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PROFILE OF SOCIAL SERVICES FROM JIU VALLEY IN LIGHT PROFESSIONALS PERCEPTION. QUALITATIVE APPROACH

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ABSTRACT: *This study aims to analyse Jiu Valley social services profile using a qualitative perspective – focus grup analysis, by investigating perceptions of social services professionals from Jiu Valley, Hunedoara County, Romania. The qualitative methods of investigation, particularly important in achieving a comprehensive profile of social services from the Jiu Valley was to achieve a focused discussion sessions on social services. The following objectives were targeted by focus group: analysis of social professionals' perception on social services from the Jiu Valley, Hunedoara County and identifying internal and external factors, to put their mark on the functioning of social services.Upon completion of discussions session focusing on social services in the Jiu Valley to conclude on the following aspects: social professionals perceive favorable development of social services in the Jiu Valley region in the period 2002-2008, and considering the dynamic development of these services is progressive. There are a number of elements which are seen by professionals as catalysts for the proper functioning and development of social services and factors inhibiting or blocking the functioning of these services.*

KEY WORDS: *Jiu Valley region; professionals; SWOT Analyses; social services; social-economical context.*

JEL CLASSIFICATION: I38

1. INTRODUCTION

In response to changing needs and societal challenges, "social services is in an expansion process being activated services focused on the individual needs: rehabilitation, adult education, childcare or services focused on the collective needs, while new social risks (aging population, with implications of population mobility,

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changes in family structures, etc.). Today have created a new trend for other types of social services" (European Commission, 2009, p.20).

According to Commission of the European Communities in 2008, both at European level and in Romania, there have been recent increases in the diversity of services reflecting different orientations of the European economy and society as a result of the aging population, changes in gender roles and family structures change, technological change and globalization.

In România, need for social services, in the context of socio-economic changes after the post-December 1989 and in the legislative context of development of national social protection system, more elaborate and specialized, has generated an expansion of social services at national and regional or local level, before beginning global crisis in 2008. Research data provided by Holt Romania, stated that under the closure of many institutions in 2002, "the need for social services was growing" (Mărginean, 2003, p.10). Also, in the next few years, the normative acts relevant to the social assistance system adopted within 2004-2006 referring to Law 47/2006 on national social security system, the Law 272/2004 on the protection and promotion of child rights, the Government Ordinance 68/2003 on social services, Order 21/2004 - on minimum standards for child care services type residential, Order 24/2004 on minimum standards for day care centers, Order 48/2004 on minimum standards for the development of life skills, etc., governing the procedures and methodologies for the establishment and development of these services.

In another study conducted by UNICEF in 2006 "Children at risk of hope. An analysis focused on the situation of vulnerable children are excluded and discriminated against in Romania" is presented to many aspects of the situation analysis of vulnerable children in Romania and is explained some of the deficiencies that occur in connection with "accessibility and quality of existing national services for vulnerable children"(UNICEF, 2006, pp. 117-120), deficiencies that attract attention to the real needs of the establishment of truly effective social services in relation to social reality. Thus among the deficiencies of social services in Romania following issues were mentioned: failure to provide an optimal balance between financial support and social services, between family-centered services and solutions that support services outside the family, between the central and decentralized through a balanced system.

Roth M. and Rebeleanu A., (2007) refer to causality between needs, social problems and social assistance. The authors show, on the one hand, the social problem of the client system (individual) as "the result of complex interactions between environmental factors and the hereditary", on the other hand, emphasizing "different view of causality in social work" which "highlights the culture values and mentality values which give rise to social problems"care "pune în evidenţă valorile culturale şi de mentalitate care conduc la apariţia unor probleme sociale" (Roth & Rebeleanu, 2007, pp. 52-53).

In Romania's present social and economic contex, in the process of transition to the market economy, affects large professional groups and represents a important aspect to professionals (Popp, 2010).

Socio-economic complex issue of population in the Jiu Valley has generated an emphasis on necessity and the needs of people living in this area monoindustrial

depending to age groups of people (children in need, adults with disabilities, poor families with many children, Elderly persons to at-risk, etc.) or according to their specific problems (poverty, housing debt, educational deficiencies, problems with relationships, employment gaps, etc.).

Successive stages of economic restructuring operate at the Hunedoara County and Jiu Valley area, the lack of viable investment alternatives are continuously generated a major negative impact among the population. Economic consequences have been fully reflected on the social increased poverty in the area damaging the quality of life. These negative aspects have induced an accumulated economic and psychological discomfort to the individual level.

Industrial restructuring in the area have brought serious social problems in the population that conditioned the creation of social services to meet the needs of the population area. Individual and social needs of the population in permanent dynamic have resulted evolution of the social services sector.

2. PROFILE OF SOCIAL SERVICES IN THE JIU VALLEY - QUALITATIVE METHODOLOGICAL APPROACH

To achieve a comprehensive profile of social services in the Jiu Valley was used as a qualitative method of investigation focused discussion session (focus group) on social services with social professionals working in social services in the Jiu Valley, Hunedoara County.

*The following objectives were targeted focus group:"*analysis of social professionals perception on social services from the Jiu Valley, Hunedoara County"and "identifying internal and external factors, to put their mark on the functioning of social services" (SWOT[1] analysis for these services).

Focus group discussion session started with the *following research questions:* What are the internal and external factors that contribute to the development of social services?; What are the positive elements perceived by professionals as catalysts (facilitator elements) in the development of social services in the Jiu Valley?; What is the perception of professionals on the negative elements that block the development of social services?; What are the main opportunities that contribute to the continuity of social services in the Jiu Valley?; What kind of risks facing social services in the Jiu Valley?; What are the social services function in the Jiu Valley, in the opinion of professionals?; How professionals see the causes that led to weaknesses and risks in social services?; What types of needs of the population covered by social services?

2.1. Methodological approach description

A number of 12 professionals working in social services from Jiu Valley have participated in the focus group session was held as planned initial, after, in advance, expressed their intention to participate - included in the questionnaire - this group

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[1] SWOT- Strengths/ Weaknesses/ Opportunities/ Threats

discussion focused on the subject. Type of the group was homogeneous, closed. A discussion meeting was held which lasted for 115 minutes. Training period necessary for the application of this method was 1 month, during which, in addition prepare documentation set, were selected participants who have sent written invitations to participate in the discussion session that was to take place, they were contacted by phone to confirm participation. Have been sent several invitations to the discution session, for there to be certainty participation to a number of 10 to 12 professionals that know the social services problems in the Jiu Valley.

To achieve this methods have been used three main instruments: Protocol focus group interview guide to focus group participants and podium technique.

Approach for conducting focused group discussions - according to the protocol focus group - the following development stage: a) the introductory section, b) addressing the questions and recording responses, c) completion of the session. After the first stage of the scroll, which was presented the topics covered by study and was facilitated presenting participants, followed the second step of addressing the key questions contained in the interview (1), followed by the presentation of professional responses. One of the basic ideas outlined at the beginning of the meeting was that "there is no right or wrong answers to questions will be addressed and that every opinion expressed by participants is extremely valuable for this study" and another made mention at the beginning of the meeting was on using information that were to be used only for scientific purposes. To centralize responses of professionals in order of importance was used the podium technique where each participant had to summarize the issues requested in descending order of their importance since analyzed aspects of the situation on first, second or third place. Also, it has been successfully used brainstorming technique (storm of ideas) on each item covered by research. Brainstorming technique was selected especially because, being a participatory qualitative technique its value generating very many significant ideas for the theme concerned.

Focus group session participants were selected from a large number of potential participants (63 professionals) have indicated their intention to participate in group discussions. To be selected participants were used several selection criteria: voluntary option to participate in group discussions of professionals, availability of professionals to participate during the scheduled focus group session, the topics covered interest, confirmation of participation in session discussion. To answer research questions concerned, *the first direction of discutions targed at shaping of the SWOT analysis* Strengths, Weakness, Opportunities, Threats of social services from Jiu Valley from social professionals perspective. This SWOT analysis aimed *identifying internal and external factors favorable or unfavorable to put their mark on the functioning of social services* and *the second direction of discussions* focused on *shaping a social services profile based on the perception of professionals* participating in the focus group session.

To answer research questions concerned the following discussion topics were discussed:

a) For *SWOT analysis of social services from Jiu Valey* the following topics were addressed: a.1. Identifying the strengths / benefits of social services; a.2. Identifying

weaknesses in social services; a.3. Identifying opportunities; a.4. Identifying risks

    b) In order to shape perceptions of professionals on the development of social services were targeted following items: b.1. identifying existing social services; b.2. elements that led to the development social services; b.3. causes that have led to Weaknesses and Threats; b.4. needs categories covered by the social services

2.2. Data analysis and interpretation of focus-group

    a) ***The first round of discutions aimed shaping the direction of SWOT Analysis*** Strengths, Weakness, Opportunities, Threats of social services from Jiu Valley from the perspective of social professionals. The SWOT analysis aimed *identifying internal and external factors favorable or unfavorable which influencing the functioning of social services*.

    SWOT Analysis used podium technique and brainstorming techniques for to collect relevant data.

    Regarding *the strengths* of social services from the Jiu Valley were synthesized following points of view in order of their enunciation:

    - Activism, motivation, perseverance and goodwill of volunteers "*volunteers who help are very kind and persistent in their actions, being helpful for social services and especially in difficult times and proved its utility ...*" (N.E., social worker, private service), existence of young employees, interpersonal communication, experience in implementation of social projects "*a real strength for the benefit of youth social services is determined by the communication team and team collaboration which delivers beautiful results for services*" (M.A., legal representant private service), diversity of actions, specific target group, organizational transparency, applicability of laws, " I wish to point out that social services in the Jiu Valley is a large palette of social actions generated by the target and beneficiaries of social service" (C.D., psihologist, private service), , existence of financial resources "*…strengths of public social services are determined by the fact that they have the financial resources for social intervention and there are some clear legal rules that help them act*" (M.E., social worker, public service), wide range of target groups, prevention and limitation of risk situations, social support beneficiaries, replicable models of participatory at national level, recognition efficiency of social services at international level, development non-formal methods "*passion of social professionals in relation to social work and respect for professional ethics in relation to service users*" (C.T., psycho-pedagogue privat social service), efficient use of resources, the existence of specialized human resources, intervention professionalised, providing integrated services complex, the optimism of some beneficiaries, organizational collaboration with international entities, respondents social actions to the real needs of the population, infrastructure services - existing equipment, adapting financial resources at beneficiaries, information resources in child protection field.

    Regarding the *weakness* of social services from the Jiu Valley were synthesized following points of view in order of their enunciation:

    - The inability to counteract inadequate attitude of the beneficiaries, "*difficulty of co-optation of social beneficiaries in social activities*" (P.O., voluntary priest

coordinator privete social service Petroşani), "*There is a lack of financing services to ensure their continuity*" (B.M., social worker private service Petroşani), dependence on social service beneficiaries, the limited number of beneficiaries of services, "*material and financial resources are limited for some services provided by the NGO sector*" (R.C., legal representant private social service Petroşani "*excessive bureaucracy in social services and staff are demotivated* (A.C., professional public service Petroşani), "*insufficient legal information resources and legislative gaps*" (M.E., social worker public service Petroşani), "*communication with difficult beneficiaries, collaboration between public institutions and NGOs is difficult and centralization of social services is maintained despite the legal regulations of decentralization* (N.E., social worker public service Petroşani), "*social action model of some types of private social services has been developed determinated period of time and exponential growth best practice model generates organizational inability to ensure service quality*" (C.T., psycho-pedagogue privat social service Lupeni), "*migration of young people in other areas with higher economic potential*" (B.O., voluntary private service Petroşani), lack of coherence in the actions of public services, "*political influences put their imprint on the development of services*" (C.A., educator public service Petroşani), results of intervention in relation to their work, "number of beneficiaries is not provided in relation with the resources" (C.D., psihologist privat service Petrila), "*difficult procedure to access grants*" (N.E., social worker, private service Petroşani), "*insufficient involvement of public authorities on the issue of sustainability of social services*" (B.M., social worker private service).

It notes the following features regarding to identify <u>opportunities</u> from the social services:

- "The large number of funding programs" (C.D., psihologist privat service Petrila), "*European opening, the exchange of experience of all social sectors, foreign voluntary resources*" (C.T., psycho-pedagogue private service Lupeni), permissive legislation, private/public partnerships, "*specialized of youth in social and human sciences segment lead to the professionalization of social services*" (N.E., social worker private service Petroşani), "*social cooperation*" (D.N., psychologist private service), "*partnerships with international organizations, there is already funded social programs*" (P.O., voluntary priest coordinator privete social service Petroşani), "*experience in social services necessary to carry out fundraising activities*" (B.M., social worker private service Petroşani), "*NGOs flexibility to adapt to the needs of beneficiaries of social services*" (C.D., psychologist private service Petrila), "*Corporate social responsibility for youth services*" (M.A., representant private service Petroşani), "*social services have an excellent human potential*" (B.M., social worker private service), "*legislative changes easy sustainability of social services and also employment of graduates and young professionals in social work in public social services*" (A.C., educator public service Petroşani).

Regarding the <u>threats</u> of social services from the Jiu Valley were synthesized following points of view in order of their enunciation:

- "Closure of other mines in the Jiu Valley area will affect the evolution of social services and increase the number of beneficiaries in inequitable relation with resources" (N.E., social worker private service Petroşani), "currently socio-economic

crisis generates reducing social services budgets" (C.D., psychologist private service Petrila), "conditional financing that are directed only to some types of social action" (B.O., voluntary private service Petroşani), "the rigidity manifested by some public institutions in supporting private social services" (T.M., social worker Petrila), "the risk having the same low salaries of specialists will lead to demotivation social professionals" (C.T., psycho-pedagogue private social service Lupeni),"lack of accesing structural funds for social services is another major risk (C.T., psycho-pedagogue private social service Lupeni).

In achieving *the SWOT analysis* all statements made by the participants have been summarized and prioritized in order of decreasing highlighted by respondents in the podium technique, then have been centralized into analytical diagram only those considered most important by the professionals.

In order to achieve an objective analysis of information obtained and to respond to research questions was necessary to group pairs of variables to view to achieving a synthesis with which to identify the factors (internal or external) which facilitating the proper functioning of social services and risk factors that put their imprint on the functioning of social services.

The elements illustrated to the above matrix, we find that the strengths and weaknesses as a counterbalance to the opportunities and risks of social services. See that despite the fact that there are a number of risk factors related to the external environment *that can threaten the the proper functioning of social services* (mine closure, layoffs, demotivation specialists, increasing the number of beneficiaries of services, socio-economic crisis, budget reducing), *at the same time there are many external factors that determine positive some opportunities that can generate social service development* (possibility of new budgetary resources by accessing European funds, legislative changes that can support social programs, opening European who can facilitate access to updated information to field of social services that implicitly promote the development of social services, experience to accessing other social service resources may be the opportunity for partnership through an important resource for other social services which have not this capability).

Also, regards *strengths* generalized by respondents for social services from the Jiu Valley (manifestation of complex social integrative action, voluntary human existence, the existence of financial and material resources, large diversification of the target group or category of users of social services, organizational transparency, social service experience in the application of various social projects, functional models of good practice, experience to implementation of social projects, organizational transparency) *these will reduce vulnerability to potential threats or risks that could affect the functioning of social services in the Jiu Valley. Correlation between opportunities and strengths of social services concerns all the opportunities that best correspond to the strengths identified to order to optimize the operation of social services* (for example the strenghts: „experience in applying previous social project" correlated with the opportunity „ existence of a large type of European funding programs" will lead towards increasing efficiency and service quality social services to recipients of services).

SWOT analysis of social services in the Jiu Valley in general illustrates that elements concur to maximize and optimize the social services and what elements can minimize the challenges to social services in this area. (See graphic 1)

Factors encouraging the development of social services

Factors discouraging the development of social services
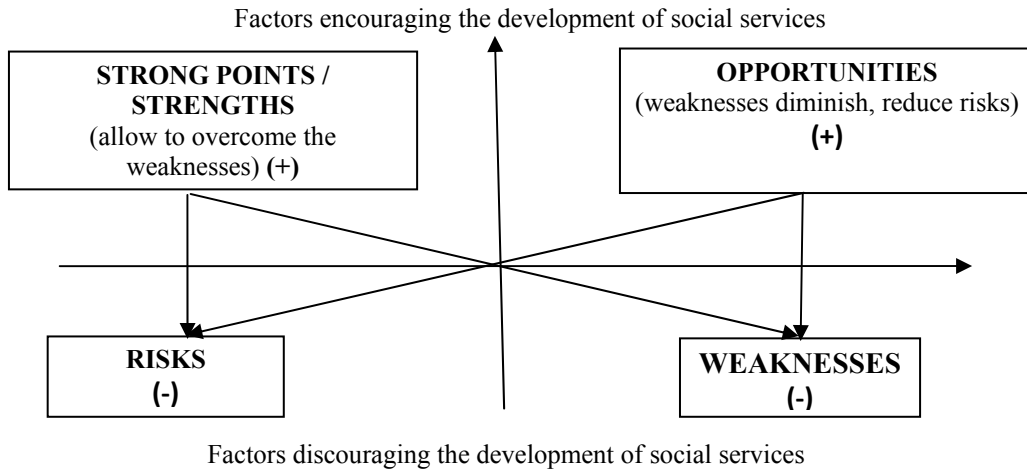
Figure 1. Synthetic SWOT Analysis

b) *__The second round of discutions was focused on outlining a profile of social services.__* Professionals were identified a number of 14 social service from the Jiu Valley cities. Concerning the development of social services in the period 2002 - 2008 from Jiu Valley Hunedoara County, the participants concluded that there is an progressive curve upward social services in the area (Figure 2).
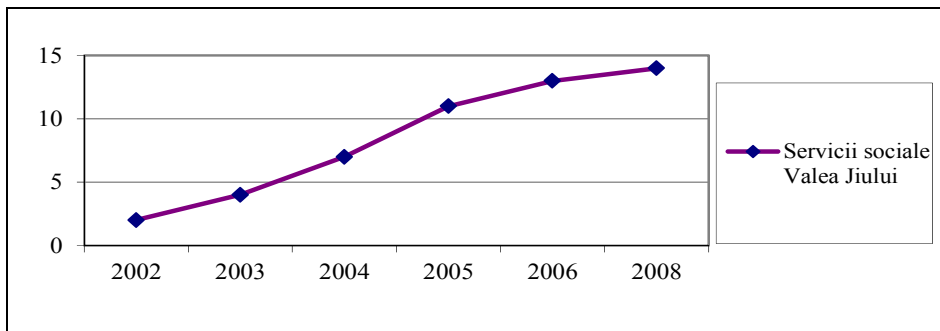
Figure 2. The dynamics of developing social services in the Jiu Valley (service number)

On the question "What elements do you think they competed in the development of these social services?" social professionals agreed on the following issues that generated dynamics of social services: *"- In my opinion need of social services was something very normal in the Petrosani and Jiu Valley community. Do not forget that during the closed mines in the area have been generated an explosion of social problems that caused the emergence and development of social services"* (N.E.,

social worker, private service); "- *Legal frame competed on the development of these social services [...] for example 2%, and the law sponsored legislation supported to some measure social services* (T.M., social worker Petrila); "- *I believe that the legislation becoming more specific help us to perfect the social services*"(P.O., voluntary priest coordinator privete social service Petroşani); *"- Coverage of the needs of service users has led to the creation of many social services in the Jiu Valley for example the need for food determined the creation social canteen or social assistance at home or the need for communication and relationship determined the creation counseling centers for parents or day care centers*" (B.O., voluntary private service Petroşani).

The main issues mentioned by professionals who have competed at the social services were, in addition to those listed above (the legal or legislative frames, needs of beneficiaries, geographical location or field of activity, adverse external conditions - the closure of mines) and ability for self-financial service capacity to attract private funds for these services and credibility of social services at community level.

To identify *internal and external factors that facilitate or make it difficult the development of social services*, and to understand what contributes to the development of weaknesses to social services was done an analysis 'cause - effect', using technique "tree diagram problems" through have been identified which the main causes leading to the emergence of weaknesses to social services. In this sense, the experts mentioned the following reasons: the limited budget allocated to social services system *"public authorities do not allocate funds for social services provided by NGOs and NGOs are forced to identify their own resources are not easy to obtain"* (N.E., social worker private service Petroşani), large number of calls for help coming from the community "*... social services face the problem of numerous requests for help coming from the people in the community, demands that can not be totally honored"* (M.E., social worker, public service), insufficient financial resources to meet the needs of social services and legal frame unfavorable*"even if made progress in legislative field,* There are some methodological weaknesses *for example increasing quality of social services* the standards provided by law but by same resources*"* (B.M., social worker, private service), institutional framework, political factors, socio-economic instability.

In the figure 3 is outlined the tree social services problems which presented graphically the relationship between the causes that have led to weaknesses in social services.

An interesting aspect of the discussion session was the passage of the subject items that have favored the development of social services subject to the needs of the population, from the discussion of participants distinguished very often the term "needs". The respondents agreed the idea that there is a direct relationship between the needs of beneficiaries and types of social services and after enunciating the main categories of needs: basic physiological needs (need for hot food or basic food, clothing, footwear, shelter, personal care plan), health needs (for drugs and primary care at home), affective needs and emotional needs, needs of family affiliation, safety needs, social utility needs, the need for respect, the need for self-fulfillment and spiritual needs, have been highlighted general types of services who cover needs described above.

EFFECTS
(Weaknesses)

| Legislative and procedural gaps, Lack of financing services, bureaucracy | Migration of volunteers to other areas Instability to services | Limited capacity support. Uncertainty sustainability services |

Problems of social services

CAUSE

| The legislative and institutional Failure to allocate funds for private services authorities | Political factors, Failure to maintain the young volunteers Unstable socio-economic factors | Crisis and the large number of requests for help; Limited budget |

Figure 3. The tree diagram of social services problems

In the closing session of talks focused on the theme of social services in the Jiu Valley was enunciated need to deepen the subject of social services from Valea Jiului to identify ways of cooperation between social service specialists conducive to improving the organization and operation of services.

Data interpretation focus group is descriptive revealing statements of participants as they were recorded to the session focused discussions *this analysis are not analytical,* particularly concerned by the perception of professionals on social services from Jiu Valley.

Focus group method was welcomed for direct extraction of objective information on social services, facilitating the identification of social perceptions of professionals on the dynamics of development of these services.

3. CONCLUSIONS

Upon completion of discussions session focusing on social services in the Jiu Valley to conclude on the following aspects:

a) *From the perspective of social professionals' perception on social services from the Jiu Valley.* Social professionals perceive favorable development of social services in the Jiu Valley region in the period 2002-2008, accentuating, in order of their development, 14 social services from the Jiu Valley cities and considering the dynamic development of these services is progressive. There are a number of elements which are seen by professionals as catalysts for the proper functioning and development of social services and factors inhibiting or blocking the functioning of these services.

The main factors contributing to the development of social services from Jiu Valley identified by experts are*: socio-economic context* (closure of mines in the area, staff restructuring) that triggered a complex social problem of population in the area, generating the need for social services and development of these services; *legislative*

situation becoming more specific favored the development of social services, *facilities of mining areas* contributed to the development of social services because the Jiu Valley region getting to be regarded as deprived area, providing institutions have access to more resources for the creation and development services; and not least was highlighted *areas of social activities* (particularly child protection) that generated the development of some segments of the services in detriment of other services (protection of older adults). By contrast, *the main inhibiting factors* identified by experts who have hindered the development of social services in the Jiu Valley are: *limited budget* allocated to private social services by local public institutions, *insufficient resources* to meet social needs of service users, *socio-economic instability* has made its mark on the functioning of social services, *institutional elements bureaucratic* procedures slowed social and *political factors* - frequent changes in political structures generated instability in social services.

    b) The SWOT analysis in terms of internal factors (strengths, weaknesses) and external factors (opportunities, risks) that contribute to development or stagnation of social services in Jiu Valley. Creating a profile of the functional social services in the Jiu Valley is a need for the public and private providers of social services, in order to facilitate a better understanding of strengths but also the real problems facing these services. Proper functioning of social services in the Jiu Valley is clearly influenced by internal and external factors that put their mark favorably or unfavorably on such services. Analysis and knowledge of internal and external organizational factors leading to minimization of Jiu Valley social services risk and also contributes to maximizing existing resources in these services.

    Regarding *the perception of professionals on internal factors* which affecting the proper functioning of social services, *are shown following strengths*, or positive aspects characterizing social services from Jiu Valley: *complex integrative actions type* of social services, *target group and category diversified of service users*, *the organizational transparency*, *resource efficiency*, *experience in implementation of social projects*, *social replicable models* of national level and *material and human resources* existence. Moreover, *the weaknesses* identified at the Jiu Valley social services refer to *the uncertainty of continuity and sustainability services*, *the difficult procedure access to EU funds*, *the growing number of requests for services* that generate incapacity to service all requests, *the bureaucracy*, *and the migration of young professionals* to other more developed areas with economic potential or *insufficient financial resources*.

    Regarding *professionals perception on external factors* that put their mark on social services *are highlighted the following opportunities*: *European openness*, exchange of experience between social sectors, social services *flexibility and adaptability* to the changing needs of service users, some regulations *favorable legislation* (2% Law and sponsorship) but following *threats or risks* that could affect the proper functioning of social services: the current *socio-economic instability* that has repercussions on social services budgets decline, *the possibility of closing other Jiu Valley mines* which may affect the development of social services and increasing the number of beneficiaries services, *restructuring of public social services staff*, rigidity manifested by some public institutions to support private social services, *specialists*

demotivation risk caused by low pay levels and uncovered structural funds for social services.

Regarding *limits qualitative focus-group investigation*, including analysis of issues that may limit mention *restricted area of the investigated population, relatively small number of questions, the choice of analysis variables for the issue concerned quite limited analysis and interpretation of qualitative data obtained* can be objective or less objective, *time-limited resources* for data analysis and interpretation of data.

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SOCIAL ECONOMY DIMENSIONS FROM ROMANIA. PERSPECTIVES AND REALITIES OF NGO SECTOR

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ABSTRACT: *Beginning with 2000 European Union understood the importance of a new perspective for European community: Social Economy. Social economy refers to individuals or legal entities who come together to take on an active economic role in the social inclusion. Social Economy represents the activities and services income generating to help vulnerable people to integrate on the labor market. In this article, in the theoretical part after we are presenting some social economy conceptual delimitations, are highlighted some dimensions of social economy in Romania, and also we analyze the actual situation and the role of the social economy for NGO sector. Our descriptive analyze used the following research methods: analysis documents, comparative analysis.*

KEY WORDS: *Social economy; perspectives; NGO sector; civil society.*

JEL CLASSIFICATION: A13

1. INTRODUCTION

In the last years we wondered about social economy dimensions and and its benefits. Thus, this study has started from the premise that "social economy has an explicit social mission from the perspective of serving the needs of members and the wider community" through income generating economic activities that support social activities for vulnerable groups, being conducted by organizations with a strong democratic character. (Constantinescu, 2011, p.4)

Based on the following research questions:

- What is it social economy and how can social economies to change and improve quality of life for people in need?

- What kind of leverage needed to make functional these aspects?

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- How can some good theoretical aspects or ideas regarding social economy be implemented in social reality?

- What is the situation of the contemporary social economy in Romania? through this analyse, we wanted to identify some concluding answers which clarify the dimensions of the social economy in Romania from the perspective of NGO segment.

In the vision of Constantinescu "the concept of social economy means many collective social initiatives with social purpose taking place within the boundaries of social and private sector businesses. The social purpose of economic activity is not limited to the provision of social services, as the term might indicate, but concerns the social finality of diversity activities which aim satisfying individuals, or community needs. (2011, p.4)

Defourney J. and Develtere P. considered that "the social economy includes all economic activities conducted by enterprises, primarily co-operatives, associations and mutual benefit societies, whose ethics convey the following principles: 1. placing service to its members or to the community ahead of profit; 2. autonomous management; 3. a democratic decision-making process; 4. the primacy of people and work over capital in the distribution of revenues." (1999, p. 33) A very important aspect highlighted by authors is the fact that the objective of the social economy is to provide services to its members or to a wider community, and not serve as a tool in the service of capital investment.

In achieving social economy, NGOs sector consist from associations and foundations play a significant role.

According to the Government Ordinance 26/2000, Article 1 "individuals and legal persons which carrying out activities in general interest or in the interest of local collectivities or, as the case, in their non patrimonial personal interest may constitute associations or fondations". So, the associations and foundations are organizations whose primary purpose is non patrimonial, but can also perform economic activities directly or through the establishment of companies. (Constantinescu, 2011)

In 2011, in Romania has elaborated the document "Social Economy Atlas" which in premiere highlights NGOs with economic activity both as integrated part of the NGO sector and separately, in order to make as clear economic orientation of the NGO sector. In this document it is clear that NGOs engaged in production are near to the concept of social economy. (Constantinescu, 2011, p.5)

Two common and related concepts with social economy concerns social enterprises and social entrepreneurs. "While the for-profit business operation and the local government enterprise may appear to be the logical and familiar institutional forms through which services are provided, there is yet another common form. It is a hybrid of market, non-market and non-monetary goods and services forming a stable organization that goes beyond the temporary function generally associated with the formation of an initiative. Its institutional form can best be described as a ''social enterprise''- a private business with a social purpose" (Laville, 2003, p. 398)

The concept of social enterprise is an extension of the social economy, adding some features: entrepreneurial orientation in the provision of social services, targeting a larger segment of beneficiaries and increasing the quality of democratic control processes. (Constantinescu, 2011, p.6)

Regarding Social enterprises Laville considered that this enterprises could "be an appropriate solution to present day service needs since they provides services which are simultaneously individual and semi-collective, that is, they are services which provide benefits for the community as well as for the direct users." (2003, p.399) In author opinion these services combat inequality, strengthen social bonds and articulate citizens' concernsand some European countries (France, Spain, Portugal, Italian) allow for a multistakeholder social enterprise that involves volunteers, workers, service users and local authorities in the decision making process.

A definition given by the European Research Network EMES network concept of "social entrepreneurship" refers to "the creation of a social value that is produced in collaboration with people and organisations from the civil society who are engaged in social innovations that usually imply an economic activity". (Hulgard, 2010, p.4)

2. RETROSPECTIVE ON THE EUROPEAN COMMON SOCIAL POLICY AND GENERATING IDEA OF SOCIAL ECONOMY

Construction of the European Union created with the aim to ensure a common and cooperative security policy, is founded on "consolidation objectives an area of freedom, security and justice, on promoting economic and social progress and on the affirmation of Europe's role in the world". (Centrul de Informare al Comisiei Europene în România, 2004, p.1)

Development of social and economic policy means formulating issues in secular manner, as the case of capital paradigm. (Popp, 2012)

Common European Union social policy, in the opinion of the European Institute of Romania, is composed of a set of complementary policies, developed and perfected over time, that "act in those sectors of activity which affect and generate individual and social wellbeing [...] and whose legal basis was established by the Treaty of Rome (European Community Treaty, 1957), strengthened by the Single European Act (1986/1987) and reinforced by the Maastricht Treaty (1992) and the Amsterdam Treaty (Treaty on European Union 1997)". (IER, 2003, p. 4, p. 8)

The main significant moments of social policy of the European community, are summarized in table 1.

A crucial moment in the evolution of European social policy, was the year 2000 when through drafting the Lisbon Strategy (Lisbon Strategy), was established ten-year goal of the European Union, with regard to transforming of the Community economy into the most competitive knowledge-based economy. By adopting the same year of the Social Policy Agenda, the objectives of the Lisbon Treaty have been translated into an action program for 5 years, which is the current social policy framework. Thus, the social agenda targeted the following aspects: social situation EU enlargement and internationalization of social policy employment rate of labor, the development of a knowledge based economy, the growing importance of information technology (Berne, 2003). Because new approach it brought by focusing on quality, 2000 was a key moment in the evolution of community social model. European Commission in February 2005, launched a new social agenda aimed at modernizing the European social model, under the Lisbon Strategy for growth and occupancy of

employment. Llena Berne, mentioned about the new agenda that "focuses on the employment and equal opportunities for all citizens and also try to ensure that the benefits of growth and the level of employment of labor force in the EU benefit all members of society, such that it is understood an increased interest for redistribution of wealth and equal opportunities" (Berne, 2003, p. 2).

Table 1. Significant moments for European social policy

No.	Year	Documents adopted	Observations
1	1957	*The Treaty of Rome*	Lay the foundations of European social policy through its articles on the free movement of workers and freedom of their establishment in the context of the creation of the common market.
2	1986	*The Single European Act*	Contains directives on health and safety at workplace, introduce social dialogue and the concept of economic and social cohesion.
3	1989	*European Social Charter*	Establishes fundamental social rights and with them, the course of action of European social policy.
4	1991	*Social Policy Protocol*	Establishes European social policy objectives that were prefigured Social Charter.
5	1992	*Maastricht Treaty*	Aimed at achieving a high level of social protection and a high level of labor employment, equality between men and women, rising standards of living and quality of life.
6	1993	*Green Paper*	Debate on the future of social policy at EU level and paves the way for the White Paper.
7	1994	*White Paper*	Sets out priorities of social policy until 2000.
8	1997	*The Amsterdam Treaty (ratified in 1999)*	Contains provisions regarding: citizens' rights, strengthening democracy, security and foreign policy.
9	2000	*The Lisbon Strategy*	Established ten-year goal of the European Union, represented by transforming its economy into the most competitive economy based on knowledge.
10	2000	*The Social Policy Agenda*	Agenda takes these specific objectives and strategy elements related to social policy and converts them into an action program for 5 years, which is the current social policy.
11	2005	*The New Social Agenda*	The New Agenda aimed at modernizing the European social model, the growth and the employment of labor. The New Agenda focuses on the employment and equal opportunities for all citizens.

Source: European Institute of Romania, Arpinte D. and others. A., 2008, pp.349-350; Andrioni, F., 2010, pp. 9-10

The key priorities from the new social agenda were included the fight against poverty and employment, on the one hand, and promoting equality on the other hand. Through these key priorities were supported by European Commission's two strategic objectives for the next five years: prosperity and solidarity for all Member States. In the New Agenda are granted a great importance to network activity, participation of various stakeholders by creating associations between public authorities at local, regional and national level, employers and workers' representatives and NGOs.

Since the New Social Agenda, which is currently in place at European level, are the two main directions of European Social action, employment and poverty reduction (based on the promotion of equal opportunities) by some measures to combat discrimination and inequality by encouraging equal opportunities for men and women, to analyze the impact of population aging and the future relations between different generations or to assist Member States in reforming pensions or the elimination of poverty, up to clarify the content and characteristics of social services of general interest, these measures were supported by EU Member States and at EU level are in progress.

ESN delegates from 18 countries of the European Union have developed recommendations for social services in the publication *Key Recommendations Social and Employment Activation*, on the theme activation on social and social commitment in social services. It is proposed that these recommendations will contribute to the development of national and European social policies on the subject. It was considered that, because social services are in direct contact with vulnerable persons, these services may have an active role in social inclusion of those persons through their involvement in community social activities as part of social inclusion. (ESN, 2006)

With regard to employment and social activation (active inclusion) social services from European Union have become more and more involved in measures by activation and integration of labor.Perspective of social services has not only a social but also an economic one, European Commission considering that the "employment is for many people defense guard against social exclusion" (ESN, 2008, p. 4). It is known that social protection focused on long-term care services or non-partisanship, leading users into dependence and social exclusion. Social workers of many European countries have had the experience working with various people at risk whose problems were amplified, result of their inactivity on market long-term labor. Through measure by social activation and active inclusion is important to underline that the "social services have the potential to activate people and lead them to become strong and independent" (*Ibidem*). Therefore, it was stipulated in the same document, a priority condition is that the service to work with other multidisciplinary sectors: health, adult education, employment services, employment, and economic sector.

So, the genesis of European social economy based on ideas contained common European social policy that underlines the need cooperation between the social sectors and the economy sectors to eradicate poverty and promote employment and social inclusion.

3. SOCIAL ECONOMY REALITIES FROM ROMANIA AIMING NON-GOVERNMENTAL ORGANIZATIONS SEGMENT

In the following we make a diagnosis of the general dimensions of the social economy in Romania, diagnose aimed at covering the following analysis indicators: 1) the number of NGOs included in the social economy, 2) the number of non-governmental organizations (associations and foundations) active in the social economy, 3) number of employees in social economy organizations, 4) income and assets associations and foundations economic activities; 5) areas activity of NGOs; 6) regional distribution of social economy organizations; 7) evolution of the number of NGOs in Romania, 8) rates establishing associations and foundations during 1990-2010.

To achieve this diagnosis was used as a research method: analysis of documents provided by FDSC Romania (*The social economy Atlas*, 2011; *The analysis of financing mechanisms directly from the state budget for NGOs in Romania*, 2007 and analysis of statistical data provided by the INS during 2000-2009).

According to the National Institute of Statistics, in Romania social economy includes a number of approximately 70,000 organizations and 36.77% of them were identified as active organizations and accumulated incomes of organizations active in the year 2009 reached EUR 6 million lei equivalent to 1.5 million euros. In social economy organizations worked more than 163,000 employees, representing 3.3% of total employed population. (See table 2)

Of the total 25,744 active organizations, associations and foundations hold the weight of social economy segment in Romania from two perspectives: a) the representative number of these organisations - 23100/2009 which represent 89.73% from organizations active and b) the amount of income, fixed assets or staff employee.

Table 2. Social economy organizations: Financial indicators

2009	Nr. Organizații Active	Total Imobilizări (Lei)	Total Venituri (Lei)	Total Excedent (Lei)	Total Personal Salariat
Asociații și Fundații	23,100	4,487,997,415	4,318,562,541	643,597,873	109,982
ONG cu act. economica	2,471	2,092,026,105	1,889,902,178	235,425,576	23,551
Case de Ajutor Reciproc	897	1,077,861,865	230,927,692	67,574,847	18,999
CAR Salariați	704	570,490,474	116,289,083	36,940,866	16,275
CAR Pensionari	193	507,371,391	114,638,609	30,633,981	2,724
Coop Meșteșugărești	788	597,105,105	760,469,633	38,138,113	25,553
Coop Consum	894	151,027,781	591,473,959	12,065,928	7,401
Cooperative de credit/ Bănci Cooperatiste	65	81,707,645	132,701,737	3,697,641	1,419
Total	25,744	6,395,699,811	6,034,135,562	765,074,402	163,354

Sursa: INS, 2009

From the statistical data provided, it appears that income and assets associations and foundations engaged in economic activities totaled 44% of total revenues and assets of non-governmental sector. Incomes generated exclusively by economic activity (sales or public contracting) have experienced a constant upward trend, reaching a value of 792 million lei at the end of 2009, which means a

contribution of 18.5% of economic activities in the total income of the non-governmental sector. (Source: INS 2009, FDSC 2012)

Regarding the main activities of NGOs in Romania in 2009 the first places are classify the social and charitable activity (23.9%), followed by the field of sports (17.8%), education, research and training (10.6%). The following table shows that despite the fact that the total revenues of organizations working in social charity are the highest (25.8%), incomes from economic activities represent 16% of total economic income, agricultural associations even if recorded 13.5% of total incomes registered the highest percentage (30%) of the total economic income.

The religious organizations, followed by social services and sports organizations have attracted economic income during 2009. Also of the data provided by the INS to show that sports organizations and educational organizations are the biggest employers in the NGO sector in Romania.

Table 3. The nongovernmental organizations: Areas of activities (2009)

Domenii de activitate	2009 (total ONG)	2009 (% din total ONG)	2009 (Total venituri)	2009(% din Total venituri)	2009 (Total venituri economice)	2009 (% din Total venituri economice)	2009 (Total Personal)	2009 (% dinTotal Personal)
Social și Caritabil	5522	23.9%	1,112,972,238	25.8%	124,801,211	16%	18,221	16.6%
Sport și activități de hobby	4103	17.8%	592,930,500	13.7%	115,691,611	15%	25,804	23.5%
Educație, Cercetare și Formare Profesională	2456	10.6%	508,887,395	11.8%	48,832,300	6%	25,537	23.2%
Asociații Agricole/Obști	2278	9.9%	581,088,727	13.5%	241,101,088	30%	8,155	7.4%
Cultură	2133	9.2%	188,505,951	4.4%	25,364,218	3%	3,522	3.2%
Organizații religioase	1852	8.0%	928,843,727	21.5%	183,781,589	23%	17,122	15.6%

Source: INS 2011; FDSC 2011

As mentioned previously in Romania are recorded in the year 2009 to 23.100 active associations and foundations. Regarding regional distribution of active social economy organizations (see table 4), these are spread in all development regions of Romania, associations and foundations with a weight higher in regions with greater development level (Central 4702, North - West-4389) and less weight in regions with lower development level (South East - 1783 South West 1790).

It may be noted, from Table 4, that 22% of all social economy organizations operating in rural areas, most representative of which are agricultural associations within the NGO sector and consumer cooperatives, which can be considered a rural phenomenon.

Table 4. Regional distribution of social-economy organizations

2009	Asociații și Fundații	CARS	CARP	COOP Credit	Coop Meșteșugărești	Coop Consum	Organizații de Economie Socială	% din Total
Nord-Est	2490	90	35	12	211	158	2996	10.6%
Vest	2370	51	22	5	69	106	2623	9.3%
Sud-Est	1783	125	19	8	126	112	2173	7.7%
Centru	4702	74	22	7	91	148	5044	17.9%
Nord-Vest	4389	87	24	14	106	153	4773	16.9%
Sud-Vest	1790	79	27	4	64	77	2041	7.2%
Sud	2091	86	34	10	74	112	2407	8.5%
București Ilfov	3485	112	10	5	47	28	3687	13.1%
România	23100	704	193	65	788	894	25744	
Rural	4,158	52	14		5	683	4,907	22%

Source: INS 2011; FDSC 2011

In the following table, it can be seen which is evolution of the number of NGOs is recorded in NGOs register of the Ministry of Justice. (Constantinescu, 2011)

Table 5. Evolution of the number of nongovernmental organizations in Romania (2000-2009)

	2000	2005	2007	2008	2009
Asociații si Fundații Înregistrate (Registrul ONG)	32,160	49,038	56,832	60,261	64,197
Asociații și Fundații Active (INS)	10,730	16,937	19,819	20,945	23,100
Rate de activitate	33.4%	34.5%	34.9%	34.8%	36.0%
ONG cu act. economică (INS)	1,265	2,536	3,203	2,416	2,471
Rate de act. economică	11.8%	15.0%	16.2%	11.5%	10.7%

Source: NGOs Register; Ministry of Justice; INS 2011; FDSC 2011

Thus, clearly reflects the idea that there is a steady increase by two times higher of the number of organizations registered in the period 2000-2009. It can be seen that the number of NGOs with economic activity has increased steadily from 2000 until 2007 and then has recorded a slight decreased in 2008 and 2009.

Regarding rates setting up of the associations and foundations in the period 1990-2010 there has been an ascendant curve in the next time periods: 1992-1997; 1999-2002; 2004-2007; 2009-2010, and on the establishment of foundations has been a progressive value during 1990-1997 and regressive value in the period 1998-2010 (see figure 1)
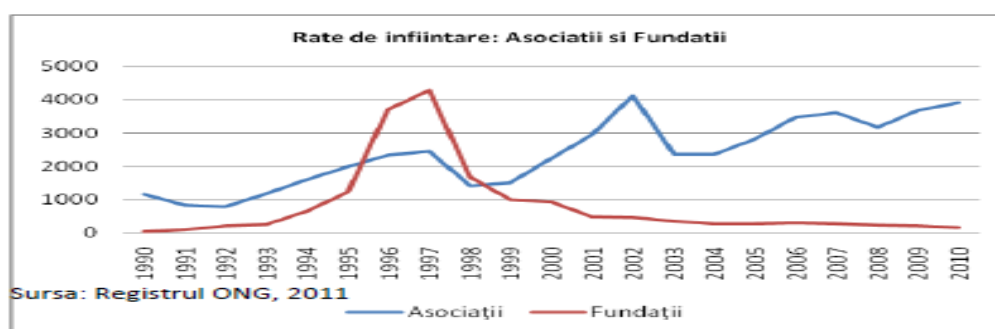
Source: INS 2011; FDSC 2011

Figure 1. Establishing rates of Associations and Foundations

4. CONCLUSIONS

The social economy represents a topical issue both at European and national level. In the context of European legislative regulations what supporting and aimed developing social economy activities, that offers sustainability activities aimed at the wellbeing of individuals and communities, non-governmental sector is a pillar of its development.

Social economy development took place on the background of political economic and social transformation, in Romanian and European society.

The political, social and economic changes since 1989 provide a policy framework conducive to the development of social economy.

In this moment, in Romania, are registered over 70000 organizations, from which over 23100 are active. These organizations are working in different fields: education, social, environment, culture, religion, offering various goods and services, establishing partnership relations with public organizations and business, mobilizing interests and capabilities, defending rights and promoting new ideas and reform projects (FDSC, 2010, p.7)

From the statistical data provided, it appears that income and assets associations and foundations which offered economic activities totaled 44% of total income and assets of non-governmental sector. The incomes generated exclusively by economic activity (direct sales or public contracting) saw a steady growth trend at the end of 2009. (FDSC, 2007)

Regarding the main activities of NGOs in Romania in 2009 the first places are classify the social and charitable activity (23.9%), followed by the field of sports (17.8%), education, research and training (10.6%). (INS, 2009)

In recent years, in Europe and in Romania, made their appearance those social entities provided by the NGO sector that operates outside the strict limits of the market and the state, and operating in the social economy. These entities have in the vision of Lester Salamon, following common features: have an institutional structure; are private, independent of the state in institutional terms; do not distribute profits - do not share profits with administrators (managers) or with a group of their "owners"; self-

governing - have control over their own operations and decisions; are voluntary - participation in them is not required by law and can attract voluntary contributions of time or money. (Salamon et al., 1998)

In conclusion, social economy involve economical and social dimensions both of them are interacting, the social economy representing a human approach to the problems and economic facts and constituting a special type of economy that aims to benefit the entire society.

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COMMUNICATION BY EVENT - THE EFFICIENCY OF SEMINARIES AS A WAY TO INFORM AND TO TRAIN

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ABSTRACT: *Starting from the idea that nowadays the companies use the promotion and communication by event more and more because of the advantages it entails, this paper uses the marketing quantitative research as a tool and it's scope is to present the opinions and the attitudes of the people that participated to seminaries within a project supported by European funds, regarding their efficiency as a tool for information and training.*

KEY WORDS: *communication by event; seminars; marketing research; focus group.*

JEL CLASSIFICATION: *C38, M31, M37*

1. CONCEPTUAL ASPECTS REGARDING THE COMMUNICATION BY EVENT

Nowadays, the companies are more and more preoccupied to find the most efficient tools of communication with the consumer segment but, at the same time, very different from the usual ones, as well as for product/service promotions or promotions of ideas and behaviors in certain situations. The classical communication tools seem to be superseded and the public is immune and, at the same time, bored, fed up with them.

Even far away in the past, business men and politicians understood the fact that the mass effect stimulated impulsive acquisition or acceptance of ideas, so that in the present day, by transforming the events in marketing tools, these can become efficient ways to attract attention - in other words communication channels used to send out the messages. (Popes, 2003)

Both the German and the Nord-American marketing schools have studied this topic, after the communication by event proved to be efficient, but still the definitions are not homogeneous (Roşca, 2011). This is, on one hand, because that communication

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by event within the promotional mix was realized not long ago (Bruhn, 1997), and on the other hand, because the event can be very different as type (sports, cultural, social, political events and so on) (Graham et al., 1995).

At the same time, in the specialized literature one can find diverging opinions regarding the inclusion of communication by event within the classical communication instruments. Thus, there are specialists (Kotler, 2010) that include communication by event within the specific sale promotion tools, defining it as a way for companies to promote their brand, by sustaining their own events or by participating at external events.

Other authors (Balaure & Popescu) include communication by event within the public relations, saying that these can help the organization to reach the following objectives:

- increasing or consolidating notoriety;
- the proper information of the target groups regarding the product, the brand or the organization;
- detriting of products with lost identities, that get confused with similar ones;
- creating a favorable image, by reaching the public liking towards a brand or an organization;
- the launch, in an original manner, of new products;
- motivating the staff of the organization and the sales brigade (Popescu, 2004).

Because of the importance it gets in the last time, motivated by it's efficiency on such a competitive market, a new tendency appears: to study this promotion technique as a standalone tool.

The main advantage of communication by event is that the messages the company wants to send, regarding products, other activities or even behaviors that the company wants to promote, reach precisely the target, assuming that at this events are invited exactly the target people (the market is segmented before the event, according to the relevant criteria for the message that will be sent). At the same time we can underline the flexibility of this tool regarding the objectives to be reached, as mentioned before, as well as the organization possibilities (sports events, demonstrations, conferences, seminaries, fairs, exhibitions and so on). One further advantage is that it can successfully add up to other promotional activities that the company sustains within an integrated marketing communication, activities that, most of the times, can be found within the classical ones (advertising, sale promotions etc.). (De Pelsmacker, et al.)

To these one can add up also the repercussions of the fact that this type of communication has the advantage of interactivity, of the direct contact with the public and so, the company can obtain vital information regarding it's endeavors, both by observing the impact of the sent message, as well as by getting relevant information regarding the marketing activities, but also the offer of the company (Popescu, 2003).

Amongst the typical actions of the communication by event one can find realization of seminaries and workshops, both at the headquarters of the company and in neutral location, where they can present products, present the public the many activities of the company or inform the public regarding some topics of interest.

Considering the theoretical aspects regarding the importance and, most of all, the efficiency of seminaries as a channel to send out information, this paper has the scope to present the opinions and attitudes of the participants to the seminaries sustained within a project financed with European Funds (The European Social Fund by the means of POSDRU 2007-2013), regarding their efficiency as information and training tools.

The main objective of this project is to create a mutual network to increase the level of protection of health and security at the workplace in the metal-working industry, by the means of implementing a mutual system of risk prevention and management at the workplace, and the people that implement it considered that with the help of 10 seminaries they will obtain the wanted awareness from the beneficiary, respectively that they will become aware of the importance of the measures to prevent and manage the risks at the workplace (http://www.aeronavsecur.ro/index.htm).

2. OPINIONS AND ATTITUDES OF THE PARTICIPANT TO THE SEMINARIES REGARDING THE SECURITY AND THE HEALTH AT THE WORKPLACE WITHIN A PROJECT FINANCED BY THE EU, REGARDING THE EFFICIENCY OF THE SEMINAR AS A INFORMATION AND TRAINING TOOL

2.1. Context of the research

According to a CE report, worldwide 250 million accidents take place every year, the equivalent of an average of 685000 accidents/day, 475/minute or 8/second. The consequences are dramatic: ca. 3000 deaths/day, e.g. 2 deaths/minute.

The classical information and training methods in the field of the safety and health at the workplace (SSM) are getting less and less efficient because of the saturation amongst the employees, but also the specialists responsible for training in the field of SSM, and one tries continuously to find new information, training and motivation methods for the employers and the employees, in order to ensure and to observe the standards in this field.

In this context and keeping in mind the one of the priorities of the European Social Fund, the main instrument that the European Union uses to finance the strategic objectives of the occupational policy, is "Increasing the adaptability of the workers and the enterprises", starting from December 2010 in our country is implemented the strategic project *"The network for the protection of the health and the security at the workplace in the metal-working industry - AERONAVSECUR"* financed by the ESF thru POS DRU.

Thru this project one tries to identify the actions that could be taken in order to reduce the economical and social costs generated by the risks that the workers take at the workplace, one searches and tests new training methods in the field of SSM. Amongst the new and tested methods one can find the seminaries or the workshop. More exactly, for the employees of the companies in the field of machinery construction and metal-working industries in Romania there were organized 10 seminaries, each for a period of three days. The employees had the chance to

participate to various training methods in the field of SSM, as following: presentations, practical demonstrations, viewing motivational videos, games, contests, discussion groups etc. At the end of each of these seminaries, the participants were asked to answer a series of questions with the help of a questionnaire that was the basis of the following study.

2.2. The general hypothesis of the study

The workers in the metal-working industry that participated in the seminaries appreciate as favorable such a participation and think that these contribute significantly to an increase of the level of training in the field of SSM.

The participants consider that a training done this way will have a real impact on changing the behavior in the field of safety and health at the workplace.

The workers from the metal-working industry that participated in the seminaries consider that, with the knowledge they acquired and the behavioral change, they will contribute to reducing the number of accidents at the work place.

The participants will want to make changes at their own workplace after they participated in this program.

2.3. Study objectives

The objectives were set by following the theoretical methodology, that entails dividing the process of setting up the study objectives in the three essential stages of it: setting the basic aspects regarding the management and the marketing, formulation of the researcher's questions and setting up the study objectives (Lefter, 2004); bellow you can find a presentation of the study objectives, as they appeared as a result of this specific process:

- determination of the degree in which the participants consider that the information and training by participating at seminaries has a real impact on changing the behaviors in the field of the health and safety at the workplace;
- determining the degree in which the participant appreciated the following aspects of the seminar: the usefulness of the training that they received; the information of the received information; the professional endeavor of the lecturers; the efficiency of the knowledge exchange with their colleagues within the seminar; the real impact on the safety at the workplace; the dissemination potential in the working environment for the knowledge received; the level of applicability of this knowledge in practice;
- determining the opinions of the subjects regarding the real impact that the participation to this kind of seminaries has on diminishing the number of work related accidents;
- identification by the participants, after they took part in the training program within the seminar, of the level of competency, aptitudes, qualifications that give them a greater ability to prevent the risks at the workplace, to be aware of their own responsibility for the health at the workplace, identification of the dangers that lead to risks at the workplace, to manage the risks in order to

ensure a safer working environment, to inform regarding the European standards in this field;

- determining the way in which the participants want to be trained in the future, by participating in seminaries or workshops ;
- identifying of other ways to inform and to train in the field of SSM, appreciated by the respondents;
- identifying of the most appreciated training methods used within this seminar;
- determining the way in which the participants intend to make changes at their own workplace after they participated in this program.

