanding, it is possible to say that it is an original social institute, which forms principles, values and norms of society.

Understanding of world of human life takes place in the field of religious ideology by the specially prepared people, professionals which differ, as a rule, by not only high qualification in their business but also high level of general culture. Prominent figures, leaders, can exemplify such professionals [7].

A leader-teacher must well imagine, what it is necessary to aspire to; he must be successive in acts, observe the principles strictly, have hard persuasions and clear aim.

In any business it is necessary to move in certain direction. If there is no aim, there is no forward movement, and, there is degradation, destruction. Motion is life. If we do not develop, do not hand on our knowledge and abilities from generation to generation, we are doomed to death.

That's why many cultures and languages remained in nonexistence, although once they were significant, that's why there is a sharp necessity in a student and teacher-professional, who is able not only to hand on knowledge but also develop student's abilities due to which he will be able to surpass his teacher in his creative activity. Very few people think about this but it touches everyone. It's like not to think about oncoming crash of our nature, if each of us will not take care of it.

We can speak about development only if a new generation will be far stronger than previous was. We mean not physical capabilities, but moral and spiritual.

Unfortunately, only five percents of people are prominent, strong personalities which move progress. It is those leaders which manage time. It is necessary that each of them prepared after himself as many as possible followers.

Comprehensive and harmonious development of man is obligatory. Man's brain consists of two hemispheres, one of which is responsible for logical thought, understanding of technical sciences, and the other is responsible for creative perception of world, for emotional descriptions, intuition, irradiation [5, p. 59].

If one of parts was of less importance, then in the process of evolution, probably, changes would have happened in proportions between them. But as it did not happen, we can surely say that nature links indivisibly, unites, creates synergy between different parts. That's why it is necessary today to reform the system of education, direct it at the development of personality, instead of simple teaching man of narrow sphere of knowledge.

The promoted demand on engineering specialities is the feature of modern stage of development of society, because a person who got such education finds application to his knowledge in the wide spectrum of the offered works and services.

It is necessary that a future specialist was able to estimate a situation, put concrete aims before himself, could comprehensively estimate a problem or the task, put before him, remembering about spirituality and humanism, that, inventing something new, he could estimate, what consequences it can lead to.

Most scientists who created a weapon, bombs and other inventions bearing death and destructions afterwards felt sorry about their creation, when learned the consequences of their application. It is more relevant during stormy development of nuclear technologies: a developer-engineer is should give himself account in every step of the scientific development, estimating the possible negative consequences of the work.

Presently the contradictions between scientific and technical progress and nature, not only development but simply existence of society show up sharply. Social conflicts and man-caused catastrophes, compelling us to reflect about primary causes of these contradictions and ways of their decision occur very often. That's why psychological and pedagogical preparation of engineers in the National technical university «Kharkiv polytechnic institute» sees one of its tasks in the formation of future leaders of production and leaders of collective, managers of any social systems of society and, foremost, in formation of personalities, whose professional and spiritual potential will correspond to the level of the most complicated problems which the laws of nature and society development put.

NTU "KhPI" was only one among technical institutes of Ukraine to develop the conception of social systems managers' personality formation by means of psychological and pedagogical and modern administrative preparation. We solve a pedagogical task on man teaching and education [6, 7]. Pedagogical activity and psychological and pedagogical preparation is managing other man's activity, supplying his teaching, education, which provide man's development and formation as individual, personality, manager. Therefore, it is necessary to move further in this direction, developing a new method of educational process.

5. CONCLUSIONS

Analyzing all aforesaid, it is possible to draw some conclusions.

At first, synergetic effect in education is an integration of basic technical education and necessary humanitarian preparation for development of engineer-leader's harmonious personality.

Secondly, when considering and estimating the features of outstanding personalities and scientists, their technical and humanitarian capabilities which harmoniously combine and complement each other were selected.

Thus, it is quite obvious, that there is the necessity to reform the system of education of higher technical educational establishments in order to improve the quality of future specialists' preparation, by opening new possibilities and potential of symbiosis of two basic directions: technical and humanitarian, forming a highly cultured, humane specialist-professional.

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THE PUBLIC ADMINISTRATION AUTHORITIES' IMPLICATION ON THE ECONOMIC DEVELOPMENT AT REGIONAL LEVEL

MELINDA SZASZ [*]

ABSTRACT: *The sustainable development has an important moral dimension and promotes economic increase and social welfare. Durability, in doctrine, represents the economic development and progress that must maintain during time. Durability, can be, also, defined as an area that demands creativity and economic and social innovation in a coherent frame directed on medium and long term. Nowadays, sustainable development is considered an objective equally important with human rights, education or work rights. A priority of sustainable development must be the fast development of mono-industrial areas.*

KEY WORDS: *sustainable development, durability, international consecration, economic and social innovation, long term, public administration authorities, financial resources, local autonomy.*

1. GENERAL CONSIDERATIONS ABOUT THE CONCEPT OF „SUSTAINABLE DEVELOPMENT"

The concept of sustainable development implies the satisfaction of actual generations' needs, without compromising the chances of future generations to satisfy their own demands. The sustainable development has an important moral dimension and promotes economic increase and social welfare. Its objective is to satisfy society's requirements on short, medium and, especially, long term, in accordance with environment's preservation and a judicious management of natural resources.

The root of this term is in Latin and means to bolster. The sense of this term is to sustain a community by all their actual and future habitants. The community can sustain it adopting increasing systems on long term and realizing a viable community by taking into consideration the economic, social and environment problems. Other important elements of these efforts are building partnerships and alliances.

[*] *Assist.Prof. at the University of Petroşani, Romania*

Durability, in doctrine, represents the economic development and progress that must maintain during time; the conclusion is that environment protection and economic development are, indeed, antagonistic. The idea of sustainable development was first contoured in the former rapport of Global Vigilance Institute in 1984 and continued in 1987 by ONU in the project "Our common future". The principles and objectives of sustainable development received international consecration in 1992 in "Rio Declaration". Lately, sustainable development became an imparted objective in many countries[1]. In our country it is an area that demands creativity and economic and social innovation in a coherent frame directed on medium and long term.