2.4. The research methodology

The marketing research is total; this assumes the investigation of all the members, information vectors of the basic population. Within this research, that means the participants to the seminaries „Prevention and management of the risks at the workplace" sustained within the project "The network for the protection of the health and the safety at the workplace in the metal-working industry – AERONAVSECUR" financed by the EFS thru POS DRU. The research method used was the face to face interview, and the preliminary data were obtained on the basis of a questionnaire, by direct interviewing. The data collection took place between February and June 2012, by interviewing all 250 participants at the seminaries that took place within the mentioned project.

2.5. Study limits

This study has a series of limitations - generated especially by the studied population, because this was limited only to the participants at the ten seminaries that were sustained within the said project. Extension of the studied population to all the employees in the metal-working industry is not possible, as well as the extrapolation of the results to all the employees in this industry, because the participants to these seminaries were not accidentally selected. Also, in the brief report of this research, presented in this paper, testing of statistical hypothesis was not considered. The authors consider still that one can objectively appreciate the efficiency of the seminar/workshop as an information and training method, subject of evaluation within this research, especially since one considered interviewing all the population studied, which is over 250 individuals. Setting aside the limitations of this study, one can state that the information obtained was particularly interesting and useful as a basis for a strategy to reduce the economical and social costs of accepting some high risks at the workplace.

2.6. Data analysis and interpretation

Every question was analyzed within the research process, but within this report we will present only the results for the most relevant questions. Data processing was made by the means of the SPSS – Statistical Package for Social Sciences.

One of the first questions was to measure the level of appreciation for a series of characteristics of the training program, for example the level of practical applicability of the obtained knowledge, the volume of the information received, the usefulness of the training within the seminar, the efficiency of the knowledge exchange with their colleagues within the seminar, the real impact on the safety at the workplace, the dissemination potential in the working environment for the knowledge received within this training program. In order to catch this aspect we used a semantic scale with five steps, where 1 means „Very low" and 5 means „Very high". (The scale assumed the existence of the same distance, the same interval between two levels.) The average score obtained as a whole by the training program, considering the criteria presented above, was 4.48, which indicates a good towards a very good appreciation. The criteria considered and presented above contributed at obtaining this overview, as illustrated by the following diagram. One can observe that the best score was 4.67 regarding the criterion "The usefulness of the training received within the seminar".

Overall, the appreciation level of the training program by the participants, considering the criteria presented above, was 4.48.
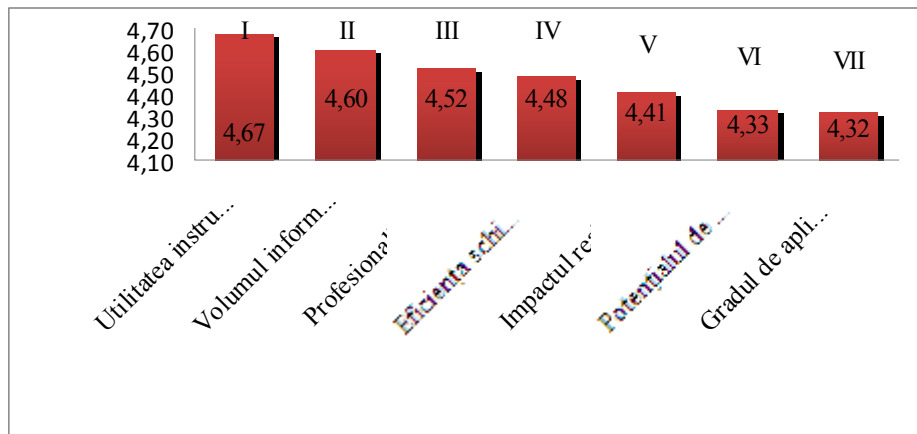
Figure 1. The appreciation of the main characteristics of the training program within the seminar

The best score was obtained by the criterion „The usefulness of the received training", with an average score of 4.67 points, followed by „The volume of information received", with 4.60 points, „The professional endeavor of the lecturers", with 4.52 points, „The efficiency of the knowledge exchange with their colleagues within the seminar", with 4.48 points, „The real impact on the safety at the workplace", with 4.33 points, „The dissemination potential in the working environment for the knowledge received", with 4.33 points, and the last place was obtained by „The level of practical applicability of the obtained knowledge", with 4.32 points.

One other aspect that was studied is the opinion of the participants regarding the importance of participating to such activities, in order to reduce the number of accidents at the workplace in the metal-working industry. With this question, the

researcher wanted to find out if the opinion of the participants to this type of training has obvious effects that can be quantified by the reduction of the number of accidents at the workplace. This aspect was measured using the Likert scale, during which the participants were asked to express agreement or disagreement regarding the following statement: „The participation to information seminaries in the field of risk prevention and management at the workplace leads to the reduction of the number of work related accidents"
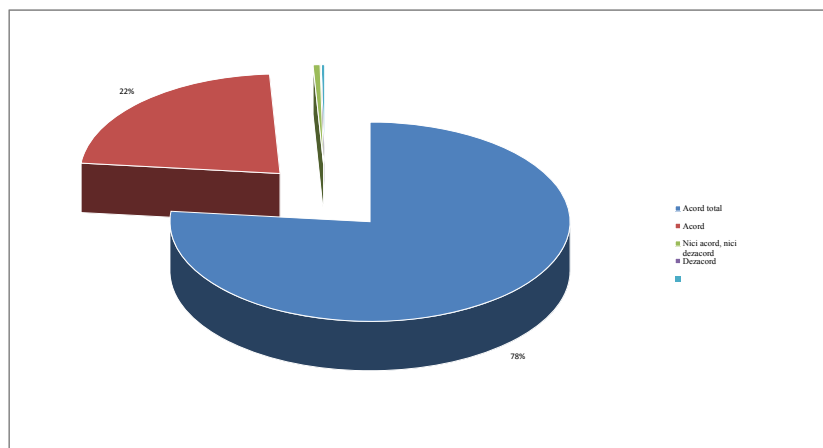
Figure 2. The way in which the respondents agree with the statement that says that the participation to information seminaries in the field of risk prevention and management at the workplace leads to the reduction of the number of work related accidents

The frequency distribution indicated a strong concentration of answers on the positive part of the scale, so that 76.8% participants answered this statement with „Total agreement"; 22.5% participants answered with „Agree", and 0.4% participants answered with „Neither agree nor disagree" and „Total disagreement".

The medium score obtained is very close to the answer "Very satisfied", with a value of 4752 points.

Using a dichotomy rated scale, one measured the degree in which the participants in this training program determines the awareness regarding the risks at the workplace. A large percentile (99.3%) of the participants in the training program think that participating to such seminaries determines the awareness regarding the risks at the workplace. Also 97.4% of the respondents think that participating to such seminaries determines the observance of the rules regarding the protection of the health and safety at the workplace.

In order to find out to what degree the respondents think that, after participating in such a training program, they will be able to better identify the dangers that lead to risks at the workplace, the researcher used a semantic scale with five steps. (The scale assumed the existence of the same distance, the same interval between two levels.)

One can note a concentrated distribution in the upper section of the scale, namely around the answer "In a very large degree". 59.8% of the participants in the

training program think that, following this training program, they can identify the dangers that lead to risks at the workplace "In a very high degree", 38.7% of the respondents think that they can identify the dangers that lead to risks at the workplace "In a high degree", and 1.5% of the participants believe that they can identify the dangers that lead to risks at the workplace "Neither in a high nor in a low degree".
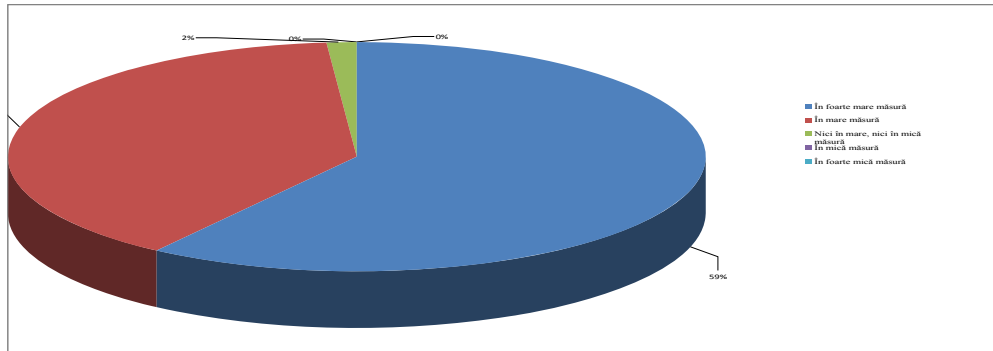
Figure 3. The degree of identification for the dangers that lead to risks at the workplace after the respondents took part in the training program within the seminar

The research has also made clear the fact that, according to the opinion of the participants, the degree o prevention for the risks at the workplace has increased after the participation to this seminar.
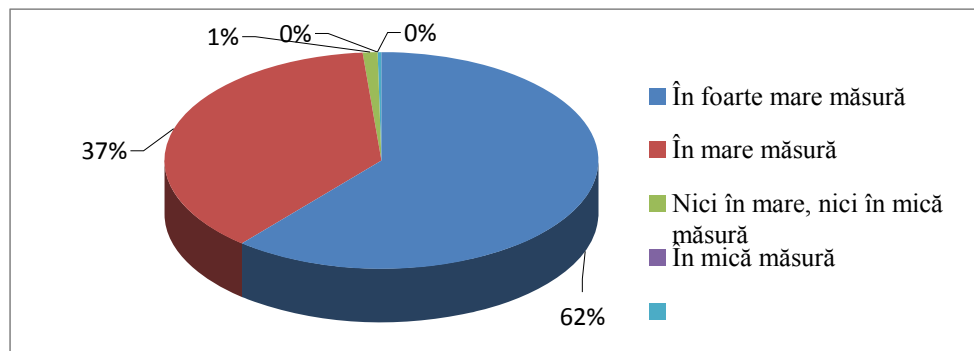
Figure 4. The degree of prevention for the risks at the workplace after the respondents have participated in the training program

Thus, 61.3% of the participants in the training program believe that, following this, they can prevent the risks at the workplace "In a very high degree", 37.3% of the participants believe that, after they've participated in the training program, they can prevent the risks at the workplace "In a very high degree", 1.1% of the participants believe that, after they've participated in the training program, they can prevent the risks at the workplace "Neither in a high nor in a low degree" and 0.4% of the

participants believe that, after they've participated in the training program, they can prevent the risks at the workplace "In a very low degree".

In the same way one has analyzed further aspects, designated to measure the competences, aptitudes, the knowledge obtained by the respondents following their participation in the training program within the seminar, as well as the awareness regarding their own responsibility regarding the health at the workplace, the identification of the dangers that lead to risks at the workplace, risk management in order to ensure a safe working environment, information regarding the provisions of the European standards in this field. After the average score was calculated, we got results between 4.77 and 4.38 according to the hierarchy that is illustrated in figure 5.
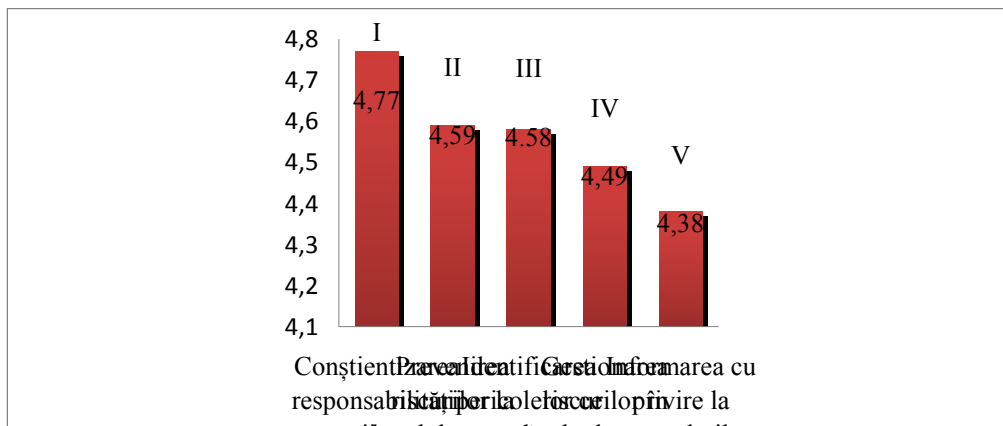
Figure 5. The competences/aptitudes/knowledge obtained by the respondents following their participation in the training program

After, by means of a question, it was established that more than 99% want to be trained also in the future by means of participation in seminaries or workshops, one tried to identify other information and training tools, praised by the respondents. Thus, the study revealed that 86% of the participants in the training program prefer to get information by means of television broadcasting, 76,8% of the participants prefer to get information by meeting periodically with competent persons, 62,4% of the participants appreciate trainings at the workplace, 28,8% of the participants prefer to access special web pages in order to get informed, 19,2% would rather receive the information via e-mail, and that 1,5% appreciate information sent by post.
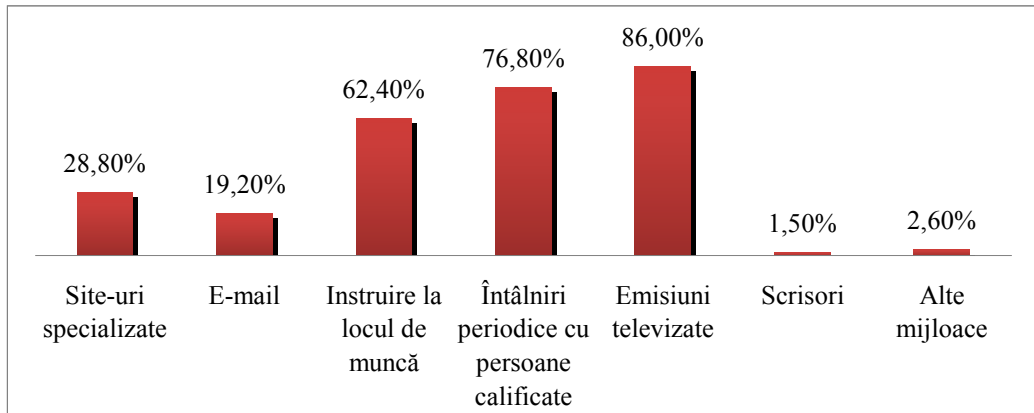
Figure 6. Information channels preferred by the respondents regarding the safety and health at the workplace

In order to find out how did the participants appreciate the training methods used within the seminar, one used a derivative interval scale of the semantic differential, which assumes the existence of the same distance, of the same interval between two levels. Thus, one measured: the efficiency of the theoretical exposés within the training program, of the plenary open discussions, demonstrations, workgroups, games and contests included in the training program.
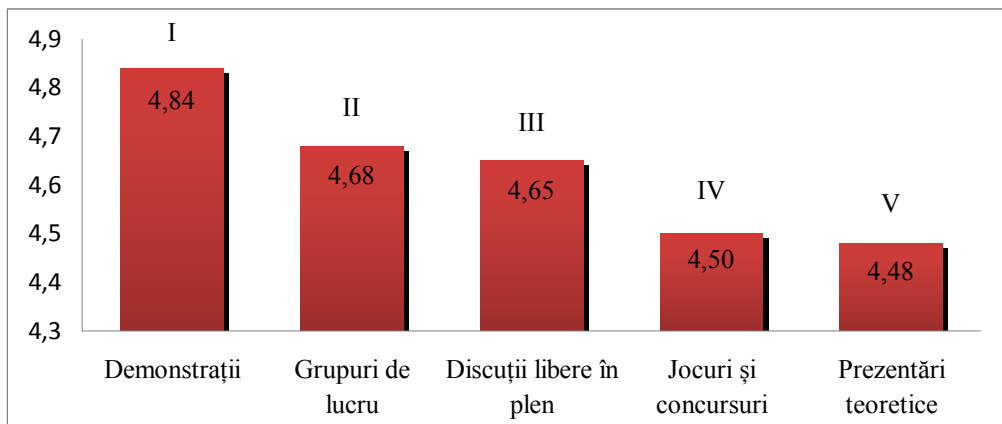
Figure 7. The degree of appreciation of the training techniques used in the seminar

After the average score was calculated, one obtained the following hierarchy regarding the degree of appreciation associated with the training techniques used in the program: Place 1 "Demonstrations", with an average score of 4.84 points, Place 2 „Workgroups" with an average score of 4.68 points, Place 3 „Plenary open discussions" with an average score of 4.65 points, Place 4 „Games and contests" with

an average score of 4.50 points, Place 5 „Theoretical exposés" with an average score of 4.48 points.

By means of an open question, the participants were asked to suggest activities, measures, actions to be implemented so that the number of work related accidents would diminish. The most frequent answers were: participation in experience exchange activities, regular meetings with competent persons, implication of the company leadership in information and training processes for employees regarding safety at the workplace, theoretical an practical activities within the company where they work, mandatory and regular training at the workplace (fire simulations - accidents - first aid procedures), practical examples, demonstrations (videos), presentation of informational material such as videos and printed material, for instance lectures, seminars in order to inform and create awareness for the workers regarding the potential dangers associated with their activity.

3. CONCLUSIONS

We can conclude that, although the participants appreciate as favorable all the characteristics of the seminar seen as a training program (the degree of practical applicability of the gained knowledge, the volume of received information, the usefulness of the training within the seminar, the efficiency of the knowledge exchange with their colleagues within the seminar, the real impact on the safety at the workplace, the dissemination potential in the working environment for the knowledge received within this training program) there is a slight difference between the way in which one appreciates the volume or the usefulness of the training and the dissemination potential and the degree of applicability in practice of the information obtained in this way. And, from the point of view of the organizer of this program, these highly praised aspects, that received just a lower score, are the most important and they could contribute decisively to lowering the economical and social costs of ignoring the risks related to the workplace. Therefore, in the future, the programs should be adapted so that they can have a higher degree of applicability in praxis.

We also state the fact that the seminar as an information and training tool is highly praised by the participants and within its structure the demonstration seems to be the most appreciated training method.

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POST-HOC SEGMENTATION USING MARKETING RESEARCH

CRISTINEL CONSTANTIN [*]

ABSTRACT: *This paper is about an instrumental research conducted in order to compare the information given by two multivariate data analysis used fordividing a population in clusters. These methods are K-means cluster and TwoStep cluster, which are available in SPSS system. Such methods could be used in post-hoc market segmentations, which allow companies to find segments with specific behaviours or attitudes. The research scope is to find which of the two methods is better for market segmentation practice. The outcomes reveal that every method has strong points and weaknesses. These ones are related to the relevance of segments description and the statistic significance of the difference between segments. In this respect, the researchers should compare the results of the named analyses and choose the method which better discriminate between the market segments.*

KEY WORDS: *marketing research; market segmentation; multivariate analysis; K-means cluster; TwoStep cluster; statistic significance.*

JEL CLASSIFICATION: *C81; C82; M31.*

1. INTRODUCTION

Using marketing research for supporting decision inside a company has become a strong necessity in the context of an increasing competition on the majority of markets. The high number of data analysis methods makes marketing research a powerful tool in gaining the competitive advantage. In their efforts to better serve the customers, companies try to identify the market segments that are the most profitable. Thus, the market segmentation can be performed apriori, based on some segmentation criteria or post-hoc, based on the marketing research results. Starting from these considerations the scope of our research is to identify the power of post – hoc segmentation methods in explaining different behaviours and attitudes of people. The main research hypothesis is that every method has its strong points and practitioners

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need to know these ones and to choose the proper methods for their needs. In order to verify this hypothesis, we made a comparison between two multivariate methods used in post – hoc segmentation. These ones are: K-means cluster analysis, which use only continuous variables and Two steps cluster analysis, which put together in relationship both continuous and categorical variables. Another hypothesis is that the second method could lead to a better discrimination between groups both from behavioural or attitudinal point of view and from the socio-demographic point of view. Thus, the researcher could identify the segments that differ in terms of behaviour and attitudes and to describe these ones according to their dominant socio-demographic characteristics.

2. LITERATURE REVIEW

Market segmentation is one of the most important activities of the decision makers in their efforts to establish the best marketing strategies. The markets cannot be approached globally as the customer needs have evolved during the time. The companies usually try to find groups of people with specific behaviours and target the most interesting ones. Sometimes a company can only identify target markets where products may be sold without or with minor modifications (Barbu, 2011), but in the most cases it tries to find those market segments that offer the best value for a company as long as value creation is the main criterion of performance evaluation by shareholders. The strategic objective of shareholders is to maximize present and future profits. (Man & Vasile, 2009)

A market segment consists of a group of customers who share a similar set of needs and wants. Thus, the marketers do not create market segments, their task being to identify the existent segments and decide which one(s) to target (Kotler & Keller, 2006, p. 240). The purpose of segmentation is the concentration of marketing energy and force in order to gain a competitive advantage within a market segment like in the military principle of force concentration to overwhelm energy (Goyat, 2011). As a company does not act alone in the general economic system, market segmentation gives the opportunity for a better decision on consumers segment which the company's products address to and other related decisions regarding the investments, suppliers, financial resources and so on (Vasile et al., 2011). In this decision making process, the communication is very important because the managers have different backgrounds, knowledge and experience and they need to be aware of the benefits given by segmentation (Ferencova, 2012, pp.16-17).

In the literature there is dominance of demographic and psychographic factors for segmentation like age, gender, income, interests, values, attitudes etc. (Goyat, 2011). Nevertheless it is hard to say that all the people that belong to such a segment have the same behaviour. For this reason, behavioural segmentation is considered a strong segmentation criterion. Marketing research helps managers to use variables regarding the customer behaviours or attitudes towards a product in order to perform post-hoc segmentations.

Post-hoc segmentation is made when the consumers' characteristics or their reactions to a new product are not known. In this case, a marketing research is

conducted and the segments are known just after the data analysis is made. The resultant groups are constituted from consumers with more homogeneity between their preferences being obtained a higher heterogeneity between groups than in apriori segmentation (Lopes et al., 2009).

In order to conduct post hoc segmentations, multivariate data analysis techniques are put in practice. Multivariate analysis is considered as all statistical methods that simultaneously analyse multiple measurements on each individual or object under investigation. It deals with multiple combinations of variables, which are put in practice by using various multivariable methods (Chandra & Menezes, 2001). One of the most popular multivariate methods used in post-hoc segmentation is Cluster Analysis. The aim of such a method is to minimize the square-error objective E for a fixed number of segments (clusters). This objective (see equation 1) equals the sum of quadratic differences between the theoretical value $\hat{Y}op$ according to a cluster analysis model and the observed value Yop of each segmentation criterion o for each person p (Hruschka & Natter, 1999).

$$E = \sum_{p}\sum_{o}(\hat{Y}_{op} - Y_{op})^2$$

(1)

In post-hoc segmentation could be used different clustering methods. For example, SPSS system provides three methods: TwoStep Cluster, K-Means Cluster and Hierarchical Cluster. These ones use different algorithms meant to provide a particular classification. K-means clustering is one of the most popular methods used in post-hoc market segmentation. In this case, the number of clusters k is apriori established. The method consists in fixing the centers of clusters by random extracting of k cases and assigning the rest of individuals to the cluster having the nearest center. The process is an iterative one, based on the recalculation of clusters' centers using Euclidean distances (Petcu, 2010, pp. 121-122). For this method, only continuous variables are used.

Another popular method is TwoStep cluster, which has several desirable features that differentiate it from traditional clustering techniques. As the SPSS package mentions, the method handles with categorical and continuous variables, by assuming variables to be independent. Finally a joint multinomial-normal distribution can be placed on categorical and continuous variables.

One of the most important issues in data analysis is the sampling process. The representativeness of the sample determines the accuracy of estimations resulted from the research indicators and the inferential statistics (Dura et al., 2010). For this purpose random methods should be used in sampling selection and the literature provides a wide range of sampling methods that can be implemented in the context of marketing research (Dura & Driga, 2011).

3. RESEARCH METHODOLOGY

In order to put in evidence several characteristics of some clustering methods, we put in practice an instrumental research. This kind of research is used for testing

and validation of the methods and instruments used in marketing research (Lefter, 2004). In this respect, the main objective of our research was to make a comparative analysis between K-means and TwoStep clustering methods. The results were compared in order to find and underline some possible shortcomings or strong points of every method.

The research was made using a database resulted from a marketing research among the car owners from Brasov-Romania, whose main scope was to identify the customer satisfaction regarding different car brands. The sample counts 100 car owners from Brasov, over 18 years old, randomly selected. The data were processed using SPSS system, using the two above mentioned methods. The same set of data and variables has been used for both analyses.

4. K-MEANS CLUSTER

For the beginning, the K-means method has been used, taking into consideration the satisfaction level of users regarding several characteristics of Dacia cars: fuel consumption, safety, maintenance costs and price level. All these variables were measured with an interval scale with 5 equidistance numeric levels. These variables were introduced simultaneous in the analysis in order to obtain 2 major segments using K-means cluster method.
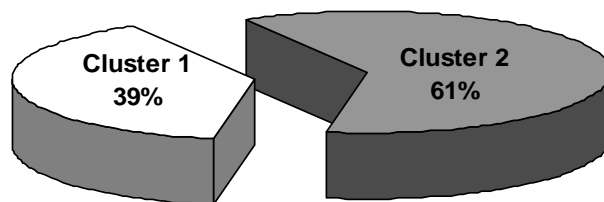
Figure 1. The structure of resulted clusters using K-means method

According to the results presented in figure 1, 39% of respondents are placed in Cluster 1, while 61% of respondents are placed in Cluster 2. The last cluster covers a large part of the sample members.

Looking at clusters' characteristics regarding their attitudes towards the analyzed characteristics of Dacia cars, we can find that the members of Cluster 2 have more positive attitudes than the members of Cluster 1 (see figure 2). Thus, the means recorded by the members of Cluster 2 are above 3 points on a five level scale (5 = very satisfied). The mean scores are above 4 points for fuel consumption and car's price. These people are characterized by a positive attitude towards their car irrespective of the studied characteristics. The members of Cluster 1 are more pessimistic, their attitudes being negative as their means are bellow the neutral level (3 points). It can be noticed that the cars' safety recorded the lowest means for both clusters, but the members of cluster 1 rated this variable with a very low score, closed to the minimum

(1 point). We can notice that the K-means method return a good segmentation of the sample members which is statistically significant.
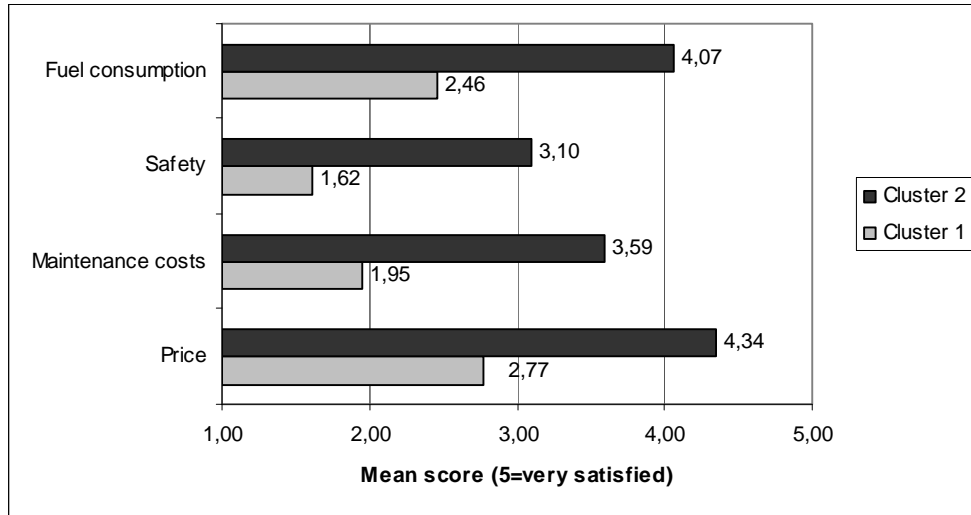
Figure 2. The mean scores recorded by the clusters' members for the analyzed variables using K-means cluster method

In order to find the patterns of the above clusters concerning their socio-demographic characteristics, we computed crosstabs between cluster membership and several characteristics such as: gender, age and income (see table 1).

Table 1. Socio-demographic characteristics of the two clusters (K-means method)

Characteristics	Cluster 1	Cluster 2	Test result	Significance
Gender				
Male	33.3%	66.7%	$\chi^2 = 1.00$	Sig = 0.31
Female	50.0%	50.0%		
Age				
18-29 years	85.7%	14.3%		
30-39 years	25.0%	75.0%		
40-49 years	33.3%	66.7%	$\chi^2 = 7.09$	Sig = 0.13
50-59 years	28.6%	71.4%		
Over 59 years	44.4%	55.6%		
Income				
Low income	50.0%	50.0%		
Medium income	36.0%	64.0%	$\chi^2 = 1.82$	Sig = 0.40
High income	62.5%	37.5%		

According to the resulted structure, in the Cluster 2 some groups are over-represented: males, people with age over 30 years and the ones with medium incomes. In the other group, which has more negative attitudes, we can find mainly young

people and the individuals with high incomes. In spite of these differences between the two groups, the statistical significance of these ones is poor, according to the results of chi-square test computed for every association. These results are presented in table 1, where it can be seen that the significance level is lower than 0.05 for every test, which means that the difference cannot be accepted for a confidence level of 95%.

Taking into consideration the above results, we can conclude that the K-means cluster method has a weak point in discrimination between the population members grouped according their socio-demographic characteristics. This phenomenon appears especially when the sample has a low dimension.

5. TWO STEPS CLUSTER

Two steps cluster method has the advantage of including in the analysis both continuous and categorical variables. Thus, the socio-demographic characteristics could be added to the other variables and the groups could be better discriminated.

For our example, we added the socio-demographic characteristics to the initial variables included in model, which refers to the car owners' attitudes. Thus, in the analysis have been included two categories of variables: continuous variables regarding the car owners attitudes towards fuel consumption, safety, maintenance costs and price level (measured with a 5 levels interval scale) and categorical variables measured with the nominal scale (socio-demographic characteristics).

The method returned two clusters, which are more balanced than in the previous case. Thus, 44% of respondents belong to Cluster 1 and the rest of 56% belong to Cluster 2 (see figure 3). In comparison with the K – means method, a part of respondents that initially were placed in the Cluster 2 have been placed in the other group (Cluster 1). The resulted groups are quite closed each other concerning the number of members.
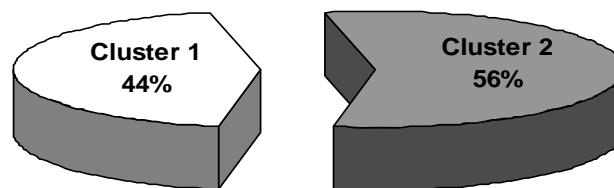
Figure 3. The structure of resulted clusters using TwoStep method

Looking at the means recorded for the cluster members we can find that the differences have decreased in comparison with the case of K-means cluster method (see figure 4). The members of the Cluster 2 also have a more positive attitude regarding all studied cars' characteristics, but the mean scores are a little bit smaller than in the previous case. They continue to be over 3 points and very closed to 4 points in the case of fuel consumption and price. In the same time, the mean scores of Cluster 1 slightly increased, but they are still under the neutral level for the analysed variables

excepting the car's price. This change is explained by the relocation of some people from Cluster 2 to Cluster 1, which determined an increase of the means recorded by Cluster 1 and a decrease of the means recorded by the other cluster. It can be noticed that the car's safety continue to have a very low mean score at the level of Cluster 1. The members of this group have a strong negative attitude regarding this characteristic of their car.
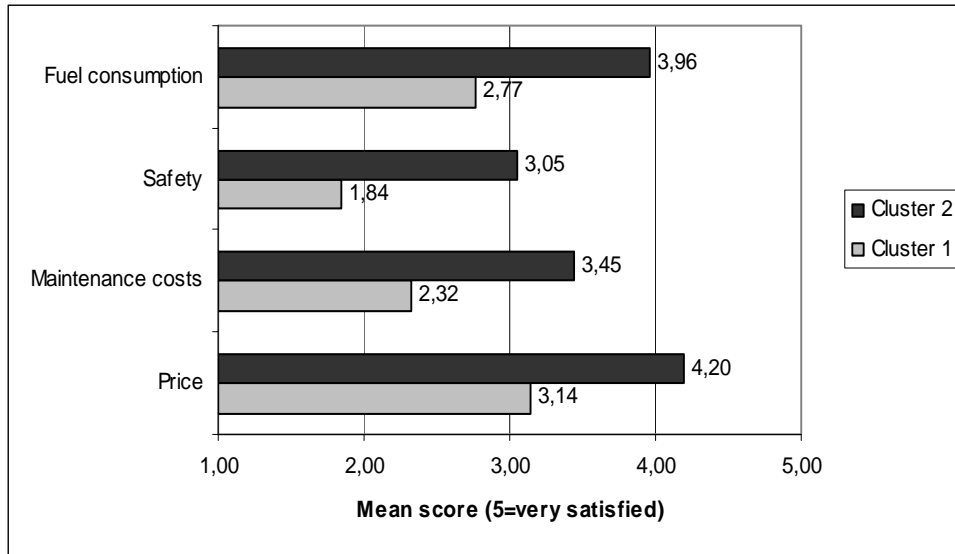
Figure 4. The mean scores recorded by the clusters' members for the analyzed variables using TwoStep cluster method

In spite of the above mentioned decreasing of the differences between the clusters' means recorded for the continuous variables, these differences remain statistically significant for a confidence level of 95%. These differences are graphically represented in Figure 5. We can see that for all continuous variables, the scores recorded by Cluster 1 are placed under the overall mean of the sample and the scores of Cluster 2 are above this overall mean. As we cannot find any intersection between the clusters' values, the conclusion is that the segmentation is well done, the homogeneity of every group being a strong one.

The distribution of the clusters' members on the socio-demographic characteristics is presented in Table 2. We can see that in Cluster 2 has been included a higher percentage of males like in the previous analysis. Regarding the age of respondents, the category over 59 years has became over-represented in Cluster 1, so that we can conclude that Cluster 2 include mainly middle aged people. Some changes also happened regarding the income distribution: Cluster 2 members, who are generally satisfied with their cars, are mainly people with medium and high incomes.

These changes are determined by a better distribution of each cluster members as result of TwoStep cluster analysis. This method takes into consideration the simultaneous differences between the customer behaviours and between the people characteristics regarding their gender, age and income. In spite of an apparent

decreasing of the differences between clusters' means, the discrimination is better than in the case of K-means method.
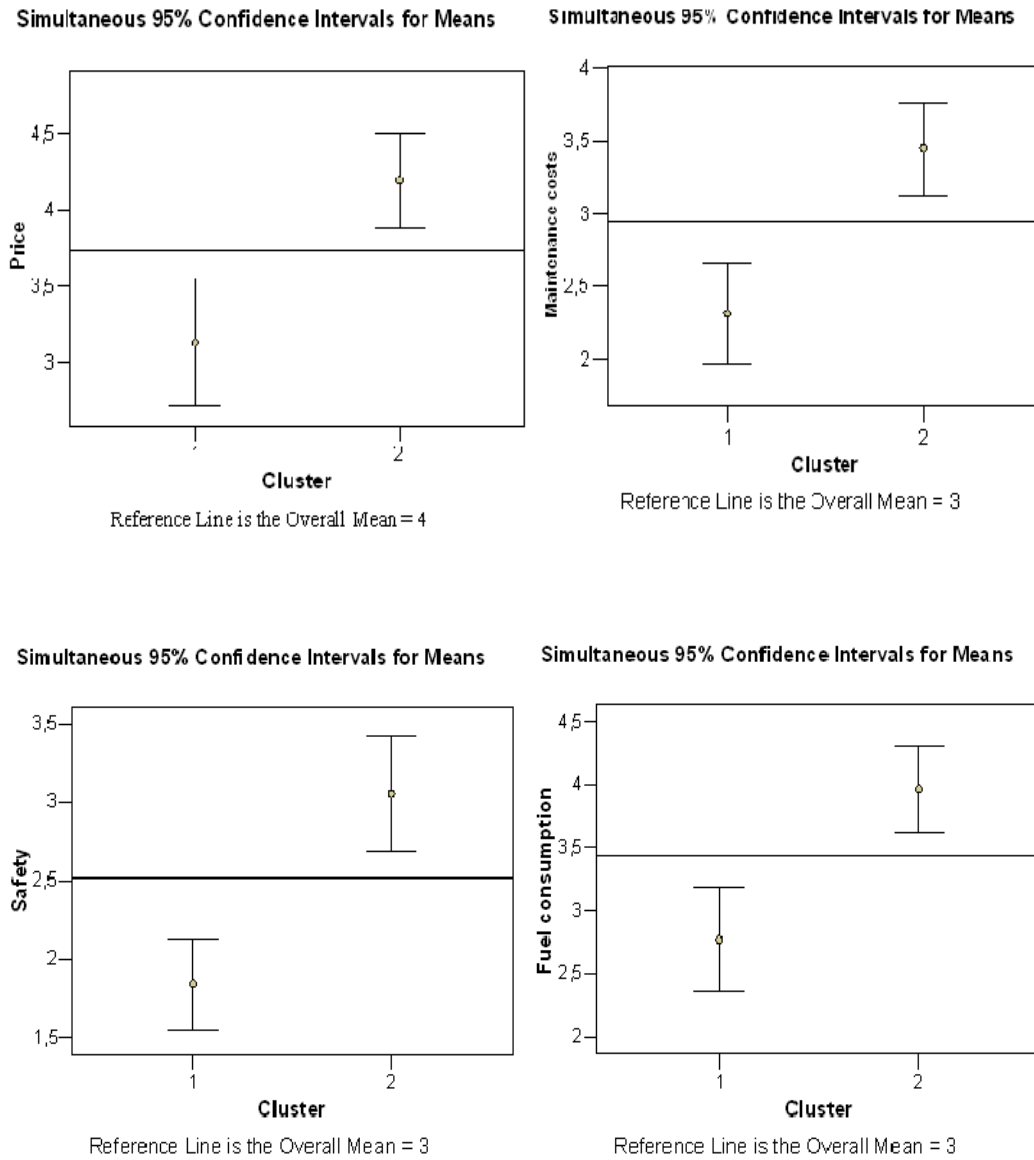
Figure 5. Positioning of clusters' members according to their scores recorded for the analyzed variables (TwoStep cluster method)

We have to mention that the differences became statistically significant in the cases of two socio-demographic variables: age and income. In table 5 the significance levels for the chi-square test are lower than 0.05 in the cases of age and income but not

in the case of gender. In spite of a high difference between the percentages of males included in the two clusters, at the level of females the percentages are much closed, which makes the difference not statistically significant (sig.>0.05). The poor significance could be also explained by the low dimension of the sample.

Table 2. Socio-demographic characteristics of the two clusters (TwoStep method)

Characteristics	Cluster 1	Cluster 2	Test result	Significance
Gender				
Male	37.3%	62.7%	$\chi^2 = 1.92$	Sig = 0.166
Female	51.0%	49.0%		
Age				
18-29 years	100.0%	0.0%		
30-39 years	0.0%	100.0%		
40-49 years	44.4%	55.6%	$\chi^2 = 56.97$	Sig = 0.000
50-59 years	5.9%	94.1%		
Over 59 years	65.2%	34.8%		
Income				
Low income	72.7%	27.3%		
Medium income	38.9%	61.1%	$\chi^2 = 10.08$	Sig = 0.006
High income	29.2%	70.8%		

6. CONCLUSIONS

Looking at the results that can be obtained using the above clustering methods, we can conclude that both categories have strong points but also shortcomings. Even if the K-means method can obtain a better discrimination regarding the continuous variables included in analysis, sometimes the results can have a poor signification when we try to describe the socio-demographic characteristics of the clusters' members. In such situations it is better to compute a Two steps clustering method, which take into consideration both continuous and categorical variables including the population characteristics. In this case the algorithm is set to maximize the differences between clusters taking into consideration all the analyzed variables.

The market segmentation has become more important for companies that offer goods and services in the present recession period when the customer behaviours changed significantly. The companies should sustain and determine the national and local authorities to put in practice policies meant to overcome the crisis and to carry out a durable economic growth by increasing the national production in order to meet the country's consumption and investments needs (Man & Marin, 2011).

Talking about the best segmentation methods, for practitioners it is important to choose the right method depending on their interest and the peculiarities of the market. For practical purposes it is recommended to obtain those groups that help to a better market segmentation. Thus, a company can use classical apriori market segmentation methods and post - hoc segmentation methods. From our point of view, a post - hoc segmentation could help the decision makers to find new and special

characteristics of the segments that are to be targeted. Further, the decision makers could develop proper strategies based on these characteristics.

ACKNOWLEDGEMENTS

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"THE NET MONETARY STATEMENT" AND "THE NET NON-MONETARY STATEMENT" – ASSESSMENT INDICATORS FOR THE FINANCIAL POSITION OF THE ENTITY

SORIN-CONSTANTIN DEACONU [*]

ABSTRACT: *This paper examines two indicators, namely the net monetary statement and the net non-monetary statement. To determine and analyze them, we started with the classification of assets (monetary and non-monetary) and liabilities (monetary and non-monetary). The actual values of these elements were established on the basis of information supplied by the balance sheet, followed by the calculus of the net monetary statement and of the net non-monetary statement. These indicators provide relevant and reliable information to the users of financial statements and, in the future, they should be taken into account because they bring additional information about the financial position of the entity.*

KEY WORDS: *inflation; net monetary statement; net non-monetary statement; entity.*

JEL CLASSIFICATION: *M41; Q10 ; H30.*

1. INTRODUCTION

Inflation is considered a phenomenon that occurs globally, having particularities at the scale of each national economy and effects such as: the continuous and self-sustained growth of prices; the foreign trade deficit; the increase of the cash amount[1]; lower living standards; wage conflicts; the start of the bankruptcy procedure for certain enterprises that become insolvent, etc. The list with the effects of inflation shows that this phenomenon presents both advantages and especially disadvantages. The advantages are short term only and refer to the fact that prices of certain goods will grow and the production will record an upward trend. After a while, the reversal occurs because the demand will drop due to price increases and the production will show a

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downward trend, which is the major cause for the outbreak of this scourge called inflation[2].

We believe the judicial liquidation of enterprises could also be included in the category of advantages, which proves that they can't cope with competition and manufacture goods and provide services of low quality and with higher costs. This way, the economy will "purge" from certain "parasites" and the "patient" (the national economy) will become "healthier". In an inflationary period, an entity may record an earning or a loss due to this imbalance, an important role being the distinction between the monetary and non-monetary elements. These elements can be identified and calculated only at the level of the balance sheet.

2. THE NET MONETARY STATEMENT AND THE NET NON-MONETARY STATEMENT

Our approach starts with the definition of the concept of asset presented in the Order of the Ministry of Public Finance no. 3055/2009 as "a resource controlled by the entity as a result of past events, which is expected to generate future economic benefits for the entity". The same law provisions that financial statements must provide an accurate picture of assets, liabilities, **financial position**[3], and profit or loss recorded by the entity. Its financial position may be judged according to certain parameters, such as monetary assets, monetary liabilities, etc., just as performance is measured according to revenues, expenses and more.

Monetary assets are resources that may be used to buy goods and services. **Non-monetary assets** are goods involved in the production activity of the enterprise and they can be capitalized through sale. **Monetary liabilities** are sources that may be paid with a significant amount of monetary assets, and **non-monetary** liabilities are largely represented by equity capitals, which can be liquidated only if the enterprise will fall under Law no. 85/2006 regarding the insolvency procedure, published in Official Gazette no. 359/2006 or under the influence of other regulations in force.

One can say that the assets of an enterprise consist of monetary assets and liabilities, on one hand, and non-monetary assets and liabilities, on the other hand.
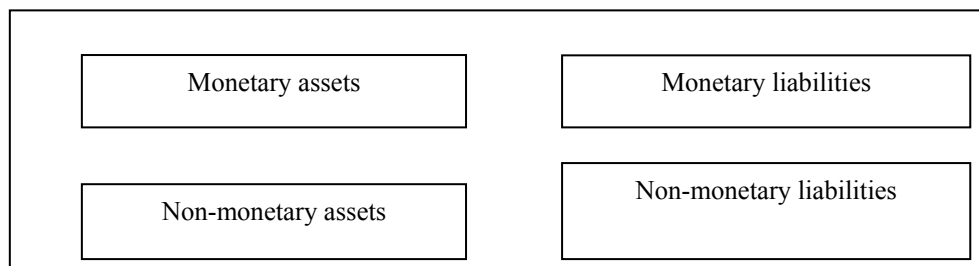
Figure 1. The assets of the entity

Although the accounting doctrine doesn't contain similar points of view in circumscribing the monetary from the non-monetary positions, the following taxonomies may be taken into consideration:

- *Monetary assets:* Long-term receivables; Claims; Cash assets and similar elements; Suspense account; Premium on redemption of bounds [4].
- *Non-monetary assets:* Intangible assets; Tangible assets; Long-term investments; Inventories; Accrued expenses.
- *Monetary liabilities:* Subsidies; Provisions; Commercial, financial, fiscal debts; Suspense account.
- *Non-monetary liabilities:* Equity capitals; Deferred income.

Next, we will present a balance sheet (table 1) drawn up by a large entity that applies the provisions of Order no. 3055/2009 on the approval of accounting regulations in line with European regulations, in order to identify the monetary and non-monetary elements.

Table 1. Extract from the Balance sheet drawn up at 31.12.N according to OMPF no. 3055/2009 (lei)

ELEMENTS		Balance at:	
		The beginning of the year	**The end of the year**
I INTANGIBLE ASSETS			298.610
II. TANGIBLE ASSETS		141.672.648	192.767.101
III. FINANCIAL ASSETS		0	0
FIXED ASSETS - TOTAL		141.672.648	193.065.711
I. INVENTORIES		25.453.060	23.017.958
II. CLAIMS		15.158.744	26.986.930
III. SHORT-TERM FINANCIAL INVESTMENTS		0	0
IV. PETTY CASH AND BANK ACCOUNTS		33.554.176	27.984.412
CURRENT ASSETS - TOTAL		74.165.980	77.989.300
C. ACCRUED EXPENSES		7.751	
D. DEBTS TO BE PAID WITHIN 1 YEAR		(39.905.581)	(77.557.453)
E. NET CURRENT ASSETS/CURRENT LIABILITIES		28.532.300	(4.824.907)
F. TOTAL ASSETS MINUS CURRENT LIABILITIES		170.204.948	188.240.804
G. DEBTS TO BE PAID IN A PERIOD LONGER THAN 1 YEAR		(16.662.834)	(25.611.474)
H. PROVISIONS		219.418	4.729.801
I. DEFERRED INCOME		(5.735.850)	(5.256.754)
J. CAPITAL AND RESERVES			
I CAPITAL		506.158.958	547.911.994
II. PREMIUM RELATED TO CAPITAL			
III. REVALUATION RESERVES	BALANCE C		
	BALANCE D	(328.789.672)	(328.789.672)
IV. RESERVES			
1. Legal reserves		350.812	350.812
2. Statutory or contractual capital reserve			
3. Reserves representing the revaluation reserve surplus			

4. Other reserves		9.580.831	14.259.988
Own shares[5]			
TOTAL		9.931.643	14.610.800
V. THE REPORTED PROFIT OR LOSS	BALANCE C		
	BALANCE D	(28.064.291)	(38.657.390)
VI. THE PROFIT OR LOSS OF THE FINANCIAL YEAR	BALANCE C		
	BALANCE D	(5.913.942)	(37.176.203)
Distribution of profit			
EQUITY CAPITALS - TOTAL		153.322.696	157.899.529

The balance sheet above highlights a few pieces of reasoning:
- A group of assets includes both monetary assets and non-monetary assets. For example, fixed assets include intangible assets (298.610 lei at the end of the year) and tangible assets (192.767.101 lei at the end of year N), which fall under the category of non-monetary assets, but there are also financial assets, which represent monetary assets;
- The first balance sheet items include non-monetary assets, and the last balance sheet items consist of non-monetary assets;
- Unlike the items of monetary assets, which are interposed with the items of non-monetary assets, the items of monetary and non-monetary liabilities can be identified "en bloc";
- The balance sheet presents monetary liabilities before non-monetary liabilities.

Based on the data in the balance sheet, we will calculate the net monetary statements and the net non-monetary statement, both at the beginning and at the end of the year.

Table 2. Net monetary statement (lei)

Indicators	Balance at:		Differences
	The beginning of the year	The end of the year	
1. Claims	15.158.744	26.986.930	11.828.186
2. Petty cash and bank accounts	33.554.176	27.984.412	- 5.569.764
3. Monetary assets (1+2)	*48.712.920*	*54.971.342*	*6.258.422*
4. Debts to be paid within 1 year	39.905.581	77.557.453	37.651.872
5. Debts to be paid within a period longer than 1 year	16.662.834	25.611.474	8.948.640
6. Provisions	219.418	4.729.801	4.510.383
7. Monetary liabilities (4 to 6)	*56.787.833*	*107.898.728*	*51.110.895*
8. Net monetary statement (3-7)	**- 8.074.913**	**- 52.927.386**	**- 44.852.473**

Table 3. Net non-monetary statement (lei)

Indicators	Balance at:		Differences
	The beginning of the year	The end of the year	
1. Intangible assets	-	298.610	298.610
2. Tangible assets	141.672.648	192.767.101	51.094.453
3. Inventories	25.453.060	23.017.958	-2.435.102
4. Accrued expenses	7.751	-	- 7.751
5. Non-monetary assets (1 to 4)	*167.133.459*	*216.083.669*	*48.950.210*
6. Deferred income	5.735.850	5.256.754	- 479.096
7. Equity capitals	153.322.696	157.899.529	4.576.833
8. Non-monetary liabilities (6+ 7)	*159.058.546*	*163.156.283*	*4.097.737*
8. Net non-monetary statement (5-8)	**8.074.913**	**52.927.386**	**44.852.473**

Next, we will summarize in a table the synthetic procedure of determining the two indicators that are the subject of this article.

Table 4. Summarizing table of monetary and non-monatary assets and liabilities according to the balance sheet aproved by OMPF no. 3055/2009 (lei)

Indicators	Year	
	N-1	N
1. Monetary assets	48.712.920	54.971.342
2. Monetary liabilities	56.787.833	107.898.728
3. Net monetary statement (1-2)	*- 8.074.913*	*- 52.927.386*
4. Non-monetary assets	167.133.459	216.083.669
5. Non-monetary liabilities	159.058.546	163.156.283
6. Net non-monetary statement (4-5)	*8.074.913*	*52.927.386*

The net monetary statement is negative at the beginning of the year (-8.074.913 lei), as well as at the end of the accounting period (-52.927.386 lei). At first glance, one could say that this indicator has negative repercussions on business. In reality, things are completely different, because the enterprise operates in a highly inflationary environment [6]. The negative amounts were obtained due to the monetary liabilities, which are superior to monetary assets, leading to an advantage for the company. This advantage is attributed to two factors:
- Monetary assets lose their purchasing power in inflationary conditions because they are under valuated when using a type of accounting based on historical costs. In our example, monetary assets consist of claims that have registered an increase of 11.828.186 lei and of cash values that diminished by 5.569.764 lei during the year;
- Monetary liabilities produce a gain for the enterprise because on the background of a diminishing purchasing power, the debts accumulated during the previous accounting periods will be paid based on a certain part of the monetary assets existent in the patrimony of the company.

Let's analyze the following example for a better understanding: We assume that an entity has a debt to an external supplier of raw materials, namely 2.000 euro,

which is evaluated at an exchange rate of 4.36 lei/euro. The debt to the supplier is paid at an exchange rate of 4.25 lei/euro[7].

The booking entry for this operation is:

401 „Suppliers"	=	%	8.720
		5124 „Cash at bank in foreign currencies"	8.500
		765 „Foreign exchange gains"	220

It is noted that the payment of the debt leads to an advantage for the enterprise compensating for the diminishing purchasing power of the monetary assets. Also, in this case, the enterprise recorded an income for which it will have to pay an income tax (except the case when the Romanian accountant doesn't "artificially increase the deductible expenses", so that the enterprise will record a loss), in this sense, the inflation is considered a particular form of taxation (Feleagă & Ionaşcu, 1998, p. 535).

The net non-monetary statement was determined by comparing non-monetary assets with non-monetary liabilities. There is something interesting in terms of this indicator, in the sense that it has the same values of the net monetary statement at the beginning of the year (8.074.913 lei) as the end of the year (52.927.386 lei), but with the opposite sign. Meaning the net monetary statements records negative values, while the net non-monetary statement records the same value, but positive. But the converse is also true: if the net monetary statement has positive values, the net non-monetary statement will have the same value, but negative.

The positive value of the net monetary statement emphasizes the following aspects:

- Non-monetary assets are mainly financed by equity capitals, which recorded the value 153.322.696 lei at the beginning of the year and 157.899.529 lei at the end of the period;
- A small part of monetary assets are funded by deferred incomes, which diminished by 479.096 lei during the year. This decrease was more than compensated by the increase of equity capitals by 4.576.833 lei;
- The advantage of this indicator that records positive values comes from the fact that non-monetary assets are funded due to net assets and not due to debts. We are dealing with a precise demarcation in terms of asset funding compared with the indicator "working capital", for example, which supports frozen assets, together with equity capitals and long-term debts.

Next, we will present a few correlations that exist between the indicators calculated above and the information learnt from the balance sheet presented previously.

The indicator "total assets" in the amount of 215.846.379 lei was calculated in two ways:

- Adding up monetary assets (48.712.920 lei) with non-monetary assets (167.133.459 lei);
- Adding up the value of frozen assets (141.672.648 lei) with the value of current assets (74.165.980 lei) and of accrued expenses (7.751 lei).

Table 5. Calculating the indicator "total asset" (lei)

Indicators	Amounts	Indicators	Amounts
Monetary assets	48.712.920	Frozen assets	141.672.648
Non-monetary assets	167.133.459	Current assets	74.165.980
Total assets	**215.846.379**	Accrued expenses	7.751
		Total assets	**215.846.379**

Table 6. Calculating the indicator "total liability" (lei)

Indicators	Amounts	Indicators	Amounts
Monetary liabilities	56.787.833	Debts < 1 year	39.905.581
Non-monetary liabilities	159.058.546	Debts > 1year	16.662.834
Total liabilities	**215.846.379**	Provisions	219.418
		Deferred incomes	5.735.850
		Equity capitals	153.322.696
		Total liabilities	**215.846.379**

The indicator "total liabilities" in the amount of 215.846.379 lei (which coincides with "total assets") was also determined in two ways:
- By adding up monetary liabilities (56.787.833 lei) with non-monetary liabilities (159.058.546 lei);
- By adding up debts (56.568.415 lei), provisions (219.418 lei), deferred incomes (5.735.850 lei) and equity capitals (153.322.696 lei).

These correlations can be made by the users of financial statements if there are different entries into the balance sheet for: total assets, total liabilities, monetary assets, non-monetary assets, monetary liabilities, non-monetary liabilities, net monetary statements and net non-monetary statement. These indicators, correlated with the working capital (which is currently included in the balance sheet model), could lead to a deeper analysis of the activity performed by an entity.

4. CONCLUSIONS

Although the balance sheet model developed by Romanian regulators no longer includes the indicators "total assets" and "total liabilities", we believe it is useful to insert separate entries for these elements. We also propose to regulators to introduce in the balance sheet model items for the indicators: monetary assets, monetary liabilities, non-monetary assets and non-monetary liabilities. These balance sheet items (which are determined on the basis of other items) could provide information needed by users of financial statements regarding: the ability of the entity to honour its obligations at maturity; the ability of the entity to invest in assets in order to consolidate the market position against competitors. Most users of financial statements are interested in the indicator "the result of the year" included in the equity capitals' category. We believe that this indicator is insufficient for assessing the activity of the company if it isn't correlated with the indicators presented previously, especially in inflationary periods.

Another conclusion that emerges from our study refers to the fact that in the case of the balance sheet approved by OMPF no. 3055/2009, the net monetary statement has the same value with the net non-monetary statement, but with opposite signs. This equation is also a way to verify the correctness of the balance sheet.

NOTES:

[1] The cash amount refers to folding money, coins as well as money in accounts, knowing that a significant portion of money lies in the accounts of various banking companies.

[2] In literature, when referring to inflation, the emphasis is on the generalized increase of prices. We believe that this is the effect of inflation and the attention should be focused on the cause, namely the decrease in production, which currently is the main problem in Romania. We mention that only the increase of production that is intended for sale within the country may finally lead to an increase in living standards. Currently, there is a type of production called lohn that doesn't help to lower the consumer price index, because this production is exported.

[3] The concept of financial position is not defined by the Romanian lawmaker in Order 3055/2009, leaving to the broader understanding that it refers to assets, liabilities, debts and equity capitals presented in the balance sheet and in the notes.

[4] We believe that this element, "Premium on redemption of bounds", represents a fictional asset for the entities that issue bonds and have no future benefits. We believe this happens because the difference between the nominal value and the issue value will generate an output of resources instead of an input of resources within the entity when the bonds are reimbursed.

[5] It is noted that the company's own shares are presented within equity capitals with a negative sign and are highlighted with the help of account 109. This solution, proposed by the Line Ministry, is questionable because own shares can't be a part of capitals according to Law no. 31/1990 regarding trading companies, republished.

[6] The entities that operate in an inflationary environment should consider its direct targeting, as well as conduct its own impact studies on elements of assets. In the paper "Testing the impact of inflation targeting on inflation", George B. Tawadros stated that the impact of inflation targeting on inflation is positive in 18 countries after conducting a study that involved 27 countries.

[7] In conditions of inflation, the exchange rate usually manifests an upward trend, but it may also show an involution.

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ALTERNATIVE PROFESSIONAL TRAINING USING IT SOLUTIONS

EDUARD EDELHAUSER, LUCIAN LUPU DIMA, ANDREEA IONICĂ, MONICA LEBA [*]

ABSTRACT *In the current economic context of Romania and especially in the difficult situation that mining areas are faced with, University of Petroşani aims to represent a powerful center for improvement, continuous training and reconversion of the labor force in these four counties. The project "Alternative professional training using IT solutions - a solution for reconversion of the labor force in the mining industry" could represent a solution, by developing modern and innovative methods of training based on an eLearning platform containing eight courses in a multimedia format. One of the professional training programs designed for qualify postgraduate unemployed persons is the IT consultant course. For collecting information that spot the training courses needs and competences we designed a questionnaire and distributed it to a number of employers, chosen as being the most significant within the prevailingly mining mono-industrial regions. The final solution is a portal designed on a tree structure basis. The technical solution proposed for designing the http://7.upet.ro/ portal was to use a Content Management System. We also used Info Path to design structured teaching scenario (teaching activities) and Edu Integrator to create reusable learning objects, and consequently the eContent for the IT consultant course, and the eLearning platform.*

KEY WORDS: *eLearning Platform; Learning Content Management System; Teaching Scenario; Learning Objects; IT Consultant Course.*

JEL CLASSIFICATION: *I23; J21; J62.*

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1. UNIVERSITY OF PETROŞANI A POWERFUL CENTER FOR IMPROVEMENT, CONTINUOUS TRAINING AND RECONVERSION OF THE LABOR FORCE IN THE ROMANIAN 2012 LABOR MARKET CONTEXT

Under the conditions of an unprofitable, decayed industry, the economical reorganization led in the first years after 1990 to a massive industrial downfall, the investment level dropped and the labour market experienced a significant increase in unemployment and informal employment. To that end it is eloquent the fact that the percentage of employed persons in the industry from the total employed population has decreased dramatically since 1990 until 1999, the socio-economic impact being felt especially in mono-industrial areas of Romania. The impact was felt on the labour market through a significant depreciation of the employment rate of working age population (15-64 years) being considered alarming especially by comparison with the EU evolutions.

In the current economic context of Romania and especially in the difficult situation that mining areas within Hunedoara, Gorj, Vâlcea and Mehedinți counties, are faced with, University of Petroşani aims to represent a powerful center for improvement, continuous training and reconversion of the labor force in these four counties. University of Petroşani, as applicant and Mining Trade Unions Union Oltenia, the Trade Unions Federation Valea Jiului and SIVECO Romania SA, as partners, are implementing, starting with October 2010, the project "Alternative professional training using IT solutions - a solution for reconversion of the labor force in mining". The project has a 4954718 lei and a 3 years (34 months 1.10.2010 - 31.07.2013) implementation period, and is cofounded from the European Social Fund through the Sectorial Operational Program Human Resources Development 2007-2013. The University of Petroşani will elaborate 8 professional training programs for qualify 600 unemployed persons, along with the two trade unions partners, Union of Mining Trade Unions Oltenia and the Trade Unions' Federation Jiu Valley, and along with the leader of Romanian software houses, SIVECO Romania. The Project's objective is to increase the employment rate of the labor force in mining mono-industrial areas within the Jiu Valley and Oltenia, by attracting young unemployed and long term unemployed on the labor market, by developing modern and innovative methods for electronic e-learning type of training.

Besides other projects dedicated to human resource development already undertaken in the Jiu Valley, this project aims to open the door to IT&C technology and for those who have not yet penetrated. More specifically, it offers eight courses which specialized unemployed persons in IT related fields, for a period of three years. The project is based on one of the best existing electronic training collaborative portals throughout Europe. The training and educational portal will contain the 8 courses in multimedia format, accessible even after the face to face training sessions are ended, training courses will be held with traditional methods of training, but also training will be made trough the portal training. These facilities will help students more easily understand their occupation specific technologies, through access to simulation processes using multimedia tools. Subsequent participation in the course, students will

have access to the website of the course and the training collaborative electronic portal. In this way, they can deepen the knowledge gained by accessing the online digital courses.

2. ANALYSIS OF THE LABOUR MARKET IN THE WESTERN DEVELOPMENT AREA – JIU VALLEY COALFIELD

2.1. Research Methodology

For obtaining the required information, the proposed questionnaire outlines the evolutions of the labor market, collecting information about the major changes concerning production methods, new materials use and the implementation of projects or production teams applied by Romanian companies. We elaborated a questionnaire consisting of 24 questions and we distributed it to a number of 100 employers, chosen as being the most significant within the prevailingly mining mono-industrial regions. (POSDRU/5.1/S/82, ID 59756)

2.2. Respondents

For starters were identified 754 companies classified on 6 wide sections (Research Development and High Tech, Industry, Agriculture, Constructions, Trade and Tourism), 53 fields of activities and size classes (micro-enterprises, small, medium, large and very large enterprises). Data were taken from CCI Hunedoara. These 754 companies were chosen among the total of 11.637 commercial societies, cooperative societies or cooperative organizations, research institutes and autonomous administrations. Subsequent, we selected 5 fields of activity considered to have a high potential in creating new jobs: Tourism and Services – Hotels and Restaurants I, IT – Information and Communications – J, Professional Scientific and Technical Services – M, Constructions – F, Manufacturing Industry – D. Among these fields we tried to identify approximately 100 companies which have the highest turnover in these activity fields in Hunedoara County. In order to eliminate subjectivity we selected then the first 20 companies with the highest number of employees and the biggest profit. It is relevant to mention that the 5 fields selected are correlated with the fields in which we completed the 8 professional training courses. We focused on the Jiu Valley and we reduced the number of companies to 8 most representative. (POSDRU/5.1/S/82, ID 59756).

2.3. Results

We tried to identify the necessary of occupations for the 8 organizations investigated, but due to the various activity fields in which they operate, just the Computer Aided Design operator occupation was identified as being needed in most organization. (20 occupations were proposed).

Enterprise	Required Courses					
	Mining	Marketing	Management	IT	EU Founds	CAD
SC D&D SAFE SRL						
SC CONSMIN SA						
COMPANIA NATIONALA A HUILEI	1					
GTS COMPANY SRL		1	1			
ICPMC - INSTITUT PROIECTARI		1		1	1	
SIP SA - PROIECTARE SERVICE		1				
CC INFO 98 SA - PROIECTARE SOFT				1	1	
GEROM INTERNATIONA SA						1

Figure 1. Required courses

Next, we tried to identify the training courses needs for these organizations, and this time the fields of marketing, IT and accessing the structural funds have prevailed. It is to be noted that the tourism field was not selected by any organization because in the Jiu Valley we could not identify too many companies with this sphere of activity.

We then identified the competencies most demanded by employers and hence we identified a shortcoming of the Romanian education system that puts no emphasis on communication and teamwork. Furthermore, lately the technical competencies have been treated with a lack of interest especially at pre-university level. (Furdui et al., 2011)
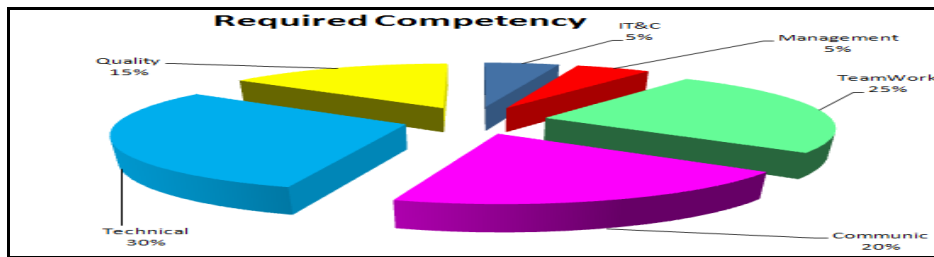
Figure 2. Required competencies

Another field investigated was that of the factors that influence regional development and in this case competitiveness and qualification hold important positions. (Furdui et al., 2011)

Enterprise	Importance for Regional Development				
	Investment	Competitiv.	Consultancy	Training	Turism
SC D&D SAFE SRL	1	1	0	0	1
SC CONSMIN SA	1	1	2	2	1
COMPANIA NATIONALA A HUILEI	2	2	2	2	2
GTS COMPANY SRL	1	1	2	2	1
ICPMC - INSTITUT PROIECTARI	1	1	2	1	2
SIP SA - PROIECTARE SERVICE	1	2	2	1	1
CC INFO 98 SA - PROIECTARE SOFT	2	3	2	2	2
GEROM INTERNATIONA SA	1	2	5	1	1
	10	13	17	11	11

5	very important
4	important
3	medium important
2	little important
1	no important

Figure 3. Importance for regional development

3. TOOLS FOR DESIGNING THE ELEARNING PLATFORM AND THE ECONTENT, AS A BASIS FOR A PROFESSIONAL TRAINING PROGRAM

There is a large variety of tools used for eLearning and eContent such as the Content Management System named Drupal, and Learning Content Management System as AeL throughout InfoPath and Edu Integrator.

3.1. Web Portal. CMS. Drupal.

A content management system (CMS) is a computer system that allows publishing, editing, and modifying content as well as site maintenance from a central page. It provides a collection of procedures used to manage workflow in a collaborative environment. In a CMS, data can be defined as nearly anything: documents, movies, text, pictures, phone numbers, scientific data, and so forth. CMSs are frequently used for storing, controlling, revising, semantically enriching, and publishing documentation. Serving as a central repository, the CMS increases the version level of new updates to an already existing file

Our http://7.upet.ro portal was designed on a tree structure basis and contains the main sections and their subsections. These compose the main menu. Each menu item is associated with an article or a listing of items.

Drupal is a content management system. Drupal Suite is a set of tailored solutions that meet needs of different sectors to maximize the productivity of web portal. Its goal is to help users compose and present web-site content such as articles, photos, and other content types. Rather than forcing users to specify a fixed, pre-declared arrangement of content, Drupal takes care of the details of how information is arranged and presented, and lets users focus on the actual content to be displayed. Most of the content on a Drupal-based site is stored in a database. Text and images are submitted by filling in forms via a web browser. When visitors view a page, Drupal gets the relevant bits of content from the database and composes all of the components of the page in a template. This makes it easy to quickly add or change content, without requiring knowledge of HTML or other web technologies on the part of the person providing the content. Drupal is an extremely flexible system that allows you to create a wide variety of websites.

There are two hosting features that are essential to building a Drupal site. The MySQL which is a database system that stores all of the essential information about the configuration and content of the site, and the PHP software that provides the necessary functions for the Drupal software code to run on the website.

3.2. AeL as a Learning Content Management System. Developing teaching scenarios in Info Path. Designing learning objects in Edu Integrator.

The AeL is a Learning Content Management System that combines the administrative and managerial dimensions of AeL LMS with eContent creation and administration. AeL authoring tools can help users to build the content needed, according to the training objectives of the organization. SIVECO team has a strong

expertise in developing eContent according to the needs of the clients, their training objectives, training curricula, and specifications. AeL eContent is SCORM and MathML compliant, developed as RLOs (Re-usable Learning Objects) that can be assembled to create new or adapted courses. AeL is a modern eLearning solution, offering facilities for management and presentation of various types of digital content such as educational interactive multimedia content, interactive guides, exercises, simulations and tests.

The eContent will be developed with InfoPath as an application for development of scenarios and Edu Integrator as a software for converting scenarios in lessons as learning objects.

Microsoft Office InfoPath can be used in different scenarios that can scale from simple, ad hoc forms, to highly managed centralized forms solutions. Microsoft FrontPage designs Web pages, while Microsoft Internet Explorer displays them. InfoPath does both—it both designs and displays XML forms. The main advantage of using InfoPath as a tool to create forms is that it allows you to rapidly create a form and has native support for validation. When we design a form template (.xsn) file, we create a single file that contains multiple supporting files. Conversely, when users fill out a form, they are actually filling out a form (.xml) file, which is based on a form template.

Edu Integrator enables the implementation of the script done in InfoPath. Lessons are organized in independent learning units, each unit being divided in turn into several screens - frames. Each screen is built by concatenation - using instructional design principles of learning items. These learning items are: text, additional sources of information (Web address), images, maps, charts, audio, animation, simulations, interactive materials, problem solving, educational games, tests.

4. RESULTS. ELEARNING PLATFORM FOR A POSTGRADUATE TRAINING PROGRAM - "IT CONSULTANT"

4.1. IT Consultant Profile

The IT consultant is a postgraduate training program. An IT consultant works in partnership with clients, advising them how to use information technology in order to meet their business objectives or overcome problems. Consultants work to improve the structure and efficiency of an organization's IT systems. Hiring in consultants to perform specific functions over an agreed period of time is often referred to as 'outsourcing'. IT consultants work in a range of sectors, including manufacturing, financial services, the public sector, health, and transport, to name a few. Clients include automotive firms, global investment banks and utility companies. The growth in e-services within the public sector has created an increase in consultancy projects linked to central and local government departments. (Draghici et al., 2011)

4.2. Designing the eLearning Portal

The technical solution proposed for designing the http://7.upet.ro/ portal was to use a Content Management System (CMS). A CMS is a system used to organize and facilitate the creation of web content. This platform facilitates the administration and logistics visual content of a portal. Our portal the following specifications: location - http://7.upet.ro/, PHP - version 5.2.x, Server application- Apache 2.2.x and data base - MySql 5.x.

http://7.upet.ro/ael/admin_cursuri/creare_curs_adm_trainer.jsp

Figure 4. Learning Management System

The lesson moment is a file in which information are grouped thematically, which can not be shown separately. It can contain multiple sub-moment for analysis, understanding and interaction. The sub-moment of the lesson is a frame from the lesson moment.

We will present a sample for one competency required for the IT consultant – Team Work. Stages as designing the lesson plan, the scenario and the eLearning lesson were used for designing the full training program. The Romanian version of the training program is available on the project site.

4.3. Designing the lesson plan

Moment 4

Contains		Description	
Moment name:		Team Work	
Time:	1 min	Meets educational objectives:	Yes
Moment description:			

Frame 1 (Sub – moment)

Steep	
Learning Item	Detailed description
Text	Members of the team must consider the goals and team values, to determine

	which types of information they need to assess potential risk levels and decide which of those levels can be accepted. For the accomplishment of work to implement a new IT applications, the operating organization or in a different organization, IT consultant will be able to identify team members extended, which can be: head hierarchical consultants from other computer companies, colleagues of the department or other departments, marketing specialists (Draghici et al., 2011)
Moment 4	
Frame 1	
Graphical requirement	

Figure 5. Moments and Frames of a Lesson – Lesson Plan

4.4. Designing the scenario

Info Path allows structured teaching scenario (teaching activities) from the perspective of integrating several facilities offered by IT&C such as text, hypertext, web pages, images, audiovisual materials, animations, simulations in a lesson. Teaching scenarios are developed step by step, considering the different moments of a lesson. For each point of the lesson we can specify exactly interactive component that we want to use. This mode allows us to have a clear vision of the script, being able to revert to a specific sequence to optimize it. (Halstead et al., 2004)

```
Moments>
  <MomentName> Team Work </MomentName>
- <Frames>
- <ContentText>
- <ContentTextItems>
  <ContentTextDescription>Members of the team must consider the goals and team values, to
determine which types of information they need to assess potential risk levels and decide which
of those levels can be accepted. For the accomplishment of work to implement a new IT
applications, the operating organization or in a different organization, IT consultant will be able
to identify team members extended, which can be: head hierarchical consultants from other
computer companies, colleagues of the department or other departments, marketing
specialists</ContentTextDescription>
  <tg_ContentText>2</tg_ContentText>
  </ContentTextItems>
- <ContentTextItems>
```

Figure 6. Teaching scenario in Info Path (XML)

4.5. Designing the eLearning lesson

Edu Integrator allows users who do not have programming knowledge to create their own reusable learning objects. The two stages of IT development are brought together in a single user environment, based on a default scenario, is able to create learning objects by linking items that has set in the script. (http://ticavansat.pmu.ro/)
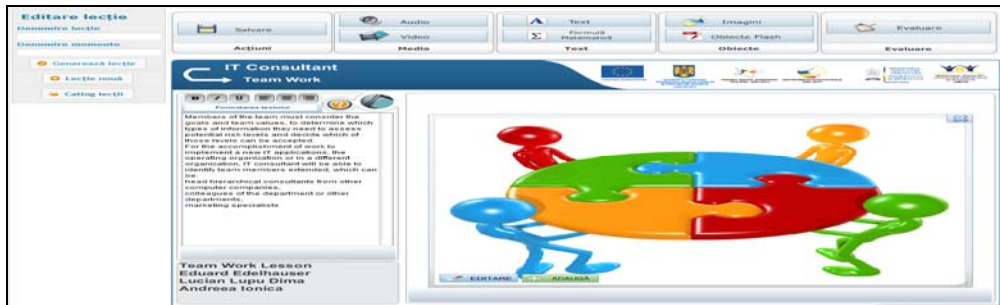
Figure 7. AeL Editor (moment.php) in EduIntegrator

http://localhost/indexMoment.html

Figure 8. AeL Index Moment in EduIntegrator

The workspace is divided into three areas: the first area is to in the left of the screen and contains scientific information; the second area occupies most of the screen and can contain pictures, animations, simulations, exercises and so on; the third area is on the left foot of the screen and provides guidelines for users.

4. CONCLUDING REMARKS

The Project's objective is increasing the employment rate of the labor force in mono-industrial areas in mining from the Jiu Valley and Oltenia, by attracting young unemployed and long term unemployed, on the labor market, by developing modern and innovative methods for electronic e-learning type of training. The strategic multiregional Project - selected within the Sectorial Operational Program Human Resources Development 2007-2013, cofounded from the European Social Fund, will be developed in the West and South - West regions, in the counties Hunedoara, Gorj, Vâlcea and Mehedinți, where the reconversion of the mining labor force is necessary.

One of the professional training programs designed for qualify postgraduate unemployed persons is the IT consultant course. The constant pressure of deadlines and client expectations is extremely stressful for computer consultants. With the demand for skilled IT professionals increasing around the world, and the increase in the number and type of consulting companies, the employment options available for computer consultants are increasing. IT consultants are used to provide strategic guidance to organizations with regard to IT technology, IT infrastructures and the enablement of major business processes through enhancements to IT. They can also be used to provide guidance during selection and procurement as well providing highly expert technical assistance, and may be responsible for user training and feedback. The eLearning web portal was designed using a CMS named Drupal Suite and the eContent was be developed with InfoPath as an application for development of scenarios and Edu Integrator as a software for converting scenarios in lessons as learning objects.

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DIMENSIONS AND CHARACTERISTICS OF IMMIGRATION IN ROMANIA

ALINA FLEŞER [*]

ABSTRACT: *Nowadays, under the strong impact of demographic, technological, social, economic, political, cultural, educative and religious factors, deepening economic, social and political disparities among groups of countries and regions, it generates and puts in the foreground a series of new features of migration processes as compared to previous periods, at the same time, causing transformations of migratory processes, such as the typology, volume, structure, intensity of flows, the costs and benefits. In this context, the present paper aims to highlight the main characteristics of the immigration flow from Romania.*

KEY WORDS: *labor market; labor migration; emigration; immigration; mobility.*

JEL CLASSIFICATIONS: *E24; J08; J61.*

1. THE HYPOTHESIS

During the present period, characterized by multiple economic and social convulsions, the movement of citizens and labor (the migration) registers increased flows and, often, changes of direction and intensity. Thus, labor migration is a multidimensional, multi-motivational and complex process which generates challenges, costs and benefits that must be managed properly on a social, community and individual level.

For the European area, including Romania, the movement of people and labor is of particular importance. The enlargement of the European Union in successive waves, the demographic ageing, in particular of the Western countries, together with the aging of the population from central and Eastern European countries, current and future EU members, the various motivations, especially the economic ones are potential strong incentives for the increased movement of people and labor, including for the change at the level of a country of the relationship between immigration and

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emigration (for long-term, there is a tendency to change the migration status of a country/region etc. from and emigration area into an immigration region).

In this context, it is necessary to emphasize that the mobility/circulation of people and especially of the workforce may influence differently - obviously depending on concrete conditions - the quality of the human capital of the country/region of origin and of destination, respectively. In fact, we are witnessing a process of internal and international reallocation of human capital of high competence, even in favor of those countries, regions etc. which offer the most advantageous conditions (economic, technological, educational and formative, etc.).

At the same time, we must keep in mind that, although important migration flows are recorded in a relatively small number of states, no country in the world does remains outside the domestic and international migration flows, be it either a country of emigration, or a country of transit or immigration, or holding all three attributes at the same time.

At the same time, because of the effects of the impact of training in terms of human capital, migration becomes an indicator of sustainable development. The internationalization and globalization of markets triggers new migratory behaviors, an increased fluidity of territorial movements; temporary migration phenomena for education and/or work tend to become more and more important. Population movements between countries and particularly the temporary ones confer an unprecedented dynamic to the changes, money transfers and competence, to the convergence of human development, provided that the benefits of these processes, in their turn, should be' globalized' for all the parties involved. On the one hand, there is a behavioral and intercultural transfer, an approximation of the ideals of work and life, an increase in mobility and adaptability, flexibility in making autonomous decisions, in promoting new types of actions, adopting new attitudes and behaviors. On the other hand, migration flows require changes in economic and social policies promoted by both the immigration areas, and by the emigration ones.

Considering the above, and taking into account the fact that, in general, Romania is a country where, in the recent years, emigration has been very striking, I considered it appropriate to evaluate the size of the immigration phenomenon.

2. GENERAL TRENDS OF MIGRATION IN ROMANIA

Romania can be classified within the concept of the "new migration" developed by Koser and Lutz in 1998. "New migration" is defined as having origins in 1989 after the Cold War had ended and the Communist regimes in Europe had been dissolved. The "new migration" is characterized by several changes that had occurred in Europe: an increase in the number of immigrants - a number that exceeded all the migration waves in Europe from World War II; a change in terms of the types of immigrants (qualified people - compared to the workers who came in Europe as foreign workers - the "guest worker policies" included mainly low-skilled laborers; clandestine immigrants; applicants for asylum and refugees from conflict regions in the world); another feature of the "new migration" is the short term or circular migration or the transit (this can be seen especially in the Central and Eastern European countries,

countries which are found on the immigrants' route to Western Europe); another representative characteristic of the "new migration" is turning the countries of emigration into immigration countries or into destinations for immigrants; the difference between the two features is often blurred. Romania can also be classified into the "new migration" because after 1989 it became both a country of emigration and a country of immigration as well. After the opening of the borders in 1990, short-term migration or circular migration became one of the sources of income for the Romanians. It is estimated that about three million people are employed in this circular/short-term migration or the transnational movement between Romania and a Western country where they can find a job. [1]

In recent years, although Romania has kept to a large extent, its character of country of transit, it started to become more and more a country of destination.

Thus, at the end of 2009, in Romania there were 59.062 foreigners from foreign countries with legal residence, representing 4% more than at the end of 2008 and 76,2% more than in 2005. Out of the total of 59.062 registered foreigners with legal residence in late 2009, 49.406 people had a right for temporary stay (84%) and 9.656 (16%) had a permanent right of residence, in accordance with the aims laid down by the legislation in force. [2]

The early 2011, similar to the reference period of the last decade, reveals the same reality in terms of the dynamics of migration flows from and to Romania. Thus, Romania maintains its characteristic of country of emigration and becomes, in addition to the characteristic of country of transit, a country of destination more attractive to immigrants. According to Eurostat forecast, during the period 2008-2060, Romania will have recorded a net immigration rate of at least 18.4 per one thousand inhabitants (1.84%).

The information provided by the Romanian emigration phenomenon is extremely important for understanding immigration in Romania, whether we are talking about the manifestation of immigration at a certain time or about immigration as a trend, and for the way in which the Romanian authorities will address the management of immigration and the integration of foreigners.

The consequences, as a result of migration of Romanians, may take the form of social costs that put pressure on the state budget, causing labor shortages in certain sectors within the local labor market, which can get more serious in times of economic growth. In this context, immigration and bringing in workers from foreign countries has been a quick and handy turnaround for Romania for solving national labor market pressures.

As regards the main purposes for which foreigners have established temporary residence in Romania these are related to the family union (family reunification, family members of Romanian citizens, the EU or the European Economic area), the education (students), the employment. Another category of migrants that should be taken into account is that of asylum seekers and those who have obtained some form of protection on Romanian territory.

This trend is directly influenced by Romania's economic situation and by the implementation of European rules which stipulate that the State in which the asylum

seeker enters or seeks protection for the first time is responsible for dealing with the application.

At the same time, we must have in mind that the migration of Romanians for employment, whether it is called emigration or labor mobility within the community after 2007 when Romania had become a Member State of the European Union, is already a mass phenomenon affecting all aspects of the Romanian life and society, and immigration, respectively.

In the year 2010, the number of Romanian migrants leaving for work abroad was estimated at about 3 million people; Spain and Italy were targeted by most Romanians who left across the border. The Romanian migration is defined by moving abroad for work, while most migrants are included in the category of active population, women and men alike.

There is a close correlation between the characteristics of Romanian migration, i.e. the Romanian migrant profile who works across borders and the immigration for the purpose of employment in Romania, namely the foreign worker's profile whom we may find within the national labor market sectors.

At present, even if Romanians never cease to migrate for work, the number of departures decreases. Changes refer to the typology of the Romanian migrant and migration. The ones who migrate are skilled specialists from the following fields of activity: health, education, technical, IT, migration being designed rather as a long-term project, having a character that tends toward being permanent. These issues are reflected in the percentage increase of concentrations of Romanian migrants in destination countries such as United Kingdom, France, Nordic countries and non-EU destinations: Canada, USA.

We believe that these developments of Romanian migration have the ability to produce interesting effects with regard to the trends of immigration flows for employment purposes towards Romania.

In the future, Romania could fill in the lack of Romanian specialists in the sectors mentioned above using a policy of attracting and encouraging the establishment, in our country of highly skilled immigrants from foreign countries.

Analyzing the current national context, Romania has to face the following challenges in the field of migration:

- Romania's accession to the EU and, consequently, obtaining the right to free movement and residence of Romanian citizens, has caused a migration of local skilled or unskilled labor towards the markets of other Member States, a fact that has led to the emergence of deficits in some areas of activity;

- opening, more than ever, the labor market in 2008 for workers with low and medium training, and prolonging the world economic crisis which began in early 2009 forces many of the foreigners admitted on Romanian territory for employment to lose their jobs and try to leave the national territory to other labor markets;

- using the Romanian territory as a transit area for illegal migration to EU countries by the citizens of Eastern Europe and the Middle East; this phenomenon is emphasized by the abolition of internal borders, from the time of application of the provisions of the Schengen acquis;

- the pressure put by the migrants from countries in Southeast Asia over the borders of South, East and North-East in their attempt to enter the territory of Romania illegally with the intent to reach other countries in Western Europe;

- in the context of a Europe that grows old, Romania is experiencing this phenomenon as well as the majority of EU Member States, immigration being a part of a package of measures that can improve this situation.

3. PECULIARITIES OF THE IMMIGRATION FLOW IN ROMANIA

Immigration is a relatively new phenomenon for the Romanian society which has experienced greater development especially in the last decade, in particular during periods of economic growth (immigration for work), in the context of acquiring the status of a Member State of the European Union (family reunification and a Romanian citizen family member) and as a result of national policies in the field of education and of encouraging Romanian ethnic migrants to attend schools in Romania (immigration for the purpose of learning).

I could notice that the immigration phenomenon in Romania has two distinct phases:

➢ Until 2004 the number of immigrants was relatively low, the majority of immigrants coming from Syria, Jordan, Iran, Egypt, China and Turkey. Most of the aliens, mostly men, came to Romania in order to carry out commercial activities, taking advantage of a permissive legislation and favorable foreign investments and the setting up of businesses. There were also immigrants who took courses of Romanian universities continuing a tradition manifested somewhat since the time of the Communist regime;

➢ In coming years, the growth in the number of immigrants, of the countries of origin and a diversification of the purpose for which immigrants are choosing Romania as a country of destination. In addition to immigrants who came to Romania to carry out various economic activities, there are specific targeted immigration flows: for work, for family reunification and for education. Thus, a relevant example of this evolution is the case of the Chinese immigrants and a similar case is that of immigrants from Turkey.

Along with the Chinese and Turkish immigrants, the immigrants from the Republic of Moldavia are one of the three main communities of foreigners in Romania. Unlike the evolution of immigration from China and Turkey, Moldavian migrants have been attracted to Romania, especially for the purpose of studies and work, and less for entrepreneurial activities. As for the Moldavian immigrants who came to Romania to find work, they were employed in the fields of activity which had registered shortage of manpower: constructions, manufacturing, trade, financial and banking services, and agriculture. Moreover, the immigrants from Moldavia have the particularity that they share the same language and culture with the Romanians, which represent the primary factors for good integration.

The year 2007 represents a turning point in terms of immigration in Romania due to the fact that it acquired the status of Member of the European Union. At that time, Romania joined the intra-Community mobility circle and the immigration policy

focuses on the immigration phenomenon of citizens from third countries, i.e. from the extra-community. At the same time, starting with this year, there comes a period with an interesting dynamics of the immigration phenomenon against the background of Romania's economic development. Thus, in direct correlation with the economic situation of Romania there was a massive increase of immigrations for the purpose of work and of the number of work permits issued to migrant workers in Romania during the economic boom (2007-2008) and a significant decline in this respect during the economic contraction and throughout the period of economic and financial crisis in 2009-2011.

However, as seen in the chart below, the phenomenon of immigration experienced a series of changes regarding the composition of migration flows caused by the alignment of the Romanian legislation to Community laws; these consequences could have been noticed since the pre-accession period. On the one hand, the increasing trends of migration of citizens from third countries who come to Romania for the purpose of family reunification or because they are family relatives of Romanian citizens, for education and, as mentioned above, in order to work and, on the other hand, the dramatic fall of the immigrants who come to our country to start a business, for commercial purposes, respectively are highly relevant in this regard.
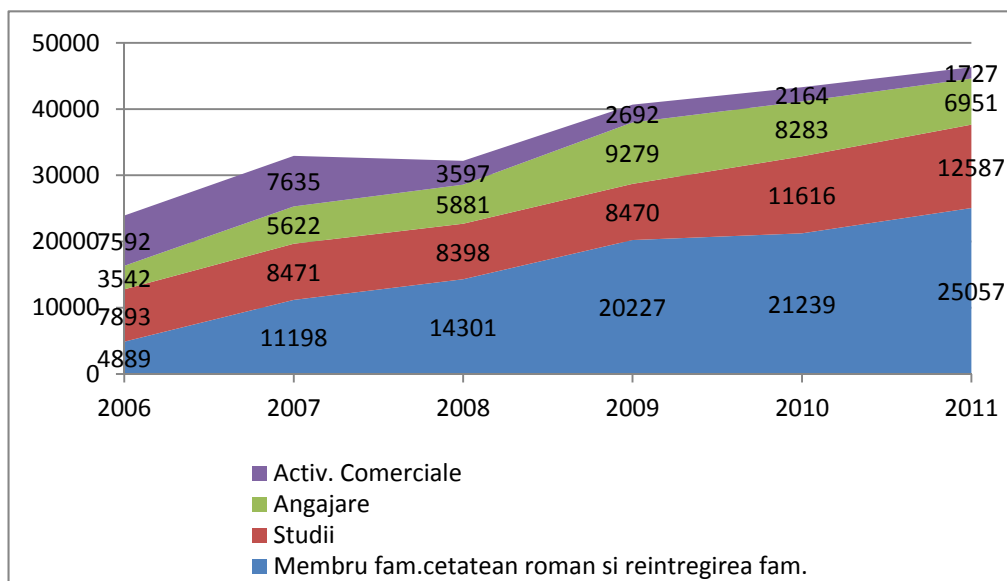
Source: data processing Romanian Office for Immigration, the Ministry of Labor, Family and Social Protection

Figure 1. Evolution of the number of immigrants according to the purpose of immigration in Romania

Immigrants who have arrived in Romania through family reunification are on the one hand the life partners of foreign nationals who are already in Romania, mainly of the newcomers in the first wave of immigration for business, education or work

purposes. Most immigrants for family reunification are women from countries in the Middle East, Turkey, China or the citizens of the Republic of Moldavia. A very small percentage of the immigrants based in Romania due to a family reunification is represented by the category of relatives in the first degree, the elderly or the minor children of aliens. Records show that at national level there is a policy that encourages the coming of foreigners for education purposes, particularly of ethnic Romanians who have special places in Romanian universities. The data show that around 80% of the immigrants who study in Romania are from the Republic of Moldavia. [3]

Many of the Basarabian youngsters chose to study in Romania, and to apply for scholarships offered by the Romanian Government in order to obtain a diploma of education from an accredited educational institution in Romania. This represents for many Moldavian migrants a hope to obtain a better job and a more promising future - whatever the choice – whether to remain in Romania or to migrate to other EU countries which acknowledge their studies.

The immigrant work force reflects the profile of Romanian migrants who leave to work abroad, the growth and the decline in the number of migrant workers is directly proportional to the economic trends reflected by the demand on the labor market. Migrant workers are found in such sectors of economy as follows: constructions, transportation infrastructure and shipyards, trade and public catering services, domestic sector and child care, and other services, including hotels, restaurants, manufacturing and agriculture. They have a medium education but consistent professional experience and skill in their profession.

From the point of view of the countries of origin, most foreigners with temporary residence are from Moldavia, Turkey and China, the three countries covering almost 60% of all of the countries of origin.

The analysis of the structure by sex and age groups of legal immigrants in Romania, both for those with temporary residence and for those with permanent residence highlights that the overall balance tilts in favor of men who hold a rate of about 60% of the total of immigrants. However, as we expected, the ration of the category including people of 35-65 years of age, grows more and reaches 70% men and 30% women.

Analyzing the distribution of immigrants by age groups we may find that the immigrant population is a young population, and more active on the labor market, potentially productive and therefore it should receive all necessary conditions for successful integration. Moreover, the age structure of migrants in Romania is a prerequisite and a potential solution to the demographic problem of Romania, an aging society, with a high emigration and a low birth rate.

With regard to territorial distribution of third-country nationals with legal residence in Romania, it is apparent that they are concentrated in a ratio of 41% in the country's capital-Bucharest - or, to be more precise, in Bucharest-Ilfov region, and about 33% have chosen in relatively equal percentages (around 6%) the major conurbations in the counties of Iasi, Cluj-Napoca, Constanța, Timis, Prahova, Bihor [4].

Among the explanations concerning the degree of attraction of urban centers upon foreigners we may find the following: urban areas are the poles of economic

growth and development which requires manpower, and therefore it needs immigrant work force either skilled or unskilled; some universities are very important and therefore attract immigrants who come for education; others are located bordering areas, namely on trade and transportation routes.

At the same time, urban congestion provides greater opportunities for the integration of foreigners due to the fact that they can quickly find a job, they can open a business or their business may have greater success, they may have more opportunities to access education and training, and to create more easily their own social networks or communities. The aliens' integration is easier in large urban centers because residents are more cosmopolitans than in small towns or in rural areas where the conservative vision persist.

4. CONCLUSIONS

The determinants of migration, as well as the economic and social impact represent the subject of an increasingly rich academic literature on sustainable development, which focuses on public policy debates and beyond. Within this framework, we can find particularly the demographic factor (size and population growth, age structure, sex and socio-professional categories) that strongly influences the internal and external migration.

With regard to the phenomenon of immigration in Romania, from the analysis undertaken one can outline the following **conclusions**: immigration is a relatively new phenomenon for the Romanian society which has experienced greater development especially during the last decade, in particular during periods of economic growth; the dynamics of the intra-EU mobility from the recent years reveals an upward trend in the number of EU citizens who have legal residence on Romanian territory, a number which has increased twice and a half during the reference period, and the average rate of growth from year to year is more than 35%; records show that at national level there is a policy that encourages the coming of foreigners for the purpose of education, particularly of ethnic Romanians who have special places within Romanian universities; migrant workers, although they have a medium education, they have an appropriate professional experience and qualification for their job.

However we must not neglect the aspect according to which there are a number of analysis and qualitative research studies that confirm the presence of immigrants in the hidden economy sector and the existence in Romania of illegal immigrants.

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PECULIARITIES OF DEVELOPMENT AND IMPLEMENTATION OF MARKETING STRATEGIES IN A PRIVATE COMPANY

ANCA JARMILA GUȚĂ [*]

ABSTRACT: *A main condition for achieving economic purpose is to formulate a firm by its management market strategies to be adopted for successful business. The paper presents the main strategies used in SC Eco Invest LLC, how to link the marketing objectives with strategy practiced in the firm and establishing a new set of objectives are presented the types of strategies that are to be adopted by the firm position against the market.*

KEY WORDS: *strategic management; strategy; marketing strategy; strategic objectives; types of strategies; the company's general objectives; financial goals; marketing objectives.*

JEL CLASSIFICATION: *M*

1. INTRODUCTION

The drawing up of development strategy of an enterprise in which a very important place it holds setting marketing strategy, represents a complex process which is subject to strategic management – the basis management component of overall economic activity. The thinking and management strategy must be materialized in development programs, in which are defined the place and role that will have the enterprise in socio-economic aggregate in which they operate, the way which it will use to conquer the desired position.

In the competence of strategic management enter three basic dimensions:
- the activity field of the enterprise;
- the establishing of its performance indicators;
- the elaboration of overall development strategies that lead to achieving establidhed objectives.

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The definition of activity field of the enterprise, the establishing of its place and role, nature and purpose must be treated with the greatest responsibility. The importance of this side of strategic management grows more in the dynamic social-economic conditions of contemporary enterprises requiring frequent strategic, involving, inter alia, the modification of realized products and services structure and ensuring new markets.

An important condition for achieving the purpose of the company is formulating of a set of objectives that express in operational terms the anticipated performances reflect the effectiveness of conversion process of enterprise resource. Every objective must contain three elements: a specific attribute through which is expressed the objective, a scale, through which this attribute is measured, a purpose, namely a certain value on the scale which the enterprise proposes to achieve.

The concrete objectives are different from one company to another, as determined by the activity profile, the place occupied by the enterprise in the market. In developing the objectives should be considered also other considerations:

- it is necessary that for a certain purpose to be given some quantitative formulation as precise as possible and the performance for its realization must be measurable;
- a certain object is required to be well employed in the hierarchical structure of the set objectives of a program.

There are many ways to classify targets. For conditions of our economy, it is work paying attention to distinguish between macroobjectives and microobjectives of the company. The macroobjectives are represented by general objectives common to all enterprises that make up an economic branch, a sector of activity, being included in their development plans and programs. The microobjectives refer to the particular objectives of an enterprise according to its specific conditions.

In terms of their nature, the objectives of an enterprise can be economic and social objectives. Through economic objectives aimed the optimization of the efficiencyof utilization of enterprise resources. Among them are:

- the objectives aimed at economic efficiency (net income, profit, net currency supply, etc.)
- the objectives concerning the rate of enterprise development, its market share and competitiveness.

In the adoption of its market strategy the enterprise has to choose between different alternatives of development. They can be defined based on the basic elements of the vector of grouth. If we consider all directions of development in conjunction with the current state of enterprise products and markets, we obtain a wide range of possible strategies, having the following contents:

- **Market penetration strategy** involves improving the position of the current markets in the conditions of offering the same products.
- **Market development strategy** guides the enterprise to find new segments of customers that would require actual products following give them new uses.
- **Reformulation strategy** leads to improvements of products aiming to increase sales to current markets.

- **Enlargement market strategy** takes into account the changes of existing products and introduction in new sale markets.
- **Replacement strategy** aims to launch at the same kinds of markets some new ranges of goods improved realized on the basis of new technologies similar to those of the original product.
- **Product differentiation and market segmentation strategy** is conceived in order to develop new variants of a product assortment and launch them on the market in order to satisfy its segments.
- **Product line expansion strategy** aims to develop new products based on existing related technologies and the same market segments.
- **Concentric diversification strategy** supposes attracting of new segments of customers, adding new variants in the current line of products.
- **Horizontal diversification strategy** consists in development of new products using different technologies than those current and which are intended for the same market segments.
- **Lateral diversification strategy represents** the alternative leading the enterprise towards the realization of new products which are not related to current products neither of technological point of view not that of market segments to which they are intended.

From the multitude of strategic alternatives, the enterprise should choose the variant that allows taking into account the highest degree of factors actions of endogenous and exogenous nature. It is necessary to exist a complete concordance between developed market strategy and all other elements of the marketing policy, so to ensure effective participation in the enterprise market.

2. PRACTICED CORPORATION STRATEGY

ECO INVEST SRL (Ltd) company was founded in 1995 with an initial social capital of 200 lei by two partners. In august 1995 the company requested and received two loans worth DM 100.000 and 100.000 lei respectively for the purchase of land on which would be built the first warehouse of construction materials from a number of 3. Also in the same period 5 vehicles of 4, 3 and 10 tons have been purchased. In 1998 the company's share capital increased from 200 lei to 500 lei - contribution of the two partners.

ECO INVEST SRL, based in Deva - Hunedoara county, has as main activity wholesale and retail sale of building materials in Hunedoara county and surrounding counties. Thus, retail trade is done through its own network of retail stores that know a very important development in Hunedoara county level, both in its main cities and communes and villages. In neighboring counties have set up a network of shops, selling partners based on custody agreements of company products. Wholesale trade is done mainly through the three warehouses that have the following geographical distribution: one in Deva, one in Hunedoara ande the last warehouse is located in Timisoara.

The products covered by marketing firm Eco Invest were carefully selected so as to provide optimal solutions to potential customers (individuals and legal entities).

Were laid the foundations of such collaborations with different local and foreign manufacturers of building materials that in fact represent the principal strategic advantage of the firm, especially if it is matter of exclusive contracts in some markets. The privat product is also represented by the bituminous plate ONDULINE, which by its outstanding features had a strong market penetration in a relatively short time. This product is part of a wider range of products of a French concern.

Other products marketed by Eco Invest can be classified into the following types: grit stone and faience, sanitary ware, paints, varnishes, adhesives, cement, lime, plaster, polishing plasters coat, bricks, timber, etc. Lack of division / marketing department motivates the fact that the company Eco Invest didn't implement the strategies well realized and correlated with the real situation existing in the market in which it operates, but it has done the adoption of some strategies without a previous study of the external environment and internal resources.

So far Eco Invest Srl company has used in its activities different strategies, depending on the states and structure of environment, which are included in the table below.

Table 1. Current strategies of Eco Invest SRL

Market indicators	Strategies adopted by the company
Depending on market dynamics	Maintenance strategy - the company has tried to maintain the volume of activity.
Depending on market structure	Differentiated strategy – when the company focused in issue to market on small when consumers (individuals) by providing direct access to them (retail stores).
Depending on market changes	Passive strategy - the company has adapted its activities to the environmental changes without having influence on them.
Depending on market demands	High demands strategy - the company tried to satisfy at the highest possible level the market demands.
Depending on the level of competition	Defensive strategy (maintaining market share) – the company through measures taken in response to competition actions, had in view maintenance of market share.

These strategies were not in concordance with the economic environment in which the company acts, they aren't effective enough to propel the company above the level of activities developed by the competition. It is necessary to amend these strategies and establish a new set of objectives that will position the company on a new trajectory in the market.

3. HARMONIZATION OF MARKETING OBJECTIVES WITH COMPANY STRATEGY

An important condition for achieving the purpose of enterprise activity is formulating of a set of objectives that should express in operational terms the anticipated performances and reflect the effectiveness degree of conversion process of the enterprise resources.

The new set of objectives of Eco Invest Srl company is divided into three categories: general and financial objectives and marketing. By general objectives of company the level of performance are targeted following attained within a certain period of time, they refer the set of activities developed by the company. By formulating these objectives the company aims to raise the expectations of all parties interested directly or indirectly by its results, namely customers suppliers, own staff, etc. In defining financial targets are commonly used indicators such as growth rate of profit, profit rate, investment efficiency, sales growth index, etc.. Marketing objectives can be expressed in qualitative or quantitative terms.
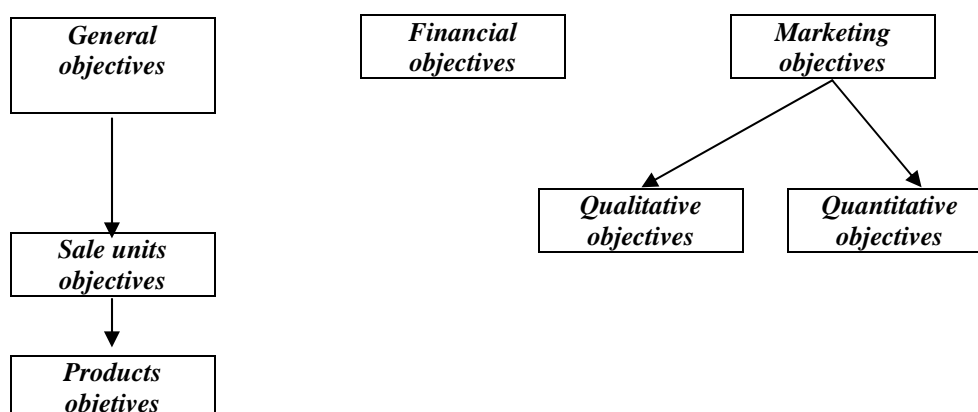
Figure 1. Company objectives

The general objectives of SC Eco Invest SRL:
- increase of turnover by 10% growth in sales volume in 2012 by:
  - increase of sales volume by 4% and by sales force an increase of 6%;
  - increase of sales share in Onduline products in total of enterprise sales with 7% (currently accounting for 28%) and other products by 3%;
- continuous training and improvement of staff in advising customers to make better the use of products;
- developing a website which will include description of the company, its activities and products sold (theire ilustration by images);
- increase annual profit by 15%;
- increasing sales force size to 2011;

- widening range of products marketed to reach the range offered by competitors;
- obtaining from French provider Onduline of exclusivity clause in the Western area of the country;
- proceeding to a policy of remuneration of all staff structured as follows: a fixed monthly rate for each employee and a variable rate - percentage of monthly profit made by the firm, given to each employee based on responsibility and contribution.

The financial objectives of SC Eco Invest SRL:

- increasing the financial autonomy of the firm;
- granting of flexible discounts depending on quantity purchased (for large consumers);
- granting of facilities for realization of the payments (payment terms greater for large consumers);
- optimization of pricing in relation to the practice of competition.

Marketing objectives of SC Eco Invest Srl:

- constituting of a marketing department;
- increase brand identity and loyalty of a large number of consumers;
- composition of the advertising budget.

Objectives expressed in quantitative terms were:

- market share increase by 3%;
- increase of market coverage degree.

Objectives expressed in qualitative terms were set as follows:

- design of brochures, flyers and catalogs that will illustrate our products;
- promotion of the brand image of external suppliers: Onduline - France, Elvico - Greece, Coem - Italy;
- improvement of the company image through: increased publicity actions, by the improvement of public relations, etc.

4. PROPOSED MARKET STRATEGY FOR ECO INVEST

The company strategy is the result of strategic options of its top management concerning the ways that will follow and alternative means that it will use to achieve the objectives.

The strategy represents a product of strategic management process that consists of a comprehensive plan, unitary and integrated set of management action to achieve the fixed objectives, which specifies how the company will be headed and how and what actions will be realized to ensure realization of assumed mission by the company.

Marketing strategy succes depends above all on its realism and on the measure in which its choosing and formulating were well-founded, this condition being complished, the means put in motion will be considered to promote it in practice.

In light of the results obtained from the use of currently applied strategies until now by SC Eco Invest SRL there is necessity of reformulation of company objectives

and strategies. As result of establishment of the new set of objectives should be adopted the following types of strategies depending on the position of company concerning the market:

- o Depending on market dynamics - SC Eco Invest SRL will adopt the growth strategy by which it will try to obtain an upward trend of sales volume both for the ten available retail units and for each product apart. Once obtained by adopting this type of strategy, this trend will ensure profit margin of targeted 15%, increase of the expected turnover and also carrying out of other general objectives proposed for the company.
- o Depending on market structure - differentiated strategy - focused on the major segment of consumer, proposed by Eco Invest SRL will lead to increase turnover in 2012. This choice is underlined by the evolution of transactions over the last three years between Eco Invest and representatives of this market segment. Thus, the value traded by Eco Invest SRL was registered for the company a percentage of approximately 90% of total turnover in 2011. In 2009 the traded value registered 61% of turnover, and in 2010 this value was 77% of turnover.
- o Depending on market changes – SC Eco Invest SRL will practice an active strategy for permanent knowledge of modifications in future of the environment, finding opportunities and influencing of its evolution through a continuous process of innovation.
- o Depending on market requirements - The strategy to be adopted by SC Eco Invest SRL will be the strategy of high requirement, since by its use in recent years company managed to achieve positive economic results and attract a significant number of consumers.
- o Depending on the level of competition. Unlike the previous period in which SC Eco Invest SRL pursued a defensive strategy, to maintain the market share, for the next period it will try to use an offensive strategy and thereby win a new position in the market. Practicing this strategy will be possible in the practice of a new pricing policy.

For the enterprise the market strategy is only a "guide". Its materializing and thereby promoting a global marketing policy suppose taking a series of practical actions and involment of some efforts for their realization. It doesn't matter of isolated actions but also of coherent aggregate put in action based on some programs which should optimize marketing efforts necessary to promote market strategy.

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ECONOMETRIC MODEL CONCERNING THE STATUS AND EVOLUTION OF THE AUTOMOTIVE INDUSTRY IN ROMANIA

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ABSTRACT: *The year when the automobile appear, 1885, changed irreversibly the world, revolutionizing the people lifestyle. This creation anticipated new industrial domains, stimulated the massive employments, and eroded the "class struggle" offering the opportunity to travel also to those without financial possibilities, offering the pleasure of hobby to thousands of people. These considerations coupled with the fact that the automotive industry in Romania is one of the industries with the highest value added, made us choose this industry for our study. The paper aims to make a presentation of the characteristics and evolution of the automotive industry in Romania, also proposing an econometric model through which to be able to predict its evolution.*

KEY WORDS: *competitiveness; automobile industry; performance; evolution; economic crisis.*

JEL CLASSIFICATION: *L25; L62; C53; C52.*

1. INTRODUCTION

The XXI century is a challenge for the automobile producers, but one aspect is universally recognized: the desire to own an automobile is spread or universal across the globe. The automobiles with engine remain the most used way to get somewhere: in the proper sense as a means of transport, and figuratively, as the image of a social status. Automobile production is one of the most important economic activities, involving different balances also in other sectors, such as relations with manufacturers of spare parts, technical research, petroleum products, the design and construction of highways, international tourism, marketing firms, organizing automotive rallies, and others. The automobile revolutionized people moments: the universal desire to possess an automobile has its source in the historical aspirations of the people for freedom,

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mobility, speed, comfort, security, independence and quality of life increasing, representing the largest acquisition of the human, after housing. Today, the automobile ensures conjunction with pleasure, but also with its quality of mean of work, being also subject of legislative disputes.