To increase the industrial competitivity the most important instruments that have to be in view are: the development of a viable and opened business environment, the acceleration of companies restructuring process, the awakening of management buy-out process, the development of competitive market, the frequent utilization of informational system in all industrial fields, the promotion of direct and intangible investments, the enlargement of industrial cooperation, the support for companies' development and the remove of social cohesion.

Nowadays, sustainable development is considered an objective equally important with human rights, education or work rights. Concisely, this process represents the reconciliation of two essential components: the legitimate aspiration for a better life and the efficient management of natural resources to keep our legacy for future generations, too. European Union's strategy has six main objectives regarding to sustainable development: weather changes and the usage of nonpolluant energetic resources, public health, natural resources management, combating poverty and social exclusion, demographic process, mobility, fields' usage and territorial development.

Obviously, a priority of sustainable development must be the fast development of mono-industrial areas, which are real "poverty spaces". For sustainable development act factors as sectorial and institutional-administrative structures, the accretion of institutional efficiency and capacity, the reduction of excessive bureaucracy, a rational implementation of decentralization and local administrative autonomy, coordination at sectorial and macroeconomic level, all these according with subsidiarity principle.

2. THE PUBLIC ADMINISTRATION AUTHORITIES' ROLE IN THE „SUSTAINABLE DEVELOPMENT"

Local public administration is one of the important sectors of state administration. Our fundamental law, the Constitution adopted in 1991, established the fundamental principles underpinned to the reforms present in all society's fields, inclusive public administration – representing the incidence domain of state-citizen relation. So, local autonomy and public services' decentralization are the constitutional principles of public administration and they must be respected to realize a sustainable

[1] Summit-ul Finanţării dezvoltării (Monterrey, mai 2002, Mexico) şi Summit-ul Dezvoltării Durabile (Johannesburg, septembrie 2002, RSA)

development of local areas. In 2001, the public administration's law established, beside local autonomy and public services' decentralization, other essential principles for public administration's organization and activity: public administration authorities' eligibility, legality and consulting citizens in local problem of special interest.

According to law's settlements, local authorities - city councils and mayors – must solve in the name and interest of local collectivities the public business and resources. Many responsibilities were transferred to local administration, getting the first base with financial decentralization, trying to get administration next to citizens, as much as possible. Public services' decentralization, as component of public administration's reform program, must include not only the transfer of activities, but, also, the financial resources' transfer, a clear demarcation of local authorities' competences and the elimination of any parallelism between their responsibilities and those of central public administration's.

Anyway, we must underline that only the constitutional consecration of these principles, however reformative and democratic they are, not followed by their strict conformation and implementation – remain only pure declarative dispositions, without any correspondent in social life. Local authorities have the moral duty to avoid compromising the future generations' possibilities to satisfy their own needs. To solve a complex problem, such as durability, all the factors that contribute to that problem, must be incorporated in the solution.

From this point of view, local public authorities play a crucial role in the sustainable development, because represent local community and wok in its name. Local authorities develop, administer and affect many services about life quality and make partnerships with other organizations.

Analyzing the rapport on local public administration's activities was determined that public authorities, in their way to a sustainable development of emplacements, confront with obstruction of financial resources, the existence of financial prise control and a remote transfer of budgetary founds on political criteria. All these facts generate a precarious situation for local collectivities, deprived of financial and patrimonial resources necessary to self-determination and sustainable development in the interests of his citizens.

Was, also, observed the discredit of social-democracy values, the corruption institutionalization, the accentuation of poverty – all, facts that infrige local autonomy principle, votary by the Constitution, the local public administration Law and the European Chart of Local Autonomy. Regarding this situation, was underlined that a real sustainable development can't be realized without respecting the regulations of operative laws, without assuring financial resources necessary to achieve all the local responsibilities and without applying the principles and the objectives registered in the European Chart of Local Autonomy.

In spite of all these, public administration, with its characteristics, it is one of the most qualified factors to project the sustainable development of the community that manages in accordance with the concrete necessities of its members. Today, an efficient administration won't try to create or to influence the development of one field

or another, because this assignment belongs to managers' companies' responsibility. Today, an administration, that knows and respects its role, carries on an attractive economic environment and develops the systems that generate the movement of economic and social activities.

3. CONCLUSIONS

The problem of sustainable development must be approached from the point of view of the equilibrium between the necessity of continuing the economic and social growth and the necessity of environment conservation – as single solution to increasing quality life issue.

As we can see from recent conferences' thematic, the Governs were preoccupied to elaborated regulations to sustain the economic growth and, in the same time, to impose severe conditions regarding environment preservation. Hereby, we can reconcile the human capital with the natural capital, made by regenerative and nonregenerative resources. That's why, more than ever, the sustainable development must be based on innovation – as the only way where through man can find ways to increase the wellbeing and to rationally use natural resources, as much as necessary to the next generations.

Creating and implementing to every level of Romanian society sustainable development strategies, can generate profound transformations that finally can decrease the inequality between Romania and European Union. Romania is not the only country in the world that confronts itself with globalization offensive. That why, this process mustn't be ignored, so much the more it has sometimes aggressive nuance in its interaction with economic, social and politic structures of a country.

In consequence, Romanian Government and the civil society, as principal vector of democracy, must take care of our own environment and resources. This can be achieved by initiating ample actions intended to assure a durable economic development for Romania. In this actions there must be found: the technological development, the social protection and the environment preservation.