The knowledge revolution generates profound and essential changes of all the economical activities` components, radically influencing the productiveness and competitiveness of firms and of national or global economies. (Sîrbu et. al., 2009)

The automobile represents nowadays a delicate problem that should be solved by moderating the dependence of people from urban environment towards the automobile, reducing the negative effects on the environment, valuing the public transport offer. Romania adherence to European Union meant major responsibilities for Romanian environment, respective economic environment, politic, demographic and socio-cultural. The automotive Romanian industry is quite internationalized, being one of the few, if not the only competitive national sector able to be integrated in the situation of internationalization and globalization of the global economy. The single market means for the Romanian automobiles producers a new challenge, that of creating a highly competitive sector.

In the context of an economy in full uptrend, the Romanian automobile and auto parts industry is characterized by an effervescence generated on one side of the infusion of foreign capital attracted by cheap labor force, well qualified, low costs, Romanians experience and on the other hand by the Romanian automotive manufacturers. (Drăghici & Mihai, 2008).

In 1990, the automotive market from our market included three Romanian brands: Dacia, Aro and Olcit. Apart from these, in Timisoara there was also a small factory for the production of a car brand with small fuel consumption (600 cm3), manufactured only in Romania under the name Lastun. (Bâldan & Ungureanu, 2007).

Currently on the Romanian market there are two autochthon producers, respectively Dacia Groupe Renault and Ford Romania, and about 43 important brands of automobiles. In fact, even these two major producers are no longer with Romanian capital, but they have majority foreign capital. Automotive industry was not the only one who has recorded massive privatizations from 1990 to the present. The largest privatization deals concluded are: Romanian Commercial Bank (sold to Erste Bank at the end of 2005), Petrom (the national oil company, sold to OMV in 2004), Agricultural Bank (sold to Raiffeisen Bank in 2001), Sidex – the giant steel mill (sold to ArcelorMittal in 2000), Romanian Development Bank (sold to Société Générale in 1998), and Dacia car manufacturer (sold to Renault in 1997). The most recent important privatization contracts were signed for car maker Automobile Craiova with Ford, in 2007 (Rădulescu, 2010).

The late privatization of Dacia Company delayed the investments in the horizontal industry (Manea, 2005). The automobile market liberalization from 2006 concerning the integration of Romania in the European Union, determined the competition increase on the Romanian automobile market.

After 1990, Romanian people took by storm the second hand automobile market in Western Europe, which led the Romanian automobile market to be up of such automobiles. Thus APIA statistics indicate that in 1999 there were recorded sales

of 6764 new automobiles from the import and in 9038 from national production. In time, the proportion between the sales of second hand automobiles and new automobiles changed, in 2007 in Romania selling 204719 automobiles from import and 110902 autochthon automobiles.

The economic and financial crisis broke the joy of new automobiles importers, in January 2010 on the Romanian market selling 2728 new automobiles form the import and 715 from internal production. This evolution enjoys the sellers of second hand automobiles and displeases the producers.

The object of the research has been the presentation of the automobile industry at both the European as well as the Romanian level, the effects of the world economic crisis on the automobile industry and the conception of an econometric model of forecasting the evolution of the Romanian automobile industry.

Theoretical support of the scientific research focused on studying both the fundamental work of specialists from several countries, as well as regular publications of EUROSTAT, World Bank, OECD, Dacia Group's internal publications; there have been analyzed statistical data of Romania's National Statistics Institute, Association of Automobile Manufacturers in Romania, the Association of Automotive Manufacturers and Importers, the European Automobile Manufacturer's Association, etc..

The procedures mainly used in our research were: logical analysis and synthesis, induction and deduction, analogy and the statistical and econometrical method. An important role has benchmarking process used in formulating ideas on Romanian automotive industry. To study the evolution of the automobile industry was used the case study method, which allowed drawing conclusions on the automotive industry in Romania.

The theoretical aspects are supplemented with examples, cases and numerical models where necessary. All these are subjected to the same fundamental goals, namely to facilitate understanding and using concepts and tools and encourage initiative and creativity of those who study the paper. In this way we hope this can help build a modern, dynamic and optimistic way of thinking.

2. THE EFFECT OF THE ECONOMIC CRISIS ON THE EUROPEAN AUTOMOTIVE INDUSTRY

The world has not been through something like this from over 70 years. Since spring 2008, the ominous signs were multiplied: first in the American immovable sector, then in the banking domain and of the investments funds, and lastly in the industrial domain. The lack of liquidity, the reluctance of banks to grant loans became within a few months phenomenon that affected all major world economies.

The headlines of the newspapers announced resounding insolvency of some financial giants like the size of Lehman Brothers corporate, of some industrial symbols such as General Motors, or even an entire country, as in the case of Iceland, whose people found themselves in spring of 2009, under the burden of a public debt higher than Germany went down at the end of World War I.

Since the first trimester of 2008, all major industrialized countries of the world have entered in recession in turn, inducting into the same downward spiral a good part

of the world economy. In some cases, such as in the Baltic States or Ukraine, the economic decline has been particularly abrupt, of over 10% in a few months.

Romania also went from, the record economic growth from 2007-2008, to a deep recession, some analysts estimating for this year a decrease of over 6% of GDP.

The automotive industry also experienced a series of dramatic developments: the American giants General Motors and Chrysler were forced to search relief in bankruptcy, brands like Opel, Saab and Ssangyong have been saved from collapse after the takeover by investors in more or less related to the automotive industry. On the other hand, the difficult access to finance of the customers made the auto markets to decrease highly: with more than 25% in the United States, with over 40% in Russia, 60% in Ukraine. Countries such as Germany and France managed to avoid this collapse, launching ample programs to stimulate the purchase of new automobiles. Thus, the government in Berlin has allocated 5 billion Euros for German version of scrappage program, establishing a scrapping premium for 2500 Euros. In Italy, the value of the scrapping premium was established at 3500 Euros. These measures proved their efficiency, contributing to the selling revival on the respective markets.

The European automotive industry represents the key of power and competitiveness of Europe, the EU produces almost one third of the automobiles produced in the world. This has an essential role for economic growth (with a major contribution to EU GDP), exports, innovation and employment.

The economic crisis affected intensively the automobile sector, for its sustaining being necessary a focalized support, that treats the structural problems through the competitiveness increasing and through the adaptation on future needs. (Hagiu, 2011)

As a result of the facts that between 60 and 80% from the new automobiles from Europe are purchased through the credits, the financial crisis that generated the deceleration of the economic growth affected widely also the industry of automobiles. The difficult situation of the European industry of automobiles is due to some three major causes:

♦ First, there has been a suddenly and uniform reduction of the automobile demand, both in the EU and worldwide, due to lower consumer purchasing power.

♦ Second, some segments of the automotive industry reported difficulties in accessing credit and concerns of liquidity absence, caused by the fact that many companies were unable to obtain credit on reasonable terms, having low credit ratings due to negative prospects of the market.

♦ In the third, the automotive industry has suffered from structural problems before the crisis; automobile companies were already finding themselves in a highly competitive business environment.

The year 2010 had a disappointed end in what concern the automobile industry, because the sales went down with 4, 7% compared with 2009.

Sales were down by 3 of the top 5 European markets compared to 2009, as: in France fell by 0.7%, Italy 9.2% and Germany with 23.4%, while in the Great Britain and Spain have registered slight increases of 1.8% and 3.1% respectively. (Table 1)

The automobiles sales that were achieved in Central Europe and East Europe in 2010, were well behaved, most markets in the region showing positive growth

compared to previous year. For example, in Lithuania and Latvia in 2010 the sales increased to 6.1% and 18.6%, in big contrast to figures from the end of 2009, showing a decrease of 72.9% and 66,.2%. Despite having sold with 13.7% fewer cars in 2009 than the Golf, Volkswagen remained the bestselling brand in Europe, with sales of 492,556 units during the year.

Table 1. Automobiles sales according to the market

Country	Dec_10	Dec_09	Change % Dec	Year 2010	Year 2009	Change % Full year
Austria	20,366	19,422	+4.9%	328,565	319,404	+2.9%
Belgium	29,243	26,449	+10.6%	547,347	476,194	+14.9%
Cyprus	1,171	1,014	+15.5%	14,099	15,004	-6.0%
Czech	14,210	14,815	-4.1%	168,220	161,663	+4.1%
Denmark	9,372	11,790	-20.5%	146,721	112,436	+30.5%
Estonia	764	697	+9.6%	10,295	9,946	+3.5%
Finland	6,191	4,144	+49.4%	111,961	90,664	+23.5%
France	228,316	228,392	-0.03%	2,251,669	2,268,671	-0.7%
Germany	230,371	215,564	+6.9%	2,916,260	3,807,175	-23.4%
Great Britain	123,817	150,936	-18.0%	2,030,846	1,994,999	+1.8%
Greece	3,675	9,680	-62.0%	140,691	220,074	-36.1%
Hungary	3,935	4,360	-9.7%	43,815	60,743	-27.9%
Iceland	225	102	+120.6%	3,106	2,132	+45.7%
Ireland	433	304	+42.4%	88,423	57,461	+53.9%
Italy	131,220	167,699	-21.8%	1,970,142	2,170,688	-9.2%
Latvia	804	339	+137.2%	6,365	5,367	+18.6%
Lithuania	857	591	+45.0%	7,970	7,515	+6.1%
Luxemburg	2,503	2,800	-10.6%	49,726	45,186	+10.0%
Norway	10,578	10,250	+3.2%	128,196	98,675	+29.9%
Poland	35,940	28,710	+25.2%	334,395	322,108	+3.8%
Portugal	22,703	17,385	+30.6%	218,052	161,001	+35.4%
Slovakia	7,754	5,864	+32.2%	66,063	85,298	-22.6%
Slovenia	3,399	3,553	-4.3%	59,226	55,712	+6.3%
Spain	69,438	90,825	-23.5%	985,526	955,823	+3.1%
Sweden	29,769	19,368	+53.7%	289,683	213,408	+35.7%
Switzerland	27,796	24,146	+15.1%	290,758	265,544	+9.5%
Netherlands	11,593	7,980	+45.3%	483,947	385,564	+25.5%
Total	**1,026,443**	**1,067,179**	**-3.8%**	**13,692,067**	**14,368,455**	**-4.7%**

Source: http://www.jato.com/PressReleases/A%20Tough%20Year%20for%20the%20European %20Car%20Industry%20as%20Overall%20Sales%20Fall%20During%202010.pdf

2011 was another difficult year for the industry, due to the cuts in national budgets of the countries from Europe and the lack of consumer confidence. It is worrying that many markets registered a significant diminution in sales in December, reiterating the fragile nature of the recovery. It is expected that the producers to be very active throughout 2011, deploying a range of strategies to support their sales performance.

3. FORECASTING THE NUMBER OF AUTOMOBILES PER 1000 INHABITANTS

Despite the crisis in the automotive industry, recent years have seen record levels on the volume of automobiles produced by worldwide brands. If in 2007 was recorded for the first time a level of 70 million automobiles in 2010 this record was broken, reaching 72 million, and for this year, if the effects of stopping production in Japan, with chain implications on all continents, will not be higher than calculated so far, will be produced over 76 million automobiles and light commercial vehicles. (Finance, 2011)

Specialists are convinced that the provided signs by all the markets with low demand and a stability more and more obvious, are arguments for better sales, which will be with an equivalent with an increase of production.

In the following subchapter we will example the econometric approach on the auto industry from Romania, Thus, we will justify the applicable model for the description of auto industry from Romania and we will estimate formulated model components (including verification of its meaning). At the end of the subchapter, we will estimate the values of the auto industry for the next period (2 years).

For the beginning we will present a statistic situation of the number of automobiles reported to 1.000 inhabitants from the last years. (Table 2)

Table 2. The statistical evolution of the number of automobiles (medium class) reported to 1.000 de inhabitants

Year	Number of automobiles
1998	77.20
1999	79.10
2000	81.10
2001	84.80
2002	85.10
2003	86.80
2004	91.30
2005	95.20
2006	98.40
2007	97.70
2008	100.40
2009	104.70
2010	114.20

Because this statistic situation is a chronological series, the model specification will start from the graphic representation of data, respective the building of waveforms.
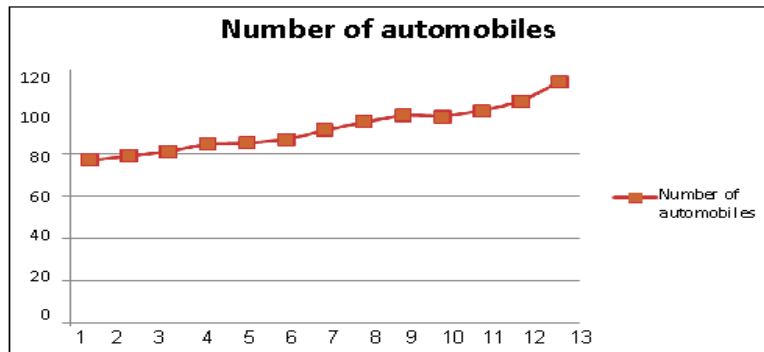
Figure 1. Evolution of the automobiles number

Because in the analyzed period, the phenomenon evolution represents a permanent increase, without significant oscillations, and the empirical points curve present a shape that can be approximated with a straight line model, which can be used to approximate the evolution of the phenomenon is:

(1) $$y_t = f(t) + u_t$$

where:

y_t – registered values by the number of automobiles in the analyzed years

f(t) – the trend component that can be described by a linear function:

$y_{1t} = f(t) = a_1 + b_1 \times t$

u_t – residual variable

The previous model will be:

(2) $$y_t = y_{1t} + u_t$$

Solving the model involves estimating the two variables:

y_{1t} = estimated component trend;

$u_{1t} = y_t - y_{1t}$ = estimated residual variable.

Trend component estimation is performed using the method of the least squares, which is to minimize the function:

(3) $$F(a1,b1) = \min \sum (y_t - y_{1t})^2 = \min \sum (y_t - a1 - b1 \times t)^2$$

The minim condition of this function results from:

(4) $$F'(a) = 0, n \times a + b \times \sum t = \sum y_t$$

and

(5) $$F'(b) = 0, a \times \sum t + b \times \sum t^2 = \sum y_t \times t$$

The calculation of this system is represented in Table. 3. From the 3 table result the following situation:

(6) $$13 \times a1 + 91 \times b1 = 1196$$

(7)   91 x a1 + 819 x b1 = 8872.9

From (6) and (7) equations result that:
a1 = 72.7346 and b1 = 2.7522

Table 3. The calculation of the system for which the trend function have the minimum value

Year	Year (t)	y_t	t^2	y_t x t
1998	1	77.20	1	77.20
1999	2	79.10	4	158.20
2000	3	81.10	6	243.30
2001	4	84.80	16	339.20
2002	5	85.10	25	425.50
2003	6	86.80	36	520.80
2004	7	91.30	49	639.10
2005	8	95.20	64	761.60
2006	9	98.40	81	885.60
2007	10	97.70	100	977.00
2008	11	100.40	121	1104.40
2009	12	104.70	144	1256.40
2010	13	114.20	169	1484.60
TOTAL	**91**	**1196**	**819**	**8872.90**

Using the software package EViews to estimate model parameters were obtained the results shown in Table. 4.

Table 4. Parameter estimation using the software package Eviews

Dependent Variable: y_t
Method: Least Squares
Sample: 1998 - 2011
Included observations: 13

Variable	Coefficient	Semnif. ind.	Std. Error	Semnif. ind.	t-Statistic	Semnif. ind.	Prob.	
C	72,7346	a1	1,386	S_{a1}	52,4785		0,000	p(a1)
t	2,7522	b1	0,1746	S_{b1}	15,7612		0,000	p(b1)
R-squared	0,9576	R^2	Mean dependent var		92,0000	y med		
Adjusted R-squared	0,9537	R^2_c	S.D. dependent var		10,9530	S_Y		
S.E. of regression	2,3557	S_{t1}	Akaike info criterion		4,6922	AIC		
Sum squared resid	61,0441		Schwarz criterion		4,7791	SC		
Log likelihood	-28,4994	L	F-statistic		248,4160	F_c		
Durbin-Watson stat	1,2079	d	Prob(F-statistic)		0,0000	p(F)		

Based on these estimates were calculated estimated values of y variable, namely:

(8) $y_1 = 72.7346 + 2.7522 \times t$

and the ut residual variable namely:

$$u_{1t} = y_t - y_{1t}$$

The values registered by these variables are presented in the table 5.

Table 5. The values registered by the y and u variables (using Eviews program)

Actual y_t	Fitted y_{1t}	Residual $u_{1t} = y_t - y_{1t}$
77.20	75.4868	1.7132
79.10	78.2390	0.8610
81.10	80.9912	0.1088
84.80	83.7434	1.0566
85.10	86.4956	-1.3956
86.80	89.2478	-2.4478
91.30	92.0000	-0.7000
95.20	94.7522	0.4478
98.40	97.5044	0.8956
97.70	100.2566	-2.5566
100.40	103.0088	-2.6088
104.70	105.7610	-1.0610
114.20	108.5132	5.6868

To test the significance of parameters and model it will be calculated:
a) The dispersion of residual variation:

(9) $S_{u1}^2 = \sum u_t^2 / (T - k - 1)$

where:
T = number of terms of the series (13)
k = number of explanatory variables (1)

(10) $S_{u1}^2 = 61.0441/ (13 - 2) = 5.5495$
$$S_{u1} = 2.3557$$

b) The deviations of the quadric average of the two estimators a1 and b1:
$$S_{a1} = 1.386$$
and
$$S_{b1} = 0.1746$$

Because the terms number of the series is less than 30, estimators will be tested using the test „t" D - Student. From the table of Student distribution, for a significance threshold $\alpha = 0.01$ and in according to the number of freedom degrees $v = n - k - 1 = 11$, it takes the value $t_{0.01;\ 11} = 3,106$.

(11) $ta1 = a1/S_{a1} = 72.7346/1.386 = 52.4784 > t_{0.01;\ 11} = 3.106$
and
(12) $tb1 = b1/S_{b1} = 2.7522/0.1746 = 15.7612 > t_{0.01;\ 11} = 3.106$

So for a significance level of 1%, both estimators are significantly different from zero. The value of the correlation is:

(13) $R = \sqrt{(1 - \sum u_t^2/\sum(y_t-ymed)^2)} = \sqrt{(1 – 61.0441/1439.62)} = \sqrt{0.9576} = 0.9786$

Testing the significance correlation report is performed using Fisher Snedecor test:

(14) $Fc = (T – k – 1)/k \times R^2/(1 – R^2) = 11/1 \times 0.9576/0.0424 = 248.416$

From the table of Fisher – Snedecor distribution, for a significance threshold $\alpha = 0.01$ and according to the number of freedom degrees $v1 = k = 1$ şi $v2 = T - k -1 = 11$, it takes the value $F_{0.01;1;11} = 9.65$.

Because $Fc = 248.416 > F_{0.01; 1; 11} = 9.65$, the value of the correlation report is significantly different from zero, for a significance threshold $\alpha = 0.01$.

In order to check the independence of residual variable values will be used Durbin-Watson test, which consists in calculating:

(15) $d = \sum (u_{1t} – u_{1t-1})^2/\sum u_{1t}^2 = 73.7325/61.0441 = 1.21$

From the table of Durbin-Watson distribution, for a significance threshold $\alpha = 0.01$, according to the number of observations $T = 13$ and the number of exogenous variables $k = 1$, it takes the values (for the case $n = 15$):

d1 = 0.81; d2 = 1.07.

Because $d = 1.21 > d2 = 1.07$ and $d = 1.21 < 4 - d2 = 2.79$, can be accepted the hypothesis of independence of the residual variable values.

The verification of the homoscedasticity hypothesis of the errors for this model will be performed using White test. White test is part of the software package Eviews and with its help were obtain the result from the table no. 6.

Table 6. The representation of the obtained results using the test White

White Heteroskedasticity Test:

F-statistic	5,3762	Probability	0,0260
Obs*R-squared	6,7357	Probability	0,0345

Test Equation:
Dependent Variable: u_t^2
Method: Least Squares
Sample: 1998 2011
Included observations: 13

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.9641	6.4478	1.2352	0.2450
t	-3,4209	2,1182	-1,6150	0,1374
t^2	0,3282	0,1472	2,2293	0,0499

R-squared	0,5181	Mean dependent var	4,6957
Adjusted R-squared	0,4218	S.D. dependent var	8,6629
S.E. of regression	6,5875	Akaike info criterion	6,8074
Sum squared resid	433,9527	Schwarz criterion	6,9378
Log likelihood	-41,2481	F-statistic	5,3762
Durbin-Watson stat	2,0327	Prob(F-statistic)	0,0260

Using EViews program and analyzing the results shown it is found that $Fc = 5.3762 < F_{0.01;1;11} = 9.65$, and model parameter estimators are insignificant for a significance threshold $\alpha = 0,01$ ($t_{0,01;10} = 3,169$), so the homoscedasticity hypothesis is certified.

The checking of the model plausibility is performed using variance analysis method, aspect represented in table 7.

Table 7. Model plausibility checking

Source of variation	Measure of variation	No. degrees of freedom	Dispersion corrected	Value of F test	
				Fc	$F_{\alpha;v1;v2}$
Variance explained by the tendency	$V_t^2 = \sum(y1_t - y_{med})^2 = 1378.5759$	$k = 1$	$S_{y/t}^2 = V_t^2/k = 1378.5759$	$Fc = S_{y/t}^2 / S_u^2 = 248.416$	$F_{0.01;1;11} = 9.65$
Residual variation	$V_u^2 = \sum(y_t - y1t)^2 = 61.0441$	$T - k - 1 = 11$	$S_u^2 = V_u^2/(T - k - 1) = 1378.5759$	-	-
Total variation	$V_0^2 = \sum(y_t - y_{med})^2 = 1439.62$	$T - 1 = 12$	-	-	-

According to this method because $Fc = 248.416 > F001111 = 9.65$, the model is accepted, with a significance threshold $\alpha = 0.01$. From the equation of variation analyses:

(16) $$V_0^2 = V_t^2 + V_u^2$$
(17) $$100 = V_t^2/V_0^2 \times 100 + V_u^2/V_0^2 \times 100$$
$$100 = 95.76 + 4.24$$

Hence results that the model explains 95.76% of the total variation in the number of automobiles per one thousand inhabitants. In conclusion, the econometric model is:

(18) $$y_{1t} = 72.7346 + 2.7522 \times t$$
$$(1.386 \text{ and } 0.1746)$$
$$R = 0.9786$$
$$d = 1.21$$
$$S_{u1} = 2.3557$$

The model is accepted as significant and can be used to estimate the number of automobiles evolution. The analysis of forecasting ability of the model on the evolution of the number of automobiles per 1000 inhabitants during 1998-2011 can be made based on statistical indicators proposed by H. Theil.

Following the calculations performed using EViews software package to test the forecasting ability of the model on the evolution of the number of automobiles per 1000 inhabitants in the period 1998-2011, resulted the data from the table 8.

Table 8. The test results of the forecasting ability of the proposed model

Indicator name	Indicator symbol	Indicator value
Theil Coefficient	T	0.0117
Deviation balance	T^A	0.0000
Dispersion balance	T^D	0.0108
Covariance balance	T^C	0.9892

The analysis of the obtained results shows that the model has good a forecasting ability due to low values reported for the Theil coefficient, the weight ratio deviation and dispersion, for the deviation balance and dispersion balance and, so, can be accepted in order to make a forecast in the domain of automobiles.

The forecasted level of the model will be for 2011:

(19) $y1_{14} = 72.7346 + 2.7522 \times 14 = 111.3$ automobiles (medium class) to 1.000 inhabitants.

The standard deviation of the forecasted level of the phenomenon will be:
$Sy1_{14} = 2.7331$

Confidence interval of the forecasting phenomenon, estimated with a significance threshold $\alpha = 0{,}01$, for which the value of t_α, taken from the table of Student distribution, is $t_{0.01;11} = 3.106$, it is calculated with the relation:

(20) $P(y_{14} [y1_{14} \pm t_{\alpha;v} \times Sy1_{14}]) = 1 - 0.01 = 0.99$
        $P(y_{14} [111.3 \pm 3.106 \times 2.7332]) = 0.99$
        $P(y_{14} [102.80;119.8]) = 0.99$
        The forecasted level of the model will be for 2012:
        $y1_{14} = 72.7346 + 2.7522 \times 15 = 114$ automobiles (medium class) to1.000 inhabitants.

The standard deviation of the forecasted level of the phenomenon will be
$Sy1_{14} = 2.8156$

Confidence interval of the forecasting phenomenon, estimated with a significance threshold $\alpha = 0.01$, for which the value of t_α, taken from the table of Student distribution, is $t_{0.01;11} = 3.106$, it is calculated with the relation:

(21) $P(y_{14} [y1_{14} \pm t_{\alpha;v} \times Sy1_{14}]) = 1 - 0.01 = 0.99$
        $P(y_{14} [114.00 \pm 3.106 \times 2.8156]) = 0.99$
        $P(y_{14} [105.30;122.8]) = 0.99$

In conclusion, following the calculations, we can estimate that in 2011 the level of phenomenon will be in the interval of [102.8; 119.8], and in 2012 in the interval [105.3; 122.8], the probability of achieving these forecasts is 99%.

The appreciation of the prognosis based on linear model, can be done with two notions, forecasting safety and forecasting accuracy, concepts which are inversely related.

The safety forecasting is given by the probability (p) that is estimated the confidence interval, and the accuracy forecasting by the relation:

a) Absolute error:

(22) $\quad e1 = |y^{\square}_{n+v} - y1^{\square}_{n+v}| = |t_\alpha \times Sy1^{\square}_{n+v}|$

$\quad\quad e1_{2011} = |3.106 \times 2.7332| = |8.4893|$

$\quad\quad e1_{2012} = |3.106 \times 2.8156| = |8.7454|$

b) Relative erros:

(23) $\quad e2(\%) = e1 / y1^{\square}_{n+v} \times 100 = |t_\alpha \times Sy1^{\square}_{n+v} / y1^{\square}_{n+v}| \times 100$

$\quad\quad e2_{2011}(\%) = |8.4893/111.30| \times 100 = 7.63\%$

$\quad\quad e2_{2012}(\%) = |8.7454/114.00| \times 100 = 7.67\%$

After calculating the relative error of forecast (e2%) corresponding to the model, it is find that it leads to errors that do not exceed 15%, which means that these can be accepted as significant for making forecasts under this test.

4. CONCLUSIONS

Given that the general perception concerning the ideal car suffered important changes, the automobile more a necessity then a standard of financial potency, it will be interesting to see the competition between the two producers. Thus, as an effect of the increase of service costs, increase of the combustible price and the traffic and parking problems, Romanians began to lead towards low class models, which consume less. On the other hand, I think the price will have the most important say in this regard.

The studies show that the sales of low cost automobile will increase by over 500% globally by 2020, which will determine many auto producers to lead to this segment where Dacia is well positioned. The economic situation pretty precarious on global level will encourage also in the next period, consumers to buy cheap cars, and the producers to target this segment not only to meet the demand, but to survive.

Dacia will have to make efforts to remain competitive in this segment, because other major producers such as Hyundai, Volkswagen, Toyota, Tata Motors and Ford have indicated their intention to develop automobiles between 2500 and 5000 dollars.

Romania has great chances to become the sixth automobiles producer in the region until 2014, after countries such as Russia, Turkey, Czech Republic, Poland and Slovakia.

If it will be reached the forecast level of production, Romania will record the third fastest growth rate of automobile production capacity of countries in Central and Eastern Europe by 2014. First place is expected to be occupied by Ukraine (242%) and Russia third (235%).

Regarding the econometric model proposed by us, different tests used to check the plausibility show that it can be accepted as significant and can be used to the evolution prognosis estimation of the number of automobiles in Romania and elsewhere.

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DIRECTIONS OF ORGANIZATIONAL COMMUNICATION AT THE LEVEL OF THE STUDENTS' CULTURAL CENTRE IN PETROSANI - A CASE STUDY

LAVINIA HULEA [*]

ABSTRACT: *General communication processes rely on messages that involve a content, a space, certain channels, clear objectives, motivation as well as factors that exert their influence upon the processes. Communication is also an important device owing to which organizations are able of mastering a series of algorithms of encoding and decoding messages transmitted through various channels. A complex approach of the process of communication determines the strengthening of the identity of all organizations. Accordingly, the Students' Cultural Centre in Petrosani attempts at founding an organizational communication framework capable of facilitating internal and external communication through transmitting improvement-directed objectives and responsibilities and through conceiving a message adapted to the needs and demands of its beneficiaries.*

KEY WORDS: *organizations' communication; channels of communication; space of communication; internal and external communication; the Students' Cultural Centre in Petrosani.*

JEL CLASSIFICATION: *D83*

1. PRESENTATION OF THE STUDENTS' CULTURAL CENTRE IN PETROSANI

1.1. Identity and objectives of the organization

The hereby case study regards the Students' Cultural Centre located in Petrosani, the District of Hunedoara, Romania, which is a legal personality public institution, subordinated to the National Authority for Sports and Youth. The centre has as a main object of activity the conceiving, organizing, and deploying of cultural and artistic events, of sporting, educational, and entertainment activities that mainly

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target the students belonging to the University of Petrosani. It also has in view the participation of young people in various programs and events implemented by other institutions at a local, regional, national or international level.

The basic objectives of the centre focus upon the following coordinates:

- Diversity of cultural, artistic, and educational programs displaying a permanent or temporary character through establishing partnerships with similar institutions, various other public institutions, non-governmental organizations, and private entities;
- Participation to an increased number of national cultural events;
- Optimization of the administration of human resources owing to constantly implementing the principle of co-responsibility, stimulating the multitude of opinions, forging an ascendant trend of the activity of its employees and collaborators, understanding the diversity of the participants to the cultural act, emitting flexible and reversible judgments;
- Implementing a coherent approach with a view of integrating within European structures;
- Establishing partnerships capable of providing the funds required by its evolution.

1.2. Directions of organizational communication at the level of the organization

Due to the characteristics of its object of activity, the Students' Cultural Centre in Petrosani establishes communication at the level of masses. Accordingly, a relation between an emitter – the cultural centre – and several receivers, representing all the beneficiaries of the programs initiated by the emitter, occurs. All relations rely on communication which, at its turn, is founded upon dialogues involving a message that should be transmitted and received both verbally and visually. It is considered that an efficient communication should focus on all the opportunities and devices at hand in order to direct the organization towards success. Such a communication includes both external communication, primarily addressed to the beneficiaries of the cultural offer and to partners and attempting at transmitting a clear message allowing the others to get a correct image of the identity of the cultural centre, and an internal communication directed towards the employees or occurring amongst them.

A consistent, authentic and coherent identity capable of adding value to the organization has been outlined in the context of a general communication framework – understood according to a managerial and entrepreneurial meaning – which all organizations require in order to carry out their goals.

2. COMMUNICATION – ORGANIZATIONS' TOOL

2.1. Terminological specifications

Organizations may be perceived as entities processing information due to the fact that they collect data, select data and change them into relevant information which is further used in order to provide organizations' survival and future development.

Yet, with a view of triggering development, organizations should be capable of sharing the relevant information about their external or internal environment according to a congruent manner; in other words they should be able of communicating and of transforming communication into an organizational coordination mechanism.

It is generally admitted that there are four types of inter-human communication, as follows:

- **Logical or verbal**, dealing with the transmission and decoding of the symbolic meaning of either verbalized (oral) words or of written words;
- **Para verbal**, dealing with the communication capacity of voice itself (volume, intonation, intensity, rhythm, accent, pauses, etc) and the verbal manifestations without verbal content (laughing, cough, moaning, sigh, screaming, etc.)
- **Nonverbal**, dealing with gestures, mimics, attitudinal postures, etc. that may display various particularities depending on the various cultures worldwide;
- **Energetic**, dealing with paranormal communication and relying on human senses (auditory, visual, olfactory, gustative, tactile), and intuition.

Communication specialists agree that individuals interact owing to their anatomic analyzers; accordingly, they have conceived a conventional representation of the channels of communication which is further displayed:

- **Measurable channels** of communication, including the sound channel, the visual, olfactory, gustative, and tactile channel;
- **Mixed channel** of communication that occurs at an intuitive level;
- **Non-measurable channel** of communication that includes the extra sensorial level.

2.2. Types and channels of communication at the level of the Students' Cultural Centre in Petrosani. The impact of communication upon the beneficiaries of the activities promoted by the organization

Communication with the target beneficiaries of the programs and activities initiated and deployed by the institution represents an important part of the management strategy of the Students' Cultural Centre in Petrosani. Owing to its specific field, the organization carries out most part of communication through verbal means, either verbalized (oral) or written, depending on the goal of communication or on the location and space of communication. The organization mainly establishes communication with its beneficiaries that are both the individuals who deploy artistic, cultural, educational activities with a view to enlarge their personal skills or to develop their personality and the audience which take part in the various activities proposed by the centre.

The previously mentioned communication occurs owing to oral (direct) verbal communication and written (indirect) verbal communication.

Whenever the organization directly communicates with the beneficiaries of the programs it displays, para-verbal and nonverbal communication tend to be used at their maximum both in formal locations - show-rooms, rehearsal rooms, offices, etc. - and in informal locations – street, University corridors, etc. – where the employees of the

organization – specialized staff, administrative personnel – may communicate with the beneficiaries.

Quite often, the organization resorts to mass-media means– newspapers, television and radio stations - in order to promote certain events and programs or to increase audience, establishing a verbal communication that seems to require the absence of nonverbal and para-verbal types of communication.

The use of direct verbal communication when addressing to the organization's beneficiaries may be accompanied by written or indirect verbal communication – posters, advertisements, fliers, etc. - whose function is to strengthen the message transmitted within direct communication locations. The measurable communication channel through its visual and sound channels is most frequently used and provides the envisaged impact on the receivers. The organization's employees who mainly make use of the previously mentioned channels are, as a rule, those whose responsibilities are the establishing and developing of the organization's relations with its beneficiaries: staff specialized in the artistic and cultural fields, secretary. During the last years, the Students' Cultural Centre has focused upon the direct relation with the beneficiaries of the activities it promotes attempting at actively engaging its employees along this coordinate. Unfortunately, the constraints determined by a certain framework of the personnel scheme has prevented the employment of a person specialized in communication and public relations.

The management of the organization has attempted at training those members of the staff involved in direct relations with the beneficiaries with a view of allowing them to get abilities connected with the use of the nonverbal and para-verbal types of communication. The training that regards the development of the capacity of nonverbal communication transmitted along the visual channel has mainly relied upon certain acknowledged guidelines of behavior and dress which rather determine habits than develop skills. With this in view, specialized and professional courses, periodical sessions or a "customer type" education directed towards the specific activity of the organization would determine the improvement of communicational behaviors as well as a differentiate, and more appropriate, manner of approaching "cultural and artistic" beneficiaries (customers).

3. COMMUNICATION SPACE

3.1. Terminological specifications

Communication specialists have also taken into consideration certain behavioral and attitude aspects which may be associated with the individuals that belong to a space and time context.

Social psychology approaches the so-called "social distance" between individuals while other communication theories state the existence of three "communication spaces" as well as various manners through which individuals placed at various physical distances from each other prefer certain types and channels of communication. Accordingly, specialized works speak about:

- **Private space** that regards all individuals and is conventionally delineated at about one meter around each individual. It is basically characterized by visual and verbal communication. Let's also notice that the impact of the messages transmitted through the measurable channel of communication, relying on the tactile, olfactory, and gustative human senses, is also high. Private space involves the stimulation of the affective mechanisms of individuals, too. Consequently, invading private space, without the conscious or unconscious agreement of the communication partner, determines a certain tension that may arouse feelings of pleasure, indifference or aggressiveness.
- **Entourage space** has been conventionally settled at about two meters around each individual and is effective in locations where people spend a large amount of time and where they tend not to pay attention to non-verbal communication. The researches upon the behavior of the individuals who find themselves in an entourage space show that such a space determines either indifference or maximal attractiveness or rejection. Entourage space allows the subconscious extraction of details out of their context owing to non-verbal communication transmitted along sensorial channels. Hence the different perception of details afferent to the private and entourage spaces.
- **Public space** involves a space larger than two meters around each individual, including a vast area of manifestation and facilitating verbal communication. It also enables the easily grasping of attention owing to the maximum impact of para-verbal and nonverbal communication. From the point of view of the social distance between individuals, the message of public space communication is not addressed to an individual but to a whole group of entities (social group, group of companies, etc.).

3.2. Communication space at the level of the Students' Cultural Centre in Petrosani

Internal communication among the employees of the organization basically occurs at the level of private and entourage spaces where verbal, energetic, and nonverbal communication prevail. As a rule, these spaces are unconsciously and mutually invaded and, although a certain tension can be sometimes sensed, the general context of the communication in the organization is positive.

Let's also notice the stimulation of the affective mechanisms of the employees at the level of their private space, the increase of human energetic communication as well as the plurality of communication in entourage space which allows the interchange between official and private registers.

An analysis of the communication spaces that regard the transmitting of messages between the employees of the organization and the beneficiaries of the centre's activities show the priority of public space followed by entourage spaces. Certain drawbacks may come out when dealing with the organization's communication with its beneficiaries in public and entourage spaces and they are connected with the fact that, under such circumstances, messages cannot be directed to a specific receiver; hence the feelings of frustration in case of certain beneficiaries. With these in view,

the organization has successfully implemented the idea of a relational space – a work environment relying on larger space, warm colors, adequate lighting, pleasant odor, living plants, and art works - capable of facilitating verbal and nonverbal communication with its beneficiaries. The advantages of the previously mentioned relational space have determined a closer communication, the decrease of private space invasion, and tension diminishing.

4. ORGANIZATION'S COMMUNICATION AND THE FACTORS THAT EXERT THEIR INFLUENCE UPON IT

4.1. Theoretical grounds

Communication is a complex process of transmitting messages, according to which the emitter encodes the information transmitted through a specific channel to a receiver who ultimately is going to decode it. At an ordinary level, communication as a message exchange between individuals is understood as a verbal or written transmission of information. The success of all communications is dependent on several factors that exert their influence on both the emitter and the receiver. Organizational communication obeys the general rules of communication being, at its turn, influenced by a series of factors, as follows:

- **Language.** In order to communicate, individuals employ certain codes and while language has been defined as a system of signs and symbols, the choice of a specific code is determined by the language of communication. Individuals perceive reality due to the linguistic code they employ; accordingly, the wide range of their experience depends on the linguistic habits of the community they belong to. Individual experience is thus classified owing to the linguistic code, during the process of communication. The items belonging to external environment are given identities due to both previous human experience and to language, a fact that sets forth the relativity of reporting language to surrounding reality; this may further explain the conventional character of all communications, including organizational communication.
- **Environment.** The notion includes all social, economic, cultural, linguistic, and ethnical factors that mark the evolution of individuals. These factors play variable parts and determine the direction of individuals' behavior towards a certain goal.
- **Convictions.** Although it is supposed that under the influence of the environment, individuals change their behavior, convictions may induce social barriers as well as contradictions with society, organizations, as well as inner contradictions.
- **Communication competence.** The concept includes a series of rules regarding the identifying and use of the most adequate words in a certain context as well as the capacity of transmitting a message that would not determine the adverse reactions of the receiver. Organizational communication mainly relies on this type of competence and requires its continual adapting to the organizational culture.
- **Motivation.** Managerial communication, as general communication, obeys the rules of message transmission: before sending the message, under the influence of external stimuli, motivation – or the reason of communication – comes out. The

complexity of human cognitive structures determines specific abstract motivations that add to the physiological ones.

- **The goal of the message.** It is a consequence of motivation determining the process of communication; it targets at getting a certain effect upon the receiver in accordance with the enunciation of the message.
- **Communication channels.** They allow the transmission of a message in order to get a maximum impact on the receiver. Choosing a communication channel at an organizational level should focus upon the receiver's expectations and needs while rigorously employing a clear, concise and positive tone in order to increase the impact.
- **Malfunctioning of communication channels.** They may occur during the whole process of message transmitting and may be audible, tactile or odorous. The success of a process of communication, in general, and implicitly of organizational communication depends on the capacity of the entities that deploy the process of communication to neglect such malfunctioning; more specifically, when receivers get the messages they should grasp an almost identical signification as the one meant by the emitter.

4.2. Factors that influence organization's communication at the level of the Students' Cultural Centre in Petrosani

The Students' Cultural Centre in Petrosani displays a complex process of communication which either occurs inside its organizational structure or is directed towards the exterior, comprising communication with its beneficiaries, partners, similar organizations, upper level entities, etc.

As a result of the specific character of its activities, the organization attempts at establishing adequate communication owing to an appropriate language, competence, and motivation, and targets the getting of positive responses from its receivers according to the enunciation of the message.

At the level of the organization, the need and reasons of communication, in other words motivation, is determined by the initiation, promotion, and continuity of the events that address to young people and are achieved owing to their help.

An essential factor of the organization's communication directed towards the exterior is the general manner of displaying the main characteristics of the institution stressing the promotion of a dynamic image. Accordingly, the organization's objectives are the following ones:

- Improvement of the interface with the beneficiaries of the organization's programs (secretary, specialized staff);
- Establishing behavior standards and efficient communication;
- Outlining and maintaining a unitary image of the organization through informative stuffs, fliers, etc.;
- Evaluating the abilities required in order to efficiently communicate with the organization's beneficiaries;
- Increasing the employees' motivation and loyalty.

5. INTERNAL AND EXTERNAL ORGANIZATIONAL COMMUNICATION

5.1. Theoretical grounds

The analysis that precedes the process of communication starts from the idea of the existence of a real or hypothetical issue, exhibiting a certain risk and involving the identification of efficient solutions able to settle that issue. The means owing to which the specific issues of organizational activities can be settled is organizational communication.

From the point of view of organizational communication a series of issues may come out and they can be divided as follows:

- Issues regarding the activity carried out within the organization (job tasks, daily work issues, crisis conditions, etc.);
- Issues connected with inter-human relations (within hierarchical levels, within an internal work group, within the partnership relations with external entities, etc.);
- Issues linked with the up-stream and down-stream organizational relations (beneficiaries, partners, circles of influence, etc.).

Depending on the character of the issues that may come out within organizational activity, two specific forms of organizational communication are to be noticed:

- **Internal organizational communication** which is the framework of an efficient coordination of the activity of the organization. It occurs within the organization, both vertically and horizontally, according to the encoding and decoding of messages in due time and based on a given space and context. A performing organizational communication represents the grounds of a good functioning of the organization and involves the following stages:
  - Clearly stating organization's goals and policies;
  - Monitoring the carrying out of the goals and conformity to the policies of the organization;
  - Coordinating the whole activity of the organization ;
  - Controlling and evaluating the results in order to get efficiency indices and comparing the results with anticipated goals.
- **External organizational communication**. In order to attain their objectives, organizations come into contact with various partners. According to the character of such partners, the following forms of external organizational communication may be noticed:
  - „Up-stream – down-stream" communication that facilitates the exchange of messages between the organization and the beneficiaries, partners, companies with whom the organization enters competition, etc., and involves direct relations (meetings, telephone conversations, fax, letters, offers, etc.) and mass media advertisements;

- Communication with non-governmental organizations involving direct relations, contacts owing to specialized publications or mutual conventional meetings;
- Communication with the governmental institutions that monitor employment, salaries, health conditions, labor protection, etc.

5.2. The process of internal and external communication at the level of the Students' Cultural Centre in Petrosani

Internal communication represents an important process of the organization's management. The absence of internal communication would result in the impossibility of transmitting organization's objectives, of monitoring the coordination of the whole activity, and of evaluating the results. Due to the fact that the organization is supervised by an upper entity that has in its subordination similar organizations in the country, two distinct structure levels may be noticed: a central level and a local level. Between these two levels there is a vertical informational communication flux, both up-stream and down-stream. The down-stream flux contains messages from the upper central entity which occur as decisions, internal notes, briefings, etc. Such items are elaborated as a result of a previous process of horizontal communication at the central level (meetings, briefings, etc.) as well as a result of the feed-back provided by the local level (activity reports, plans, programs, budget reports, etc.).

The organization's external communication is as important as its internal communication. It is either directed towards the exterior relying upon the correct and inciting transmission of the cultural, artistic or entertainment offer or is the recipient of the data coming from beneficiaries who communicate their expectations, aspirations, and needs. According to such items of information, the organization outlines the structure of its offer as well as the manner of implementing the cultural, artistic or entertaining product. And, in order to be able to do such a thing, it is important to permanently improve relations with beneficiaries. The employees involved in the direct relation with beneficiaries are those who carry out the process of communication providing the transmission of information up to the decisional level of the organization.

External communication at the level of the Students' Cultural Centre in Petrosani also involves communication with non-governmental – mainly youth – entities and with governmental entities due to the fact that, owing to the character of its activity, the organization has to develop partnership or subordination relations with such entities.

6. CONCLUSIONS

A complex approach of the process of communication determines the strengthening of the identity of all organizations. Reality has proved that it is not enough to create a certain product – in the hereby case, a cultural product – without letting people know about it. Consequently, communication becomes an essential issue, due to the fact that when a general communicational process towards the exterior and within the interior of the organization lacks, activity is going to be terminated.

With this in view, the Students' Cultural Centre in Petrosani has attempted at founding an organizational framework capable of facilitating inner communication as well as external communication through transmitting the objectives and responsibilities in a manner that may determine improvement and through conceiving a message adapted to the needs and demands of its beneficiaries. The improvement of the process of communication has permanently had in view the transmission of the messages towards the receivers in due time, clearly, and accurately and the settling of concrete motivations and objectives of the messages which could strengthen the partnership between the organization and the beneficiaries of its cultural offer.

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QUALITY SERVICES EVALUATION MODEL BASED ON DEDICATED SOFTWARE TOOL

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ABSTRACT: *In this paper we introduced a new model, called Service Quality (SQ), which combines QFD and SERVQUAL methods. This model takes from the SERVQUAL method the five dimensions of requirements and three of characteristics and from the QFD method the application methodology. The originality of the SQ model consists in computing a global index that reflects the customers' requirements accomplishment level by the quality characteristics. In order to prove the viability of the SQ model, there was developed a software tool that was applied for the evaluation of a health care services provider.*

KEY WORDS: *Quality; QFD; SERVQUAL; Model; Software Tool; Quality Management Tool.*

JEL CLASSIFICATION: *L15*

1. INTRODUCTION

The transformations in the way of thinking and understanding the quality concept led to a wider area of its applicability.

In the past the quality was interpreted only as a statistic parameter that was related mainly to the products. Now, due to the client perspective introduction, the quality concept can also be applied to services field.

The characteristics and particularities of the services make it hard to give a generally acceptable definition. The aspects of quality (figure 1) make it difficult to

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define and quantify the services' quality that is generally considered a measure of the clients' requirements accomplishment.

The most known instrument in attempting to quantify the services' quality dimensions is "The gap model" of service or SERVQUAL model developed by Parshuraman in 1985.

This conceptual framework was developed initially to measure customer perception of service quality for the financial service sectors but later extended to sectors such as hospitality, telecommunications and healthcare.

The main goal of this model is to determine the average gap score (between customer's perceptions and expectations) for each service attribute.

We have chosen from the quality management tools the QFD method. The approach of this method is to early eliminate starting from the design phase the gaps between customer expectations and perceptions.

I - Quality resulted from customers' requirements evaluation
II - Quality resulted from the service design
III - Quality resulted from service processing

Q - Quality of the service
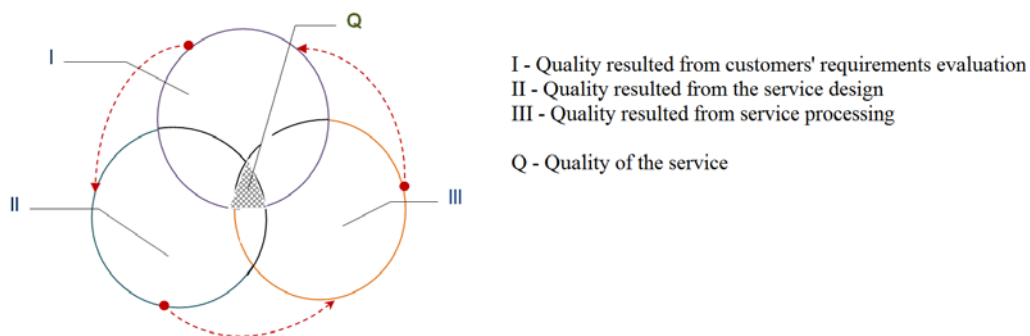
Figure 1. The aspects of quality (Dragulanescu, 2003)

2. LITERATURE REVIEW

QFD transforms the customer needs into engineering characteristics for a product or service, prioritizing each product or service characteristic while simultaneously setting development targets for it.

The QFD method can be used for both tangible products and non-tangible services (Ionica et al., 2010).

QFD is a quality management tool focused on customer. It was primarily meant for products, but it can be easily applied for services too.

There are reported applications of the QFD method in many service areas, such as accounting by Booth, in 1995, administration by Hofmeister in 1992, banking by Ko and Lee in 2000; contracting process by Hybert in 1996, engineering services by Pun in 2000, food distribution by Samuel and Hines in 1999, government services by Lewis and Hartley in 2001, hotels by Dube in 1999, on-line bookshops by Barnes and Vidgen in 2001, mortgage by McLaurin and Bell in 1993, professional services by Adiano in 1998, public sectors by Curry in 1999 and Hallberg in 1999, real estate appraisal by Ferrell and Ferrell in 1994, retail by Nagendra and Osborne in 2000, technical library and information services by Chin in 2001, wholesale by Keenan in

1996 and, in particular, healthcare by Chaplin and Terninko in 2000; Einspruch in 1996; Hallberg in 1999; Lim and Tang in 2000; Matsuda in 2000 (Chan et al., 2002).

There is a great amount of QFD resources available. Part of the QFD softwares were developed to help the QFD use in various applications, such as software evaluation (by Fawsy Bendeck of Universitat Kaiserslautern, Germany: http://www.agr.informatik.uni-kl.de/_bendeck/qfd/index.html), QFD Designer (by Qualisoft/ Fulfillment Services, USA: http://www.qualisoft.com), QFD Scope (by Integrated Quality Dynamics, US: http://www.iqd.com), QFD/CAPTURE (by International TechneGroup, US: http://qfdcapture.com), QFD2000 (by Total Quality Software, UK: http://www.qfd2000.co.uk), Qualica QFD (by Qualica Software, Germany: http://www.qualica.de), and VOCALYST (by Applied Marketing Science, US: http://www.ams-inc.com) (Chan, et.al., 2002). Herzwurm have performed a thorough analysis and evaluation of the QFD software tools.

3. RESEARCH METHODOLOGY

The advantages of combining the two methods, SERVQUAL and QFD, were identified by previous works in this field, like the paper "A QFD and SERVQUAL Approach to Hotel Service Design" (Ikiz et al., 2008).

The model from this paper integrates the best elements of SERVQUAL and QFD methodology.

Also, in literature, it is stated that only Miyoung and Haemoon have used SERVQUAL in house of quality design to measure customer satisfaction in return for service quality.

We introduce an alternative solution for services' quality evaluation, a new model called Service Quality (SQ).

This is to compute an overall index that measures the level of customer requirements accomplishment.

For this reason there were followed the steps involved in the QFD methodology. In order to facilitate the QFD methodology implementation was designed and developed a dedicated software application that also computes the index.

As application for this methodology we chose the healthcare field. The customer requirements were captured using the techniques of questionnaire applied in two phases.

The first phase regarded general aspects about the respondents and their perception on the existing services.

The second phase had the goal of determining the specific and detailed customer requirements.

4. RESULTS

The main results related to the respondents, clients of a pharmacy, and their perceptions regarding the provided services are presented below. The answers to the first question, "How often do you use services offered by our pharmacy?", showed that 45% use them monthly, 12% weekly and 43% infrequent (figure 2).

For the second question 5% of the respondents said that they use the services of the pharmacy for several days, 20% for one month or less, 45% for several months and the rest of 30% for several years (figure 3).
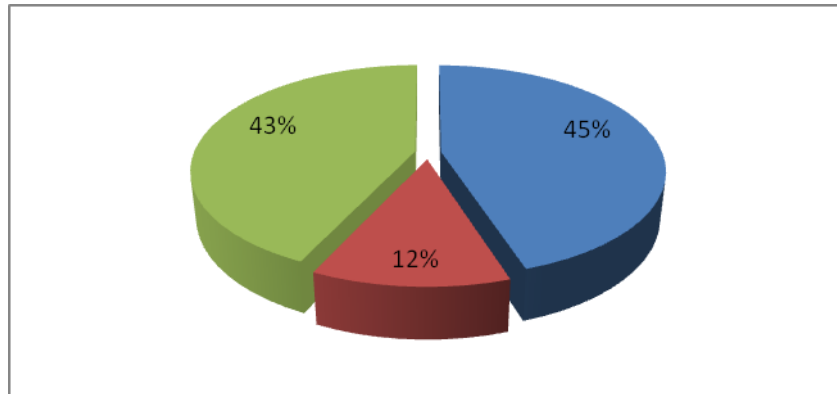
Figure 2. Frequency of services use
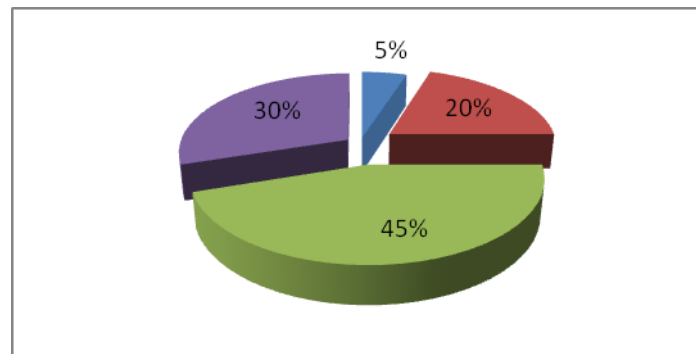
Figure 3. Duration of services use
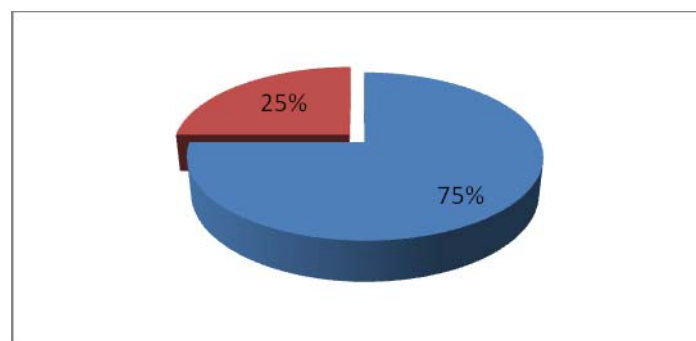
Figure 4. Clients' satisfaction

Regarding the clients satisfaction, 75% of the respondents say they are satisfied by the services offered by the pharmacy and 25% are less satisfied. No respondent is completely satisfied or unsatisfied (figure 4). Compared to other pharmacies, the offered services were evaluated by the 30% of the responded as much better, 30% as better and the rest of 40% as the same (figure 5).
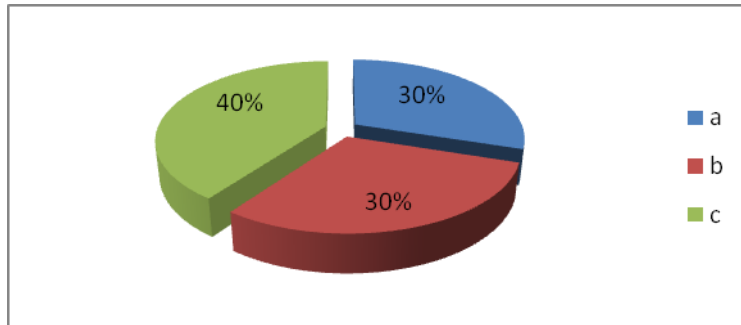
Figure 5. Compared services

35% of the responded declared that they will surely further use the services of the pharmacy, 45% probably and 20% possibly will (figure 6).
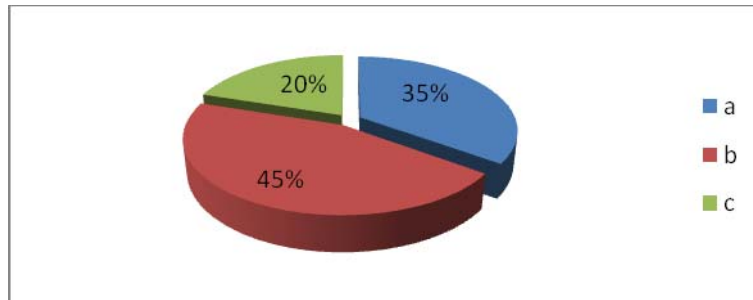
Figure 6. Further use of services
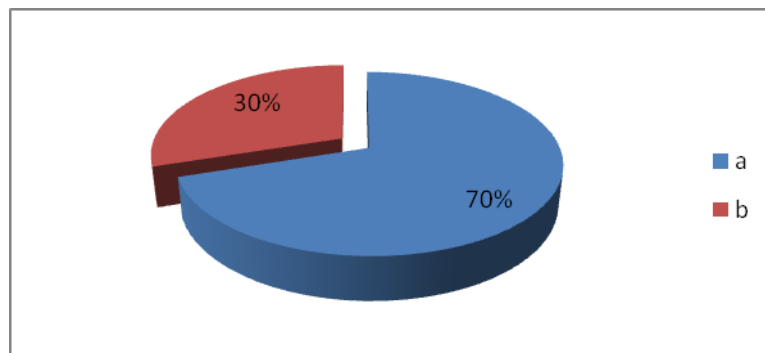
Figure 7. Problem solving

From the respondents, 70% appreciated that they encountered no problem related to the services and products offered by the pharmacy and 30% had all the problems encountered solved in time by the pharmacy's personnel (figure 7).

The detailed customers' requirements resulted from the second phase of questionnaires.

Combining the SERVQUAL and QFD methods, the customers' requirements were grouped in five classes as follows:

Table 1. Customers' requirements grouped in classes

SERVQUAL class	Code	Requirement
Reliability	CR1	Easily solve the requests
	CR2	Prepare recipes in own laboratory
Responsiveness	CR3	Treated with professionalism
Assurance	CR4	Get clear and precise information
	CR5	Friendly environment
Empathy	CR6	Treated with kindness and compassion
Tangibles	CR7	Free additional services

The quality characteristics were also grouped in classes as follows:

Table 2. Quality characteristics grouped in classes

SERVQUAL class	Code	Characteristic
Process	QC1	Waiting time in the queue
	QC2	Free blood sugar measurement
	QC3	Free HTA measurement
	QC4	Free cholesterol measurement
	QC5	Free body weight measurement
People	QC6	Explain understandable to the client
	QC7	Personnel with communication abilities
	QC8	Kind reception
	QC9	Well trained personnel
Physical environment	QC10	Pleasant environment

In order to apply the model resulted from the combination of QFD and SERVQUAL we designed and developed a software application that computes a global index that reflects the customers' requirements accomplishment level (figure 8).

In figure 9 is presented the global index resulted after improvements on the QC2 characteristic, by including the supplementary services of free blood sugar measurements for more clients.

In order to increase the customers' requirements accomplishment level, we focused on introducing new or improved free supplementary services.

Initially, the only free service offered by the pharmacy was blood sugar measurements only as occasional offer once a month for 50 clients. In figure 9 is shown the case of this free service improvement, by offering blood sugar measurements one a week for 25 clients.

As can be seen the global index increased from 40.129% to 51.041%.
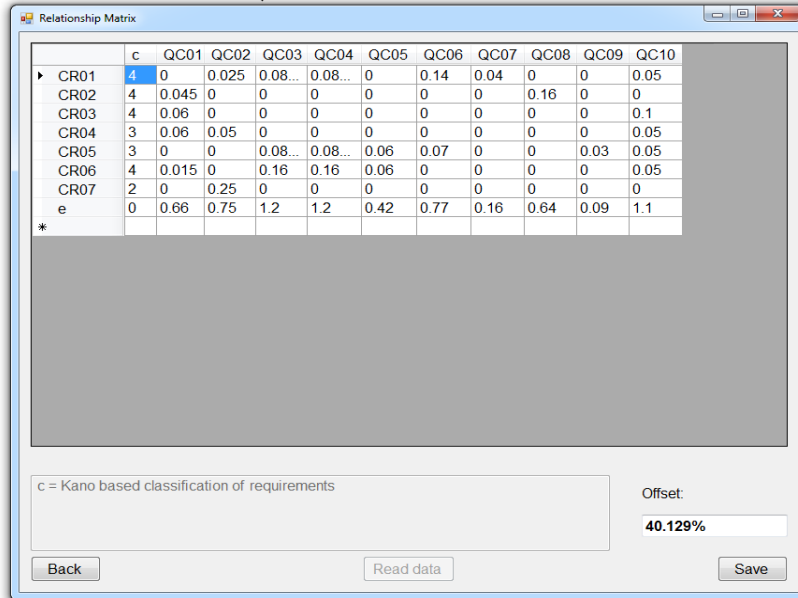
Figure 8. Global index
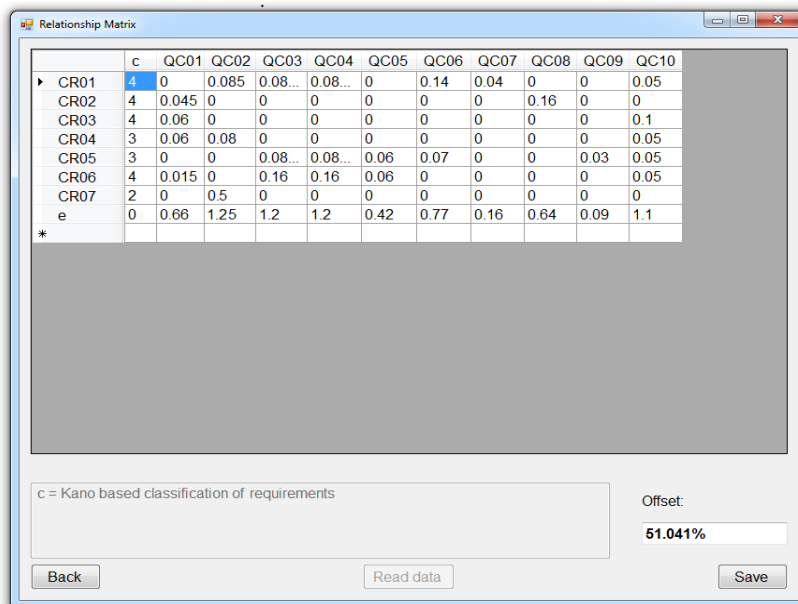
Figure 9. Global index after QC2 improvement

4. CONCLUSIONS

The paper developed the SQ model based on SERVQUAL and QFD methods for the evaluation of services quality. There was designed an own software application that computed a global satisfaction index based on the developed model.

The global index is a measure of the customers' requirements accomplishment level by the quality characteristics.

There can be established a satisfaction grill based on the correlation between the general information resulted from the first phase of questionnaires and the computed index values. The proposed grill is presented in table 3.

Table 3. Satisfaction grill

Satisfaction level	Index value
Completely unsatisfied	0 – 20 %
Unsatisfied	20 – 40 %
Satisfied	40 – 60 %
Very satisfied	60 – 80 %
Completely satisfied	80 – 100 %

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VAT COLLECTION TO COLLECTION: ADVANTAGES AND DISADVANTAGES

ROXANA ISPAS [*]

ABSTRACT: *This paper presents the major changes in the payment system of value added tax (VAT). Through the Government Ordinance no. 15/2012 amending and supplementing Law no. 571/2003 regarding the Fiscal Code, there was introduced, with effect from 01.01.2013, the payment of the value added tax (VAT) on cashing the whole or partial counter value of the supply of goods or provision of services. There are detailed the most important data on the topic, but also information about the risks and benefits resulting from the new legal provisions.*

KEY WORDS: *delivery of goods; service provisions; taxpayer; VAT; turnover; deductibility.*

JEL CLASSIFICATION: *E62; F65; H32; H25.*

The legal provisions on VAT collection to collection mandatory applies to:

- taxpayers registered for VAT purposes, who have their headquarters in Romania and whose turnover in the previous calendar year do not exceed the 2,250,000 lei limit. These individuals were required to file a notice to the competent tax authorities until October 25th, 2012 in order to be registered in the Register of persons applying VAT collection.

If on January 1, 2012 these people are not registered anymore for VAT purposes (e.g. they are abolished or inactivated), or join a tax group, they will no longer be recorded in the register of the taxpayers who apply the VAT collection system.

Taxpayers who have registered for VAT purposes after the 1st of October 2012 will apply the general provisions (the turnover form the previous year) from Article 134^2 paragraph (3) letter a) and Article 156^3 paragraph (11), respectively they will submit a notification until the 25th of January 2013 unless they have exceeded the limit

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of 2.25 million lei in 2012 and will apply the VAT collection system starting with the 1st of February 2013, those who have the month as a fiscal period or starting with the 1st of April 2013, those whose fiscal period is the trimester.

The taxpayers who were removed from the records of the persons registered for VAT purposes according to Article 153 paragraph (9) letter. a)-e) of the Tax Code and the VAT registration occurs after October 1, 2012, shall submit a notification until January 25, 2013 unless they have exceeded the limit of 2.25 million lei in 2012 and will apply the VAT collection system starting with February 1, 2013, those whose tax period is the month, or starting with April 1, 2013, those whose tax period is the trimester. There are not included in the calculation of the limit achieved during 2012, the deliveries / supplies made during the period the person did not have a valid VAT code.

• Important: The system is applied until the overcoming of the limit.
- taxpayers who have their headquarters in Romania and are registered for VAT purposes in the current calendar year, starting with the date when they were registered for VAT purposes

The taxpayer who last year did not applied the VAT system to collection, but whose turnover for the respective year is less than the 2,250,000 lei limit, applies the VAT system to collection starting with the first day of the second fiscal period of the year following that when he did not exceed the limit, unless the taxpayer is registered in the Registry Office of the taxpayers who apply the VAT system to collection and who apply the system starting with the date specified in the registration decision in the register.

After the 1st of January 2013 the following categories of taxpayers will not make notifications, but they will be recorded ex officio by the competent tax authority in the book of the persons who apply the VAT on collection:

✓ Taxpayers who register as VAT payers within the year in accordance with Article 153 paragraph (1).

✓ Taxpayers who are removed from the records of the persons registered for VAT according to Article 153 paragraph (9) letter a)-e) of the Tax Code and reregistered for VAT purposes. There are not included in the calculation of the limit, the deliveries / supplies made during the period the person did not have a valid VAT code.

For example, a taxpayer applies the VAT collection system on the 1st of January 2013 and has as a tax period the trimester, but in the second trimester of 2013 he/she exceeds the limit of 2.25 million lei.

Therefore he/she is obliged to submit a notification in order to exit the system on July 25, 2013, and he/she will not apply anymore the VAT collection system from the first day of the second fiscal period following the one when he/she exceeded the limit, respectively from the 1st of October 2013.

If in 2014 this taxpayer will not exceed the limit of 2,250,000 lei, starting with 2015 he/she will get back under Art. 1342 paragraph (3) a) and will submit a notification according to Article 1563 paragraph (11) on the 25th of January 2015 in order to join the VAT collection system starting with April 1, 2015, if he/she has the

trimester as a fiscal period, or starting with February 1, 2015, if he/she has the month as a tax period

If during the current calendar year, the turnover of the taxpayer whom the VAT collection system is applied to exceeds the threshold of 2,250,000 lei, the VAT collection system is applied until the end of the fiscal period following the one in which the threshold was exceeded.

The VAT collection system applies only for the operations for which the delivery location or the place of supply is deemed to be in Romania.

The VAT collection system does not apply to taxpayers who are part of a single tax group. Single tax group is considered a group of taxpayers established in Romania who, being independent from the legal point of view, are in close relationship with each other from the organizational, financial and economic point of view.

The VAT collection system does not apply for the following operations:

- ✓ Delivery of goods / provision of services for which the beneficiary is required to pay the tax according to the tax code;
- ✓ Delivery of goods / services which are exempt from VAT;
- ✓ Operations subject to special arrangements for travel agencies, special scheme for second-hand goods, works of art, collection and antiquities;
- ✓ Delivery of goods / provision of services whose counter value is collected, partially or totally, with cash by the taxpayer eligible to applying the VAT system on collecting from legal persons, natural persons registered for VAT purposes, authorized persons, freelancers and associations without legal personality;
- ✓ Delivery of goods / provision of services for which the beneficiary is an affiliated person to the supplier / provider.

Legal provisions regarding the postponement of the deduction right connection with transactions subject to VAT collection, according to Art 145.

- ❖ The right to deduct the VAT on purchases made by a taxable person to a taxable person applying the VAT collection system according to art. 1342 paragraph (3) - (8) is postponed until the tax on goods and services that have been delivered / rendered was paid to the supplier / provider.
- ❖ The right to deduct the VAT on purchases made by a taxable person applying VAT collection system according to art. 1342 paragraph (3) - (8) is postponed until the tax on goods and services that have been delivered / rendered was paid to the supplier / provider even if part of the operations made by the taxpayer are excluded from applying the VAT collection system according to art. 1342 paragraph (6). These provisions do not apply to the intra-community acquisitions of goods, to imports, purchases of goods / services for which the reverse taxation is applied according to Art. 150 paragraph (2) - (6), art. 1523 paragraph (10) or art. 160.

The VAT chargeability occurs only when the counter value for the delivery of goods or provision of services is totally or partially collected, but no later than 90 calendar days from the invoice date, respectively for the situation when the invoice was not issued within the legal term, no later than 90 calendar days calculated from the deadline required by law to issue the invoice.

The right to deduct VAT on purchases made by a taxpayer from a taxpayer who applies VAT collection system is delayed until the payment of the supplier / provider's invoice, unlike previous legislation which provided the VAT at the time of invoice.

Thus, taxpayers will be required to justify the payment of their bills to their own suppliers in order to obtain VAT refunds.

The persons who are obliged to apply the VAT collection system will exclude from applying the VAT collection system the following operations which are subject to the general rules concerning the VAT eligibility of VAT - Article 1342 paragraph (6):

- Operations for which the place of delivery, according to Art. 132, or the place of the provision, according to Article 133, are not considered to be in Romania (not taxable in Romania).
- Supplies of goods / provision of services for which the beneficiary is a person liable for tax payment according to art. 150 paragraph (2) - (6), art. 1523 paragraph (10) or Article 160;
- Supplies of goods / provision of services which are exempt from VAT;
- Transactions subject to special arrangements provided in Art. 152^1 - 152^3;
- when the counter value of the supply of goods / provision of services is collected, partly or totally in cash by the taxpayer eligible to apply VAT collection system from legal persons, persons registered for VAT purposes, authorized individuals, free lancers and unincorporated associations. In case after the invoice was issued its total or partial counter values is collected in cash, for the tax of these sums the eligibility rules provided by article 134^2 paragraph (1) and (2) letter a) are not applied;
- Supplies of goods / provision of services for which the beneficiary is not a person affiliated to the purchaser / supplier in accordance with Article 7 paragraph (1) Section 21.

For these operations there will not be mentioned on invoices *VAT on collection*.

For the other performed operations they will apply the VAT collection system and will mention on invoices *VAT on collection*.

Supply of goods / provision of services whose counter value is collected partially or totally in cash by the person eligible to apply the VAT collection system from other categories of beneficiaries than those referred to in article 134^2 paragraph (6) letter d) of the Tax Code, are exempted from applying the VAT collection system.

The sums in cash deposited by the beneficiary directly into the provider's / supplier's bank account are not considered revenue / cash payments.

According to article 134^2 paragraph (6) letter d) of the Tax Code, the supplier / provider who is obliged to apply VAT collection system, exclude from the VAT collection system those amounts from an invoice which are not collected in cash from legal persons, individuals registered for VAT purposes, authorized persons, freelancers and unincorporated associations (the partial collection in cash of an invoice system is not excluded from applying the system to the entire invoice).

In case the invoice's counter value is collected in cash, according to art. 134^2 paragraph (6) letter d) of the Tax Code, the supplier / provider who is obliged to apply the VAT collection system, excludes from applying the VAT system in collecting those amounts from an invoice which are collected in cash until the day of invoice, inclusively legal persons, individuals registered for VAT purposes, authorized persons, freelancers, self-employed and unincorporated associations.

For any differences unpaid until the date of invoice, the supplier / provider applies the VAT system on collection and enrolls the mention referred to in art. 155 paragraph (19) letter p) of the Tax Code unless the supply / provision falls into another excepted category provided by article 1342 paragraph (6) of the Tax Code.

Example:

Company A, which applies the VAT system on collection, supplies spare parts worth 1000 lei to Company B on March 12, 2013. The invoice 1,000 lei plus 240 lei VAT, is issued on March the 12th, by which time the company has already received 500 lei in cash from company B.

On the issued invoice, Company A will state separately the amount that was collected in cash and the VAT, respectively 403 lei plus 97 lei VAT which the normal rules for charging is applied for, and separately the difference of 597 lei plus 143 lei VAT next to which it is mentioned "VAT on collection".

If on April 20, 2013 Company B will make another payment in cash of 300 lei, for company A the liability of the VAT for this amount collected in cash, namely 58 lei occurs on April 20, 2013.

At Company B chargeability to tax for the this payment occurs also on April 20, 2013, respectively B will deduct the 58 lei VAT worth in the deduction for April 2013.

This may be a premise situation of a financial imbalance, in the sense that the company is obliged to pay its suppliers in order to deduce the VAT even if it did not cashed the invoices issued to customers.

In addition to this, at the end of the 90 days term envisaged by law, the Company is obliged to pay the VAT to the state for the unpaid invoices.

So, the question is where you can get the finances necessary to the payment of a double bond, the one to the supplier and the one to the state, given that the company has not cashed its own claims, because there is only one step to insolvency.

Additional costs for taxpayers

The implementation of the VAT collection system will generate for taxpayers additional costs determined by the changing of the information system and increasing the complexity of the accounting operations necessary to separately highlight the issued invoices and those not collected in terms of VAT.

In fact, I think that in this case, it will be obligatory to keep two separate book keepings: the one connected to the issued invoices and the one connected the cashed invoices, which must be separately reported.

Regarding the turnover for calculating the legal limit of 2,250,000 lei, this one consists of the total value of the delivery of goods and provision of services taxable and / or exempted with deduction right, as well as of operations resulted from economic activities for which the place of delivery / supply is considered to be abroad, made within a calendar year.

In 2013, the taxpayer who has established his business in Romania and whose turnover between the 1st October 2011 and including the 30th of September 2012 does not exceed the limit of 2,250,000 lei, will apply the VAT collection system starting with the 1st of January 2013 .

For this purpose, the taxpayer who would apply the VAT collection system starting with January the 1st, 2013 was required to submit to the competent tax authorities, until October the 25th, 2012 inclusive, a notification showing that the turnover achieved in the period between the 1st of October 2011 and the 30th of September 2012 inclusive did not exceed the limit of 2.25 million lei.

If case the person has not filed the notification, he/she office will be registered ex officio in the Register of the taxpayers who apply the VAT collection system until the 1st of January 2013 and going to apply the VAT collection system starting with the 1st of January 2013.

The taxpayers registered for VAT purposes, whose economic headquarters is in Romania, whose turnover in the previous calendar year does not exceed the limit of 2,250,000 lei and who must apply the VAT collection system are obliged to submit to the competent tax authorities until the 25th of January inclusive a notification stating that the turnover in the previous calendar year does not exceed the limit of 2.25 million lei.

The taxpayer who applies the VAT collection system and exceeds the limit of 2,250,000 lei the current calendar year, is obliged to submit to the competent tax authorities, until the 25th inclusive of the month following the tax period in which he/she exceeded the limit, a notification which shows the achieved turnover in order to change the applied system.

If we refer to the advantages and disadvantages for the companies that will apply the VAT collection system one can observe increased efficiency of their activities by correctly predicting cash and use of cash flow for new investments, which can boost the national economy.

Advantages in this respect may be visible only in a narrow sector of the economy, as companies applying the VAT collection system are part of the very small enterprises whose annual turnover does not exceed 2,250,000 lei.

All other small, medium and large enterprises with an annual turnover which exceeds the sum of 2,250,000 lei which represent the majority and which shed considerable sums from the state budget are not supported by the new amendment.

We also consider the situation where, very often, such companies have the state as a debtor, which does not pay on time, justified by insufficient funds to the budget.

Such a behavior correlated with the obligation to pay VAT on issuing the invoice, regardless of collection, can lead to a financial meltdown.

On this account, the new legislative measure, although it is intended to be positive, helps very little the Romanian economic space, considering that takes outside its applicability the major companies supporting the national economy.

In the future, it would be desirable for them to be subject to some favorable legislative measures on the fiscal account, knowing that in a shaky economy, burdensome taxation causes financial disasters.

The new legislative amendment proves its ineffectiveness also from the prospect of establishing a fixed term to practically delay the VAT payment, whether the counter value of the delivered goods / rendered services it is charged or not

In order to really help the business environment an the small entrepreneurs, it would be desirable for the new regulation to provide the VAT collection for cashing the counter value of the delivered goods / rendered services, regardless the payment moment.

But what really happens is only a granting of a grace period for VAT payment, this in case small entrepreneurs fail to recover the owing debts closer to the finish of the 90 days term from the issuing of the invoice.

Consequently, although the legislation framework is another one, the practical situations will not get another resolution other than the one under the empire of the old law, and small companies will risk the non-payment of bills, in which case the damage is focused on one hand on not cashing the price of delivered goods / rendered services, and on the other hand on losing the sums of money which will credit the state with under the VAT payment.

The obligation to pay VAT can generate company's insolvency in case its beneficiaries and clients do not pay the owing invoices, and the state will not lose anything.

Therefore it is really maintained the possibility of eliminating the small companies from the market by not paying the invoices, given that they are bound to find funds to pay the VAT, even if they have not received their claims. Short after its application, we will see if the new legal regulation will bring something positive to the national economy or will remain just a simple act.

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THE LONG MEMORY PROPERTY OF HUNGARIAN MARKET PIG PRICES: A COMPARISON OF THREE DIFFERENT METHODS

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ABSTRACT: *The present study investigates the long memory property of market pig prices. Simply knowing that these time series have long term dependence could have strong significance when forecasting prices. The presence of long memory is crucial information in making business decisions and creating portfolios. Long memory can be measured by calculating the so-called Hurst exponent. In our article, we studied and described three different methods (Rescaled range, Detrended Fluctuation Analysis, Autoregressive Fractionally Integrated Moving Average). Data consist of four time series (piglet, young pig, sow, slaughter pig) between 1991 and 2011. Before conducting the econometric analysis, all the series were seasonally adjusted using the TRAMO/SEATS method. Data preparation was followed by differencing the time series and testing their normality and stationarity. In the next step, we divided the analysed period into four parts and determined the Hurst exponent for each sub-period, using all three methods. In summary, results showed that slaughter pig prices are random; pig and piglet prices developed similarly and have long memory, while sow price changes definitely have short memory. Among the methods of pinpointing long term memory, ARFIMA was used for making the forecast. The forecasting ability of the method was compared to the traditional ARIMA model, with ARFIMA proving to be the better of the two.*

KEY WORDS: *long memory property; market pig price; ARIMA model; ARFIMA model; DFA-2 method.*

JEL CLASSIFICATION: *C53; Q11.*

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1. INTRODUCTION

Random movement is known as the Brown-motion or the random walk in the literature. In the case of a time series, this means that price movements from one period to another are random, irrespective of their direction (increase, decrease). In fact, the measurement of their increase or decrease, as that of the direction of their movements, is also random.

Previous research findings have substantiated how many systems in nature do not behave like a random movement, even if such behaviour were to be expected of them. This statement had been proved to many natural phenomena, such as river floods or rainfall, by Herold E. Hurst, an English hydrologist who investigated the changing water levels of the Nile (Hurst, 1952). Hurst arrived to the conclusion that some time series have a so-called long memory property, which means that a previous event, action or shock will have an influence on the far future.

Within the scope of this study, we test the Long Memory property on the monthly average pig market prices, including pigs, piglets, sows and slaughter pigs. We also calculate the Hurst exponent using three different methods in each time series. The Hurst exponent estimates the predictability of a time series and that is what makes this statistical tool valuable in financial analysis and this is also the reason we chose to use it.

2. THE LONG MEMORY PROPERTY

A stationary time series has the Long Memory property if the autocorrelation function decays to zero very slowly over a very long time period. The rate of decay is determined by the so-called Hurst exponent (H) according to the following expression (Beran, 1994):

$$\rho(k) = Ck^{-\alpha} \text{ , where H} = 1 - \alpha/2 , \qquad (1)$$

while C is a finite constant and $\rho(k)$ is the autocorrelation function of the time series with lag k. According to Hurst's conclusions, if H=0.5 than data points of the time series are independent and the series is a random walk.

If 0.5<H<1, the series indicates persistent behaviour or long memory. If there is an increase from time step t_{i-1} to t_i there will be probably be an increase from t_i to t_{i+1} (Alptekin, 2006). The same is true for decreases. A decrease will tend to follow a decrease, while an increase will tend to follow an increase. The autocorrelation function of such series is always positive.

When the Hurst exponent is positive and below 0.5, then the series is called anti-persistent. In this case, an increase will tend to be followed by a decrease or a decrease will be followed by an increase (Alptekin, 2006). The autocorrelation function of these types of series is negative. This behaviour is sometimes called mean or trend reversion, as a low H value indicates that the process could not diverge significantly from the seasonal trends and the effect of the reversions is strong.

The Hurst exponent has already been employed in many fields in mathematics, such as chaos theory and fractal analysis (Mandelbrot, 1969). As the theory of fractals has been developed, the methods for calculating the Hurst exponent have become widely used.

2.1. Major application fields

The Long Memory property of time series has been a focus of attention in recent years and applied mainly to describe stock prices in financial and economic literature (Lo, 1991; Chow et al., 1995; Eisler, 2007; Erfani-Samimi, 2009; Telcs, 2009). Additionally, other authors have studied the inflation rate (Scacciavillani, 1994; Hassler-Wolters, 1995), the price movements of gold (Cheung-Lai, 1993) and the fluctuation in exchange rates (Booth et al., 1982; Fang et al., 1994; Alptekin, 2006). Research findings uniformly confirm that investigating the long term dependence in time series plays a huge rule in determining price movements and in making more precise forecasts. On the other hand, the strength of the Long Memory and the length of the time period is crucial information in making business decisions and creating portfolios. Some applications in the literature deal with the fluctuations in commodity futures prices (especially crude oil, coffee, sugar, maize, wheat, soybean, swine, cattle) (Helms et al., 1984; Tomek, 1994; Kohzadi et al., 1996; Wei-Leuthold, 2000; Shahwan-Odening, 2007; Ramirez et al., 2008; Ahti, 2009; Power- Turvey, 2010).

3. DATA AND APPLIED METHODS

For the examination of long term memory, three main methods can be applied for calculating the H-exponent:
- Rescaled range (R/S)
- Detrended Fluctuation Analysis (DFA)
- Autoregressive Fractionally Integrated Moving Average (ARFIMA)

The first method deals with the question whether the time series has long term memory or not, the third method examines how strong the long term memory of the time series is and whether this method can be used to make forecasts. The advantage of the second method is that it can be applied with non-stationary time series and is capable for being used in the measurement of fluctuations. All three methods can be applied in substitution of any of the other methods because they each provide information which the others do not. Agricultural prices often show irregular behaviour, which refers to the nonlinear interdependency of the markets. The nonlinear interdependency in economics is not a specified concept in the literature. References do exist, but only in relation to, i.e. the following phenomena: the distribution of prices is usually non-normal; the autocorrelations of time series, even in cases of long time periods, are long term dependences; the time series includes non-periodical cycles and is not stationary. The long term time series involve the above- mentioned characteristics; therefore, the examination of long term memory is capable of characterising all these phenomena.

3.1. The Rescaled range (R/S) method

Among the methods capable of being employed in the examination of long term memory, the rescaled range is the most widely used and is one of the methods with the least estimation errors (Hurst, 1951). First, he applied the maximum values x_i of subsequent years, according to the formula (2) (Telcs, 2009):

$$Y_i = \sum_{j=1}^{i} x_j \qquad (2)$$

Then he computed deviation of the k-th sum from the "n" years average:

$$D_k = Y_k - \frac{k}{n} Y_n \qquad (3)$$

If D_k is positive the higher (above the average) years dominate.

Hurst also computed the [Max(Di) – Min(Di)] = Rn values and divided with the empirical deviation. The quotient can be given according to formula (4) (Alptekin, 2006):

$$\frac{R_n}{S_n} \cong C \cdot n^H \qquad (4)$$

When analysing the water level of the Nile, Hurst got 0.7 for the quotient of the formula (4) (Telcs, 2009).

3.2 The estimation of Hurst exponent by means of the R/S method

In the first step, we divide the time axes consisting of N data into m continuous part periods, in which there is N data (N=n*m). We calculate the R/S statistics in the following way (Alptekin, 2006):

$$\left(\frac{R}{S}\right)_j = s_j^{-1} \left[\max_{1 \le k \le n} \sum_{i=1}^{k} \left(X_{ij} - \overline{X}_j \right) - \min_{1 \le k \le n} \sum_{i=1}^{k} \left(X_{ij} - \overline{X}_j \right) \right], \qquad (5)$$

where s_j is the standard deviation of the j*th* period, the X_{ij} is the i*th* data of the j*th* period.

It is necessary to rescale the volume, because this way, different periods can be compared. In the second step, we calculate with a given n and m the following statistics (Alptekin, 2006):

$$\left(\frac{R}{S}\right)_n = \frac{1}{m} \sum_{j=1}^{m} \left(\frac{R}{S}\right)_j \qquad (6)$$

We repeat the first two steps in a way that we increase n to n/2 and we divide the time axes only for two part intervals. The Hurst exponent can be given by using a regression estimation according to formula (7):

$$\log\left(\frac{R}{S}\right)_{n} = \log(C) + H\log(n) \tag{7}$$

The (7) formula is the logarithmic version of formula (4) which describes the R/S values according to time in a logarithmic frame of reference. The Hurst exponent is given by the gradient of the diagram. With the H parameter estimated by the R/S method, we can give the average length of non-periodical cycles, i.e. the average length of long term memory. For the different values, we calculate the R/S values and the H values and observe that the H values with which n value reach there apex. This n value is the average length of non-periodical cycles.

3.3. Detrended Fluctuation Analysis (DFA)

The basis of DFA was established by Peng et al. (1992) and was called fluctuation analysis. It was first developed for studying DNA-sequences and nucleotides (Peng et al., 1993; Peng et al., 1994). DFA is a somewhat different from the fluctuation analysis, in that it removes the local trends in the series. The first application was also presented by Peng et al. (1994) and Peng et al. (1995).

Let us suppose that we have a time series (x_i) of N elements measured at regular intervals and the elements of the series follow random movement around the mean. The trajectories of the time series are computed as follows (Király, 2005):

$$y(j) = \sum_{i=1}^{j} x_i \ (j=1,...,N) \tag{8}$$

Expression 8 gives the sum of the elements at time point j. The trajectories will then be split into n-length parts (time windows), so the maximum number of the sections is $\left[\dfrac{N}{n}\right]$. The local trends denoted by $f_k^p(j)$ polynomial are estimated in every time window, where j is the actual time point, p is the degree of the polynomial and k is sequential number of the actual time window.

In the next step the detrended $z_p(j)$ data are generated according to equation 8:

$$z_p(j) = y(j) - f_k^p(j) \ (j=1,...,N) \tag{9}$$

Given the length of the time window, the average square fluctuation can be measured in the following way (Peng et al., 1993; Peng et al., 1994; Király, 2005):

$$F_p(n) = \frac{1}{n \cdot \left[\dfrac{N}{n}\right]} \cdot \sqrt{\sum_{j=1}^{n \cdot \left[\frac{N}{n}\right]} z_p^2(j)} \qquad (10)$$

In the case of long range dependence, we suppose that $F_p(n)$ is the power of n with the DFA-p exponent δ $/F_p(n) \approx n^\delta/$. Short-range dependent time series have $\delta = 0.5$, long-range dependent series and are characterized by a $\delta > 0.5$, while anti-persistent series have $\delta < 0.5$ (Koscielny-Bunde et al., 1998; Talkner-Weber, 2000; Király, 2005).

3.4 ARFIMA models

The fractionally integrated ARIMA model was created by Granger and Joyeux (1980) and Hosking (1981). This model counts as a parametrical method in revealing long term memory and its basis is an ARIMA model return with the help of a lag-operator in formula

$$\left(1 - \sum_{i=1}^{p} \varphi_i L^i\right)(1-L)^d X_t = \left(1 + \sum_{i=1}^{q} \theta_i L^i\right)\varepsilon_t, \text{ ahol } L^i X_t = X_{t-i} \qquad (11)$$

The d parameter means the degree of differentiation and in the case of d=0 we get a stationary time series and in the case of d=1 the time series is non-stationary. There are stationary time series in the case, of which the autocorrelation formula depends on long range and there is correlation between two further observations, as well. In this case, there can be two cases. 1. The time series involves unit root, but the unit root test shows a false result. 2. In the time series there is not unit root, but it has long term memory; therefore, the traditional ARIMA model does not fit. In the case where we differentiate the time series again, this would not be a solution either, because of over-differentiation. Granger and Joyeux (1980), and Hosking (1981) suggested as a solution that the d differentiating parameters have a fractional value. In this way, the Taylor series of the $(1-L)^d$ difference operator in the formula of the ARIMA model is given according to formula (13) (Korkmaz et al., 2009):

$$(1-L)^d = 1 - dL + \frac{d(1-d)}{2!}L^2 - \frac{d(1-d)(2-d)}{3!}L^3 + \dots (-1)^k \frac{d(1-d)(2-d)\dots(k-1-d)}{k!}L^k \quad (12)$$

In other words, fraction differentiation is given by an indefinite autoregressive representation of the time series, with integer lags which have special coefficients.

If the value of d is between 0 and 0.5, the time series has long term memory, if d<0, it has short term memory. If d=0, the process is random walking. Therefore, if we add 0.5 to the d parameter, we get the estimation of the Hurst exponent.

4. RESULTS

A significant part of the studies analysing the pig sector mentions that the emission of the sector and the prices are described by cyclical movements. Nyárs (2005) thoroughly analysed the significant pig-keeping member states of the EU and the characteristic processes of the Hungarian and Polish pig sectors and stated that, in the examined states, pig cycles could be revealed inthe buying up prices. The experts on the regulation of market processes have been examining formation price oscillations and the pig cycle for decades. The theory of the cobweb model can be found in classic economic literature. This theory posits the notion that the loss of market information has an effect on the behaviour of the cycle. The price of slaughter pig, crop prices compared to each other have a significant effect on the decisions of pig-keepers, particularly in reference to the activities of small-scale producers. The formations of Hungarian buying-up prices are described by shorter cycles than those EU member states with advanced pig-keeping methods. In the EU, there are 9 year periods, while in Hungary, 3 or 4-year-periods are repeated. The reason for the long cycles is, on the one hand, the predictable market regulation and, on the other hand, the concentrated production structure. Therefore, we chose the monthly average Hungarian market prices of the period following 1990 as a basis of our examinations. The observed prices were as follows: the average price of piglets, young pigs, sows and slaughter pigs at animal markets and fairs. For the empirical analysis, 240 observations in all the four categories, i.e. the monthly average market prices observed between January 1991 and December 2010, were at our disposal.

4.1. The monthly formation of seasonally adjusted market pig price data between January 1991 and December 2010

Before examining the time series economically, we must filter out the season effects. The time series we used involves 20 entire years and did not contain missing observations. Before starting the econometric analysis, we adjusted the series seasonally by using TRAMO/SEATS (Golinelli–Parigi, 2008). We applied a trading day adjustment (5 day and length of month effect) and an Easter adjustment only in cases where such adjustment was significant. We also detected the additive outliers, the temporary changes and the level shifts automatically. For our additional investigations, we used the adjusted series and Figure 1 also presents the seasonally adjusted series.

Figure 1 shows that during the period since 1990, the basic trend in pig market prices has been slightly increasing. The market is still basically a buyer's market (Bakucs-Fertő, 2005) which affects the development of the prices, apart from seasonal and cyclical effects. In each case, the average prices have changed according to a 3-year cycle, which has turned into a 4-year cycle since Hungary joined the EU. Price developments show a large fluctuation over the 20 years since 1990, so we had to divide the entiree period into 4 sub-periods from a professional standpoint and analyse the four series even in these sub-periods. The first part contains data from 1991 to 1994, as prices were almost continuously increasing, without any cyclical affect. The second part involves data from 1995 to 2004. In this period, there was experienced a

large cyclical effect, which caused a 3-year movement in prices. It is also observable that slaughter pig prices and sow prices developed the same way.
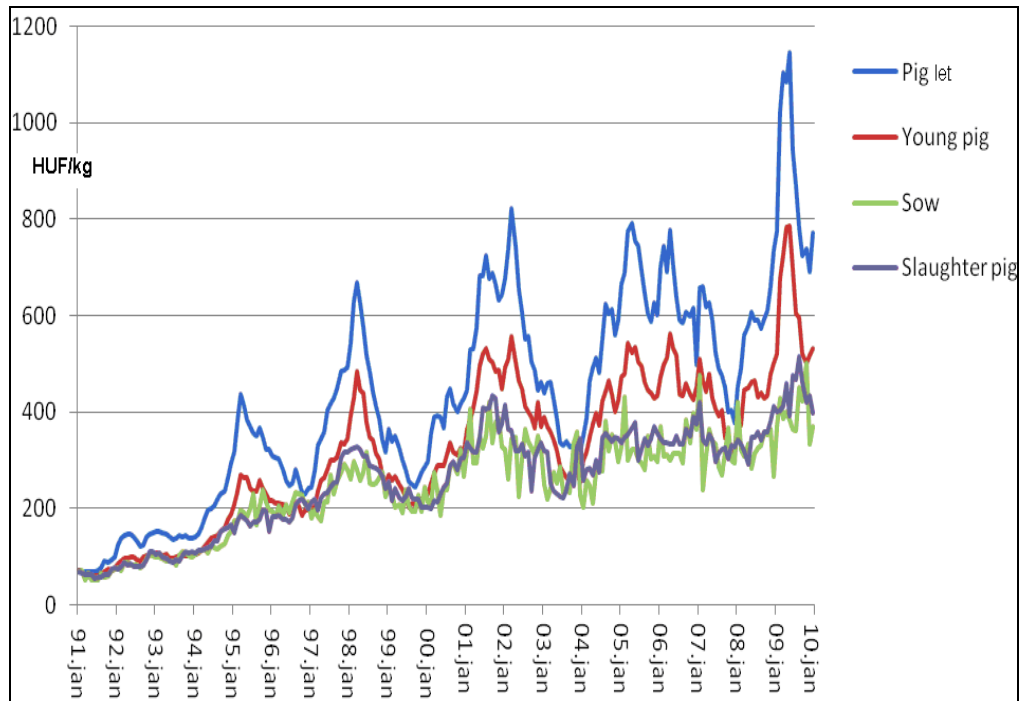
Remark: The seasonal adjustment was used by the TRAMO/SEATS-program.
Source: Magyar Statisztikai Évkönyv [1991 - 2006] and KSH stAdat táblák (2010).

Figure 1. Seasonally adjusted monthly average pig prices /1991- 2010/ (in HUF/kg)

The third period covers the first stage after EU accession, during which prices either decreased or stagnated. There had been a dramatic decrease in the cases of pig and piglet prices. The final sub-period, as a second stage after EU accession, lasts from July 2008 to December 2010. In this stage, we can observe a steady increase in pig and piglet market prices, while slaughter pig prices increased modestly (Figure 1) and sow prices follow a random movement.

4.2. Economic analysis of the data

Long memory is not a clearly specified concept in the financial theory. What is present in the literature are symptoms suggesting long memory, i.e. that prices are usually distributed non-normally; the autocorrelation function decays to zero very slowly, even for a very large period; the series has non-periodic cycles and is not stationary (Taylor, 1986). According to these symptoms, we would further test the seasonally adjusted time series, in order to find more evidence of long memory.

Table 1. Normality test results of the seasonal adjusted time series

Tests	Sow	Piglet	Young pig	Slaughter pig
Doornik-Hansen*	9.168 (0.010)	7.985 (0.018)	12.155 (0.002)	15.227 (0.000)
Shapiro-Wilk	0.969 (0.000)	0.969 (0.000)	0.965 (0.000)	0.959 (0.000)
Lilliefors**	0.085 (0.000)	0.062 (0.030)	0.075 (0.000)	0.114 (0.000)
Jarque-Bera	6.296 (0.043)	8.26 (0.016)	8.799 (0.012)	9.229 (0.010)

Remark: Econometric Software GRETL was used to test normality, significances are in parenthesis
*Doornik and Hansen (2008);
** Lilliefors (1967)

The normality and stationarity of the series were tested, as well as the decay of their autocorrelation function. Long memory processes exhibit non-normality and non-stationarity, their autocorrelation function decays to zero very slowly. Normality test results can be seen in Table 1.

The null hypothesis of the normality tests is that data is normally distributed. All the tests proved significant at the 5% significance level, so we can reject the hypothesis of normality in each case.

Table 2. Stationarity test results of the seasonal adjusted time series by ADF-test

Model	Sow	Piglet	Young pig	Slaughter pig
Constant	-1.587 (0.488)	-2.39509 (0.1431)	-2.134 (0.231)	-1.547 (0.509)
Constant and trend	-3.274 (0.071)	-4.57618 (0.001)	-4.446 (0.001)	-2.962 (0.143)
Differentiated series	-10.917 (0.000)	-8.19323 (0.000)	-7.549 (0.000)	-7.544 (0.000)

Remark: Econometric Software GRETL was used to test normality; we employed the Augmented-Dickey-Fuller test; significances are in parenthesis

The null hypothesis of the ADF test is that the time series has a unit root, as the time series is non-stationary. The test proves non-stationarity in all cases, as the null hypothesis cannot be rejected at the 5% significance level Table 2. Pig and piglet market prices are trend stationary; the other series are not. On the other hand, the differenced series are all stationary, so it was reasonable to differentiate the seasonally adjusted series and apply the Hurst exponent estimations to them.

Table 3 includes the descriptive statistical indexes of differentiated price data. On this basis, it can be stated that for the whole time serial, the average of the change in pig price was the highest 2.61 (HUF/kg), a result which could be connected with the fact that also the unit price was the highest here. The value of the median was quite the

opposite, since for young pigs, 50% of the monthly changes were lower than 2.26 HUF/kg. The standard deviation was the most significant in the case of sow price changes. The minimum and maximum of changes could also be observed here (-244.99 and 201.39HUF/kg price change).

In Table 3, we included not only the characteristics of the whole time serial, but also the characteristics of each period. Similar to the fact observed in the whole time serial, the average of piglet price change was the highest except for the 3*rd* period. The value of the median fluctuated between 0 and 1 in the second period, while the other periods were characterised by higher fluctuation. It is interesting to observe that the value of standard deviations grows and, similar to the whole data serial, the average deviation was the highest in the case of sows in every serial. The formation of minimum values is related to this trend, since in the 3*rd* period, the smallest price difference between the two time points was -244.99 HUF/kg in the case of sows. This value shows how large the loss was which producers suffered month after month, if they were forced to sell their animals in the given period. In the case of maximum values, it can be stated that, except for the 4*th* period, the highest price movement between the two months appeared for piglets. Therefore, producers could earn their highest incomes by selling their piglets, if they exploited the advantages coming from the price change. Thus, on the basis of Table 3, it can be stated that the differentiated price data in the various periods showed a big difference in cases of certain products.

Table 3. Descriptive statistical values of the differentiated price data

Me.: HUF/kg

Denomination	Piglet	Young pig	Sow	Slaughter pig
Whole period				
Mean	*2.61*	1.76	1.40	1.36
Median	0.82	*2.26*	0.54	1.29
Standard Deviation	35.32	23.16	*49.94*	24.02
Minimum	-156.76	-86.07	*-244.99*	-86.51
Maximum	144.37	149.74	*201.39*	84.08
First period				
Mean	*4.97*	2.68	1.78	2.08
Median	3.09	2.91	1.25	1.19
Standard Deviation	10.23	5.93	8.03	6.66
Minimum	-10.34	-14.29	-16.08	-8.61
Maximum	*32.33*	19.35	19.99	20.96
Second period				
Mean	*2.68*	2.18	1.21	1.49
Median	*0.15*	*0.76*	*0.15*	*0.69*
Standard Deviation	30.86	21.08	42.57	25.30
Minimum	-58.76	-51.48	-128.23	-86.51
Maximum	*123.02*	65.00	103.62	77.96
Third period				
Mean	-1.38	-0.23	0.44	0.06
Median	-1.42	2.01	-3.18	0.44

Standard Deviation	50.22	24.31	66.01	25.82
Minimum	-156.76	-61.72	***-244.99***	-75.65
Maximum	***130.68***	39.08	128.75	55.67
	Fourth period			
Mean	***4.20***	1.42	2.90	1.52
Median	-6.05	1.84	7.09	5.56
Standard Deviation	***50.65***	***40.95***	***82.24***	***33.04***
Minimum	-78.86	-86.07	-165.30	-71.07
Maximum	144.37	149.74	201.39	84.08

Source: Own calculation

Before we turn to the results of the estimations, one thing must be strongly emphasized. In the case H=0.5, the original data follows a random movement, as it is non-stationary. The differenced series (price change) is stationary, so it cannot follow a random movement.

Table 4. DFA-2* estimated Hurst exponents

Sub period	Sow	Piglet	Young pig	Slaughter pig
1.	0.639	0.765	0.459	0.824
2.	0.852	0.785	0.223	0.477
3.	0.397	0.555	0.256	0.497
4.	0.588	0.686	0.274	0.525
Whole period	0.750	0.709	0.162	0.402

*Remarks: Estimations were made by the DFA Software with p=2, quadratic polynomials were used for detrending the series
(*PhysioNet* [2010])

Average sow market price changes have short memory in all sub-periods and in the whole period (Table 4). Slaughter pig price changes did not have long memory except in the first sub-period. The Hurst exponents of the pig and piglet price changes are very similar to each other, excepting the third sub-period in all other sub-periods and during the whole period, they had long memory. The slaughter pig price changes had short memory in the whole period, and the original prices show random movement in all sub-periods except the first one. These statements are greatly reflect those given in Figure 1.

Table 5. The Hurst exponents estimated by the R/S method

Period	Sow	Piglet	Young pig	Slaughter pig
1.	0.765	0.734	0.426	0.531
2.	0.657	0.659	0.354	0.525
3.	0.458	0.568	0.365	0.504
4.	0.849	0.669	0.287	0.582
Whole Period	0.484	0.487	0.280	0.419

Note: The estimation was made by the Rescaled range analysis program (*Sewell, 2010*)

The Hurst exponents estimated by the R/S method are the same as the values estimated by the DFA 2 method, except for some exceptions, as seen in Table 5. The exponent applying to the whole period and for young piglet prices and the value of the first period on the basis of the R/S method, in cases where slaughter pig prices refer to irregular movement. The changes of sow prices are short memory prices as it was shown by the DFA-2 method.

Table 6. Hurst exponents and model parameters estimated by the ARFIMA method

Period	Sow	Piglet	Young pig	Slaughter pig
1.	0.736 (p=3, q=2)	0.759 (p=2, q=2)	0.274 (p=3, q=2)	0.563 (p=1, q=4)
2.	0.863 (p=1, q=0)	0.652 (p=4, q=2)	0.174 (p=2, q=1)	0.392 (p=4, q=4)
3.	0.581 (p=2, q=3)	0.655 (p=3, q=2)	0.213 (p=4, q=4)	0.394 (p=1, q=1)
4.	0.869 (p=4, q=4)	0.773 (p=4, q=4)	0.317 (p=0, q=1)	0.459 (p=4, q=1)
Whole period	0.885 (p=4, q=3)	0.739 (p=1, q=0)	0.223 (p=4, q=3)	0.428 (p=3, q=4)

Note: The estimation was made by the Matrixer program (*Tsypalkov, 2004*).

The exponents estimated by the ARFIMA models are similar to the exponents estimated by the DFA-2 method and the same conclusions can be made except for the change of slaughter pig prices, as seen in Table 7. In the 2-4 periods, and also referring to the whole period, the exponents of slaughter pig price changes refer rather to short memory. In accordance with the findings given above, we would like to draw attention to the fact that one of the main advantages of the ARFIMA method is the definition of the strength of long term memory. All this can be observed in the analysis of the change of the piglet prices, where the parameters referring to the long term memory are higher than for the DFA-2 method in each period. In the case of young piglets, this is true only for the 3-4th and the whole period. Nevertheless, the parameters referring to short term memory in the case of sows in the first 3 periods are much lower than the values obtained using the DFA-2 method.

Among the methods of pinpointing long term memory, ARFIMA can be used for making forecasts. In Table 7, we have summarised the forecasting ability of the method compared to the traditional ARIMA model fitted for seasonally adjusted data. In the table, we compared the achievement of the two methods on the basis if the MAPE index. The mean absolute percentage error of the ARFIMA model turned out to be worst in the case of the forecast of the characteristically short term memory sow prices, while in the case of the characteristically long term memory piglet and mainly young piglet, this method was more efficient in forecasting. In the case of sows, for both methods, the MAPE index was significantly higher than 5%, since the changes in these prices show a much more hectic movement, compared to the other pig prices. Behind such a result could be the fact that the price of market sows is partly independent of breeding animal prices from the earlier periods. In the forecast of the slaughter pig prices, similar to random walking, the ARFIMA method was the more successful.

Table 7. The comparison of forcasts estimated by the ARFIMA and ARIMA methods on the basis of seasonally adjusted data

Time series	Model	Prices in 2010						MAPE*
		July	August	September	October	November	December	
Piglet prices	ARFIMA (5;0.485;3)	727.0	706.1	684.0	661.5	641.0	622.0	*3.367*
	ARIMA (4,1,4)	725.8	706.2	686.2	665.2	650.0	632.5	3.373
	Seasonally adjusted data	*724.4*	*709.9*	*704.6*	*654.0*	*614.6*	*698.3*	
Young pig prices	ARFIMA (1;0.085;0)	513.5	508.8	504.6	500.5	496.6	492.9	*1.786*
	ARIMA (2,1,2)	536.0	531.4	514.2	501.1	501.5	511.8	4.211
	Seasonally adjusted data	*504.9*	*492.2*	*508.1*	*497.3*	*476.5*	*492.5*	
Sow prices	ARFIMA (1;-0.1;1)	364.7	362.7	361.4	360.1	358.9	357.7	*19.009*
	ARIMA (0,1,1)	377.1	378.5	379.9	381.4	382.8	384.3	16.032
	Seasonally adjusted data	*429.8*	*325.9*	*527.2*	*445.0*	*486.1*	*401.4*	
Slaughter pig prices	ARFIMA (3;-0.011;4)	369.4	375.6	371.2	371.5	380.3	379.5	*2.894*
	ARIMA (3,1,4)	360.4	374.9	368.5	357.4	369.7	373.2	4.685
	Seasonally adjusted data	*400.9*	*372.9*	*374.3*	*379.3*	*390.3*	*392.5*	

Source: Own calculation with the help of the forecast and fracdiff packages of the R 2.11.1 program
* Mean Absolute Percentage Error

4. CONCLUSIONS

On the basis of our analysis, it can be stated that the methods for the examination of long term memory exactly mirror the characteristics described for the specific periods of seasonally adjusted time series. During the examination of the changes in the piglet and young piglet prices, the DFA-2 and ARFIMA methods did not show long term memory in price changes, except as refers to the period (3rd period) after EU accession. In the same period, according to the R/S method and taking into consideration the whole serial, the piglet and young piglet prices showed irregular movement. In the case of sows, according to all three methods (DFA, R/S, ARFIMA), the changes in average market prices had a short term memory in each period and in total, as well. The explanation for this can be that the price of sows appearing on the market is partly independent of the breeding animal prices from the earlier periods. The changes of slaughter pig prices with the DFA and ARFIMA methods between 1991-1994 (first period) turned out to have a long term memory, which the R/S method did not show. The data of the original time series in the 2-4th periods are similar to random walking and the price changes in total have short term memory on the basis of the

DFA-2 and R/S methods. In the 2-4th periods and also in the whole period, the exponents of slaughter pig price changes refer to short memory, according to the ARFIMA method. Considering the comparison of the methods, the R/S method turned to be less robust in showing long turn memory in the cases of piglet and young pig price changes. Nevertheless, for these price changes, the other two methods obviously justified the existence of long memory. One of the main advantages of the ARFIMA method is in the definition of the strength of long turn memory, which could especially be observed in the analysis of piglet price changes, where the parameter values referring to long turn memory were higher in each period than the values at the DFA-2 method.