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THE UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN EDUCATIONAL AREA

TEODORA VĂTUIU, VASILE POPEANGĂ *

ABSTRACT: *The Learning Space knowledge management system, offers a wide range of possibilities on how to gather, store, exchange and restructure participants' collective knowledge. The advancement of information and communication technologies, offers the training sector the promise that the latest generation of network applications will induce qualitative changes in education and training. The restructuring of the traditional forms of education reverses the direction of social movements: it is not the student that goes to the school, but rather the school that approaches the student. Within this co-operative learning procedure, all projects and project outcomes can be documented and made publicly accessible, discussions can be summarized, and literature and link lists, as well as collective search, learning and composition process of the background materials become available.*

KEY WORDS: *Digital economy, Information and Communication Technologies, the Knowledge Management System, the Restructuring of the Traditional Forms of Education.*

1. INTRODUCTION

The major changes in the last years – the exponential increase of mobile communications and the number of the Internet users, the contribution of TIC sector (technologies of information and communications) at economic increase and at job creation, restructuring of the companies and business in general in order to benefit efficiently from the new technologies, the accelerated development of electronic commerce – support transition from industrial to post – industrial era. Widely using of informational technologies and communications as well as the progress towards the Informational Society, assures the economic increase in conditions of maximum protection of the environment, accelerating reducing of physical consumption in the

* *Assoc.Prof., Ph.D. at the "Constantin Brâncuşi" University of Tg-Jiu, Romania*
Prof., Ph.D. at the "Constantin Brâncuşi" University of Tg-Jiu, Romania

favor of information valorizing and knowledge, displacement of the center of weight from investments in fixed means to investments inhuman capital. In this way the Informational Society integrates the **objectives of sustainable development**, based on social justice and equal chances, freedom, cultural diversity and innovative development, ecologic protection, restructuring of industry and business environment.

The new digital technologies make the access, storage and transmission easier and more available. Having the digital information at disposal, this may be transformed in new economic and social values, creating huge opportunities for developing new goods and services. The information becomes the key-source for **digital economy**. This notion refers especially to present transformations of education activities as a result of using the digital technologies, which assures the access, processing and storage of information in an easier and cheaper manner. The new economy is characterized through intensifying of enflaming of knowledge within the new goods and services, increasing the importance of learning and innovation of globalization and sustainable development. The huge bulk of information changes the operational way of markets, making the restructuring of markets and the advent of new opportunities possible through the creation of value through exploiting the available information.

Building the new pattern of society raises major social and political problems – both at national scale and international – of attenuation of **digital divide** phenomenon (removing from benefits the new technologies of some social categories and of some regions/ geographical areas) and of social cohesion, of preservation and promotion of culture specific to each nations and local community, of protection towards the citizen and consumer. Settlement of these issues can be done only through a wide dialogue among the governmental authorities, the representatives of the business environment, of academic environment and the civil society.

The government and its institutions have the role to stimulate, lead and control this transition process towards the Informational Society through concrete programs and through initiating a new background of specific regulations. In this aim, both the national priorities of development on medium and long term and the adhesion objectives at Euro Atlantic structures have to be taken into consideration. The action program of European Union eEurope– "An Informational Society for Everybody" constitutes an important background of orientation.

The strategy of formation and reformation of human resources constitutes the departure of economic and social modernizing policies of Romania. The educational policies promoted by Romanian Government have as a main objective the education itself, with the implication of the principal actors of academic process.

Investment in education and people training is the most profitable for a society's developing on long term. That is why the institutions of education and learning, as well as those of scientific research are regarded as strategic institutions for the national destiny.

The governing program starts from the idea that our performances will be determined first by the competence and people's training, by their manner of working, by the capability of institutional structures of valorizing efficiently this potential.

The education is the strategic factor of perspective development and it concerns the multidimensional and anticipative shaping of the human factor. The changes in the educational system will have effects in all the components of society, being the deciding key factor for passing to a new kind of society. Designing their future with clearness and audacity call people to study permanently to study to improve their living condition.

In order to subscribe to the new horizon of post-industrial civilization, Romania has to reactivate its creative potential, the intellectual force and moral resources of society, its desire to state itself and the spirit of initiative of youth, the educational system and the other qualities of the human factor.

The governing program in this area is focused upon the following decisive factors: basic education for everybody, self-perfection capability of the educational system, higher education and scientific research, permanent education in an educational society.

In such a perspective, education and scientific research are not considered *consumption* institutions, but factors for multiplication and development of resources.

Through the complexity of the phenomenon implied by informational society's development, the phenomena that have to be understood and managed, through the necessity of building a new culture of knowledge and learning in the conditions of utilizing the new technologies and research-development, active participation of academic community (research institutes, education and culture) becomes also essential. Designated financing for using informatics in education until now and for the next period are low enough, comparatively to the budgets of most of the European countries, in such conditions in which 13,5% of the high school pupils have access at a computer only at school, in conformity with a study performed by the Center of Development and Innovation in Education.

Far of being a happy situation, it is not sad either – the emphasize on infrastructure in the period 2001-2005 starts to flourish and constitutes a solid base for the next steps of MEC, that should take into account the pupils' performance and the efficient teachers' using of computer in teaching. Acquiring by the teachers of a new technology, computer using for teaching and learning, as well as framing the educational soft are processes at the beginning, that have to be sustained and prompted in the extent they constitute premises for organizing a step focused on pupil.

Education system is appreciated by the government as a national priority that has to enjoy a special attention in the policy of long-term development. With the aim of its rallying at the contemporary requirements some measures have to be taken:

- Strengthen of the school role as a main institution of education and learning;
- Acquiring the informatics language. This program, which refers to population's teaching to read and write, represents the gateway to the tomorrow's world civilization. A minimal program is taking already place on the basis of which in a few years, each school will be equipped with computers and Internet access and with the necessary base for this kind of learning. During 2001-2005, 750.000 of computers have been acquired;

- Assuring the proper conditions for learning and fluent speaking two foreign international languages, especially by young people. This condition is vital for an efficient communication nowadays and the access to information;
- Thoroughly acquiring the necessary techniques for using the computer, that have become compelling components of the social life and contemporary development, especially at the top sectors of informational society;
- Studying thoroughly the Romanian language, history and civilization as fundamental elements for preserving the national identity within the context of our European integration and globalization, major characteristics of contemporary processes.