Therefore, in summary, slaughter pig prices are random; pig and piglet prices developed similarly and have long memory, while sow price changes definitely have short memory, which means that a decrease will probably be followed by a decrease in the long run. From among the methods capable of showing long turn memory, we tested the forecasting ability of the ARIMA method and compared it with the traditional ARIMA model fitted on the original data on the basis of the MAPE index. The mean absolute percentage error of the ARFIMA model turned out to be worse in forecasting sow prices with characteristically short term memory, while in cases of piglet and young pig prices with characteristically long turn memory, this method was the more efficient in forecasting.

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PUBLIC WORKS CONCESSIONS - DELIMITATION FROM OTHER CONTRACTS

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   ABSTRACT: *Initially in France the judicial basis of contracts concerning the occupancy of public domain was the Law of 17 June 1938, but also art. L 84 of the Domain's Code (1790), as well as a number of relevant decisions of the State Council. Some of the contracts concerning the occupancy of public domain are the funeral contracts and certain public works or railway concession contracts. Other contracts are applicable to domain areas not affected by this type of occupancy, namely the public domain destined for public use, like concessions of public road services or of maritime fishing institutions. The distinction is significant, as in dedicated contracts, like the funeral concession, the occupant's utilization and disposition rights are considerably wider than in the case of contracts of general interest.*

   KEY WORDS: *concession; contract; public work; public interest.*

   JEL CLASSIFICATION: *K12*

1. PUBLIC WORKS CONCESSIONS. EMPHYTEUTIC LEASES.

   In the spirit of art. 1 of the Law of 17 June 1938 the contract of public domain occupancy has certain defining elements: the deed underlying private utilization is a contract, while acknowledgement of a contractual relationship is not determined by the existence of contract specifications; the contract needs to be constitutive in relation to public domain utilization; occupancy has to concern public domain, the concessionaire being the person authorized to manage the public domain.

   The state is further responsible for public domain exploitation by a number of means, from simple access to the public domain to granting private utilisation rights.

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In Romanian legislation, it was the Law of administrative claims no. 554/2004 that defined for the first time the concept of administrative contracts and regulated the applicable judicial regime.

Thus, according to art. 2 par. 1 -c), second sentence of this law, the category of administrative deeds includes contracts closed by public authorities concerning exploitation of public goods by performance works and services of public interest, and by public acquisitions, respectively.

Consequently several categories of public work contracts can be identified: Public acquisition contracts (*marché de travaux publics*), public works concessions, public services concessions, contracts known as *les marchés d' entreprise de travaux publics,* and emphyteutic leases (*baux emphytéotiques*), the latter being initially established by the Law of 5 January 1988.

The Law of 29 August 2002 establishes that local public institutions and local communities can accept emphyteusis to private and public persons for a period of 18 to 99 years, by which the beneficiary is granted a real property right over the land on that works are performed.

The emphyteutic lessee however cannot alienate the object of the emphyteusis. Administrative emphyteusis is legally established in order for a public service, of operations of general interest to be carried out.

This contractual form allows a private person to develop the state owned public domain, the emphyteutic lessee exercising true property right over the erected buildings, what is assimilated to a public-private partnerships.

The law of the state of Québéc considers emphyteusis a dismembered form of property and is a long term land contract that allows the beneficiary to improve a property in exchange for the right to enjoy that property as an actual owner over the duration of the contract. This institution is utilized in the large projects of urban management.

2. THE PUBLIC ACQUISITIONS CONTRACT

Through a *public acquisitions contract* a public person charges a contractor – a private person – to carry out public works for the benefit of the public person for a price (*prix*) agreed in that contract.

The identification criteria of these contracts were established by jurisprudence, starting from three elements: one of the co-contractors needs to be a public person (an organic criterion defining the very administrative judicial nature of the contract); the object of the contract needs to concern an operation of public works; the contractor is remunerated in form of a price. It is this last element that differentiates the public works acquisition contract from the public works concession.

According to art. 3 -f) of Government Emergency Ordinance no, 34/2006, the public acquisitions contract is the deed closed in writing between one or more contracting authorities on one hand and one or more economic operators on the other, with the object of conducting works, supplying products or performing services.

The contracting authority has to choose whether to implement the project in the traditional system of public acquisitions or as a concession.

The differences are outlined in the *Guide for the Implementation of Projects by Public Works Concessions in Romania* (The Guide for the Implementation of Projects by Public Works Concessions in Romania was approved by Order no.1517 of 27 May 2009 of the Ministry of Public Finances and no. 9574 of 16 July 2009 of the National Authority for Regulation and Monitoring of Public Acquisitions, published in „Monitorul oficial al României", part I, no.512 of 27 July 2009, http://discutii.mfinante.ro/static/10/Mfp/ PPP/GHID_CONCES_PUBLICE.pdf*): in the case of a concession, the exploitation right of the results of the conducted works is granted to the concessionaire, who at the same time *mandatorily assumes most of the risks* in connection with conducting and exploiting the works.

Exploitation risks include: a*) the risk of availability* (non-achievement of performance and quality parameters of the building or the provided service, clearly determined and measurable over the entire duration of the project); b) *Market risk* (Non-utilization by the end-users of the results of the completed works);

Thus the entity assigning the concession does not undertake to pay any amount of money, if the contract establishes that the exploitation risks are entirely assumed by the concessionaire.

If the exploitation risk is divided between the concession assigner and the concessionaire, the concession contract needs to explicitly stipulate the financial contribution of the concessionaire during the contract.

Should the requirements for project implementation in form of a concession (long term delegation of a public service to a private operator, service productivity, value of the investment, starting date of the works, existence of similar concession projects) not be satisfied, the contracting authority can choose a traditional scheme of public acquisitions instead of a concession.

The *public works contract* is defined as a contract the object of that is either the performing of one of the works related to the activities of Annex 1 of *Government Emergency Ordinance no.34/2006* or to the execution of a construction, or both design and execution of works related to the activities of Annex 1, or design and execution of a construction; or by achievement by any means of a construction that satisfies the necessity and the objectives of the contracting authority.

3. LES MARCHÉS D'ENTREPRISE DE TRAVAUX PUBLICS

Les marchés d'entreprise de travaux publics are those contracts by that a public person assigns building and exploitation of a „public edifice" (*ouvrage public*) and public services in principle to the contractor, the latter being remunerated by the public person (and not by royalties as in the case of concession). Similarly to the concessionaire, the contractor too has the obligation of exploiting the result of the work.

The *Mixed economy company*, as opposed to concession, is not limited to exploiting and organizing a public service, but can expand to exploiting certain assets by associating private capital to an activity of the state or to public services in form of a joint stock company, governed on one hand by the principles and rules of commercial

law, but that includes also state capital on the other. This was a form of state-owned subsoil exploitation after the Constitution of 1923.

The *Publicly owned entreprise* is a contractual form of performing public works by the administration itself. The Romanian doctrine stipulated that in addition to concession and the mixed economy company public service organization also includes the publicly owned entreprise under its various forms.

4. ARRENDAMENTO

The *Arrendamento (lease)* is a type of contract the object of which is the exploitation of agricultural land, either by public exploitation plans or by private initiative.

The deed we refer to is the *Law of Agricultural Reform no. 45404/1964* of Brazil; art 9 of this act stipulates that the state can exploit directly or indirectly any of the agricultural properties in its ownership.

Exploitation is applied to „public lands". These are either property of the „Union" (the federal state, s.n. - C.M.) and made available by the state to services and works of any kind, or belong to the individual federal states or townships.

Arrendamento, however, is significantly different from the concession of public works. Agricultural exploitation does not involve public works and, according to art. 94 of the same act, cannot be exercised on the public domain to other purposes than research, experimenting, demonstration and promotion of agricultural development.

All enumerated categories of contracts, although different under certain aspects, sometimes rather difficult to identify, have as a common denominator the fact that they are administrative contracts of public management. The purpose of closing public management contracts pertains to the essence of administrative contracts, hence the mere closing of such a contract between a public and a private person does not suffice.

All these contracts include clauses exorbitant to common law. As an exception the contracts closed between industrial and commercial public services and their users are always contracts of private law, regardless whether they include exorbitant clauses. Thus the object of the industrial and commercial public service contract is an activity comparable to that of a private company, namely the production of goods and services (for example railway transportation) and involves management comparable to the private sector (absence of a monopoly, the functioning of the public service in a competitive sector).

In Spain the public works concession contract is one of the three classic modalities of executing public works, next to execution of the works by the Administration and by outsourcing. The concession contract is regulated in articles 5.2.a, 7.2 and 220 – 226 of the *Law of Public Sector Contracts.*

Like any administrative contract, its regulation includes the standard structure characteristic to these public judicial deeds:
   ✓ devising of the preparatory documents (feasibility study – economic and financial feasibility study, project of the works and economic –

financial plan, contract specifications including the administrative clauses and technical specifications, articles 227 – 233 of the law, art. 232 excepted),

- ✓ the modality of assignment (competition-based, exceptionally negotiated, art. 231.1),
- ✓ the rights and obligations of the concessionaire (art. 242 and 243),
- ✓ the privileges of the contracting authority (art. 249
- ✓ and in addition, *ius variandi* art. 250, receivership – art 251, penalties – art. 252), reception of the works and causes for contract termination (art. 261 – 266).

5. THE CONCESSION CONTRACT OF PUBLIC SERVICES & THE PUBLIC WORKS CONTRACT

The public service is aimed at the regular and continuous satisfying of a general requirement, and is organized by the state and the local public administration authorities upon establishing the existence of general interest.

Public service has two senses:

- an organic one that entails the existence of a form of organization, of an administrative apparatus,
- a material sense that refers to an activity aimed at satisfying a general interest.

The latter is essential for the characterization of a public service, which is a widely analyzed concept. Identification criteria were determined already in the interwar period, one of the four essential elements rendering the performed service public being the general public interest to be satisfied. The elements identified by authors as specific for the concept of public service are:

- ✓ an element of entreprise,
- ✓ continuity of the public service,
- ✓ dependency on and subordination to the public power,
- ✓ general and collective utility.

In the interwar period it was argued, based on the theory of the public service, that this underlies also public works concession contracts, hence challenging the independent existence of the latter. The French doctrine defined the concession contract as having for its main objective the assignment of the public service to the concessionaire.

The object of the contract, however, can be the performing of operations required for that service, these being considered public works, „as they are performed on *property meant to ensure the functioning of the public service*". The concession of public services without the concession of the related public works was viewed as an exception. The public services contract was considered to rank first among the administrative contracts.

The assimilation of public works to public services concession is also addressed in more recent literature, considering that the concession contract merges the category of public works with that of public services, as in practically every case the

beneficiary of the concession of a public work also undertakes the management of the public service the public works are meant for, and vice-versa, the concession of a public service will conduct and exploit public works related to this service.

The *pre-eminence of the public services concession* over public works concession is conditioned by the main object of the concession contract that has to concern the execution of a public service and not exclusively the execution of public works.

This principle is acknowledge to the present, and underlies the rationale of the Government Emergency Ordinance no. 34/2006 as subsequently modified and completed.

Also article 12 of the *Law of Public Sector Contracts (Spain)* provides that should a contract include provision of services based on one or the other type of contract, including the specific elements of public services or public works concession, respectively, the contractual provisions to be considered, based on certain criteria, are those most important from the economic viewpoint.

Public works concession contracts are not to be confused with and are regulated separately from those of public services. The service contract that includes the works contract is not be confused with the public works contract and the public services concession contract.

Thus art.10 of the *Law of Public Sector Contracts (Spain)*, defines the service contract as having the object of constant performance for the conducting of an activity or towards a different result of a work or provision.

In the sense of this law service contracts fall into the categories enumerated in Annex II. Art. 13 states that Annex II enumerates the cooperation contracts between the public and the private sector, amongst which the concession contract of public works of a certain computed value established by law.

6. CONCLUSIONS

The public works concession contract is a modality of efficient public management – a concrete example of ample implementation of the public power prerogatives. The concept of public works concession contract has acquired unconditional existence, recognized in both national and European law.

A comparative study is of relevance, as this contract – starting from a common basis - has different characteristics in the various states applying it in relation to their national legislations.

The aim of a comparative study is to reveal the conflicting aspects, but also the defining elements of such a contract type in the legal systems of Europe (France, Spain, Portugal, Great Britain), South America, the Middle East and the European Union.

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ROMANIAN INSURANCE MARKET- ROAD TO RECOVERY AFTER FINANCIAL CRISIS

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ABSTRACT: *The paper aims to present the Romanian insurance market size and her place in the international insurance trade, comparing our market with markets of different countries from the major regions of the world, using different indicators for sizing and comparison. Then will be presented some solutions for insurers to overcome after the financial crisis and recovery their activity.*

KEY WORDS: *insurance market; premium; insurance density and penetration; crisis effects.*

JEL CLASSIFICATION: *G01; G14; G22.*

1. ITRODUCTION

The most international insurance and reinsurance transactions are made in several markets, concentrated in the major financial centers of the world. The insurance trade is low compared to international transactions in other fields. The share of foreign insurers differs from country to country, in recent years they have increased due to liberalization of the markets of different countries, and especially due to the acquisitions and the insurers mergers on different markets. The strongest increase of the insurance activity took place in the last thirty years and this trend is based on the following factors (Ciurel, 2011): the unprecedented growth of industrialized countries after the Second World War, the changes in the structure of insurance markets in many parts of the world, improving the business climate that prevented international companies to operate as direct insurers on international markets, globalization of financial services, and insurance services, in particular leading to a strong concentration of international trade in these services.

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Today, one of the most important features that characterize the development of global insurance is currently the world insurance market globalization, presented by a gradual liquidation of economic and legal barriers that separate the insurance markets of some states. Another feature of the international insurance market is the existence of a large number of insurance companies operating in various organizational and legal forms, with a large capital and big assets, with a wide range of operations and insurance products offered, a developed legislation in insurance and a viable state surveillance system, the existence of various associations and unions of insurers, a developed system of intermediaries, consulting firms.

Insurance market activity may contribute to economic growth not only by itself but also through the complementarity with the banking sector and capital market (Cristea, 2010). Among the factors (Negru, 2010) that could negatively influence the insurance market can be included: negative currency depreciation in the assets and liabilities of insurance companies, increasing inflation, stock market liquidity situation, some credit institutions where the insurance companies have made investments.

2. HOW IMPORTANT IS OUR INSURANCE MARKET IN THE GLOBAL INSURANCE TRADE?

The current global financial crisis is the worst the world has seen since the Great Depression during 1929-33. The severe worldwide recession - which in most countries began to show up in 2008 - was triggered by the housing bubble in the USA (Jungmann & Sagemann, 2011).

The worldwide crisis has left its mark on the international insurance market differently from one region to another, from one country to another. The developed countries were less affected than emerging economies. Financial instability is a very important issue for developing countries and currency mismatch is one of many causes of financial crises. However, currency mismatch is most likely to be linked to other fundamental causes of financial crisis, such as excessive corporate leverage, overheating and fiscal deficits, rather than the cause of crisis itself (Lomborg, 2004).

Before the financial crisis in Romania, the economic context was totally different from now. The economy recorded growth rates, financial markets, including insurance, were booming, but now as any other country in the world, have to deal with financial crisis effects. The capital market in developing countries is extremely small, so a large outflow of capital will inevitably trigger a financial crisis, and international capital flows will be intrinsically unstable (Lomborg, 2004). Referring to the most important regions of the world, Europe is the largest insurance market in the world followed by America, Asia, Oceania and Africa.

For seeing how much means our market in global market, we analyzed three indicators: premium volume, insurance density and insurance penetration. In figure no. 1. we presented the worldwide situation under financial crisis influence, through the first indicator taken into consideration - gross written premium. Most affected by financial crisis was the year of 2009, the premium volume decreased in this year with

4.77% comparatively with the previous year. The trends changed in 2010 when it is notice an increase with 4.25% of gross premium volume from total insurance activity. In figures 2, 3, 4, we presented the top ten countries through the first indicator taken into consideration, and the place of our insurance market in this context. In this ranking by gross premium written from total insurance business, the firsts 5 ranks are identically in the period analyzed, and also it is point the rank of Romania situated on 49 rank by gross premium written and those ratio represent only 0,06% from world insurance business.
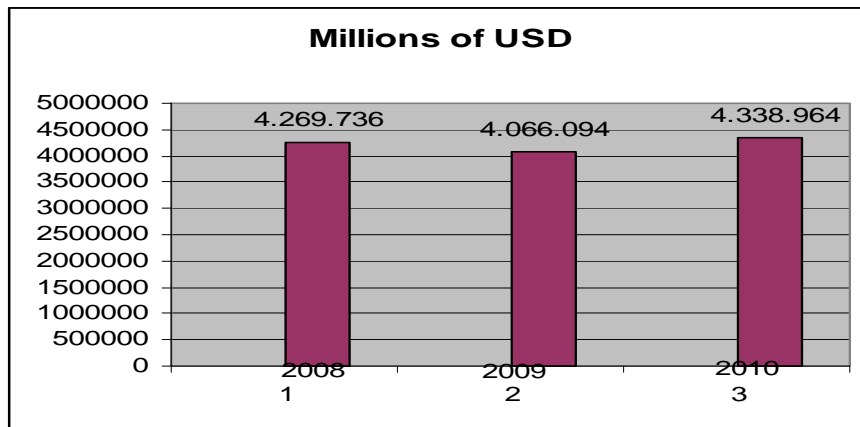

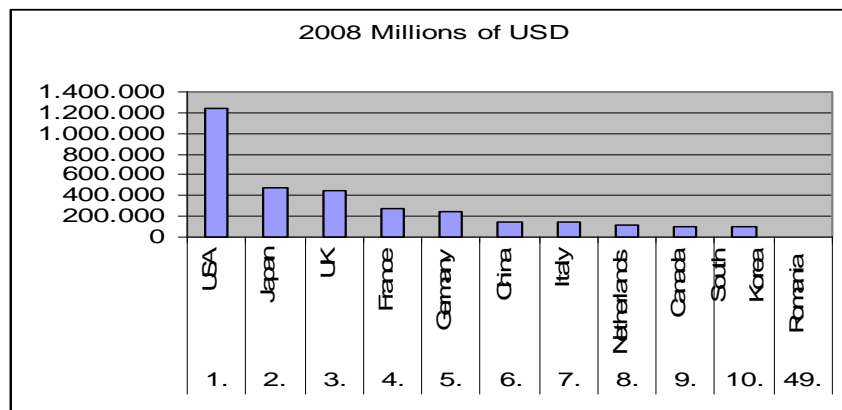**Figure 1. Total gross written premium**

Figure 2. Top 10 countries by gross premium written in 2008

The second indicator analyzed is insurance density. The year of 2009 is a year in which it recorded a decrease of insurance density in all regions of the world, a worldwide an inhabitant pays for purchasing in case of total business insurance an average of 595,1 US dollars. During 2010, insurance density worldwide increased by 5,13% compared with the previous year (figure 5). In figure 6, 7, 8, we presented the

top ten countries through the second indicator taken into consideration. The results show that the most countries from top 10 are from Europe, only USA is present in that top 10 countries worldwide by insurance density in 2008 and 2009, and also Japan was a new entry in 2009 with an increasing trend in 2010. Romania is on 59 ranks in this top in 2008 and on 65 ranks in 2010. For example an inhabitant of the first country in the top pays, an average, for purchasing an insurance policy 3666,8$, and we pay 24$, but growing throughout the analyzed period.
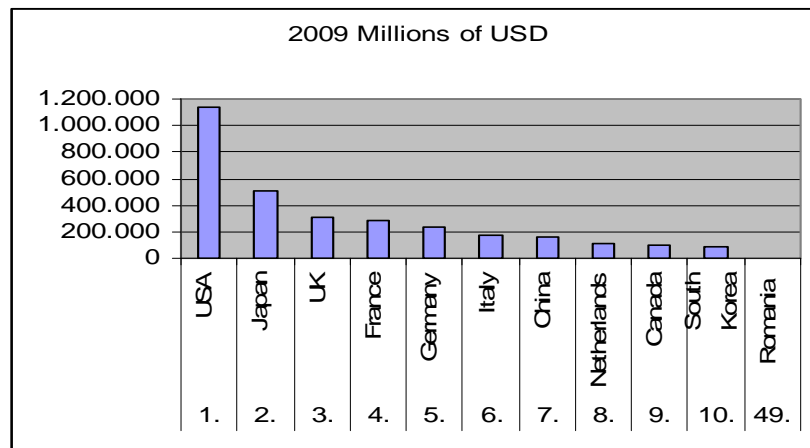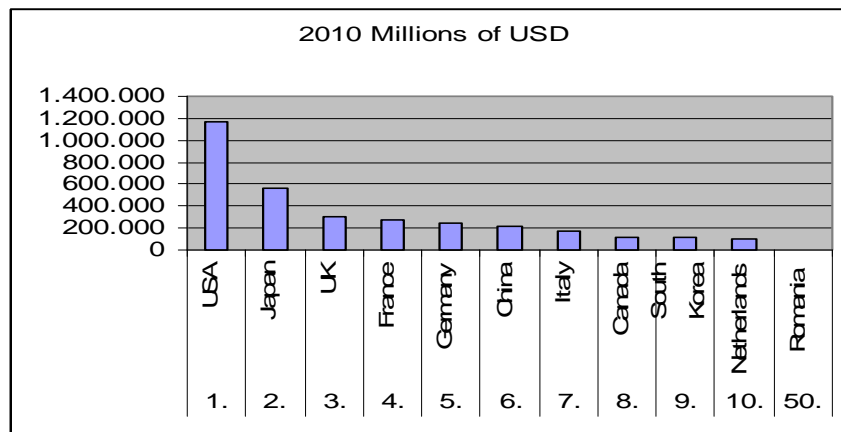

Figure 3. Top 10 countries by gross premium written in 2009

Source: Swiss Re (2009, 2010, 2011)

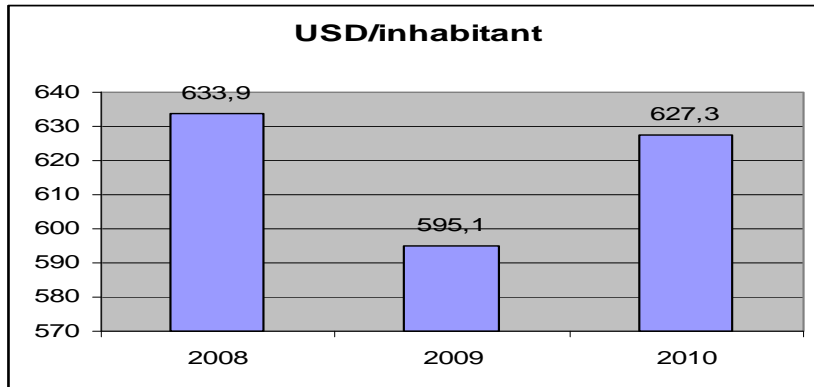**Figure 4. Top 10 countries by gross premium written in 2010**

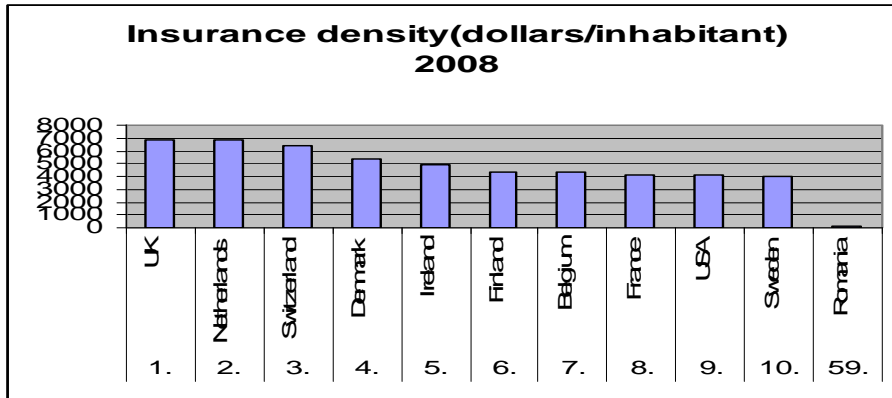**Figure 5. World Insurance density**
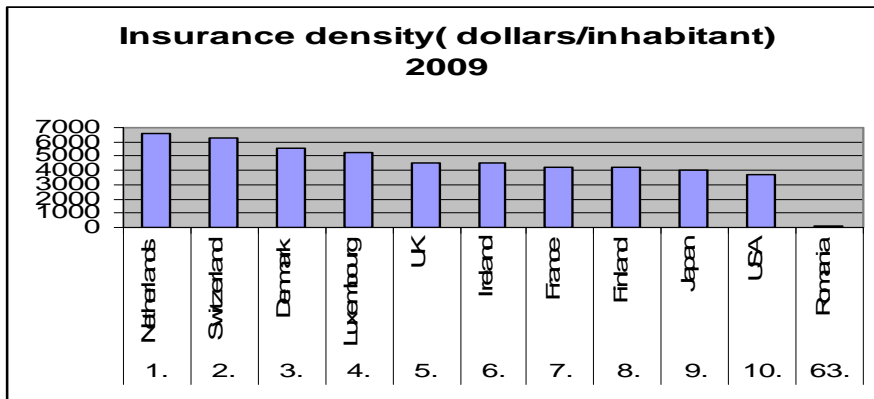

Figure 6. Top 10 countries by insurance density in 2008

Figure 7. Top 10 countries by insurance density in 2009
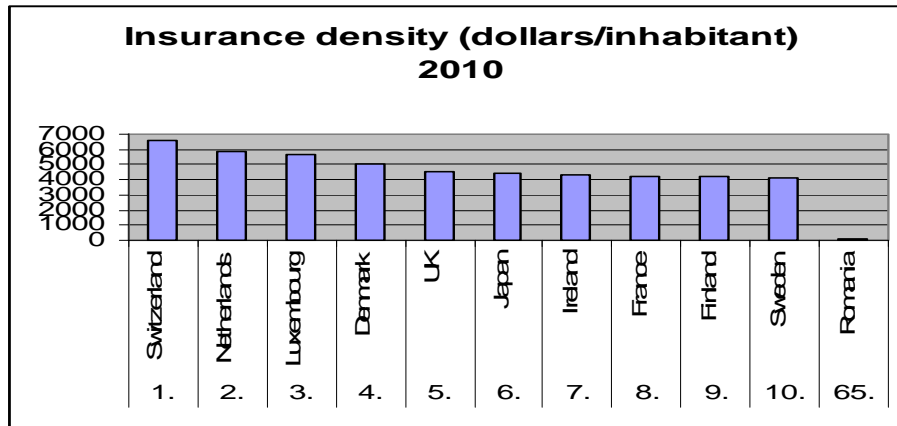
Figure 8. Top 10 countries by insurance density in 2010

The analysts say that such a global crisis did not exist before, and the measures to overcome the effects and prevent in future, is a difficult process that requires international cooperation between governments and supervisory authorities. Worldwide, currently, the data collected shows that there are large differences in insurance coverage, ranging from country to country, thousands of people are under-insured and they need financial protection provided by these products.

The third indicator used to show how small is our insurance market, is insuranse penetration rate. According with these informations (figure 9, 10, 11, 12) is notice that the highest insurance penetration is found in Taiwan, increasing from one year to another about 11.9% in 2010 comparative with the level from 2008. On second place are United Kingdom in the year 2008, Netherlands in 2009, and South Africa in 2010. In our country's insurance penetration is very low compared to other countries from top, in continuous decline over the last year analyzed.
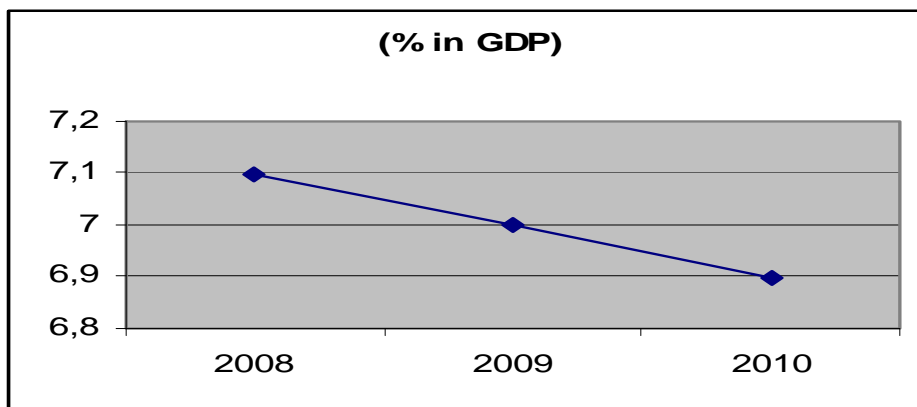
Figure 9. World insurance penetration
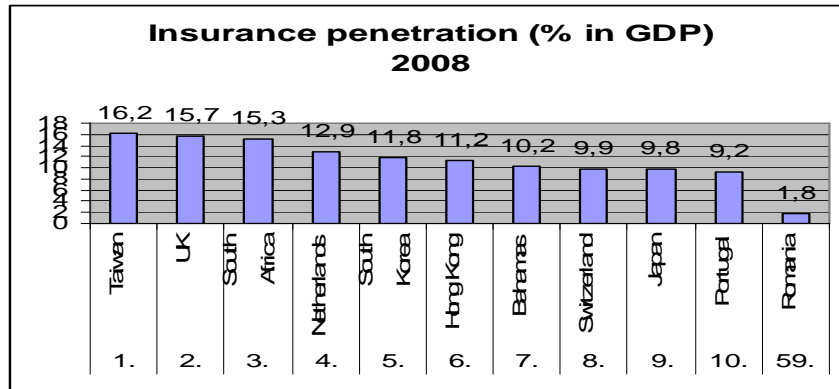
Figure 10. Top 10 countries by insurance penetration in 2008

Looking back, most insurance markets have returned to pre-crisis level indicators analyzed. This favorable trend is valid for insurers from developed countries and the developing ones. However, there are many risks that the insurance industry must always be aware of them, but the biggest is the possibility of new turbulence in financial markets.
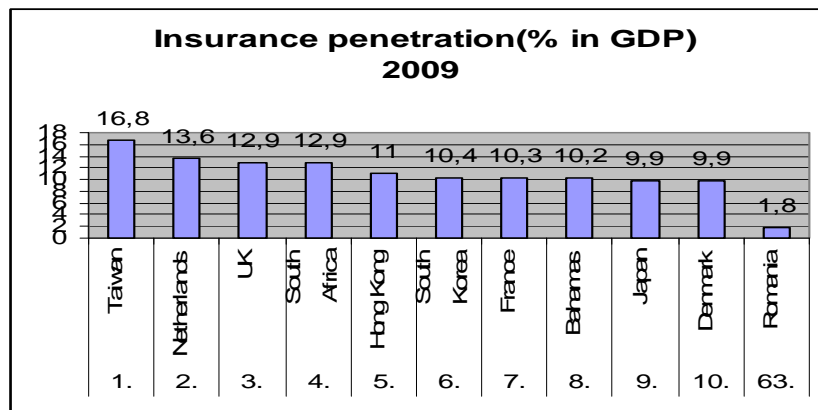
Figure 11. Top 10 countries by insurance penetration in 2009

In conclusion, the Romanian insurance market is still very under-insured, with a small volume of premiums and very low insurance density and penetration, compared to other insurance markets and this will not change in the coming years. Many insurers have faced for the first time with a crisis situation. All economic models used to predicting the economic shocks did not work. Unlike other insurance markets from developed countries, the Romanian market still depends to a large proportion of motor insurance. But should be considered the income average of the population of Romania, because the level and structure of income in developed countries are very

different, in the near future we will not be able to get to their income level, so we can compare on equal footing with them.
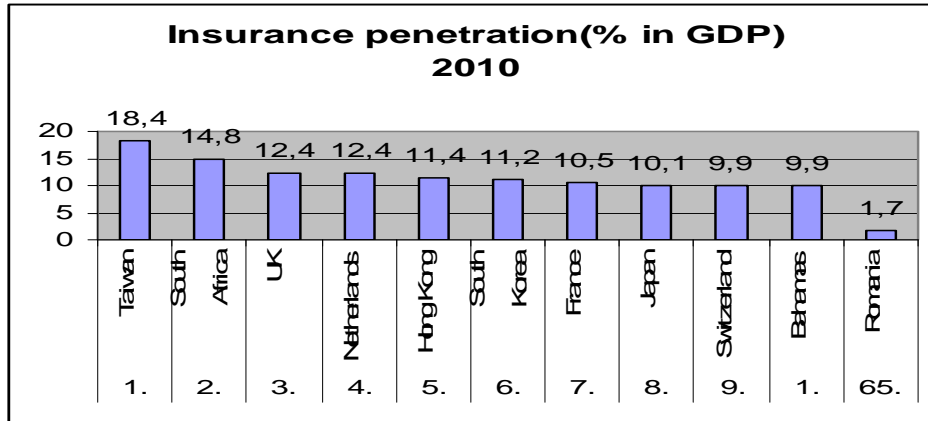
Source: Swiss Re (2009, 2010, 2011)

Figure 12. Top 10 countries by insurance penetration in 2010

3. SOLUTIONS FOR THE INSURERS OPERATING ON THE ROMANIAN INSURANCE MARKET

The most important feature of the Romanian insurance market is the foreign contribution to share capital, the foreign investors have made large capital infusions to strengthen the financial capacity of the insurance companies, today our insurance system is based over 90%   on foreign capital. This means that our insurance market is perceived as a good opportunity for business development.
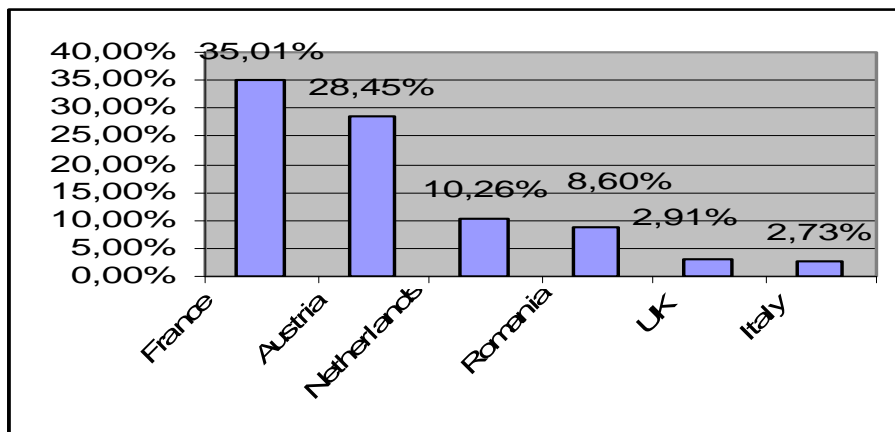
Figure 13. The foreign investors countries

Table 1. The foreign contribution to share capital

Year	Share of foreign capital (%)
2008	87,93%
2009	88,65%
2010	90,40%
2011	91,22%

Source: Insurance Supervisory Comission from Romania, Annual Reports: 2009, 2010,2011

Life insurance represent, in developed countries, over 70% of the total insurance market and in our country they represent less than 20%. Insurance industry in Romania is connected directly to the evolution of the main economic sectors, and is dependent on consumption, which declined in recent years. Insurance market recorded a decrease of gross written premiums volume, compared to the years before the crisis, when there were increases between 25% - 30% (figure 14).
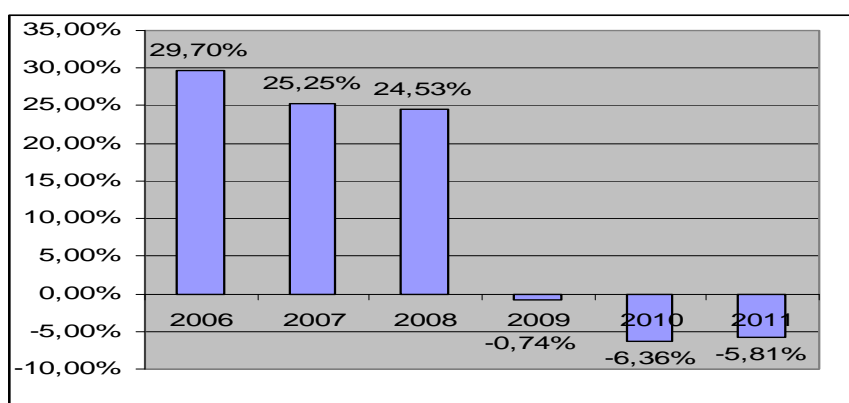
Figure 14. Increase in nominal terms of gross written premiums volume compared with the previous year (%)

Life insurance sector has easy recovered in 2010 and 2011, however, low share of life insurance in total gross premiums has made that the positive progress in this segment to be insignificant to the evolution of gross written premiums. Life insurance registered an increase not because the financial instability has been remedied and that would have raised the living standards of Romanian people, but maybe because life insurance was seen from many people as a form of long-term savings. Returns obtained through investment programs unit - linked also contributed to this development. Insurance penetration and insurance density are other indicators that registered increases before the financial crisis and then decreases as a consequence of crisis effects (figure 16, 17).
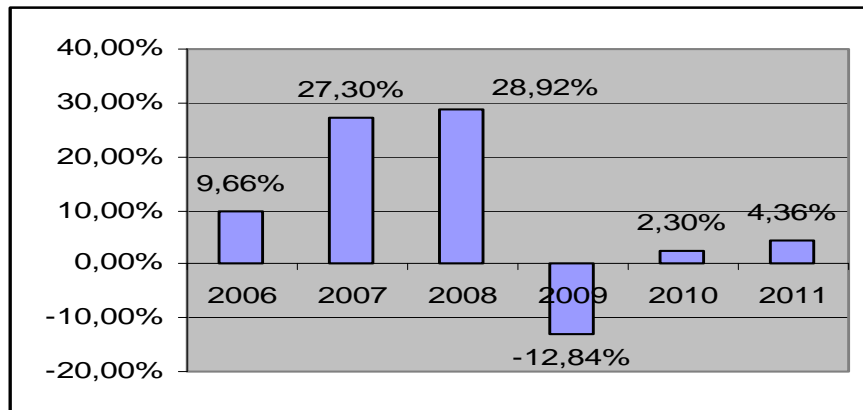
Source: Insurance Supervisory Comission from Romania, Annual Report: 2011

Figure 15. Increase in nominal terms of written premiums volume in life insurance compared with the previous year (%)
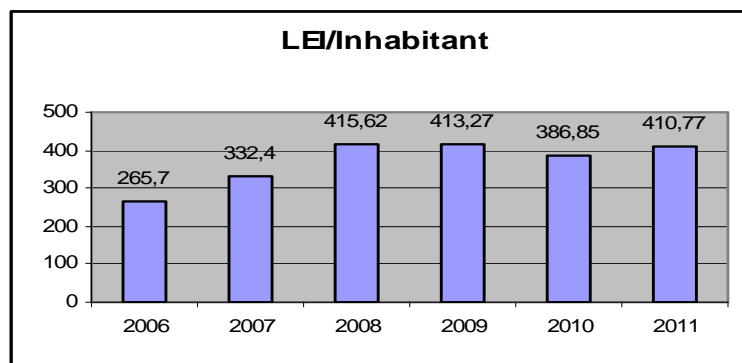
Figure 16. Insurance density in Romania before and after crisis

Source: Insurance Supervisory Comission from Romania, Annual Reports: 2010, 2011

Figure 17. Insurance penetration in Romania before and after crisis

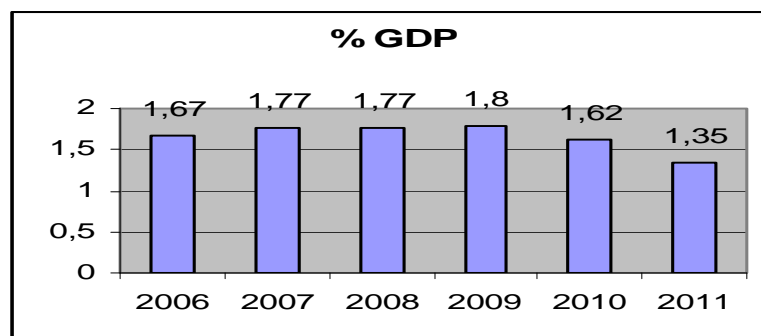Romanian insurance market has seen crisis effects, not very different from other countries, but of course, weighted with market size. The companies are faced today with challenges arising from increased frequency of risk taken. Another problem that the insurance market in Romania will have to deal is to find the point of balance between the real costs of risks assumed and the prices of products sold to the consumers, because they have an important influence on the quality of services. Most of times the price of a policy is determined without a strategic vision, to increase the market share, which will negatively affect the profitability but especially their ability to pay its obligations to policyholders.

We believe that in the near future should be taken several measures to support the insurance business, increase market confidence in the insurance system, promoting greater transparency and, most importantly, the introduction or increased deductibility for certain types of insurance that come to help customers (life insurance, health, private pensions), more focus on financial education of the population and most importantly, increasing professionalism of those who work in the insurance field. The insurance industry should focus more on increasing the quality of products and services, which has depreciated considerably in the last two years, which would lead to the conservation portfolio of clients and will contribute to restoring confidence in the insurance market, also we should develop other lines than auto insurance. The deficit by qualified specialists in this field, is another issue that should be considered in near future. Next we propose some solutions for insurers:
- financial stability and regaining consumer confidence remain the most important objectives;
- permanently maintain solvency legal limits;
- avoid taking risks beyond established and maintain sufficient liquidity;
- maintaining the existing customer portfolio;
- increased communication with customers;
- products development by introducing differences between them;
- protect market position by exploring niche areas for life insurance;
- standardization of training of those who sell insurance;
- insurers preparing for the implementation of Solvency II Directive;
- a greater attention to risk management.

Insurance industry, in the coming years, will be influenced by some non-economic factors: the aging population, which does not necessarily mean a better life as a result of the relationship between needs and available resources to cover them, reducing the birth rate, rising unemployment.

4. CONCLUSIONS

Romanian insurance market is still very much underinsured, with a small volume of premiums and very low insurance penetration and this will not change in the following years. The low degree of insurance penetration of less than 2%, compared to 8% average at European level can lead us to the conclusion that there is an uncovered potential and we believe it will still stay so in the following years. The development of our insurance market, especially life insurance market, would contribute to economic

development through a higher volume of investments by more efficient allocation of capital, encouraging the long-term savings, and faster development of financial markets. Looking further ahead we believe we will not get at level of other European countries even the next 10 years, the main reasons were and remain: lack of fiscal incentives, lack of financial resources, lack of tradition on life insurance, economic crisis, low population incomes and uncertainty about financial security, insurance losses from the investment component and even, low confidence in this area.

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ROMANIA'S PRIVATE HEALTH INSURANCE MARKET POTENTIAL

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ABSTRACT: *The significant gap between the quality of life and the level of health expenditure has led to the need to reconsider the modalities and the sources of collecting and redirecting the funds of the sanitary sector in such a way that sustainable medical results are generated for the entire population of the globe. Under these circumstances, the role of private health insurance is constantly increasing, even though its importance is still being influenced by the types of social policy and the dimension of the public health sector at national level. Due to the impact of these factors, the actual dimension of private health insurance market varies significantly across countries. In order to be able to realistically assess the level of development of the private health insurance market in Romania, the analysis has to be taken further than the simplistic measurement of indicators such as income and expenditure.*

KEY WORDS: *private health insurance; density of private health insurance; degree of penetration of private health insurance.*

JEL CLASSIFICATION: *I10; I11; I13.*

1. INTRODUCTION

Most commonly, market analysis undertaken in the field of health insurance usually measures the share of private expenditure in relation to total health expenditure. According to the latest available data on Romania during the years 2005 and 2009, 18,03% (World Health Organization - Global Health Observatory Data Repository, apps.who.int/ghodata/) of total health expenditure were borne directly by the insured, additional to compulsory health insurance contributions, whereas the European average was 1,65 percentage points lower, representing 16.38% of the total health expenditure (apps.who.int/ghodata/) (figure 1).

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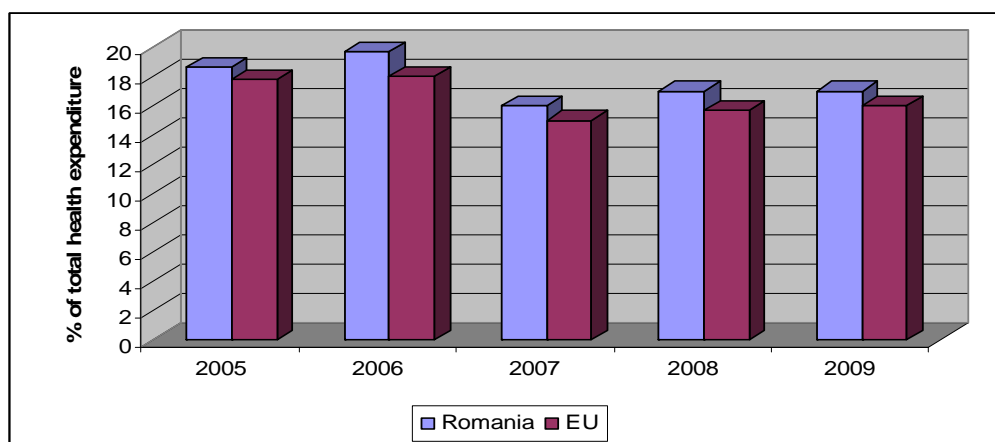
Source: working of the authors based on Health Systems in Transition – Romania, World Health Organization, vol. 10, 2008, p. 56 and www.tradingeconomics.com

Figure 1. Private health expenditure in Romania and the EU between 2005-2009 (% of total health expenditure)

Apparently, the private health sector in Romania is somewhat comparable to the one in the European Union. Should the analysis be taken further through the use of specific indicators such as insurance penetration degree and insurance density (The Geneva Association – Global insurance industry fact sheet, Geneva, 2011, p. 2), the results show a significant gap between the private health insurance market in Romania and the average market size in Europe.

According to the results in Table no.1, while the penetration degree in Europe averaged about 0,72% between the years 2005-2010, Romania's penetration degree during the same period barely reached 0,006% (Matei & Mihart, 2012).

Table 1. The degree of penetration in Romania between 2005-2010

Indicator	Year					
	2005	**2006**	**2007**	**2008**	**2009**	**2010**
Gross written premiums *(million lei)*	17,60	29,80	23,73	28,21	24,86	21,23
GDP *(billion lei)*	287,20	342,40	404,70	503,96	491,27	513,64
Degree of penetration *(gross written premiums/ GPD, %)*	0,0061	0,0087	0,0058	0,0056	0,0050	0,0041

Source: working of the authors based on data provided by INSSE (www.insse.ro) and CSA (www.csa-isc.ro)

In comparison to other countries in Europe (both members and non-members of the EU), Romania ranks last in terms of penetration degree of private health insurance, as shown in figure 2.
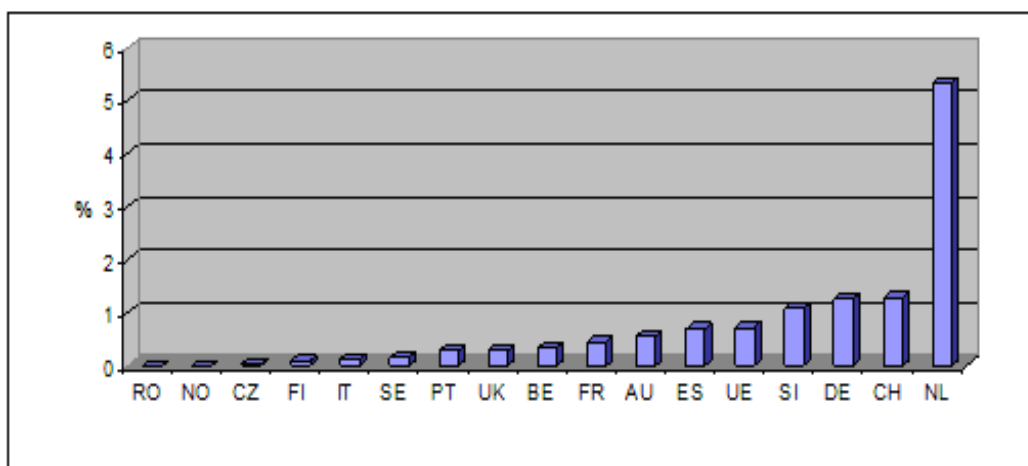
Source: working of the authors based on data provided by CEA - Insurers of Europe, www.cea.eu

Figure 2. Country ranking in Europe according to the penetration degree of private health insurance

With regard to the density of private health insurance, we acknowledge that between the years 2005-2010, the average registered density was of 1,19 lei, as presented in Table 2.

Table 2. Private health insurance density in Romania between 2005-2010

Indicator	Year					
	2005	**2006**	**2007**	**2008**	**2009**	**2010**
Gross written premiums *(million lei)*	17,60	29,8	23,73	28,21	24,86	21,23
No. of inhabitants *(millions)*	21,62	21,58	21,53	21,50	21,47	21,46
Density *(lei/capita)*	**0,81**	**1,38**	**1,10**	**1,31**	**1,57**	**0,99**

Source: working of the authors based on data provided by INSSE (www.insse.ro) and CSA (www.csa-isc.ro)

In terms of density, "Romania is placed below European average" (CEA Insurers of Europe - CEA Statistics N°41: The European Health Insurance Market in 2008) of 175.15 euro, „ranking last in the region" (Matei & Mihart, 2012) with a value of 0.27 euro per capita.

Under these circumstances, and also taking into consideration the need to at least maintain the current level of health insurance coverage, we believe that certain possibilities are available in order to stimulate the future private health insurance market in Romania.

2. POTENTIAL DEVELOPMENT MEASURES FOR THE ROMANIAN PRIVATE HEALTH INSURANCE MARKET

In order to test the potential development of the private health insurance market in Romania will test two sets of measures that could be taken, respectively: either to standardize the density of private health insurance in Romania at the 175,155 euro density average (at a rate of 4.3 lei / euro) in Europe or to forward the entire amount representing social health insurance contribution to private insurers.

Under the assumption that private health insurance density can be standardized to the value of 753,166 lei (175,155 euro), we notice that the penetration degree is expected to evolve positively, as shown in Table 3.

Table 3. Expected insurance penetration degree with standardized density at 2010 European level

Indicator	Value
Density *(lei per capita)*	753.166
Number of inhabitants in 2010 *(million)*	21.462
Expected gross written premiums *(million lei)*	16164.450
Gross written premiums in 2010 *(million lei)*	21.230
GDP in 2010 *(million lei)*	513640.800
Expected penetration degree *(%)*	3.140
Actual penetration degree in 2010 *(%)*	0.004

Source: working of the authors based on data provided by INSSE, www.insse.ro, National Accounts Section

In the case of the first hypothesis, we find that the gross written premiums increase from 21.23 million lei to 16,164 million while the penetration degree has positive evolution from 0.04133% to 3.14%.

However, we consider that such an increase in density can not be achieved due to the significant discrepancies between the average gross monthly income in Romania (1902 lei/ 416.51 euro) and the average gross monthly income in Europe (3166 euro). For greater representation of the hypothesis we will determine the potential penetration degree of private health insurance in a context of proportionality between density and average gross monthly income in the EU27. The results are presented in Table 4.

Knowing that private health insurance density ratio to the average gross monthly income in Europe represents about 0,46%, we applied this percentage to the average gross wage in Romania, obtaining a density value of 8,75 lei per capita per month and a annual value of 105 lei per capita. Under these conditions, the expected total gross written premiums would be 2.253,51 million lei, while the potential penetration degree is expected to reach 0.43%, marking a significant increase from the values recorded in 2010.

Table 4. Expected insurance penetration degree with a standardized, proportional insurance density

Indicator	Value
Average density in UE in 2010 *(euro)*	175.155
Average gross monthly income in UE in 2010 *(euro)*	3.66.000
Density ratio (to average gross yearly income) *(%)*	0.460
Average gross monthly income in Romania in 2010 *(lei)*	1902.000
Expected value of density (per month) *(lei)*	8.750
Expected value of density (per year) *(lei)*	105.000
Number of inhabitants in 2010 *(million)*	21.462
Expected gross written premiums *(million lei)*	2253.510
GDP in 2010 *(million lei)*	513640.800
Expected penetration degree *(%)*	0.430
Actual penetration degree in 2010 *(%)*	0.004

Source: working of the authors based on data provided by INSSE, www.insse.ro, National Accounts Section and CSA, www.csa-isc.ro

A penetration level of 0.43% would bring the national private health insurance market to a size comparable to that of Austria (0.57%), France (0.49%) and Belgium (0.43%) (CEA- Insurers of Europe).

In the case of the second hypothesis, we have made the assumption that in order to reform the national health insurance system, the National Health Insurance House could redirect all income from compulsory contributions to private insurers, while as the 2010 value of gross written premiums remains constant.

This presumption of a stable value of the gross written premiums for private health insurance could be argued for by taking into account the fact that the population already holding a private health insurance is aware of its own health risks and will not cancel existing contracts. The expected penetration degree and density under this assumption are presented in Table 5.

In this case, the penetration degree is expected to reach 2.564% without imposing additional financial effort on the insured, since we have assumed earlier that gross written premiums in 2010 are subject to a voluntary behavior market, which is not significantly influenced by the type of management in the health sector. Even if all insured in the private system would resort to a termination of existing policies, the penetration degree would only diminish to the value of 2.56%.

Moreover, the expected penetration degree would still not vary significantly, should we take into account a suggested legislative measure which provides that 2.8% of the funds collected by private insurers are retained in order to cover own

administrative costs. In this case, the total value of gross written premiums would be 12805.84 million lei and the penetration degree could reach a value of 2.49%.