A certainty has become the fact that the step for information depends on many variables within the educational institutional environment – conservative on the one hand and a complex organizational culture on the other.

Different high schools and universities have different experiences concerning equipping with computers and educational software, depending on firstly by the attitude, opening and interest manifested toward the process by the managers of the respective institution. Besides a small ratio of high schools that effectively refused to use the laboratories brought by MEC, the biology, physics, chemistry etc. classes taking place in AEL laboratories, using electronic lessons have become a usual thing in our high schools. This thing has to be regarded as participating in a usual dynamics of educational system, future oriented. Not only some pupils' performance at informatics contests have to make us happy, but also the fact that the new generations will be prepared to live in an informational global society.

Due to the facilitating access at information during the entire life, the computer becomes a instrument necessary to each citizen of informational society we live in. the access to a job depends more and more on the level of competence demonstrated in the work with computer. The children who have not access to a computer and cannot use it will become marginalized in tomorrow society – a society based on knowledge.

2. EDUCATION INNOVATION BASED ON E-LEARNING

This E-learning is a kind of education, which takes place through the Internet. The learning solutions based on the Internet become more and more popular, offering more rapid results at low prices, a large access at learning and a clear accountability for all the participants at learning process.

E-learning supposes using the informational technologies and communications and the environments to deliver the educational materials and for improving the processes of learning, acquisition of knowledge and habits and assessment of pupils and students. E-learning includes:

- Research concerning the using of Internet (World Wide Web, WWW), electronic libraries and online data base;
- Materials for interactive learning (sometimes multimedia) simulations included;
- Group learning activities (electronic conferences, chat in real time or discussions

through electronic mail;
- Classes or discussions through video conference;
- Management of online classes.

In the present dynamic culture, the organizations, which implement the Web learning, give the participants within the knowledge, act, the possibility of valorizing the change to their advantage. Internet learning assures the responsibility, accessibility and opportunity. It allows the students and the organizations to keep the pace with worldwide economy, which is evolving now with the Internet speed.

E-learning is the solution of learning and communication problems arisen by digital economy. E-learning refers to Internet assisted learning. The process has begun being used in learning departments of the companies, schools and universities, as supplement in traditional teaching methods. The systems of e-learning may also improve the traditional learning materials as for example the discussions in the classrooms, textbooks, CD-s, computer learning apart from the Internet.

3. WEB SITE AS A SUPPORT OF EDUCATIONAL MANAGEMENT

Realizing an efficient and attractive Web site suppose passing through the following stages:

a) **Planning.** Planning represents the process through which we try to define clearly the reasons for which we want to realize a web site, what means we have at hand, who is the target- audience. The aspects we have to take into account when we plan a web site are: aim audience, access, contents, copyright, special effects, feedback.

When we make the plan for a web site we should remember that each web page has to have a clear objective. This has to be in conformity with the final aim and the chosen general theme. Many web-designers use different special effects to confer a spectacular feature to the realized pages. For the most used we can enumerate animated images, scrolling marquees, blink texts, Java applets, Java-scripts, shockwave animations, Flash, Active X, etc. Scrolling marquees (defiling texts), though at first sight the defiling texts from one side to another seem interesting, are not recommended to be used on a web site. So far the main means of communications between learning units and pupils or students was through the agency of digital clipboard. However this means of communication did not offer an interaction opportunity between the two parts or feedback. Once the Internet spread an easy communication is possible. Improving the methods through which the users interact with a certain site is essential for creating a good site. Using feedback is also very important for increasing the number of visitors and with the aim they express their thoughts, suggestions and commentaries regarding a web site. E-mail is the easier way to receive messages from readers and that is why it is compulsorily supplying the e-mail address on every page. On the other hand a web-master has to be able to answer in a short time in order to maintain a relationship of mutual trust.

b) **Model Maker.** Through model making of a page we understand the way the constitutive elements of a page are arranged: contents, graphics, links, navigation

system, multimedia elements, etc. Within the same process of model making the structure of the page will be analyzed. In order that all the information is presented in an attractive and original way a web page may be simple or divided into: Frames; Simple tables; Multiple or imbricate tables; Combination of these elements. The way in which the component elements are arranged in a web page depends on everyone's imagination and common sense. It is desirable to leave a good first impression with the first page. It has to be very attractive and interesting and clearly present what the rest of the site includes.

Let us not forget that we have 15 seconds to capture the reader's attention. Generally speaking, the visitors do not want to be bombed with selling supplies for some goods and services. We have to offer them more and more useful information and articles. When model making begins we have to take into account the following elements: the style of the pages, the component elements of a web page, contents, graphics, links, navigation system, and multimedia system, the model of distribution on the page, frames and tables.

The visitors of a web site have to recognize without difficulty a certain style, a certain touch, which we have to imprint the pages, which means we have to find special characteristics, an ingenious arrangement for these pages. They have to be quite different and even to stand out in bold relief in the multitude of web sites. Consequently we have to keep a personalized style and at the same time unitary.

Using a unitary design has another major advantage: when we want to add a new page, we have already the general format so all we have to do is adding the contents. In this case we have to pay attention that the model making of the page should range naturally within the general way of presentation. This think may be solved through the style of writing, the way it is arranged in page and using of empty spaces. We should not use a text written in only capital letters. This text is read more difficult, the reader will have the impression he is visually aggressed. Also it is not advisable to use blink texts and scrolling marques.

It is also useful to try an attractive color for the text, but in this case we have to be sure that this color is in contrast sufficiently high with the background color. If the contrary happens, readability will be lower and the readers will be soon tired to navigate the pages of the site. The web page does not have to look like a massive block text. The contents may be divided in paragraphs, each paragraph being separated from the others through empty spaces. In this way the text is easy to read without harming the eyes. Graphics is used mainly to improve the aspect of a site and increasing its attractiveness. Images are also used for underlining a text or massage transmitted by a web site. It is advisable that we include only useful images and really useful.

When the model making is realized, great attention should be given to hipper-links. They may be: Internal (towards other pages within the site); External (towards other site on Internet). An interesting content and an easy navigation represents the two main components of a well-done site. Although, even the most attractive contents is not useful unless it stands out in bold relief by a clear and consistent navigation system.

The **Menu** is a graphical representation or of text type of the contents and it is often incorporated within the general theme of the site. The main menu has to supply quick and direct hints at the sections and information available on a web site. It will be realized in a practical and attractive shape. The usual location for placing the main menu is in the left side of the screen, but it also may be placed in the right side of the web page. The sections of the menu will be denominated so that they assure a concise and suggestive description of the web pages that are going to be accessed.

c) **Programming.** After we have finished the model making stage, we have to transform all the information that we accumulated in a web page. In order to do that, we have to have installed a computer, our work instrument, used to visualize a web site, the browser. Afterwards we need more programs and utilities. A simple web page may be used using the HTML language. If we do not know this language, there is no problem. We can build a web page using HTML editors or we may look for sites where there are patterns of web pages. We still need a graphic editor, in order that we may realize the images we want to insert in the web pages.

d) **Publishing.** In this stage let us suppose that we have finished the effective realization of the page on our computer. We have to carry on and think about choosing a domain name for that site. The name has to be suggestive enough and symbolize our preoccupations. Then we should pick a host. As well as the domain name, we have to choose between choosing a free host or web host, in exchange for some further facilities. Then the stage of FTP transfer follows between our computer and web hosting we have chosen. If we have used an HTML editor (for example Microsoft Front Page or Macromedia Dream weaver), we have the possibility to use the options of closed files transfer included in these programs. After we have transferred the files, the final checking options are compulsorily and valid HTML. We have to make clear the fact that checking the web pages may be done also as intermediate stages during realizing the web site. Finally, if we want that the readers come back to visit the site we have to renew it periodically.

e) **Site Promotion.** In order that the site should be visited by more and more readers, we have to start a promotion campaign. Not even the best realized web site cost a thing, unless it is brought to the readers' notice. We create a database that includes our promotion activities. For example for promotion with the help of drivers we make a table to include the following information: The name of the driver; Registration date; Necessary time for date registering; Key words; The code, which testify that the site was registered. After we have filled in registration form of the site, we have to wait a few days or weeks (depending on the chosen driver) until the site will be registered.

4. CONCLUSIONS

Promoting a web site is a complex and lasting action, but the learning technology improves both the efficiency and effectiveness of the education process. The learning technician combines projecting of the documents delivered on the Internet

(web), programming and designing for learning in order to realize teaching-learning materials delivered online.

We may certainly state that the Internet and the way to use it, the way different kinds of information are displayed through it, already does not have a secondary role in pupils and students' everyday life, but most important these elements of digital world have become irreplaceable.

Through our endeavor we have brought some examples, which show the efficiency of using the Internet, by demonstrating the wide possibilities of E-learning, that it seems it had an unexpected impetus upon the contemporary society. It is already known how many people have access, utilize and retransmit thus the information.

Throwing a useful light upon the educational sites allows solving two problems that are in front of their owners: attracting the visitors on server as well as belated attraction repeatedly. The initial server visiting depends on the group of servers that manage the traffic, due to which the visitor has the possibility of learning about the server. Nonetheless the belated success may be a fact in case of great bulk of repeated visits that take place as a consequence of the capacity of the server to accomplish the functions in the second group, that is carrying out some services qualitatively superior or fulfillment of other wishes for the visitors.

As you can notice, creating a site implies a serious attitude and often not very cheap in order to assure the launching of a qualitative site successful with the visitors.

We hope that this paper mange to demonstrate how important the presented problem is, what impetus it had upon the contemporary world and the most important of all, and how these elements can be used in our own interest, in education of the individual as a human being.

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ASPECTS CONCERNING THE ACQUIS IMPLEMENTATION BY THE INFORMATISATION DOMAIN OF TAXES (CHAPTER 10)

TEODORA VĂTUIU, VASILE POPEANGĂ *

ABSTRACT: *The European Council decided that the European Union shall go on monitoring attentively the preparations for adhesion and the achieved progress in Romania including the effective implementation of the assumed commitments in all domains of acquis. The acquis in the domain of taxes (Chapter 10) covers extensively the domain of indirect taxes, referring to value added tax and the excise duty.*

KEY WORD: *The acquis, European Union, IT Systems*

1. GENERAL CONSIDERATIONS

The process of Romania's adhesion contributes to ensuring the security, stability and economic growth, in Europe. This is in full accord with the fundamental project of the European objective, that of making of Europe a realm of peace, prosperity and overcoming the divisions in the past.

In December 2004, the European Council decided that the European Union shall go on monitoring attentively the preparations for adhesion and the achieved progress in Romania including the effective implementation of the assumed commitments in all domains of acquis, especially in the domain of justice and home affairs, competitiveness and environment. In this respect, the Commission will go on making reports concerning Romania's progress in her preparation for the adherence, together with observations, if it is the case.

The 25 Member States and Romania and Bulgaria closed the negotiations of adhesion in 2004 with the objective of receiving Romania as a Member State in January 2007.The Adherence Treaty was signed in April 2005. The ratification process

* *Assoc.Prof., Ph.D. at the "Constantin Brâncuşi" University of Tg-Jiu, Romania*
Prof., Ph.D. at the "Constantin Brâncuşi" University of Tg-Jiu, Romania

of the Treaty by the Member States is in full development, Romania ratifying already the Treaty.