Table 5. Expected insurance penetration degree under the assumption of total redirection of funds deriving from compulsory health contributions

Indicator	Value
Funds from compulsory contributions in 2010 *(million lei)*	13153.500
Gross written premiums in 2010 *(million lei)*	21.230
Expected gross written premiums *(million lei)*	13174.730
Number of inhabitants in 2010 *(million)*	21.462
GDP in 2010 *(million lei)*	513640.800
Expected penetration degree *(%)*	2.564
Expected density *(lei)*	613.863

Source: working of the authors based on data provided by INSSE, www.insse.ro, National Accounts Section and CSA, www.csa-isc.ro

In figure 3 we have brought together and illustrated the penetration degrees in the case of all hypotheses which have been previously discussed.
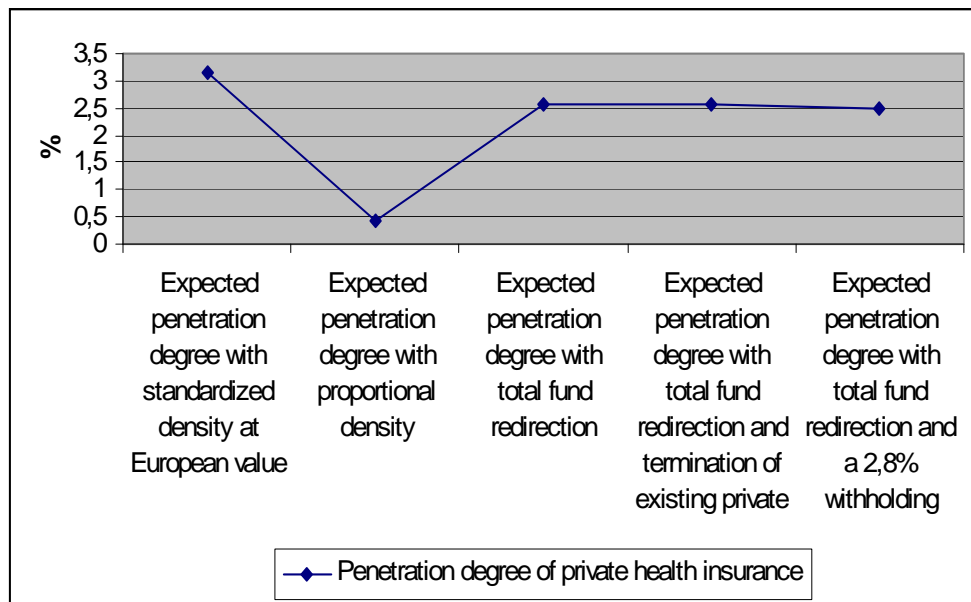
Source: working of the authors based on the results in Tables 3,4,5

Figure 3. Private health insurance penetration degree for discussed hypotheses

As shown in figure 3, the highest penetration degree in Romania would be obtained in the case of density standardization at European level, even though this situation would significantly increase the financial burden of the insured, especially if they have private insurance binding.

In such a case, the additional cost induced by the existence of private health insurance would be 753,166 lei for standardized density and 105 lei should proportionality be applied. On the other hand, the lowest level of penetration degree is obtained for a proportional density, while all forms of total fund redirection underline a somewhat constant penetration rate of 2.5%.

3. CONCLUSIONS

Even if optimum yields in terms of revenue are obtained with the first hypothesis, the absolute uniformity of the average private health insurance density at European level, it is necessary to take into account the possible effects of such an approach.

Any increase in the level of private expenditures on health may have long-term negative effects threatening the overall sustainability of the health insurance system. For these reasons, we believe that a viable alternative for a health insurance system reform should try not to impose additional costs for the insured, or at least minimize them.

Although the assumptions we have discussed can bring significant benefits in terms of resource management, while contributing to the development of the private health insurance market in Romania, up to a level somewhat comparable to that of the other European counties, the actual effects on health are difficult to quantify.

While the costs of medical services, medicines and sanitary materials are allowed to move freely on the market it is possible that none of the proposed solutions will succeed to reduce the financial burden of the state.

Under the pressure of rising costs, private health insurance might prove unsustainable, leading either to an increase in policyholders' premiums or to bankruptcy. Insolvency or bankruptcy of the insurers would entail important budgetary transfers that would be, at best, a perpetual maintenance of the already existing health system deficit.

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ANALYSIS OF CURRENT STATE AND FUTURE TRENDS OF AUTO PARTS MANUFACTURING SECTOR IN ROMANIA

DANIELA MIHAI [*]

ABSTRACT: *In the economy of any country, the auto parts manufacturing sector holds an important percentage in the national automotive industry. The dynamics of sales within it can vary significantly on short term, depending on the automotive market trend. This is also the case of the current situation in Romania, where the effect of the regressive automotive sales evolution will propagate, most probably, with a significant delay for the companies involved in production and trade of auto parts (for both first-assembly manufacture and car maintenance and repair). The statistical data indicate that even though the total volume of vehicles delivered decreased with 7.4% in 2011 as compared to 2010, the total turnover of the companies in the automotive industry increased with 7.8%. The apparent paradox is explained in the present article through the particularities of the demand for spare parts intended for the rolling stock in operation and through the effective organization of the distribution system.*

KEYWORDS: *auto parts manufacturing sector; product finishing units; distribution strategies; first-assembly product; spare parts; vehicle maintenance and repair; motorization degree; age of the automotive park.*

JEL CLASSIFICATION: *M21; L62.*

1. INTRODUCTION

The automobile industry is one of the most important industries in the world, producing over 50 million finite units yearly, generating sizable added value per employee and stimulating the international trade, economic growth, research and sustainable development of economies. The unemployment rates in the automotive field are clearly inferior to the economy average. The significant financial effects resulted from the fees and taxes per motorization are reoriented in the benefit of the community – building highways, culture, health and education.

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The automobile industry influences significantly the global economy, generating annual deliveries of lasting goods (the average use duration of minimum 3 years) of about 17%, part of the secondary sector of economy (Hagiu & Platis, 2012). In this respect, the auto parts manufacturing sector holds a representative position, contributing with approximately 9 – 10% to the turnover in the case of rough cut producers and generating it 100% in the case of the companies specialized in this type of activity (component and spare parts manufacturing).

2. CURRENT STATE OF HORIZONTAL INDUSTRY COMPANIES IN THE CONTEXT OF SALES DECREASE ON THE AUTO MARKET

In recent years, the automotive manufacturing sector has undergone a sustained recovery, knowing the great development in the context of the transfer to it, within the completed units of product execution has meant a growing volume of parts and subassemblies. Carmakers strategy aims location about 33-34% of the level of integration of the completed product manufacturing establishments and, where appropriate, in percentages ranging from 0.5 to 7.0 up to approx. 10.0% to suppliers. The advantages of these strategic options consist of increased specialization, quality and productivity in manufacturing auto components.

When referring to the auto parts manufacturing sector is reasonable to consider both product supplies to complete the rough product - installation (by providers approved by car manufacturers) and those intended to meet the need for spare parts for maintenance and repair required by the specific system (internal and external network service) and the fund market (open market).

In this context, the automotive industry has been resized and reconsidered in order to be able to provide the necessary quantities and assortments, thus giving a new impetus to the entrepreneurs in the horizontal industry profile. Thus, considering the weight of two structural elements in volume export value of automotive (cars and auto parts), which in 2011 accounted for over 18% of the total Romanian exports, confirming the strategic importance of the automotive manufacturing sector national economy. The statistic data shown in Table 1, corresponding fa representative period after the decision to reduce the level of integration of the completed product manufacturing establishments at about 33%, shows the percentage of contribution that cars and components in the automotive sector exports: it is ascertained that over 70% of the export is made by the auto parts manufacturing sector.

The turnover of the companies involved in the automotive industry in Romania surpassed in 2011 11.14 billion euros, registering a 7.8% growth comparing to the previous year (2010). Within it, only the amount of 3.5 billion Euros (28.3%) was achieved from the automobile sales (Dacia Renault and Ford), the difference of 7.64 billion Euros (71.7%) being obtained from the exports of companies that activate in the auto parts manufacturing field.

If the operators within this sector had as sole beneficiaries the product finishing companies the trend of their sales should be similar. But reality does not confirm this evolution. The different trend can be explained with the contribution to the

total turnover for the spare parts destined for the maintenance and repair of indigene manufacturing automobiles which are being used by external beneficiaries.

Table 1. Auto export volume percentage contributions

	2008	**2009**	**2010**	**2011**
Automobiles	18,6	31,2	29,6	28,3
Auto parts (CKD collections inclusively)	81,4	68,8	70,4	71,7

Source: adapted from the National Institute of Statistics – data available online on http://www.insse.ro

By correlating the increase in 2011 with 7.8% of the export volume for companies in the auto field ($I_{2011/2010}$=1.078) with the sub unitary index of auto sales increase (the total sales have decreased with 7.4 % - $I_{2011/2010}$=0.926, and the export ones with 3.1% - $I_{2011/2010}$=0.969), it is obvious the ascension of the auto parts manufacturing sector.

Table 2. The evolution of the automobile sales during the period 2000-2011

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Internal sales	50133	52013	52742	57874	80013	113276	107777	102000	84708	41862	36719	30872
Export	2270	2355	4939	11292	18895	50623	79438	128000	172886	269420	312010	312361
Total sales	52403	54368	57681	69166	98908	163899	187215	230000	257594	311282	348729	343233

Source: adapted from http://www.apia.ro/buletin-statistic/
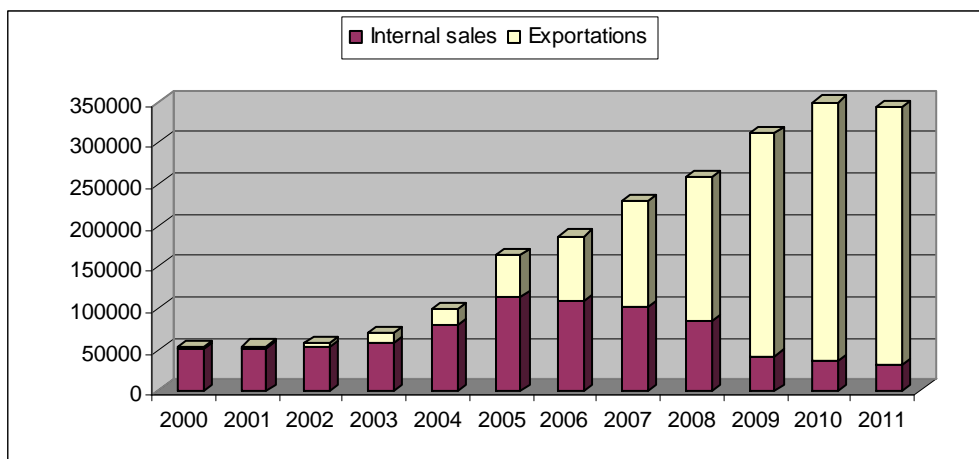
Figure 1. Automobile sales during the period 2000 – 2011

The evolution for these companies' sales is just as favourable internally. Even though the finite product sales are follow a descendent trend, as it can be noticed from the data in table 2, suggestively illustrated by image 1, the increase of the turnovers for the organizations in the auto parts manufacturing sector is explained with the increase of the sales of spare parts destined for vehicle maintenance and repair.

Table 3. The evolution of the number of vehicles in use in Romania and of the monitoring degree

	2007	**2008**	**2009**	**2010**	**2011**
No. of vehicles in use (million pieces)	3.541.718	4.013.721	4.230.635	4.307.290	**4.322.951**
Motorization degree (automobiles/1000 inhabitants	169	196	211	220	**227**

Source: adapted from http://www.mediafaxtalks.ro/auto-industry-2012/program-10-547

The request within this market sector is fuelled by the slight increase of vehicles presently used in Romania, which reported the evolution shown in table 3; even though the motorization degree evolves more and more, it still remains much inferior to the EU average which in 2011 reached a level of 473 automobiles for 1.000 inhabitants.
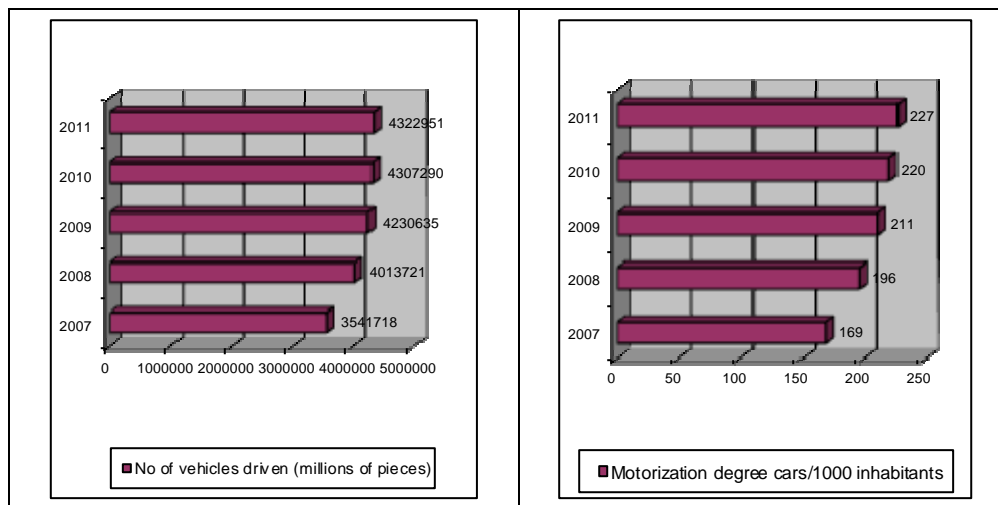
Figure 2. The evolution of the number of vehicles in use and of the monitoring degree

It is noticed that, in the year 2011, there were in use 4.32 million vehicles, to which there are added 0.56 million light commercial vehicles. Their structure of age groups and the weight of each category (age groups) in the total number of vehicles in use are registered according to table 4.

Table 4. Segmentation on age groups of the auto park in Romania

	0-2 YEARS	3-5 YEARS	6-10 YEARS	11-15 YEARS	16-20 DE YEARS	> 20 DE YEARS	TOTAL
No. of vehicles (million pieces)	0,34	1,08	1,37	0,83	0,54	0,74	**4,9**
Weight vehicle category (%)	7	22	28	17	11	15	**100**

Source: adapted from Stroe, C. 2012

The data elaboration (with frequency calculations with the help of the SPSS application) leads to the determination of an average age for the auto park in use in Romania for the year 2011, of 11.5 years.

The organization of the auto park in Romania of the year 2011 of "age" categories is illustrated in figure 3.
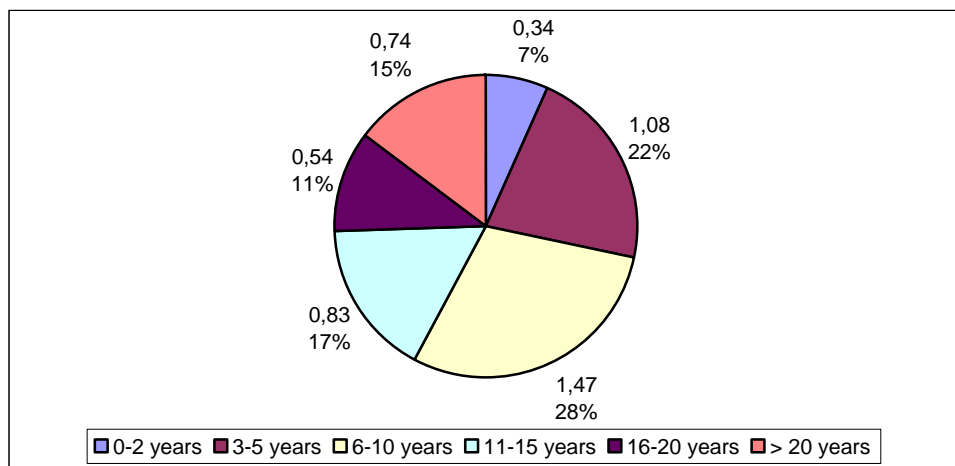
Figure 3. Structure per „age" categories of the auto park in Romania of the year 2011

It is easy to conclude that the most relevant stimulation (unwanted) factor concerning the internal demand for auto spare parts is the seniority of the auto park currently in use in Romania.

Table 5. The evolution of the number of operators in the authorized distribution networks

	2006	2007	2008	2009	2010	2011	2012
Number of companies	528	635	708	712	717	678	655
Variation (compared to the previous year)	n.a.	+20,3%	+11,5%	+0,5%	+0,5%	-5,4%	-3,4%

Source: adapted from http://www.apia.ro/
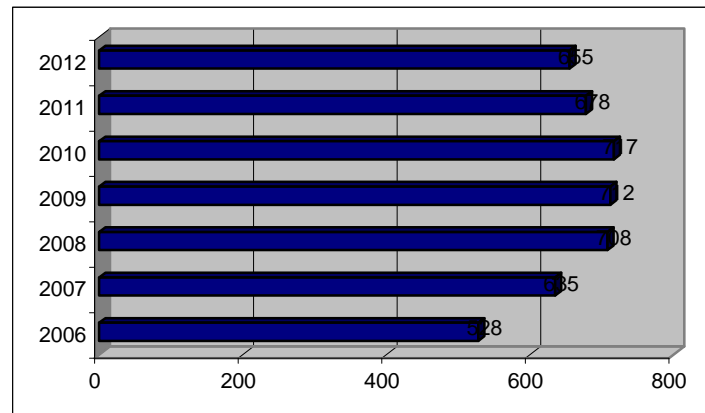
Figure 4. The evolution of the number of operators in the authorized distribution networks

By analyzing the effects of the automobile sales decrease over the companies in the horizontal industry (of auto parts) and from the point of view of the authorized distribution networks, the evolution is totally different. The data in table 5 prove the imminent limitation of their activity as effect of the decreases registered by the auto market in Romania.

3. ORGANIZATIONAL ASPECTS CONCERNING DISTRIBUTION

At macroeconomic level, the organization of the distribution system within the auto parts manufacturing sector differs according to the origin and destination of the parts and components that make the object of the supplier-beneficiary relationships.

Thus, the distribution of the components destined for the manufacturing of rough cuts supposes, most of the cases, a direct relationship supplier-beneficiary (product finisher), received on grounds of firm contracts, rigorously founded. In exchange, in the vehicle maintenance and repair process, in the spare parts insurance system there are mainly shaped the following structures (Mihai & Drăghici, 2005, pp. 245-252):

A. The distribution through representation centres of manufacturers' interests in their relationships with the menders (service systems).

From the organizational point of view, the method takes the shape of distribution with a sole intermediary, but who, from the patrimonial point of view, bears two different aspects:

a – the distribution centre belongs to the vehicle manufacturer, the auto spare parts distribution unfolding according to the chart – figure 5.

It is ascertained that the variant is centred on the problematic of exchange parts (quantities, brand-like structure, quality, conditions-terms regulations, receiving operations, shipment) the solving of which generates the conditions for fulfilling the obligations of the automotive manufacturers, according to the service demands agreed upon for automotive maintenance and repair works. Moreover, the intermediary link

(**Distribution**), represented in the chart from image 5 by *The automotive spare parts national (areal) deposit*, is dimensioned so as to allow the gathering of the spare parts quantities offered by the entire manufacturers network, the destination of which shall be *The automotive maintenance and repair centres* – services for general or specialized operations (sheet metal works – dying, mechanic repairs, electric repairs, etc.).

- C_i – informational circuit
- C_m –material circuit
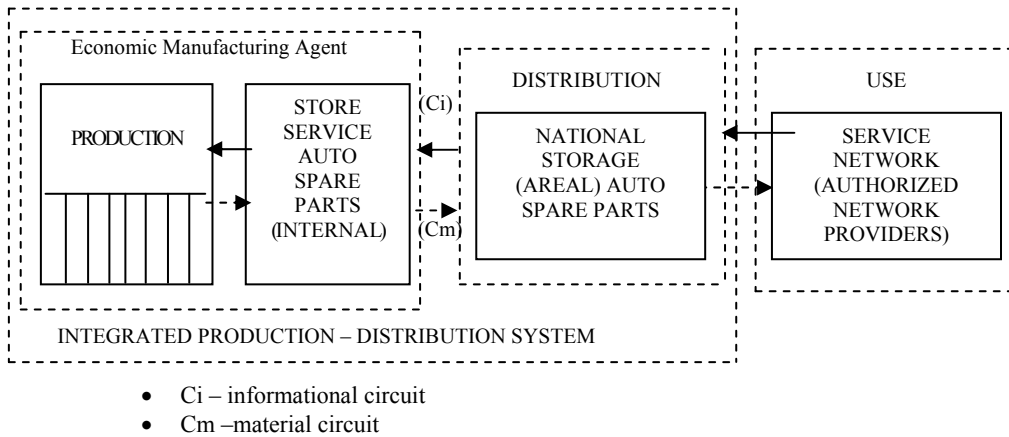
Figure 5. Automotive spare parts distribution system through relationships between the vehicle manufacturers and corresponding spare parts, intermediary representatives and user networks (agreed upon services)

b – the distribution centre belongs to the vehicle manufacturer, according to the previous paragraph (**a**), but by this means the operations of moving the spare parts towards the maintenance and repair centres are performed by all the automotive spare parts manufacturers, the distribution taking place according to the chart shown in figure 6.
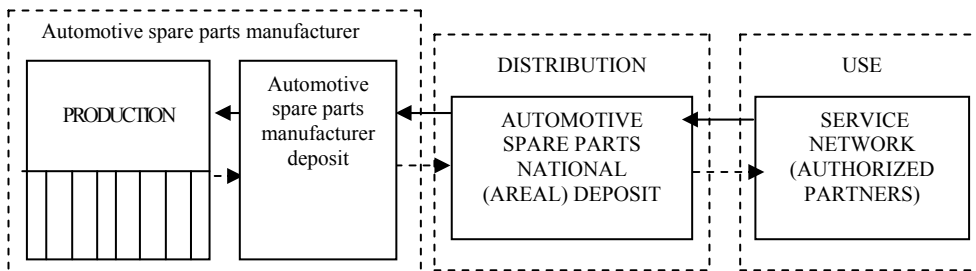
Figure 6. Automotive spare parts distribution system in the relationships between manufacturers-users (agreed upon repairers – service units)

B. Imported spare parts distribution, for the relationships with external manufacturers that produce parts and components destined for the maintenance and repair of vehicles that are made and used in Romania.

Just as in the case of the previous situations, from the organizational and functional point of view, the methods practiced come under the following forms:

a₁ – specific for the auto manufacturers operations and corresponding spare parts, for the relationships with the users – agreed upon service systems – chart – image (7 – a₁).

a₂ – specific for the auto manufacturers operations and corresponding spare parts, for the relationships with their own retail distribution network – chart – image (7 – a₂).

- Ci – informational circuit
- Cm –material circuit
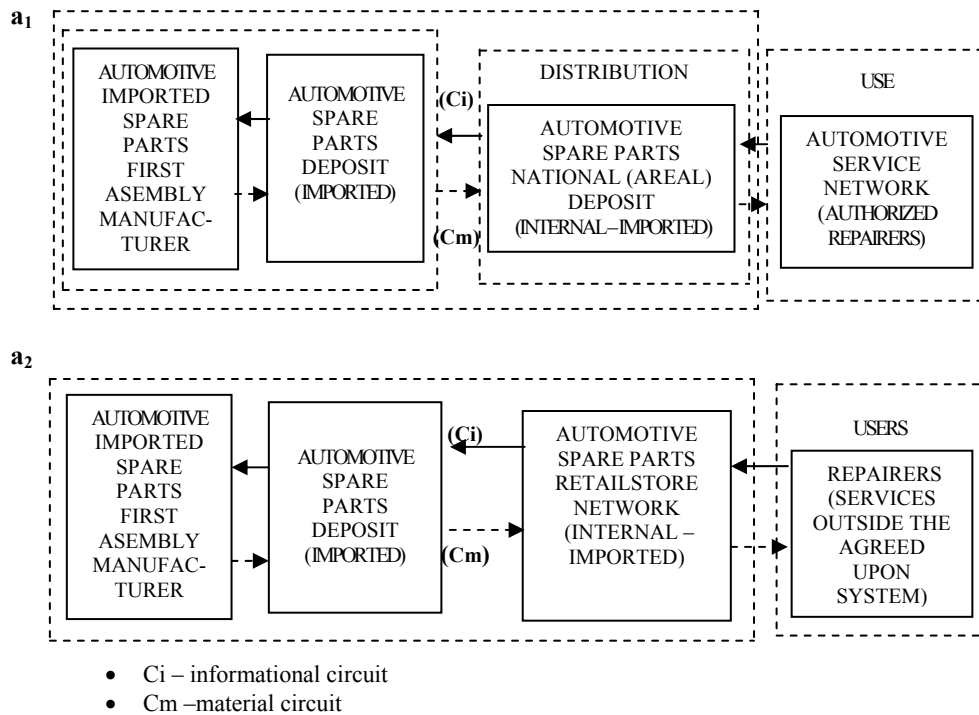
Figure 7 – a₁ and a₂ – Insurance and distribution system for imported automotive spare parts destined for the maintenance and repair of vehicles made in Romania through own systems belonging to the automotive manufacturers – distribution deposits or retail stores

C. Exported spare parts distribution, destine for the maintenance and repair of vehicles made in Romania but which are used by beneficiaries abroad.

The problematic assembly of the activities that form the context of the spare parts made by internal manufacturers and which are destined for the maintenance and repairs of Romanian vehicles currently used by users abroad represents a responsibility for every profile industry manufacturer that comes under a specific mechanism of the type mentioned in figure 8.

It is ascertained that, regardless of the situations of the mechanism for the distribution of spare parts destined for the maintenance and repair of vehicles made in Romania, used by beneficiaries within the country and abroad, the process claims the existence of the maximum opportunity element – ***the demand*** for automotive spare parts, forwarded by internal or external users – that motivates the construction and

functioning of any of the mechanisms by images 5 – 8, whether the user (maintenance-repair service system) has its operative head office in the country or abroad.

- Ci – informational circuit
- Cm – material circuit
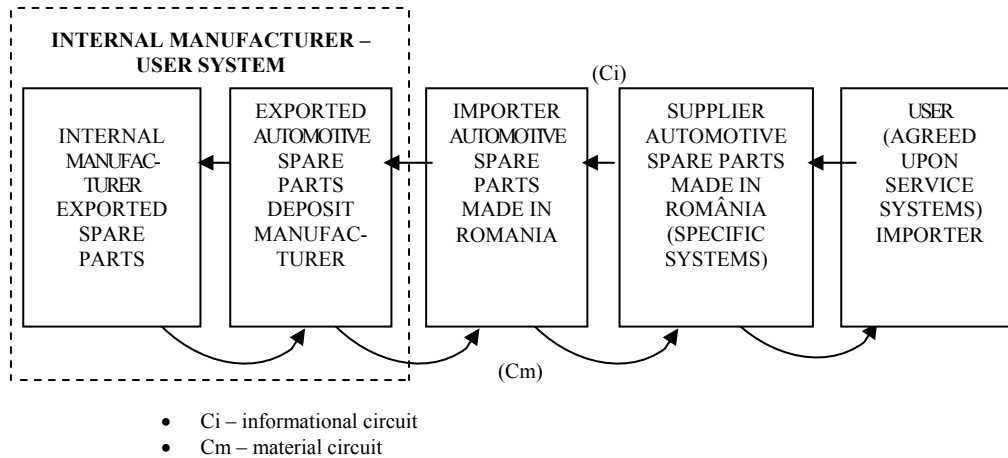
Figure 6. Insurance and distribution system for auto spare parts of internal production destined for the maintenance and repair of vehicles made in Romania, used by external beneficiaries

4. EVOLUTION TRENDS FOR THE AUTO PARTS MANUFACTURING SECTOR IN ROMANIA

The level reached in perfecting the systems for manufacturing and trading vehicles and spare parts by the great manufacturers in Europe and other continents represents the standard all the manufacturers in Romania follow for continuing business in this field. The continuation to implement the concept of *market-like orientation* represents the only viable choice for the operators in the field, thus being able to insure a long-time profitability for the adopted organizations (Pandelică & Diaconu, 2011).

The transformation process regarding the conditions and demands in the automotive field that are currently manifested more dynamically than ever requires from the manufacturers in Romania a new ability to adapt to the worldwide automotive industry state and trends, materialized in the ability to insure from now on a more and more diversified automotive range and – as a direct consequence – parts and components destined for their manufacturing and maintenance – repair in the usage period, at the most compelling quality, performance, comfort, security in usage and efficiency standards. In the future, the vehicle projection shall be influenced by: urban development, standard exigencies regarding environmental protection; customer needs. (Brutu, 2011).

A phenomenon worthy to be taken into consideration in shaping the evolution trends for the auto part sector is the emphasis of the manufacturing migration phenomenon in the vehicle industry, towards attractive regions. The main three strategic axes of the population migration in the automotive industry are: North

America → towards South America, Japan → towards China and Western Europe →
towards Eastern Europe. The numbers in table 6 are relevant in this respect.

Table 6. Worldwide phenomenon of the automotive manufacturing migration

	2005	**2011**	$I_{2011/2005}$
North America	16.353.042	13.468.490	- 18%
South America	2.970.958	4.327.750	46%
Japan	10.779.659	8.398.654	-22%
China	5.707.421	18.418.876	223%
Western Europe	15.826.847	15.188.636	-4%
Eastern Europe	4.974.153	6.217.364	25%

Source: adapted from Stroe, C., 2012

It is noted that during the period 2005 – 2011, the volume of the production
was significantly reduced in the areas characterized by deep reorganizations of the
manufacturing capacities (in North America with 18%, in Japan with 22%, and in
Western Europe with 4%). The hierarchies have changed and the auto manufacturing
barycentre has "migrated" these last years towards the areas with possible increase of
requests. Thus, in the context of delocalization, industrial manufacturing in the
automotive production increased during the accounting period (2011 comparing to
2005) with 223% in China's case, 46% in South America and 25% in Eastern Europe.

Worldwide speaking, several governments in preferential migration areas
reconsidered the tax system from those respective states, the option for reducing them
representing an important factor which determines the decision of foreign investors,
substantially increasing these countries' amenity for foreign investments (Rădulescu,
2011). Among the stimulation factors of production delocalization there can be
mentioned: cheap and highly qualified labour force, resource abundance, high level of
demand, etc. (Mihai, 2008, pp. 64-70).

In the evolution of automotive spare parts sector in Romania two significant
action directions are profiled:

a – alignment to the technical and technological trends that are being
manifested in the profile industry in countries from Europe and other continents;

b – a new strategic way of thinking regarding the necessity for a radical
transformation of the current systems through which there are insured the spare parts
destined for the maintenance and repair of the vehicles made in Romania.

In the future, under the impact of new technologies specific for the production,
the automotive spare parts distribution and trading system shall bear radical changes
compared to the system currently in use (Drăghici & Mihai, 2005, pp. 237-243).

On these grounds, the *Development strategy* of the part and accessory
manufacturing systems, including spare parts for the maintenance and repair of
automobiles made in Romania, shall aim to:

- Externalize non-profitable technological activities;
- Make self-contained the departments and activities centred on certain technologies;
- Retechnologize and pass them in reprivatisation on the rival market;
- Enter into the supplier chains that are being formed or changed;
- Open, flexible, proactive project management;
- Priority for the marketing client and market-oriented;
- Full commitment for quality;
- Insure the capacity to develop products and processes etc.

5. CONCLUSIONS

The auto parts manufacturing sector in Romania goes through an ascending evolution, despite the decrease of automobile sells both on the internal market and for the export. One cannot say the same about the other operators involved in the system, being obvious the tendency to restrain the authorized distribution network as consequence of the automobile market decrease.

The organization of the automotive spare parts and components manufacturing and distribution system is so designed as to be able to provide the quantities and sorts of parts and subassemblies for both first assembly manufacturing and the automobile maintenance and repair programmes.

Even if long-term it is expected that the effect of declining car sales development to be spread and the companies involved in the manufacture and sale of automotive components, this will happen with a significant delay. Current momentum is maintained sector, in addition to decreasing the degree of integration of the completed product manufacturing establishments, the increased demand for spare parts, caused in turn by an aging fleet was in operation. Calculations leading to the determination of the average age of automotive park in operation in Romania, in 2011, of 11.5 years. In addition, trends are not optimistic looming in the current crisis and reduce incentives for automotive park renewal is expected to increase.

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THE INFLUENCE OF INCREASING RELIABILITY OF BELT CONVEYORS UPON THE PRODUCTIVITY OF LIGNITE QUARRIES

FLORIN-MIHAI NIŢESCU [*]

ABSTRACT: *At present belt conveyors have an important role in the mines of lignite quarries because they contribute decisively to achieving an optimum production. From this point of view the management of mines should be constantly preoccupied with ensuring, in optimal conditions, the operation of these elements of fixed capital and, if it is necessary they should maintain constant reliability. In this context, this paper has as theme the relation between the reliability of conveyors and the productivity within lignite quarries.*

KEY WORDS: *productivity; reliability; lignite quarries; open minnings; economic efficiency.*

JEL CLASSIFICATIONS: *L70; D20.*

1. ASPECTS REGARDING THE EXPLOITATION OF LIGNITE QUARRIES

The existence of coal deposits in Oltenia is known from ancient times due to exposures in the foothill areas or unveiled by the rivers Jiu, Tismana and Jaleş as well as by adjacent rivers, which made the inhabitants of villages on both sides of the rivers above to use lignite for household purposes.

The development of open mining of useful mineral deposits requires solving particularly important problems, related to:
- establishing rational exploitation limits;
- defining the extent of benches and analyzing their stability;
- determining production and the duration of activity of quarries; the opening, the preparation and the operation of the quarry;
- choosing the most rational and efficient technologies and equipment; organizing the activity within the quarry.

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The fact that open mining in Romania is relatively recent (in comparison with other countries) has created the possibility to choose the most modern equipment and has benefited from the experience of other coal basins in the world so that this equipment is realized according to the actual world technological level.

Open mining is now evolving worldwide, both in terms of production per exploitation unit, and in terms of the number of enterprises, increasing the production of raw materials extracted through quarries as compared to the total production of the same useful mineral.

The basic characteristics of open mining in present days are:
- applying effective methods of exploitation;
- comprehensive mechanization of production processes with the use of appropriate equipment of high productivity;
- possibility of rational planning and organization of work.

Surface working presents a series of advantages in comparison with underground working, requiring the analysis of its operation whenever possible.

Among the obvious advantages there are:
- full mechanization of working operations;
- obtaining greater production and much higher productivity as compared to the underground mining;
- the cost is much lower than in the case of underground mining;
- operating losses are about three times less than in the case of underground mining;
- open mining provides optimal working conditions and thus, it is safer than the underground mining;
- the operation of the quarries starts in a shorter period of time than the operation of underground mines.

Among the possible exploitation methods to be applied to a deposit one should choose the most rational one, which ensures great production and high productivity, few losses of useful mineral substances and the best safety conditions.

The mining method selected for exploitation influences the mechanical equipment within the technological flow, the size of the quarry, the number of benches/steps and the geometric elements of the quarries and also the technical-economic indicators obtained in the quarry.

The operating methods fall into four classes of methods, according to the system of transportation of mine dumps:

I. Operating methods with direct deposit of useless rock in heaps;

II. Operating methods with the transshipment of useless rock in heaps;

III. Operating methods with the transportation of useless rock in heaps;

IV. Combined operation methods.

Out of the Group of combined operating methods, the lignite quarries of Oltenia use the following methods of exploitation:
- the operating method with partial transport of waste to the inner dump and partial storage within the inner dump;
- the operating method with partial transport of waste to the outer dump and partial storage within the inner dump;

- the method of operation which transports a part of the useless rock to outer dumps, a second part of it to inner dumps and stores a third part within the inner dump;
- the method of operation which transports a part of the useless rock to outer dumps, a second part of it to inner dumps and partially transfers the third part of the stripping to inner dumps.

The belt conveyor is the most modern transportation system, which enables continuous transport from the work site over several kilometers. Remarkable progress has been made in building these transport facilities. Nowadays, high capacity conveyor belts are used in major quarries. Moreover, some strips hanging on cable are used, which ensure the translation movement, while the belt remains put.

Transportation systems within quarries consist of the following categories of conveyors: stationary conveyors, semi-stationary conveyors, non-stationary conveyors, conveyors with arms in the console, intermediate conveyors and overburden bridges.

2. GENERAL DESCRIPTION OF THE BELT CONVEYOR

The belt conveyor consists of a continuous loop of material, folded on two pulleys, one of which is the drive pulley being powered by an electrical motor through a gear assembly or a V-rope drive. The drive pulley is placed in front, at the discharge opening, in the direction of the belt. The unpowered pulley/the idler is also actuated by the belt and it plays the role of stretching the material.

Looping the belt around the pulley can be done by a stretching device composed of a trolley with four wheels that move on a metallic frame under the action of weights. This can be obtained with two threaded rods.

Taking into account the resistance of the belts, the maximum length of a conveyor belt was capped at 250-300 m. If the product needs to be transported on greater distances, it uses a conveying system consisting of several serial powered conveyors.

The belt is supported by rollers along its path, being placed more often beneath the loading part to eliminate distortion under the weight of its cargo. The whole system is supported by metallic construction steel profiles.

The loading part (the drive) may be flat or gutter shaped, with rollers pitched at both sides.

Products are loaded on the conveyor with the help of a funnel which may be fixed or mobile, depending on the feeding place.

Unloading can be done exactly the same at the other end of the conveyor through the discharge hopper, or at various points on the sides of the belt with stoppers in the shape of metal blades sloping towards the direction of the belt or of the travelling trippers with funnel.

The residues that stick onto the belt are removed at regular intervals or continuously with cleaning devices.

Belt conveyors can be fixed in continuous processes or mobile, placed on wheels that can be moved from one place to another.

The products carried by using conveyors can be packed in bags, bales, boxes, and barrels or spilled in the form of powder, grains, lumps, etc.

Depending on the physical-chemical characteristics of the materials to be transported, belts can be made out of:
- hemp or cotton fabric, used for solid dry materials, without edges and resistant at temperatures below 80°C and tear-resistant up to 40MPa;
- fabrics made of camel hair resistant to materials impregnated with acids, but that does not support hot materials;
- rubber sheets and ply belting, which are most commonly used, as they are much more resistant to moisture, but the temperature of the material being conveyed must not exceed 65°C;
- tiles or laminated steel tapes which are used for hot and wet materials.

Transportation of materials is done both horizontally and making steep incline up to 26°, the inclination depending on the friction indicators between the cargo and the belt. A steeper inclination of the belt requires ribs to firmly contain the items being carried, the length of the conveyer being limited.

Roller belt conveyors are used in various branches of industry, such as mining, steel industry, construction materials, etc. This type of conveyor is used in industries where it is necessary to ensure a continuous flow of material.

3. THE RELATIONSHIP BETWEEN RELIABILITY AND PRODUCTIVITY IN LIGNITE QUARRIES

Forecasting reliability stands in the center of many reliability programs within the industry. The basic principle of forecasting reliability is to define the rate of failure for all key components in a system and then putting them together in order to get global failure rate of the system.

This process explicitly considers that all components are serial, which means that, if one element breaks down, the whole system will crash. The result gives an estimate of the time when a system, most likely will fail.

In recent decades, several standards have been developed to assist in carrying out this type of analysis. The standards define models for different types of components, based on test data. With few exceptions, the models assume a failure rate, which is constant in time, to address the life cycle of a component in case failures are seen as random.

The statistics indicators of reliability are:
- the average function time (t);
- the mean square deviation of the function times (σ_t);
- failure statistics;
- the experimental function of reliability [$R_M(t_i)$];
- the experimental rate of failure [$\lambda_M(t_i)$].

Because it employs working with installations, modern and complex tools and equipment, providing an efficient and safe use during their entire life cycle, is a main condition.

Through reliability we understand the use of the product at the projected parameters, its his secure and continuous operation, under stated conditions for a specified period of time.

According to the definition of the International Electro-technical Commission (I.E.C.), reliability is a characteristic of a fixed capital element, i.e. the probability with which it carries out a necessary task, under stated conditions for a certain period of time.

Reliability is also the synthesis of the four concepts:
- probability;
- performance and task;
- terms of functioning and operation;
- specified lifecycle.

Reliability is a synthesis parameter the assessment of which, in the context of costs and periods of implementation, can be graphically represented by an RCD triangle (reliability, costs, deadlines), as shown in Figure 1.
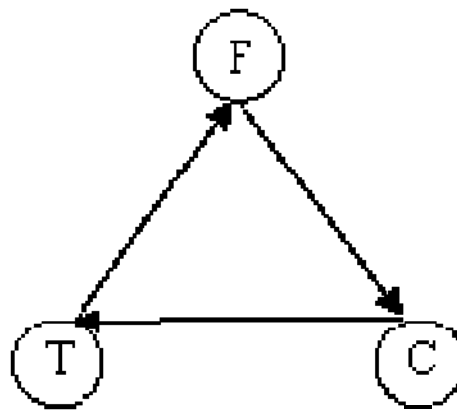
Figure 1. The RCD triangle

where:
R - reliability,
C - costs,
D – deadlines.

Reliability assessment is carried out in three phases:

I. In the design phase, based on considerations of reliability relating to the conception and design of the product as well as on the reliability of its components in specified operating conditions; in this phase we should consider the preliminary reliability (forecasted or designed).

II. In the production phase, on the basis of experimental testing of products within laboratories, testing stations, trial stands; at this point we

should take into consideration the technological or experimental reliability
III. In the operation phase, on the basis of information relating to the behaviour of products for a certain period of time; in this phase we are dealing with operational reliability.

The nominal reliability is also mentioned, and it represents the dependability of a product stipulated in the specifications (standards, internal rules, conditions of contract etc.).

A notion which can no heard very often when speaking about reliability is the notion of breakdown, meaning failure (fault, malfunction, shutdown, incident) which prevents the product to fulfill one, more or all of the basic functions provided. That is to say that not every malfunction of a product constitutes a breakdown.

Breakdowns may fall into the following categories:
- partial failures that cause the termination of one or more functions of the product without leading to a total shutdown;
- total failure which paralyzes all functions of the product and leads to complete shutdown

According to their occurrence failures may also classify in:
- instant failures which occur accidentally and are based on hidden flaws of the product,
- progressive failures determined by wear and tear caused by pushing the parameters of the product off limits.

Allowing for the theoretical considerations presented above, we consider that in the case of belt conveyors used in lignite quarries the determination of reliability is a basic premise in order to increase or at least maintain steady productivity and hence general effectiveness of the economic unit.

In general, through **economic efficiency** one can highlight and measure the complex relationship between the effects, i.e. the results of economic activities and the efforts (expenses) made to obtain them. Efficiency is higher if the same amount of production factors turns out a higher production value, or when a specified amount of results is achieved with a minimal consumption of production factors.

Economic efficiency expresses the ratio of the useful effects (outputs) to the efforts made to get there (expenditures) or vice versa, the ratio of consumption of production factors to the results obtained.

$$E = \frac{efect}{efort} = \frac{R}{C}; \qquad E = \frac{efort}{efect} = \frac{C}{R}$$

where:
E = economic efficiency
R = result (profit)
C = expenditures or consumption of production factors

In terms of productivity, it is generally defined as the ratio of the measured volume of production to the measured volume of the inputs (production factors). Each input can be associated with a measure of productivity, as there are results which cannot be directly linked to any of the production factors. According to the theory of economic growth, productivity is measured as a result which shows the excess of

production obtained which cannot be explained by the increased of the production factors used (capital and labor).

Generically, we shall tackle further on the problem of capital productivity (yield).

Capital productivity (yield) refers to the efficient use of capital and designates the ratio of total production volume to the amount of capital being consumed.

Due to the impossibility of measuring the capital, the capital coefficient is used as a tool for economic analysis of the economic efficiency of capital.

Capital coefficient expresses the capital requirements for getting economic effects; the smaller this parameter, the higher the efficiency of using the capital. It can be determined as an average or as a margin.

The average capital coefficient (K) shall be calculated by relating the amount of used capital (K) to the production volume (Q) obtained over a certain period of time.

$$\overline{K} = \frac{K}{Q}$$

The marginal coefficient of capital (Kmg) can be calculated by relating capital variation (ΔK) to production variation (ΔQ) over a certain period of time.

$$Kmg = \frac{\Delta K}{\Delta Q}$$

This reflects the increase in capital necessary for obtaining an additional production volume, on condition the other factors of production should not change.

In our case the productivity of a belt conveyor can be determined according to the relation:

$$W = Q \times v \times q \times k \times B$$

Where:
W= productivity (yield) of the fixed capital element de capital fix
Q= quantity conveyed
v = speed
k= the fall (flow) of the materials conveyed
B= the width of the belt

Therefore, we believe that the optimal operation of a piece of equipment such as a belt conveyor is influenced by the following factors: the speed of transport, the quantity transported and the width of the belt.

4. CONCLUSIONS

In terms of equipping lignite quarries from Oltenia Coal Basin with modern equipment one may observed the aging of machinery, a situation that can be recovered through a better reliability of these installations, which leads to higher productivity; higher productivity means higher income for the economic unit, which ensures a better

remuneration of human labor, thus leading to increased economic comfort of employees.

In the same train of ideas there has been observed a deficiency in innovation and competitiveness of lignite quarries. These are critical impediments for the increase of reliability.

In future, the lignite sector should take into account the following:

• the increase of the technological level within quarries as a result of:
- rehabilitation of technological lines for quarries and dumps;
- monitoring the operation of equipment within the quarry and the consumption of electricity;
- switching to the inner dump in all the lignite quarries;
- extending the technology towards direct dumps;

• improving the infrastructure of quarries as a result of:
- easy and secure access to all equipment and technological works;
- ensuring secure communication facilities and performances;
- setting up of premises with building in good condition, with access roads and well maintained platforms.

• optimal and reliable management of fixed capital assets, and in particular of belt conveyors, in order to increase economic efficiency of the unit.

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ECONOMIC STANDARD – QUANTITATIVE COMPONENT OF QUALITY OF LIFE

ROXANA PLEŞA [*]

ABSTRACT: *In the present social/economic conditions of our country, the problem of objective analysis and research of the population's everyday social life, of its wellbeing, of final consumption and possibilities of satisfying vital necessities, of the living standard and lifestyle, of the quality of life as a whole, becomes more and more present and significant. In the present period, the concept of quality of life was not only used by specialist, it actually became "exchange currency" in public debates. Considering the political and economic context and the integration of Romania in the European Union, the assurance of life quality is a vital objective in order to rapidly reach a living standard at acceptable level of civilization, defined in a European context.*

KEY WORDS: *quality of life; income and expenditure; economic standard; financial balance; poverty.*

JEL CLASSIFICATION: *Z10.*

Although the quality of life is not limited to economic standard, the latter is a basic component thereof. Economic standard is the economic basis of individual life. Zamfir Cătălin (1984, pp. 77-79) presents several complementary indicators, each of those revealing the economic basis from various perspectives:

1. **Total family income** (monetary income) is the sum of salaries, pensions, allowances, additional income of a family in a month. A problem relate to incomes is the difficulty of obtaining accurate information from the subjects included in the investigation of the quality of life. The tendency is to under-evaluate the total family income. Salaries are generally accurately reported by the subjects, but the income coming from unregistered work, income in nature, income from investments, tend to be frequently underrated;

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2. **Household belonging** is a strictly objective indicator, referring to the material basis accumulated in a household, to the object possessed by the family: TV set, refrigerator, washing machine, motorcar, computer etc;

3. **Estimated economic standard** is based on individual estimations of the economic level of their own life. This indicator reveals the measure in which economic resources satisfy necessities, economic requirement specific to the person, group (family) or community. It is difficult to determine the maximum limit of resources with which a person (family) can satisfy their necessities. All the research regarding the "minimum standard of living" start from the idea that the latter is relative, and it requires to be defined related to the more general social-economic context of the community. There is a "natural scale" of the standard of living at the level of common conscience, allowing each person to make an estimation of its own standard of living. The minimum acceptable standard of living, according to the definition of the European Council, can be fixed in terms of monetary variables or physical variables.

In case of monetary variables a certain level of income and wellbeing can be assessed, and any individual situated under this level can be considered as being poor. In case of physical variables, poverty means lack of goods and services necessary for the individual or the group, considered as indicators. The most common are household belongings, access to education, to medical services. Generally, monetary variables are more difficult to be used than physical ones.

This "natural scale" of the standard of living has a limit at the level of "strict necessities", and at the level "I have everything I need".

Continuing the idea of the "minimum decent level of life", Zamfir C. (1994, p. 27) finds an equivalence of the steps of this scale as below:
- not enough for the strict necessities = under subsistence level: absolute poverty;
- enough only for the strict necessities = minimum level of subsistence: relative poverty;
- enough for a decent living, but we cannot afford special expenditures = decent minimum level;
- we can afford certain special expenditures, but with efforts = a generally good level of life, but with frustrations and sacrifices;
- we manage to have all that is necessary, without great effort =abundance of resources.

At the level of Jiu Valley, almost 15% of the subjects/families live in absolute poverty, a double percentage in relative poverty, one third at a decent minimum level of life, whereas a little more than 16% can enjoy a generally good level of life, the percentage of those that benefit of abundance of resources is insignificant (figure 1).

4. **Financial balance of the family** is important for many investigations of the standard of life and of the economic behaviour. Financial balance shows an equilibrium between necessities and possibilities, a lifestyle, as a whole, balanced. Financial imbalance is manifest by loans and important variations in expenditure in the period between salaries. Some researchers consider that financial imbalance of the family can be an indicator of relative poverty: economic means significantly reduced than active necessities of consumption, expressed by expenditure.

At the level of Jiu Valley area, more than one quarter of the subjects declare that they had to borrow money before their pension, and more than half live at the limit of a decent living. While more than 40% of the subjects have a precarious material situation, only one tenth of those say that when all the expenses are covered, a certain sum was left from the family income (figure 2).
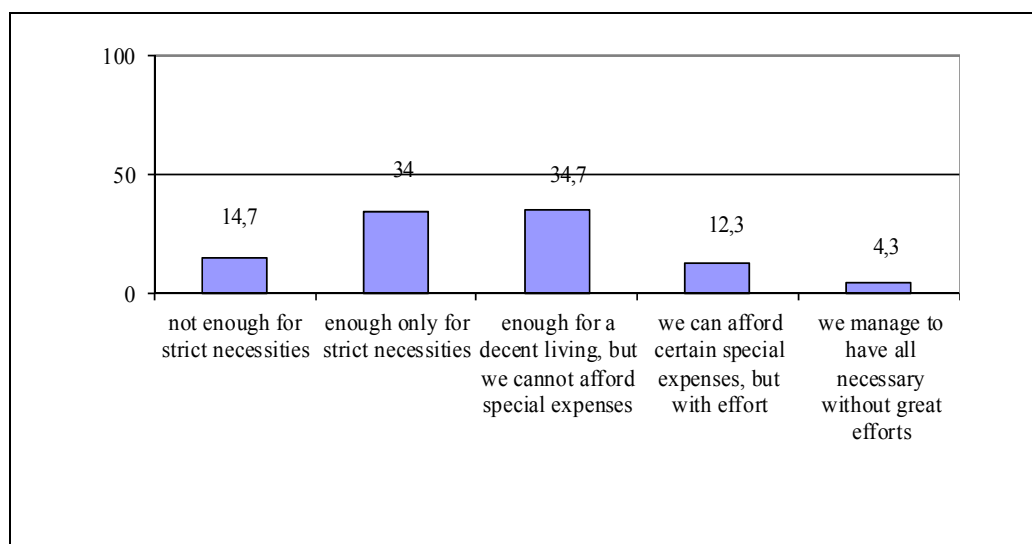
Source: Research made by the author in the year 2009, on a sample of 600 pensioners

Figure 1. Estimated economic standard (%)
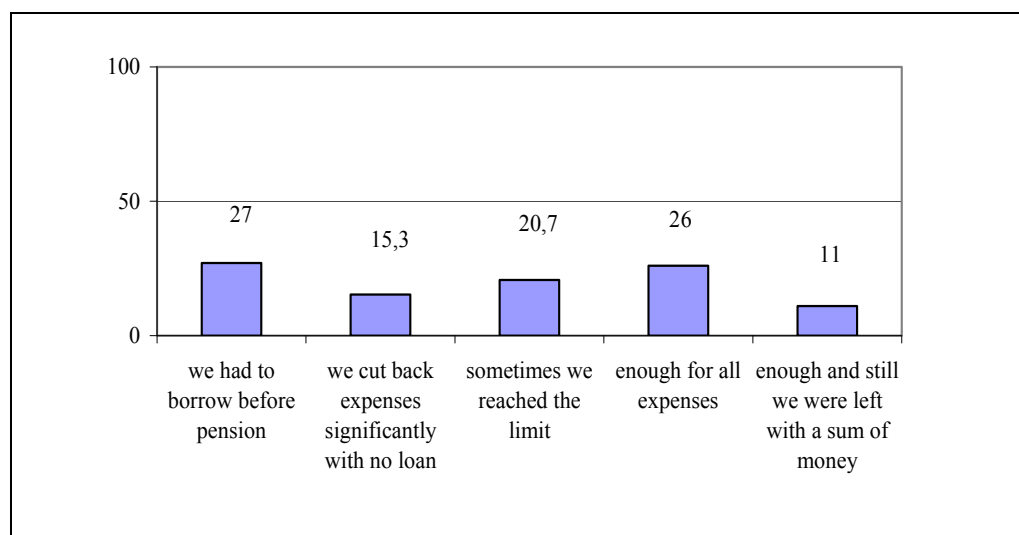
Source: Research made by the author in the year 2009, on a sample of 600 pensioners

Figure 2. Financial balance of the family (%)

5. **Estimation of the ratio income/necessities.** This indicator expresses a global assessment, made by each person, of their income from the point of view of their necessities.

The first two indicators of the economic standard – family income and household belongings –are strictly objective indicators. The other three indicators assess economic resources by relating those to one's own necessities.