Within the perspective of its quality of Member State, beginning with 2007, Romania will have to ensure the payment of its contribution for financing the budget of European Union within the system of own resources. The maximum level l of own resources necessary for the financing of Community spending cannot overcome1.24% on the whole of Community VNB. The sums, which are to be paid for financing the Community budget, are roughly 1,343 million euros for 2007, 1,525 million euros for 2008 and 1,563 million euros for 2009. Romania should be able to acccomplish the obligations of a Member State at the date of adhesion, on condition of dispatching its efforts in this aim in a number of areas emphasizing its strengthening of its administrative capacity on the whole. The study identifies three stages of preparation for the adhesion:

- Firstly there are the domains in which Romania is already prepared and attained a considerable level of following the line of acquis or in which the preparations are developing and will be finished until the date of adhesion whether the rhythm is maintained. They include, for example, the domain of transportation, applying the anti-trust legislation or mutual recognition of professional qualification in the domain of free mobility of the individuals, which one of the fundamental rights guaranteed by the Union.
- Secondly there are the domains where the efforts have to be intensified; here the authorities are encouraged to channel their efforts for orchestrating with the EU requirements in the period left until adhesion. This refers to social dialogue, some parts in the chapter of customs union, regulations concerning the environmental protection or the struggle against organized crime.
- Finally there are domains which constitute serious reasons of concern and need the immediate action of Romania in order to benefit from the advantages of the adhesion but also to contribute at maintaining the proper balance within the Union. These domains refer to the capacity of absorption and management of European funds or to ensure a high level in the domain food security to the citizens' interest and the present Member States. The authorities are strongly encouraged to make al the necessary efforts in order to bring a remedy the existent deficiencies without undue delay.

Romania's efforts have taken shape through:

- *The elimination of some exemptions in the domain of added value tax, which were not in harmony with the provisions of Guidelines VI of EEC (77/ 388).*

The provisions of The Extraordinary Order no. 138/ 2004, approved with alterations through Law no. 163/ 2005 with from 1 June 2005 have eliminated the following exemption in the domain of added value tax:

- Operations which falls within the show tax province;
- The societies of cable broadcasting for TV programs;
- Radio and TV stations other than the national ones;

- Selling of films or programs licenses, broadcasting rights, subscriptions at the international news agencies, other similar broadcasting rights intended to radio and TV activity, including the exemption for the import of material equipment used in recording;
- The operations in the units of penitentiary system using the prisoners' work.

Through these provisions, some of the commitments taken over by our country through the Document of taking up this position concerning Chapter 10 – Taxes - were accomplished beforehand and at the same time a raise of the budget income is ensured.

- Alterations in the domain of excise, which took shape through:

- The increase of excise for the products subject to harmonized excise, in conformity with the commitments taken over through Document of taking up this position concerning Chapter 10 – Taxes;
- The insertion within the sphere of application of harmonized excise of other products regulated through Community instructions, in conformity with the commitments taken over through Document of taking up this position, respectively black oil and electricity;
- Elimination of some exemption from excise payment in the case of ethylic alcohol and the mineral oils intended to eliminate the tax evasion and to ensure the alignment to the Community legislation in the domain;
- The increase of the excise level in case of other products subject to non- harmonized excise (cars with cylindrical capacity of 2500 cmc. crystal wares, furs ready-made clothes etc.).

The Commission supports financially speaking Romania's preparations for adhesion focusing on the provisions of eliminating the identification deficiencies. The total volume of pre-adhesion assistance available in the case of Romania is substantial. The EU budget for Romania is 1.023 billions euros in 2006, which will be used for the pre-adhesion programs.

The Adhesion Treaty provides Romania's adhesion in 1 January 2007. This includes a series of provisions in conformity with which the Union can take measures in order to gauge serious violation in the internal market operation or in the settlement of deficiencies in the domain of judicial cooperation domain in civil and criminal cases induced by Romania. Other security means refer to Community acquis. Provided the fact that there were certain methods for adopting and implementing the Community acquis in Romania exist in the extent that would be a serious risk fro Romania not to be prepared for complying the requirements of adhesion in a number of key-domains as the 11 domains as it follows: Justice and Home Affairs and Competitiveness, then Romania's adhesion could be delayed with a year. The Commission will carry on monitoring Romania's preparations and will encourage the country on the road of reform in the period until the adhesion in order to ensure this without any problem.

2. ACQUIS IN THE DOMAIN OF TAXES

The acquis in the domain of taxes *(Chapter 10)* covers extensively the domain of indirect taxes, referring to value added tax and the excise duty. It establishes the definitions and principles for AVT, while the excise for the energetic products, tobacco and alcoholic drinks constitute the object of EU guidelines referring to the structure of taxes, the levels of minimum rates retaining and mobility of excising goods. Concerning the direct taxation, the acquis covers a series of aspects referring to tax profit and has as an aim removing the obstacles in face of trans-frontal activities among enterprises. Finally the Community legislation in the domain of administrative cooperation and mutual assistance provides the instrumentalities necessary for preventing evasions and eluding tax payment intra- Community both in direct and indirect taxation.

In the domain of *AVT,* the legislation alignment is in an advanced stage, but efforts are necessary in order to ensure complete alignment till adhesion date. A series of progress has been registered in legislative alignment through eliminating some exceptions from VAT payment, which were incompatible. Still efforts are necessary for ensuring the legislation alignment of AVT to acquis until the date of adhesion. Especially the thresholds of record and exemption must be lowered to the level established in the Adhesion Treaty and the special schemes must also be included. During the negotiations, of adhesion Romania has been given specific treatments to go on the exemption of AVT payment concerning the international passenger transportation with a right of deduction on permanent basis and for applying a threshold of record and exemption of 35,000 euros for small and medium enterprises.

In the domain of *excises*, the increase of the rates of excises in the case of the products of tobaccos, alcohol and mineral oils can be registered as progress in adopting the legislative framework, starting with April 2005. Also efforts are necessary for completing this alignment, such as attaining the minimum level of excises rate, reshaping the provisions referring to intra-Community mobility for all the compatible categories of products and adopting the guidelines concerning the electric energy as well.

In addition, Romania has to introduce the legislation applied for the curtailed level of the excise in case of orchards' owners who produce for their own consumption in conformity with the transition arrangements obtained during the adhesion negotiations. In this respect, Romania has to ensure the adequate existence of administrative capacity for the effective application of the limitation in case of distilled products, charged at curtailed levels for the own consumption, taking into account the fact that applying the relevant legislation will need the control upon a number of small distilleries. During the adhesion negotiations, Romania was given also a number of transition arrangements for adjusting the level of excises applied in the case of oil products and electricity (petrol without lead, Diesel oil, natural gas, crude oil and electricity). Romania was also give a period of transition until December 2009 to go on

applying a more curtailed rate of excise than the minimum applied in EU upon tobaccos.

In the domain of direct taxation, Romania has to complete the applying concerning the indirect taxations upon capital increase, holding company and underlying company, interest, royalty and savings. It has also to take into account the alterations brought to the Norm concerning the fusions. In addition, Romania has to be sure until the adhesion that the existent and future legislation will be in conformity with the Conduct Code for business taxation. Romania must do the necessary preparations until the adhesion, to ensure an effective exchange of information on the basis of the Guideline 2003/48/EC. During the adhesion negotiations Romania was given a period of transition until January 2011 concerning the duty on payments obtained from interests and royalties.

With view to *administrative cooperation and mutual assistance*, Romania should complete the legislative alignment and make the necessary preparations for information exchange with the Member States until the adhesion date.

3. THE SYSTEM CONCERNING THE ELECTRONIC INFORMATION EXCHANGE

The preparations for the system concerning the information exchange for the excises (SEED) did not begin until 2004. Though recently, a series of progress has been analyzed, significant delays have appeared in founding the two systems whereas the development calendar is very tight at present. Romania has to intensify its efforts in order to prove that it may accomplish the requirements of IT inter-functioning of taxation until adhesion.

Concerning the payment of taxes through electronic means (*e-tax*), many beneficiaries have given up Venis and this happened because they wanted a new information product, which allows a better management of specific resources to each domain of activity, management offered by *itaxcollect.* Passing from a system to another was not an easy one though, and it meant a special effort both from the beneficiary and the IT Systems Company, which realized and implemented *itaxcollect*. Later on, the object module Internet Tax Collect, front-office component of the infrastructure was integrated, which allows the citizens information on taxes and duties that they owe. Information can be done through the Internet at the address: www.dgit4.ro, as well as at the info-kiosk. Also the electronic payment module was implemented, supplied by IT Systems.

The costs supposed by the information effort were low comparatively to other similar applications, while the savings went to other deficit sectors of the City Hall.

Because a strong platform was needed to administrate the high volume of data and at the same time to ensure the security of information, ORACLE was proposed. IT Systems offered the solution of such a platform by utilizing Oracle technology, thus ensuring a capacity of complex and complete integration, but also high feasibility, scalability, security and flexibility.

This application specific to the domain *Itaxcollect* accomplishes the management of data connected to the establishing, finding, control, tracing and cashing the taxes and duties, as well as other incomes of local budgets, being a system, which integrates the following modules:

- ItaxCollect Management System – the back-office product intended to be used within local agencies of taxes and duties;
- Internet Tax Collect – intended to citizens' information through the Internet or info-kiosk and Internet payments;
- ItaxCollect Data Migration – a product intended to data migration from the old collecting system to ItaxCollect server.

ItaxCollect is built in an object oriented technology and a three-layer architecture, where the power is given by the performance of the processing server, whose objects are stored on the whole in a server Oracle 9i. ItaxCollect customers, whether back-office customers or front-office customers, they are authenticated by an Application Server made by Java technology, covering the intermediate layer of the architecture.

Oracle 9i was chosen because its engine special power in an efficient manipulating of high volumes of data or in ensuring a high degree of security and safety, but also for its portability on different calculus platforms.

The structure of customer/ server type of the application allows storing and processing of all the data in a knot. Thus they are avoided storing and processing on separate machines and at different moments of time of the data supplied by many sources and different versions with possible errors, unevenly, incomplete, inconsistent or non- up to date recordings. In addition the data can be monitored and checked any moment without supplementary operations.

Thought as a collection of functional-specialized objects, the product allows along rapid and easy alteration of any of them, their interconnectivity with other applications of general interest without substantial adjusting. For example, the application of cadastre/ urbanism type or population record may be easily connected through the service of application, the same server of application, which ensures the Web server information publishing toward the tax payers. The fiscal calculus is intimately connected by the structure of the heritage rigorously stored in Oracle and is based on legal norm in force. Authorized persons may alter these norms any moment, through the menu of management depending on legislation changing.

Oracle 9i gives increased feasibility and quickness in conditions of increased competition for the resources. Taking into account, at present the utilization of Windows system on the greatest majority of customers-devices in the collecting points, the graphic interface for the current version of the product was compiled in native code Win32, having as an aim the speed of operation. The customer application offers a standard interface Windows, made in Romanian, consisting of windows and menus grouped on functional criteria (*Connectivity, Statement, Local Taxes, Treasury, Administration* etc.) the access at information takes place after authorizing the request

by the application server, the schemes administered by Oracle server are not able to be attained in a direct way, but only controlled manner. The system represents an extension of the payment system of taxes through the means of the card.

In order to ensure a more rigorous control of economic agents, which elude from duty payment owed to the state budget both in the moment of clearing the customs and later on, a project of normative act was framed concerning the use of data base of economic agents being on special record in the process of clearing the customs, a procedure, which will allow the clearing operations for those who will be on record in this data base.

In the domain of information technology, the Application concerning the processing of customs declaration through the Internet was realized.

The present number of connections is 30. The new mechanism of electronic payment of customs debts extended to 79 offices out of the 111 existent already, through 9 banks (ABN Amro, ING, HVB Bank, Raifessen Bank, UNICREDIT Romania SA, BCR, CITYGROUP, BRD Societe Generale, Banca Transilvania) using also Internet connections.

4. CONCLUSION

The European Commission, as a guardian of the Treaties, is now monitoring the preparations for Romania's adherence, in order to be sure that Romania is able to accomplish all the obligations and requirements ensued from its quality of member with full obligations and rights after the adhesion date, in the Member States' interest as well as Romania's.

The present study offers the results of evaluation of the preparations for Romania's adherence. It covers both the political and economic reforms made by Romania in order to accomplish the criteria of adhesion with EU, as well as implementing the legislative order of EU, which must be obeyed by every Member State, the so-called Community acquis.

Romania took decisive steps in order to reform the judiciary system to a greater independence and for the betterment of the situation of media's freedom, restoring of property, the minorities and children's protection.

Though a number of weak points still exist: significant efforts are necessary to go on the reform in the domain of public administration, the effective implementation of the reform in the domain of the judiciary system and the ensuring of effective application of the struggle against corruption, including the corruption at the top. In the area of human rights and that of protection of minorities, efforts are necessary especially for the betterment of the situation of the people with physical and mental disabilities.

With respect to the economic criteria, which have to be complied with the quality of Member State, they should be accomplished until the date of Romania's adhesion provided the continuance and the intensification of its efforts. At large,

Romania kept the economic macro-stability even through this policy the macroeconomic deficiencies were extended. Moreover the legislation and management administrative aspects in the business environment, including the application of the decisions in the area of bankruptcy, need to be improved. Romania registered significant progress in following the line of EU legislation.

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Index of Authors

The authors are entirely responsible for the content and the quality of the papers.

Instructions for Authors

THE TITLE OF THE PAPER WILL BE WRITTEN WITH CAPITAL LETTERS, CENTERED, AT 7.0 cm FROM THE UPPER EDGE OF A4 FORMAT, ALONG THE ENTIRE WIDTH, TIMES NEW ROMAN, 14 POINTS, BOLD.

(14 points)
(14 points)

The first name and the family name will be written with CAPITAL LETTERS, BOLD, CENTERED, 130 mm width, Times New Roman, 12 points, being followed by asterisks, *and in the footnote the didactic and scientific degree, the position and place of work of the authors (possibly fax, E-mail) are indicated, with italics, 130 mm width, Times New Roman, 11 points.*[*]

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<Tab> **ABSTRACT:** (Capital letters, Times New Roman, 10 points, bold) *The Abstract will only be in English and will have between 50 and 100 words, arranged all over the entire width, single, left – right alignment, all over the width of the printed space, Times New Roman, italics, 10 points.*

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<Tab> **1. THE TITLE OF THE CHAPTER IS WRITTEN WITH CAPITAL LETTERS, BOLD, TIMES NEW ROMAN, 11 POINTS AND WILL BE NUMBERED WITH ARABIC NUMBERS.**

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<Tab> The paper text paragraphs will justified, single spaced, Times New Roman fonts, size 11 points. The paper will be edited in English on A4 format (210 x 297), page setup: top 4,6 cm, bottom 4,6 cm, left 3,7 cm, right 3,7 cm, in WORD. The size of the symbol · is given next and is written in the instructions used to assist in editing the text. It indicates a blank line and does not show in the text of the paper, being obtained by pressing <ENTER>. The size of a <Tab> is 1,27 cm. No blank line is left between the paragraphs. Between the last line before the title and the title of the chapter and between the title and the first next line a blank line is left for each.

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[*] *Prof., Ph.D. at the University of Petroşani, Romania*

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<Tab> **1.1 Subchapter. Subchapters can be used in the text, numbered with the number of the chapter and a number showing the number of the subtitle within the chapter. The subchapters and the numbers are Times New Roman, 11 points, bold.**

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2. PRESENTATION OF THE FIGURES

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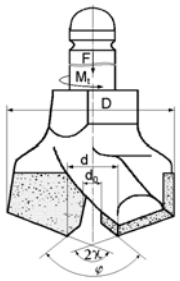

Figure 1. Detachable bit

Figures should be enclosed in the text in the order of their presentation, as far as possible on the page where reference is made to them. They shall be numbered with Arabic numbers. Black and white, high contrast figures are recommended. Photos can be used as well, but they should be of good quality, clarity and sufficient contrast. The figures will have a legend (name of the figure), which, along with the number, will be written underneath with Times New Roman, 10 points, centered as to the figure. The figures will be surrounded by text.

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The tables will be enclosed in the text, a 10 points blank line being left above and under the table, and will be numbered with Arabic numbers. Both the number and the explanations to the table are written with Times New Roman, 10 points, bold, centered in the space of the table and above it. The table entries will be Times New Roman, 10 points, bold, and the data in the table will be Times New Roman, 10 points. The thin lines of the table will be ½ points (0,02 cm), and the thick ones will be ¾ … 1 points (0,03 … 0,04 cm).

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4. PRESENTATION OF THE MATHEMATICAL EQUATIONS

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The mathematical equations will be with Times New Roman, 11 points, center of the page and numbered on the right with Arabic numbers between round brackets.

(8 points)<Blank line 8 point high>

$$X^2 + Y^2 = Z^2 \qquad (1)$$

(8 points) < Blank line 8 point high>

An 8 point high blank line is left between the last line before the relation and the relation and between the latter and the next first line.

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[1]. Nicolescu, O. - *Sisteme, metode şi tehnici manageriale ale organizaţiei***,** Editura Economică, Bucureşti, 1999