Index of cost of life is an essential economic indicator, reflecting an important aspect of the quality of life and of the economic state of a country. Most frequently, the index of cost of life is as an index of prices, especially consume prices. The concept of cost of life is a complex one that can be defined from several points of view. In the broadest sense, it refers to the cost of an invariable, universal and generally valid budget of necessary goods and services. Often this budget corresponds to the concept of utility which, although corresponds to a quantity of goods and services, has a broader sense, referring to the integral satisfaction in time of necessities of consumption, both quantitatively, and qualitatively (Lefter, 1991, pp. 106-107).

The index of life cost represents the ratio between the costs of life in the present period compared to the cost of life in the basic period, in conditions where utilities are kept at a constant level that is necessities in the basic period are integrally covered in the present period as well. Since utility is not a completely measurable, quantifiable, operational concept, the real index of the cost of life cannot be calculated, but only estimated. Other opinions substitute the concept of utility with the concept of standard of life, the meaning being the same.

Essentially, the index of the cost of life measures a change of prices for goods of consume and services in the current period compared to the basic period.

Population income and consumption are considered by specialists as the most important components since, by their size and dynamics, they offer an overall look over the quality of life.

Income is one of the key factors that directly influence the population's level of living. As Zamfir C. (1994, p. 36) states, if we start from the premise that the population income is turned into consumption, that any increase of the income draws along a consumption increase, then a parallel analysis of the population's income and consumption is required.

Almost all of the research made regarding quality of life start from the hypothesis of existence of a direct connection between the level of income and the quality of life of the population. The idea is backed up by the fact that in higher income generally means the possibility of satisfying more necessities. The level of the income directly influences the level and quality of consumption of food, other products and services. The volume of expenses in a certain period depends on the level of income in the same period, on the accumulations from the income in the previous periods, as well as on the use of expected income.

The **income of the population** represents their material resources. From macroeconomic perspective they are seen as an aggregated indicator, taken into consideration as such in the analysis of the economic processes. Social policies are concerned with observation of the income of the population, the analysis thereof often determining directions of action, not to mention that for the individual they are a

fundamental problem. Currently, the term refers to monetary resources, but in a broader sense non-monetary resources that can be used are also included. (Ilie, 2000, p. 55).

Income refers to monetary resources, but in fact they are not limited to collecting money, but also include the counter-value of the goods and services obtained and received by the population, as a result of rendering socially useful services or as rights. Economic statistics identify the following large groups of income. (Zamfir, 1994, pp. 37-47).

a) Primary income is obtained by the population by its participation in the process of production and distribution of material goods and services, alongside with generation of national income. In its turn it falls into income from work and income from property and capital. Income from work is obtained by direct participation in the productive process and means any income obtained as a result of lending workforce by its owners. Income from property and capital are obtained as a result of their possession.

b). Income from redistribution refers to transfers from the state (social transfers), aiming at social protection of the individuals, being an explicit objective of wellbeing. Out of these categories: old age pensions, illness and accidents pensions, descendant's pensions, allowances for unemployment, utilities, social situations, children, education etc.

c). Income in nature are the least frequent. They can come from participation in production process, work, but also from redistribution process. The may lie in: food, other than food products, various services, transportation or other associated benefits.

d). Other income. Economic reality also includes other special income.

Population consumption represents the totality of food products and non-alimentary products consumed and services used by the population in non-productive ends, for a certain period of time. The expenditure for consumption of the population equally depends both on the level of the income, and on the evolution of the prices of products and services.

The models of population consumption express behaviour particularities adopted by various population categories regarding acquisition of goods and services for personal and household needs. A consumption model can develop in a geographical space, being active for a certain historical period, including sets of concrete, repetitive activities at various intervals, organized in structures viewing the existence and awareness by the consumers of a common body of facts and social realities (Stanciu, 2005, p. 276).

Consumption models existing in Romania can be described, at a higher degree of information synthesis, by the use of largely inclusive statistic indicators referring to effective consumption of goods and services in Romania, such as: level and structure of population's expenditure on consumption, level of providing households with long term goods, indicators regarding the way of dwelling, consumption of medical services, degree of inclusion in the process of education and instruction etc. In the Institute of Research of the Quality of Life (Mihăilescu, 2001, p. 49) there were earlier studies in determining the minimum consumption.

Minimal living involves the necessary resources for current consumption - food, clothes, footwear and dwelling - complete with an education and occupational training component, which would assist their progress and one of social status that would allow the development of the individual in society.

Minimal subsistence involves aspects related to survival of a person, in conditions of a short term public assistance, in view of reintegration of the respective person into society. It differs from minimal living by elements of social development and affirmation, which are not anticipated for survival.

Inflation, unemployment, deterioration of income and other social costs supported by the population lead to a calculation of these minimums in time, which are related to society's resources and conditions at a given time, expressing the cost of life based on generally accepted standards.

In an economy that adjusts to new laws and mechanisms of functioning, namely market laws, consumption are also affected. It is organically linked to economic circuit components and is influenced by a series of factors: development level reached by the respective country, tradition, inflation, income earned by the population, demand and offer of goods and services on the market etc. Diversity of existing situations, education and level of professional training, lifestyle, adaptation to the requirements of the jobs, lead to differences in aspirations of life and to various levels of consumption.

The last decades of the 20th century brought along, at least for the well developed societies, a new approach of poverty and standard of living. Alongside with the increase of the level of aspirations, of technological progress and material possibilities of societies, with the diversification of lifestyles, with the increasing interest for community problems in detriment of society in general, the attention of public opinion, of political world and of scientific community more and more focussed on problems of general and individual wellbeing, on the problem of poverty and social inclusion, as objective of social protection systems.

The very **concept of poverty** has raised interpretation problems regarding its real significance. The definition of the concept has suffered modifications in time, in relation with what society defined and admitted as being "basic necessities". From minimal needs regarding food and cloths, step by step, a minimum requirement of dwelling, education and health was considered, of which any individual should benefit, as member of a society.

A classical definition of poverty was developed by Rowntree, who considered that a person is poor when "his earnings are insufficient for obtaining a minimal necessity of keeping up his physical efficiency" (Lucuț & Rădulescu, 2000, p. 125). As a result of this definition, appreciation of the population's means of subsistence at hand has for a long time been an etalon to measure poverty. Subsequently, such components were appreciated as being too restrictive, thus other definitions and other forms of measuring poverty came up. Thus, Townsend used for the first time in measuring poverty, the inquiry on family expenses, appreciating that the volume of total expenses of a family represents the most adequate measure of their resources, more suitable than the volume of their total resources. Poverty is thus defined by the lowest level of resources of an individual or his family, because of which they are excluded from the

habits and activities of life that are considered as being usual. (Lucuț & Rădulescu, 2000, p. 125). Even if there are a great variety of attempts to define the concept of poverty, its unquestionable sense, present in all the definition used, is the following: poverty is a perpetual state of lack of resources required to provide a decent lifestyle, acceptable at the level of a given community. (Zamfir & Zamfir, 1995, p. 57).

Definition of poverty is thus made from two perspectives: from the perspective of consumption (satisfying needs) and from the perspective of the activity, of functioning of a normal society. From consumption perspective, poverty is defined as the incapacity of satisfying those needs that are considered as being minimal. From the second perspective, poverty is defined in terms of minimal conditions that are required for the normal functioning of an individual in the respective community. This latter perspective emphasizes not the mere individual survival, but the existence of those means that might provide a person a complete participation in the social life, to accomplish the roles assigned to him, to participate to the minimal training activities that would provide sufficient opportunities to develop by his own efforts. This perspective starts from the logics of functionality in the assembly of social life. A normal society is that which offers to each person the possibility of functioning as it member.

The most suggestive example regarding the characterization of the way of life from material point of view of Jiu Valley population, or in other words, the standard of living currently perceived, is shown in figure 3. It is unquestionably seen that the best period was the one until 1990, from that time to 2009, a permanent and accentuated deterioration of the standard of living is remarked.
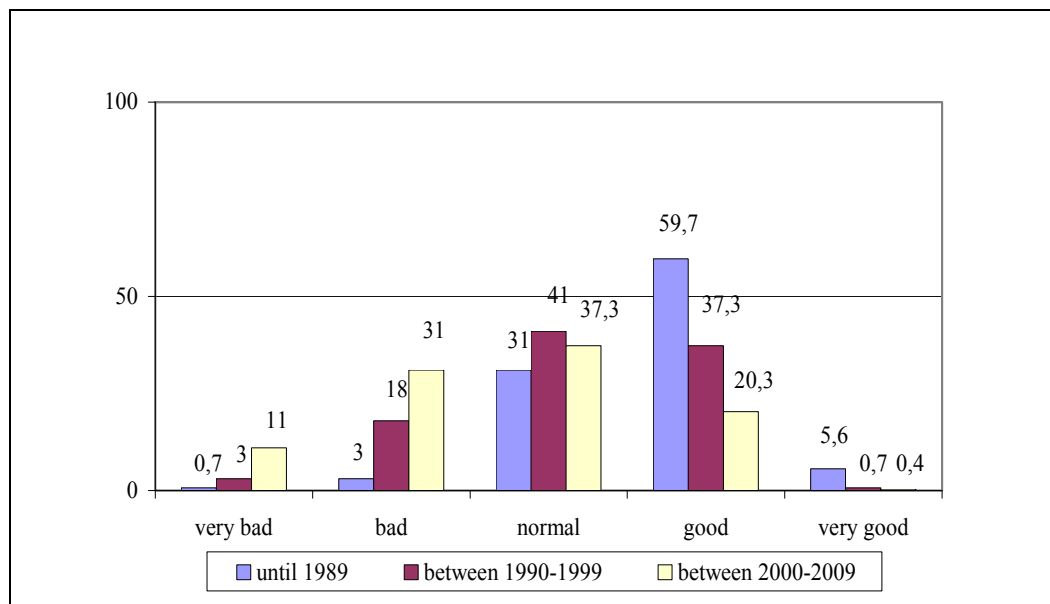
Source: Research made by the author in the year 2009, on a sample of 600 pensioners

**Figure 3. Characterisation of the way of life from material point of view
in various period (%)**

Cumulating the variants very bad and bad and good with vary good, we have the following situation (%):

	very bad + bad	good + very good
before 1990	3,7	65,3
between 1990-1999	21,0	38,0
between 2000-2009	42,0	20,7

The data in figure 3 shows that the people investigated perceived a continuous worsening until now of their way of life from material point of view, the summed up percentage of those very dissatisfied and dissatisfied increasing from one period to another, namely: before 1990, dissatisfaction was at a reasonable quota, between 1990-1999, approximately one fifth of the subject appreciated unfavourably their way of living, and in the last period analyzed, between 2000-2009, more than two fifths of the subjects declared that they were dissatisfied. The sad conclusion is that in the last period, the percentage of those dissatisfied is more than ten times higher than in the first period (from 3.7% to 42.0%).

Could it be the nostalgia for the much criticized, blamed period before 1990, or is it a "reality", at least at perception level? Even if it is a slightly deformed perception, or the reality itself, the situation is dramatic, without any exaggeration. Obviously, the economic crisis is also the cause of the drastic degradation of the life conditions in 2009, if not entirely responsible. One can easily deuce how would the level of living be perceived at present, when besides the 25% cutback of the income of budgetary people, other regulations were enforced as well, which affect the income of budgetary people and of pensioners.

An **antipoverty strategy** is a way of unitary planning a body of programmes, measures and actions systematically directed towards supporting poor persons and families, in view of providing a higher standard of living. The concept overlaps partly the body of social policies, run in the benefit of the poor, to which the component of their integrated planning is added. An antipoverty strategy aims at all sectors, promoting objectives including all plans: jobs, dwellings, health, education protection of family and children, social protection of underprivileged categories etc. To be able to talk about antipoverty strategy, the public system should be involved at the level of its conception and progress, but non government actors could participate as well. In principle, a functional strategy should benefit from resources and should fix objectives in relation to those, it should be made operational in an action plan that would provide detailed measures and would identify how its progress towards reaching the objectives would be monitored. (Zamfir & Stănescu, 2007, p. 553).

Poverty control policies represented one of the most important fields of articulation and development of social protection systems, of social policies in general The first measures of social policy were developed to support this underprivileged category. Thus, the Poor Law Act in Great Britain in 1601 represents the first antipoverty strategy of a state. This regulation stipulates the obligation of each parish to take over the responsibility for their own poor, offering them assistance in exchange for work in the benefit of the community – as we would say today – from those who are apt to work, the similarity with the assistance for the poor in our day being

remarkable. At the beginning of the 20th century, all developed countries ran support programmes for the poor.

Eradication of extreme poverty is a fundamental objective of the UNO global strategy of promoting Objectives of millennium development, which has set the objective of reducing by half the Dimensions of this phenomenon until 2015 (Zamfir & Stănescu, 2007, p. 554).

At the level of the EU, poverty control takes place within the institutional framework of the strategy adopted by the European Council of Lisbon with its main objectives the promotion of jobs and economic growth. The concept promoted is not poverty, but social inclusion in other ways as well, not only due to economic reasons.

In the opinion of the same author (Zamfir & Stănescu, 2007, p. 554), a considerable expertise has been accumulated in Romania, in the research of the phenomenon of poverty. In the first years after 1989, there was no specific program of controlling poverty, in spite of the increase of this phenomenon, and a widening gap between social strata. In 1998 a first strategy was developed to fight poverty. Romania drew up it first Country Report o the Objectives of development of the Millennium in the year 2004, becoming one of the 191 participating countries in the global agenda of UNO for development. The Framework-Objective of this strategy is cutting back severe poverty, being complete with a series of more specific objectives, such as the increase of the rate of graduation in mandatory education or improvement of maternal health.

At conceptual level, the last years have marked the shift of the emphasis from poverty control, as lack of economic resources, to the fight against social exclusion, understood as a multidimensional phenomenon, of lack of access to various social services. This shift of accent involved a more comprehensive approach of social policies, where social transfers are completed with the reform of social services (education, health) and the construction of a national system of services of social assistance.

Social programmes help the poor, but do not eliminate poverty from society. The phenomenon of poverty is not strange to any society. Therefore, the aim of poverty control is in fact guiding the social efforts towards reducing risks for poverty becoming permanent or chronic and for social marginalization and exclusion.

Thinking in terms of human rights, poverty and social exclusion can be construed as infringement of people's fundamental social rights. Efficiency of national policies of providing access of the population to fundamental rights depends on the accuracy of identification and removal of mechanisms that hinder individuals to enjoy these social rights.

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PREMIUMS CALCULATION FOR LIFE INSURANCE

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ABSTRACT: *The paper presents the techniques and the formulas used on international practice for establishing the premiums for a life policy. The formulas are generally based on a series of indicators named mortality indicators which mainly point out the insured survival probability, the death probability and life expectancy at certain age. I determined, using a case study, the unique net premium, the annual net premium for a survival insurance, whole life insurance and mixed life insurance.*

1. INTRODUCTION

Actuarial science appeared from the eighteenth century through a combination of the interest rate with mortality tables, actuarial term appears once with the society "The Equitable" in 1762, and the first who founded the actuarial profession was William Morgan, who held this post at this society (Anghelache, 2006). The actuary has the most important role in calculating insurance premiums, "called so life insurance mathematician" (Ciurel, 2000) with the following major tasks: determining the insurance premium, determining mathematical reserves, the surrender values of capitalization products, new products development, and others. The main elements underlying the calculation of insurance premiums are mortality tables, general health of the population, age and sex of the insured, contract period, the level of sums insured to be paid in death case or at insurance contract maturity if it is a endowments insurance, interest rate derived from the investments of premiums, the expenses related to the issuance of the insurance contract, the insurance company's profit.

This technique of determining the insurance premiums and mathematical reserves in life insurance is particularly important. Correct determination of premiums

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is based on observance of some clear principles (Ciurel, 2000): insurance premiums must be adequate, which means that for a group of contracts, the money collected from policyholders, plus the interest earned from the investment of these amounts, shall be sufficient to pay all promised amounts and cover the insurance company expenses; insurance premiums must be equitable, that risk must consider each person insured; insurance premiums should not be excessive compared to the insured sums. I will analyze the price of three types of insurance policy: survival insurance, whole life insurance, mixed life insurance.

Survival insurance is characterized by the fact that the insurer undertakes to pay the insured sum when the contract expires provided that the insured is alive. Sum insured consists from insurance premiums paid by the insured during the insurance period, accumulated and capitalized in various ways by the insurer. So, the insured receive the insured sum only if, on expiry of the contract, is alive, otherwise "the insurer is considered released from that service which is stated in the insurance contract, having no obligation to the heirs of the insured" (Dănulețiu, 2007) Survival insurance is not attractive, so does not stimulate saving.

Whole life insurance aims to protect the insured against the risk of death, a future risk, sure, but uncertain as time. A whole life insurance has a limited duration and requires that insurer pays to the beneficiary the sum insured if the insured's death occurred during the period of the contract. Instead if the insured survives when the contract expires, then the insurer is relieved of any obligation to the insured, "insurance premiums are set according to the characteristics of each contract based on actuarial calculations" (Alexandru & Armeanu, 2003), whole life insurance is an insurance protection against the risk determined and not a savings insurance.

Mixed life insurance is characterized by the fact that "the insurer offers a product that covers both risks through a single contract, survival and death." (Badea & Ionescu, 2001). Coverage in an insurance contract the two alternative risks not remove their contradictory character. It seems that the insured is protected in both cases. In fact to the death of the insured, insurance beneficiary shall receive the sum insured and if the insured survives, he benefits of the sum insured. If the insured is protected for both risks, he pays the insurance premium related to both risk of death and survival, cumulatively, the insurer actually justified by the requirement to achieve a balance between premiums earned and benefits incurred.

2. CASE STUDIES CONCERNING THE NET UNIQUE PREMIUM

I studied the unique net premium for a **survival insurance**. These types of insurance have the following technical characteristics: insurance period denoted by n, expressed in years; insured sum, denoted by S;

Risks covered by such insurance may be: if the insured to age x, survives to age x + n years (= end insurance), the insurance company pays to this person the sum S at the end of the insurance period; if the insured to age x does not survives to age x + n years, then the insurance company does not pay the sum S, and no premium refund;

The insured sum can be paid by the insurer: lump sum settlement or payment in driblets. The unique net premium for a survival insurance, the insured sum paid with lump sum settlement, is calculated as:

$$_nE_x \equiv A_{xn}^l = \frac{l_{x+n} \cdot v^n}{l_x} \qquad (1)$$

Where: $_nE_x \equiv A_{xn}^1$ - the unique net premium with unitary sum insured; l_x- number of survivors to age x; n- period of insurance, years; v^n- life actualization factor.

We both denominator and numerator weighting of v^n and we get:

$$_nE_x \equiv A_{xn}^l = \frac{l_{x+n} \cdot v^n}{l_x} \cdot \frac{v^x}{v^x} = \frac{l_{x+n} \cdot v^{x+n}}{l_x \cdot v^x} \qquad (2)$$

The relation $l_x \cdot v^x = D_x$,(D_x - are commutation numbers) so then:

$$A_{xn}^l = \frac{D_{x+n}}{D_x} \qquad (3)$$

When the insured sum S is other than unitary, the premium is calculated:

$$P = S \cdot A_{xn}^l = S \cdot \frac{D_{x+n}}{D_x} \qquad (4)$$

For example, we calculate the net premium to be paid by a 30 years old person, who buy a survival insurance policy, period contract 20 years, with a sum insured of 10000 c.u., the interest rate is 10%. From mortality tables we have: $D_{50}=716$; $D_{30}=5403$; P=10000$\frac{716}{5403}$=1325,18 c.u.

Besides survival insurance, the most popular and the cheapest are considered the **whole life insurance**. The insurer will pay to the insurance beneficiary a certain amount of money at the insured person's death. Depending on contract period these insurance can be: - annuity insurance where the premium is denoted by A_x; term insurance where the premium is denoted by $A_{x:n}^1$.

The first type of insurance supposes the insurer obligation to pay to the insurance beneficiary a sum of money upon the death of the insured person after any period when death happens. The payment of sum insured can be at the end of year when the insured died or immediately after death. In calculating the unique net premium for a whole life insurance annuity, with payment of sum insured at the end of year of insured death are taken into account: the insurer suppose that all persons lx of age x buy a whole life insurance an indefinite period. From the mortality table we know that during the first year of contract, will die d*x* people and will remain alive l*x* +1, so the insurer will pay d*x* c.u.

Since payment will be made at the end of death year, the present value of payments in the first year will be $d_x.v$, in the second year $d_{x+1}.v^2$, in the third year $d_{x+1}.v^3$, etc., in this case the present value of total payments in   - x + 1 years are:

$$d_x \cdot v + d_{x+1} \cdot v^2 + ... + d_\omega \cdot v^{\omega-x+1} \qquad (5)$$

$$A_x = \frac{d_x \cdot v + d_{x+1} \cdot v^2 + ... + d_\omega \cdot v^{\omega-x+1}}{l_x} \qquad (6)$$

To simplify the calculations we multiply both denominator and numerator with v^x and $l_x . v^x$ is denoted by D_x and $d_x \cdot v^{x+1} = C_x$:

$$A_x = \frac{C_x + C_{x+1} + ... + C_\omega}{D_x} = \frac{\sum_{t=x}^{\omega} C_t}{D_x} \qquad (7)$$

The numerator is calculated and represent M_x (M_x - are commutation numbers):

$$A_x = \frac{M_x}{D_x} \qquad (8) \qquad\qquad P = S \cdot A_x = S \cdot \frac{M_x}{D_x} \qquad (9)$$

When the insured sum S is other than unitary, the premium is calculated according to rel. (9). If the payment of sum insured is made immediately after insured death the insurance premium is denoted by $\bar{A}_x$ (D_x, M_x - are commutation numbers, i - interest rate):

$$\bar{A}_x = \frac{M_x}{D_x} \cdot \sqrt{1+i} \qquad (10)$$

I will exemplify these types of premiums using the following data: a 30 years old person, who buys a annuity insurance policy, sum insured 10000 c.u., annual interest rate is 10%.

- the sum insured will be received at the year end of death:

$$A_{30} = \frac{M_{30}}{D_{30}} = \frac{328}{5403} = 0,0607 \text{ , P = 607 c.u.;}$$

- the sum insured will be paid immediately after death:

$$-\qquad \bar{A} = \frac{M_{30}}{D_{30}} \cdot \sqrt{1+0,1} = 0,060 \cdot 1,048 = 0,0628, \text{ P = 628 lei}$$

The second type of contract, term insurance, assumes the obligation to pay a sum of money to insurance beneficiary after the insured death, if his death occurs within the period specified in the insurance contract. The reasoning behind the premium calculation is the same as the annuity insurance.

$$A^1_{x:n} = \frac{M_x - M_{x+n}}{D_x} \qquad (11)$$

When the insured sum is other than unitary:

$$P = S \cdot A^1_{x:n} = S \cdot \frac{M_x - M_{x+n}}{D_x} \qquad (12)$$

Using the dates above for example, if the insured would have bought an insurance policy, contract period - 5 years:

$$A^1_{30:5} = \frac{M_{30} - M_{35}}{D_{30}} = \frac{52}{5403} = 0,00962 \, , \ P = 96,2 \text{ lei.}$$

Next, I determine the unique net premium for a **mixed life insurance**, denoted by $A_{x:n}$ and is calculated by adding net unique premiums of survival insurance and whole life insurance:

$$A_{x:n} = \frac{D_{x+n}}{D_x} + \frac{M_x - M_{x+n}}{D_x} \qquad (13)$$

When the insured sum is other than unitary:

$$P = S \cdot \frac{D_{x+n} + M_x - M_{x+n}}{D_x} \qquad (14)$$

I will exemplify using the following data: a 30 years old person, contract period - 5 years, sum insured 10000 c.u., annual interest rate is of 10%.

$$A_{30:5} = \frac{D_{35} + M_{30} - M_{35}}{D_{30}} = 0,6224, \ \ P=6224;$$

3. CASE STUDIES CONCERNING THE NET ANNUAL PREMIUM

The contract period for a life insurance is for several years and using the net unique premium is extremely rare, because it requires too much financial effort for insured, therefore can be used instalments throughout all contract period, or a shorter period. We talk about net annual insurance premium of survival insurance, a net annual insurance premium of whole life insurance and annual net premium of mixed life insurance.

In case of **survival insurance** we have two possibilities:

- if the payment period of net annual premium coincide with the contract period (m = n), the annual net premium for a person age x, which requires a survival insurance for a period of n years is:

$$P^1_{x:n} = \frac{A^1_{x:n}}{\ddot{a}_{x:n}} \quad (15) \qquad P^1_{x:n} = \frac{D_{x+n}}{N_x - N_{x+n}} \quad (16)$$

Where: $P^1_{x:n}$-the net annual premium; $A^1_{x:n}$-the net unique premium for a survival insurance, $a_{x:n}$- the net unique premium related to anticipated annuity insurance for a specified period n, D_x, N_x - are commutation numbers.

- if the payment period of net annual premium is less than the contract period (m < n), the annual net premium for a person age x, which requires a survival insurance for a period of n years is:

$$P^1_{x:n} = \frac{A^1_{x:n}}{\ddot{a}_{x:m}} \qquad (17) \qquad P^1_{x:n} = \frac{D_{x+n}}{N_x - N_{x:m}} \quad (18)$$

I calculated the net annual premium that should be paid by a 30 years old person, which requires a survival insurance, contract period 5 years, sum insured 10000 c.u., annual interest rate 10%:

1. m = n, $P^1_{30:5} = \dfrac{D_{35}}{N_{30} - N_{35}} = \dfrac{3311}{55822 - 33385} = 0{,}1475$ P=1475 c.u.;

2. m < n, if the insured wants to pay the premiums in 3 years:

$P^1_{x:n} = \dfrac{D_{35}}{N_{30} - N_{33}} = \dfrac{3311}{55822 - 41070} = 0{,}2244$ P=2244 c.u.;

Relating to **whole life insurance** I presented the net annual premium for:
- annuity insurance where the premium is denoted by P_x;
- term insurance where the premium is denoted by P_{xn};

For the first type of insurance we have two situations:

1. if the payment period of net annual premium coincide with the contract period, m = n:

$$P_x = \frac{A_x}{\ddot{a}_x} \quad (19) \qquad\qquad P_x = \frac{M_x}{N_x} \qquad (20)$$

Where: A_x- the net unique premium for a annuity insurance, $\ddot{a}_x$- the net unique premium related to an anticipated annuity insurance,

M_x, N_x - are commutation numbers

2. if the payment period of net annual premium is less than the contract period m < n:

$$P_x = \frac{A_x}{\ddot{a}_{xm}} \quad (21) \qquad\qquad P_x = \frac{M_x}{N_x - N_{x+m}} \quad (22)$$

For the second type of insurance we have, also, two situations:
1. m = n

$$P^1_{x:n} = \frac{A^1_{x:n}}{\ddot{a}_{x:n}} \quad (23) \qquad\qquad P^1_{x:n} = \frac{M_x - M_{x+n}}{N_x - N_{x+n}} \quad (24)$$

Where: $A^1_{x:n}$ - the net unique premium for a term insurance (whole life insurance), $\ddot{a}_{x:n}$ -the net unique premium related to an anticipated term insurance; M_x, N_x - are commutation numbers

2. m< n

$$P^1_{x:n} = \frac{A^1_{x:n}}{\ddot{a}_{x:m}} \quad (25) \qquad\qquad P^1_{xn} = \frac{M_x - M_{x+n}}{N_x - N_{x+m}} \quad (26)$$

I calculated the net annual premium that should be paid by a 30 years old person, which requires a whole life insurance, sum insured 10000 c.u., annual interest rate 10%:

1. annuity insurance
    - m=n

$$P_{30} = \frac{M_{30}}{N_{30}} = \frac{328}{55822} = 0,0058 , \quad P=58 \text{ c.u.;}$$

- m < n, the insured wishes to pay the premium in 10 years:

$$P_{30} = \frac{M_{30}}{N_{30} - N_{40}} = \frac{328}{55822 - 19670} = 0,0090 \quad P=90 \text{ c.u.;}$$

2. term insurance
    - m= n= 5

$$P^1_{30:5} = \frac{M_{30} - M_{35}}{N_{30} - N_{35}} = \frac{328 - 276}{55822 - 33385} = 0,0023 \quad P=23 \text{ c.u.;}$$

- m < n the insured wishes to pay the premium in 3 years:

$$P^1_{30:5} = \frac{M_{30} - M_{35}}{N_{30} - N_{33}} = \frac{328 - 276}{55822 - 41070} = 0,0035 \quad P=35 \text{ c.u.;}$$

The net annual premium for a **mixed life insurance** is calculated by adding net annual premiums of survival insurance and whole life insurance:

$$P_{x:n} = P^1_{x:n} + P^1_{x:n} = \frac{A^1_{x:n}}{\ddot{a}_{x:n}} + \frac{A^1_{x:n}}{\ddot{a}_{x:n}} \quad (27) \qquad P_{x:n} = \frac{M_x - M_{x+n} + D_{x+n}}{N_x - N_{x+n}} \quad (28)$$

when m < n the formula became:

$$P_{x:n} = \frac{M_x - M_{x+n} + D_{x+n}}{N_x - N_{x+m}} \qquad (29)$$

I calculated the net annual premium that should be paid by a 30 years old person, which requires a mixed life insurance, sum insured 10000 c.u., annual interest rate is 10%:

- m = n= 5, $P_{30:5} = P^1_{30:5} + P^1_{30:5}$ =0,1475+0,0023=0,1498, P=1498 c.u.;

-   m < n = 3

$$P_{30:5} = \frac{M_{30} - M_{35} + D_{35}}{N_{30} - N_{33}} = \frac{328 - 276 + 3311}{55822 - 41070} = 0,2279 \quad P=2279 \text{ c.u.}$$

4. CONCLUSIONS

The above net premiums presented guarantees only cover obligations to the insured, insurance payments, when happen the insured risk, but in order to cover costs of conducting insurance operations, the insurers add an addition to net premium thus obtaining gross premium, paid by the insured when purchasing the insurance policy. Insurer created on account of premiums received from policyholders, a fund which is capitalized as bank deposits or other investments in economic cycle and produce incomes that satisfy insurer's obligations to policyholders, the insured sum payment. Insurance premiums must be adequate, equitable, should not be excessive compared to the insured sums, so that show haw important is the actuary activity. The researcher's analysis show that in all developed countries in the world, males have higher overall rates of mortality than females, so for premium calculation must be taken into discussion other important factors: including whether or not a person smokes, their age and marital status, where they live and their lifestyle in general. The same thing we can say about female life expectancy exceeds that of males today, but this has been the case in these countries for many years.

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SOCIAL ORGANIZATIONS

ROBERT PRODANCIUC [*]

ABSTRACT: *The paper approaches the concepts that are specific to the study of organizations from a systemic and actional perspective. When defining the organizations we have to start from the social actions system. The social actions also ensure the criterion for the organizations typology. Then the components of the organization are being analyzed. The roles of the organizational structures were treated next. The general characteristics of the organizational systems were presented afterwards. The transition from the theoretical aspects to the pragmatic ones was done through the presentation of the leadership. The efficiency of the social organizations is measured by the ability of the management to integrate them into the environment.*

KEY WORDS: *institution; organization; group; action; efficiency; environment.*

JEL CLASSIFICATION: *Z13*

Ion Tudosescu (1978, pp. 16-34) considers organizations to be organizational structures with formal character where people adhere freely, with no obligations, depending on their collective or individual interests. The most important characteristics of the social organizations are: the fact that people adhere freely to the organizations (but it also means that they comply compulsory with the norms that regulate the activity of organizations) and the members of the organizations obey the competence of the organizational management.

This author considers that the interests of the people that adhere to the organizations are connected to the types of actions that the organizations mediate and the criterion for making a typology of organizations is the same one as for the typology of institutions. As a result, reported to the mediated human action we can distinguish in between the next types of organizations: economical organizations, research and creation, cultural, educational, religious and political. The thing that is to be noticed is that Ion Tudosescu uses in this typology the label "… institutions and organizations". We tend to agree with him and the simple connection of the two terms – "institution"

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and "organization" with the conjunction "and" must be overcome by using the concept of "institutional-organizational set" which constitutes a determinable existential unit. Another possible remark is that the dimensions of the organizations are the same as the ones of the institutions. The dimensions they can reach are from a functional unit up to the level of United Nations.

The role of the organizational structures composed of institutions and organizations, or of the institutional-organizational sets are to mediate:

1. the integration of the individuals into useful social action through:
   a. the organized part taking in the organized labor division;
   b. the cooperation and the activities exchange;
2. the correlation of the individual interests with the collective ones for achieving the common goal;
3. the promotion of the set members' interests in relation with:
   a. the members of other groups;
   b. some before others of the same group;
4. the amplification and deepening of the empowerment of individuals and groups in their relations with society and nature.

As a conclusion to the role of the organizational structures in the social life, the author states that through the socialization function of the individual actions in the actional system of a society we get a general measure of the efficiency degree of a certain society and furthermore a criterion for its progress.

In the same context, Cornel Popa (1978, pp. 35-52) has a logical-mathematical perspective over the subject and comes up with another definition. The organization is a relatively stabile number of agents that have a unique goal, a decision making department, execution departments, as well as a certain labour division, cooperation relations between agents, a formal structure and a norm system that is meant to increase the efficiency of their social actions. The author analyzes the considered definition and points out some important aspects. The organizations appear as instruments that rationalize the actions of the collective agent in order to achieve the given or intended goal. Any organization has a differentiation and a segregation between the conception activity and the implementing activity, expressed through the existence of hierarchical levels associated with different attributions and responsibilities. Organization imply professional variety and heterogeneity of the actional agents, which makes it necessary for several compartments to exist that require cooperation relations. The organization requires to have specific functioning structures expressed through different types of organizational charts that stipulate the attributions and responsibilities of the people involved in the activity. Each organization has a norms system that provides the tasks and the attributions of all the actional agents categories of the organization.

Starting from the work of Henri Fayol, the author shows that the organization must be organized and administrated. The organizing takes place at the beginning of the organization's existence and it means providing everything that is needed for its functioning. This initial action has three interlinked components. First of all it is necessary to ensure the financial component that allows having a suitable place for the work means. Secondly, the social component is needed made up of the organization's

personnel. It is organized in a formal structure, which means a set of hierarchical, functional and cooperation relations established as a framework of the organization. Generally, this formal structure is shaped as an organizational chart which states the place, statute and role of every compartment in the whole of the organization, as well as the competence and the responsibilities of their managers. The hierarchical, decision, command and control relations are also stated. The attributions and responsibilities are stated in operating laws, norms and regulations. The hierarchical levels are emphasized vertically through the organizational chart starting with the management and up to the last employees. The organizational chart expresses horizontally the functions performed in the organization. A special importance is paid to the position because it means a certain functional position occupied into a certain hierarchical level. Through the position, the supraordination and subordination of the holder are stated. These are associated with the command and subordination. Thirdly the informational circuit is taken into consideration. The commands and the confirmation of execution are being sent through these circuits. The retro information is imperative to the goals achievement of the organization.

After the organization starts to activate it must be administrated. It implies foreseeing, detailed organizing, commanding, coordinating and controlling. Their aim is to rationalize conducts, to be economical about using the existing means and to reduce the required effort.

When defining the organization concept, Norman Goodman (undated, pp. 87-107) utilizes the group concept. This justifies according a special attention to this concept. According to him the group was defined as being two or more individuals that have a common identity feeling and influence each other in structured ways based on a common set of perspectives referring to their behaviour. The author describes the group typology as being composed of:

1. primary groups and secondary groups:
   - primary groups are groups with a small number of members, that have mutual, personal, close, lasting relations;
   - secondary groups are groups that have a larger number of members established for a precise purpose, where relations are impersonal and their duration is determined;
2. internal groups and external groups:
   - internal groups are formed of members that have feelings of identity and loyalty
   - external groups are perceived as not belonging to a person and doesn't imply loyalty feelings;
3. reference groups are used by every person to express, compare and evaluate their own behaviour.

As such, these groups have the following functions: the normative function by defining the adequate behaviour, the comparative function by establishing a behaviour standard, the public function by evaluating the behaviour acceptability.

According to Norman Goodman an individual can enter a group by chance or by his own will. The decision to enter a group may be facilitated by the proximity that allows for mutual personal relations and by the similarity that results from common

interests, ideas and values. The group's formation implies mutual activities, so as the interactions are agreed by the group's members. Thus, through a gradual and cumulative process of interactions adequate behaviours are enforced. This enforcement of adequate behaviours is obtained as a result of the conformation process. Behaviour conformation starts from statuses, that determine the persons' position in the group and, as a result of that position, the person is involved in specific activities. The way that the activities are carried out is what is called role. The statuses are not equal, they supply some people with more power, influence and respect. Through the interactions of the group members, they delimit themselves from the nonmembers and identify themselves with the group. The group exists as long as its members mutually communicate information, feelings and attitudes. Disagreements can appear during the interaction and communication of the group members, if they exacerbate they can become conflicts. Conflicts are positive when they help to clarify the goals and the borders as well as to increase group cohesion and participation. Cohesion is the degree to which the members feel bound to the other group members. The group stability can be increased through this, but also it can lead to a tolerance decrease regarding the difference of opinion. Stabile groups are relatively small, and allow for several different relations to exist. The author considers that the size that allows for stability and direct communication is 10 members, though he thinks that there is no optimal size. Regardless of the size of the group, there is always a person among the group that actively influences the group through his personality, achievements and position. Whether it is recognized or not as being so, that person is the group leader. He can lead democratically, authoritatively or laissez-faire. His leadership can be instrumental – centred on goal realization or expressive – centred on assuring the harmony and solidarity of the group. The group's action implies choosing a way to do it, which means decision, consensus and responsibility.

Norman Goodman passes on from the group to the organization defining the latter as being a type of group that was created for the accomplishment of a certain task and that has a formal structure, through which it tries to perform that task. It is obvious that the author considers the secondary group. We believe the "formal organization" term to be a redundancy because in the definition of the organization the formal structure of the group is mentioned. Searching for the similarities of the organizations, Norman Goodman finds the following general characteristics:

1. planning and rationality mainly refers to the relation between means and goals, but also the types of activities and the organizational structures;
2. formalization, meaning the structuring of relations between activities and organizational actors and a precise description of the individuals' duties and of the responsibilities of the departments;
3. bureaucracy, as part of the structure, is responsible of planning, overseeing and coordination of the work of different segments of the organization. Bureaucracy implies specialization and division of labour, hierarchy, rules and regulations, impersonality, files and written documents, technical competence, promotions, administrative personnel etc.;
4. the informal part of bureaucracy means the form of authority manifestation in the personal relations between the organization members which we

believe to be outside of the formal framework and so outside of bureaucracy. This part is breaking the rules, ads or replaces the organizational goals with personal ones. It supports the search for alternative forms of bureaucracy and organizational reforms.

Mircea Agabrian (2003, pp. 152-180) shows that we can talk about a group only when there is relationship between individuals, meaning interaction and communication. For him, a group is a collection of people that have some common interests and goals. For the author, the definition also refers to the small group considered as an objective fact of activities and relations. The status and the role are visible from and in the group. They must be seen in order to find out the aspects of the individuals' participation into the group as having a collective function and as an objective person. Based on M. Sherif's definition the author points out the following content notes of the group: it is a formation of people, its members are face to face interacting in mutual activities and it develops norms and values that regulate the behaviour of its members.

Talking about the groups dimensions, the quoted author analyses the dyad as the smallest possible group and the triad to show its complexity. Continuing, he establishes the limit of the small group at 7-12 members. Over this limit the formalization of the relations is required and so we end up with a formal organization. He approaches the group typology and finds: primary and secondary groups, formal and informal groups, interior and exterior groups and finally the reference group. The latter one is described as a social group whose perspective is adopted by a certain individual as a reference framework for his own behaviour and attitudes. For an individual the group represents support and security, but also control and constraint. Extreme pressure towards consensus and conformity can lead the group to dissolution.

Mircea Agabrian realizes the transition from group to organization by defining the formal organization as being a relatively large group that has norms, a number of goals, or official objectives, a structure of statuses and roles as well as a set of rules designed for promoting its objectives. Detailing the components of an organization, he defines them in an interesting way:

1. the social structure represents the product of the relation patterns that are between the organization members. It can be:
   - formal – the positions and the relations are defined and specified explicitly;
   - informal – social positions correspond to the characteristics and affinities of the organization members;
2. the participants/social actors are individuals that are organization members, who contribute to its existence in exchange for various incentives, especially money;
3. the objectives – define the wanted finalities;
4. the technology – the material combined with the intellectual or knowledge process through the materials in various shapes are turned into income;
5. the environment – the financial, political, technological, social and institutional context to which an organization has to adapt.

The presentation of the definition and the components of the organization allow Mircea Agabrian to point out its characteristics.

1. the organization is deliberately founded by one or mode people at a certain date;
2. the organization develops formally structured relations and interdependency reports between its members;
3. the organization has a set of objectives;
4. the organization is self-perpetuating;
5. the organization divides the work that has to be done and distributes it to several individuals;
6. the organization administrates resources;
7. the organization ensures the communication between individuals and groups;
8. the organization ensures the presence of one or more leaders.

Using multiple classification criteria, Mircea Agabrian refers to Etzioni's typology:

1. voluntary organizations in which the individuals enter being interested by its goals and activities;
2. utilitarian organizations that have precise objectives;
3. coercive organizations which admit people with relating problems.

The organization's characteristic to have one or more leaders or managers makes the author approach the leadership. The leadership refers to the ability to exert an influence over a group, so as the group's behaviour is directed toward specific objectives and results. There are two types of leaders. The first one is the instrumental leader that helps the group define the task and establishes what has to be done in order to accomplish it. The expressive leader is supporting the group's cohesion and tries to achieve the members' emotional wellbeing. The thing that differentiates the leaders from the rest of the organization members is mainly their personality, being, according to the author, more intelligent, extroverted, mentally balanced, dominant, confident in their own abilities, liberal and even physically attractive. The leadership style can be democratic, authoritarian or laissez-faire. Whatever the leadership style, it is a part of bureaucracy. Accepting bureaucracy is due to its rationality as well as its legality. However, it can become dysfunctional when it avoids decision taking, proves incapable of being trained, self perpetuates, replaces the goal of the organization with its own goals, tends to expand, engages in ritualism and alienates the workers.

Ioan Mihăilescu shows that the organization is an association of individuals, a social group with its own goal that acts in accordance with an appropriate norms and values system in order to achieve a certain objective. The author gives special attention to bureaucracy, as a type of social organization where power is exercised by an administrative department that is more or less rational. The elements of the ideal type of bureaucracy are: the prescriptions system, the rationality of goals pursuing, hierarchical organization, the impersonal character of functions exercising, the specialization and competence. It is obvious that the ideal type of bureaucracy cannot be found in reality, but it can have characteristics that make it as efficient as possible. The characteristics of bureaucracy are transferred to the organizational structures and so they become effective. These characteristics are: relative unity of the organizational

structures, flexibility of the social changes, litheness of the number of hierarchical levels, optimal sizing of the compartments, activities' rationality, effectiveness of the informational system, technical, economical, social and mental multidimensionality, inexpensive operation and effectiveness of the structure as a whole. Bureaucracy has some characteristics that make it possible to diagnose it as being pathological reported to the functioning of the efficient ideal type. This diagnosis can be motivated by four critical directions regarding this type of social organization:

1. it creates structures that can arouse resentments and animosity;
2. rigidity of task execution in unforeseen situations;
3. responsibilities division makes problem solving harder;
4. attachment splitting between clients and the rules of bureaucracy.

The critics above show that sometimes the rigidity of regulations can turn into an obstacle in goals achievement or can lead to rule breaking. Whatever the consequence, the reaction of the organization members is negative and has different forms. Inefficiency and discontent can be remedied only with radical reforms. The sociology of organizations can contribute decisively to the functionality adequacy of the social organizations and the general social dynamism.

Anthony Giddens (2000, pp. 311-332) considers that an organization is a large group of people structured impersonally and that has the purpose of ensuring certain objectives. It must be underlined that the author is including the large group and the impersonal structure into the definition. Because the organizations interact among themselves and with society, determine the fact that neither the citizens nor they can control things, so place them under the control of functionaries or experts on which there can be no influence. Thus, the organizations can subject the individual to some imperatives that he cannot stand against.

From the perspective of the theories about organizations we are not going to insist on purely theoretical aspects but we would rather examine aspects that are more or less pragmatically. First of all we point out the physical framework especially designed. It is characterized by specific features, relevant for the activity of the organization. Furthermore the layout mode of the rooms, halls and of the open spaces from an organization building can offer base clues regarding the operating system of its management. Like Michael Foucault, the author stops at supervising as the main element of the operating system of the management and that means activity overseeing. There are two supervising ways. On one hand there is the direct supervising of the employees' work by the superiors. On the other hand there is the indirect supervising, which is more subtle and it consists of having files, registers or sheets about the subordinates. In order for the organizations to be efficient it is required that the employees' work is done accordingly. This means that it must be coordinated in time and space equivalent to respecting a rigorous schedule or timetable. Continuous supervising is required for the work to be reasonable in the allocated time, but this causes resentment and adversity. This is the reason why the organizations from the modern societies are preoccupied with space and time reorganizing. Computerization is supporting this reorganization significantly.

Erhard Friedberg (1997, pp. 397-432) considers that he offers a simple definition when saying that organizations are formalized and hierarchical human sets

made to ensure cooperation and coordination of its members in order to achieve some given goals. For this author the first important problem posed is regarding the organization of the behaviours of a certain number of social actors whose cooperation is indispensable, but who keep a certain degree of autonomy and who pursue interests that are not necessarily convergent. The importance of studying the organization comes out of the fact that it ensures the survival of the organizations. For this purpose he presents a number of four central problems of the organizations' organization:

1. the problem of the social actor's status and his action;
2. the problem of organizational integration;
3. the problem of the organizational boundaries;
4. the problem of the organizational effects.

In order to realize this, the author utilizes the historical perspective of the scientific approaches. For this, two directions that evolved separately are taken into consideration. The first one refers to the widening of the motivational conceptions up to transforming every organization member into a complex and relatively unpredictable agent. The second one shows that the organizational difficulties and conflicts rise from an insufficient congruence between the values of the individuals and the opportunities and constraints enforced by the organizational structures. In this case, the actional agent's choices are determined by the incomplete information and the practical impossibility to optimize. As a result, the deciding agent turns to a convenient solution. To understand this behaviour the contextual, organizational and social conditions of decision taking must be known, as well as the conscious or unconscious preferences for the options taken. As the preferences are multiple, vague, ambiguous and contradictory they can be subject of manipulation and self manipulation conscious or unconscious. In conclusion, the behaviour of the deciding agent must be considered as an active and reasonable adaptation to the opportunities and constraints perceived at a certain time.

Regarding the integration problem, the author shows that the goal of the organization cannot constitute an integrator element. This situation is because it must be understood as the product of a compromise in a dominant coalition that can enforce its own preferences over the other participants and can obtain their cooperation. This way the organizational goals have the same rationality limitations as the whole human behaviour. Under these conditions, the organizational set's cohesion, coherence and integration are threatened by the power strategies of the participants. As a result, the organizations become vulnerable towards the members tendencies to take advantage of the information asymmetries to cover and protect themselves against the controls of the organization. The natural consequence is that the organizations become systems with weak links. However, the organizations are capable of imposing a minimum of order, visibility and regularity individual and collective power gaining strategies chaos that develop inside it. The order is realized especially because of the contract through the individual stabilizes his behaviour as long as the organization provide proper remuneration. However the individuals' behaviour is especially dependent on the opportunities that they notice in a certain situation and on their ability to profit on these opportunities. This means that everybody profits on the ambiguity, incoherence and contradictions of their role. As a reaction, the organization is required to make its

members not abuse on the liberty and opportunities they have at their disposal and even to produce rules and constraints through the interactions.

The problem of the environment of the organization refers to the main dimensions of the influence of different characteristics of the organizational context over the structures, the functioning and the performance of the organization. Thus, any organization manages its report with the environment. It is the result of the evaluation of organizational conditions and the operations of the structural changes accordingly. The evaluation appears as a result of all the members' perception over the external opportunities and constraints. At the same time, internal constraints structure the perception of the environment. As a result the boundaries of an organization and its opening degree are fluctuating depending on the circumstances, the challenges, the stakes and the ability of the organization members to cope.

The effects of the organization is seen best in the reflectance of the organizations confronted with pressures to adapt, changes and performance achievement. It is especially about the consolidation of the traditional functioning, which is connected to their autonomy. The set of integration and articulation mechanisms of the divergent behaviours of the organizational members becomes a cultural way of approaching the organizational structure – organizational culture. This type of culture allows the organization to function, but at the same time it is a barrier that prevents knowing and implementing other ways to function. In other words, society's cultural characteristics which are internalized by the individuals through the process of socialization represent a constraint, to the extent that they influence their choices. Organizational culture is a local phenomenon with specific problems. The important thing is that it can be modified, transformed and enriched through an active process.

In the conclusion of his study Erhard Friedberg finds that the organization is an artificial form of the collective action structures that produce order. As such, the qualitative knowledge of the organizations is especially necessary. This knowledge would allow the managers to think and apply learning and abilities development programs to change the behaviour of the participants in a more appropriate way that is different from the present one.

At the end of the considerations over the organizations we refer to the contributions of Viorel Cornescu and Sica Stanciu (2003, pp. 35-38; 60-78). It is considered that the objective element of the constitution of the organizations is the social character of work, determined by the fact that nobody can satisfy their needs unless the efforts are united in carrying on common activities, after which the results change. The organization has the following elements: people, relations and interactions, interactions structure, everybody participates to the group activities with their own objectives, the intertwining of the individual objectives into the final goal of the organization. With these considerations it can be appreciated that any organization is made up of a group of people between whom interpersonal or pluripersonal structural relations are established, in which the individuals are differentiated by authority, status, role and is constituted in order to achieve some proposed objectives or goals aiming at achieving a high efficiency. Through this definition the organization is presented as a complex, open and dynamic system that incorporates human, material,

financial etc. resources made up of a diversity of elements, by their combination the objective of the activity is obtained. The analysis of any organization must take into account the individual; formal autonomy of functions; informal structure; the behaviour resulted from the individuals' relation and the environment in which the organization exists. Regarding the environment we can say that it is represented by the forces external to the organization, it influences directly or indirectly the objectives, plans, procedures, activities and results. The analysis of the environment is done in four steps: continuous observation, monitoring, prognosis and analysis. The environment has two components. The internal environment reflects all the activities and conditions in which the activity takes place, as well as the relations between departments. The external environment is situated outside the organization; it cannot be controlled and determines its performances. The last component is also made of two parts. The microenvironment is represented by participants from the closest environment. The macro environment is made up of societal forces with long action range. The relation of the organization with its environment takes two forms. The first one is the market aspect through which the organization ensures its necessary resources for its normal activity. The second aspect is competitive, it signals a rivalry among the participants to the social activity and through which the best satisfaction of the needs and interests of all the beneficiaries is attempted. Education is no exception regarding the relation it has with its external environment and we consider it to be useful and necessary to promote the educational marketing.

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EVOLUTION OF THE ROMANIAN CAPITAL MARKET IN THE LAST FOUR YEARS

SORIN CLAUDIU RADU [*]

ABSTRACT: *The effects of the great recession have also been felt in Romania and the domestic capital market, component of the European financial market, has suffered from the negative evolutions of the world's economy, fallowing the downward trend of the external markets since the crisis started. Considering the economic situation as of 2008, the Romanian capital market was faced with a small number of transactions, a decreased stock capitalization and low level of credibility, massive diminishment of liquidities, capital withdrawal on the financial market and significant depreciation of stock exchange indicators. This paper aims at presenting the evolution of the capital market in Romania for the last four years, pinpointing several strategic directions that are meant to support the domestic stock exchange and place them in the European stock exchanges top.*

KEY WORDS: *capital market; emergent capital markets; investors; market growth; Bucharest Stock Exchange; Romania.*

JEL CLASSIFICATION: *G01; G11.*

1. INTRODUCTION

Within globalization of the financial markets, the stock market plays an important role in generating and maintaining the economic dynamics and contributes, at the same extent, to the growth of economic instability.

Theoretically, the stock market is considered an alternative in the field of finance in any economy, but this major role has never been exploited enough within the Romanian stock exchange. Along its activity, the local stock exchange did not desire to ensure this financing role for the economy by attracting available capital in the medium and long run based on the issues of real estate securities and it evolved unexpectedly low. Thus, it did not have an important role in the growth of efficiency of available resources from the economy in order to facilitate demand for financing sources.

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In Romania, the activity which is specific to the capital market is underdeveloped both regarding quantity and quality. Its extent to the total of financial markets is reduced and the blue chips have dropped in comparison with European countries or other emerging countries.

The market's weak development has mainly resulted from the fact that it is related to the Mass Privatization Programme (MPP) and Romania's engagement with other international financing organisms in order to create a secondary market for the shares resulted from the above mentioned programme. Unfortunately, in Romania, the capital market was seen by most people as a necessary annex in the privatization process.

The Bucharest Stock Exchange (B.S.E.) is a regulated market, authorized to trade forwards and deliver cash which work regularly. We observe the transparency requirements in view of ensuring the investors' protection and function based on the regulations that permit access to and the conditions of the market, and act based on financial instruments and transactions of the stock rules of the system.

B.S.E. is not considered very representative for the Romanian market because only a few great companies are listed. The reduced dimension of the local market with few Romanian investors, very few transactions underdone monthly, foreign investors represent an important element of the market which, through time, definitively influenced its evolution.

The financial instruments used for the B.S.E. transactions are classical (shares, bonds, titles, fund units, structured products and futures contracts), the investitures are in an impossibility to transact modern financial instruments which combine the characteristics that regard a maximum capacity of titles with minimum risks.

The weaknesses of the international financial system have indirectly generated negative effects on the emerging markets. The evolution of the international financial crisis, which originated in the most developed economy of the world, affected the capital markets in Romania and thus put an end to the rising trend of market indexes regulated by the Bucharest Stock Exchange starting from 1998.

Within the crisis, the Romanian capital market has recorded an evolution which was common to all other European, American and Asian markets. It is characterized by liquidity loss and stock indices depreciation. The correlations between the indices of the Bucharest Stock exchange and the European stock exchanges have determined a rapid and persistent growth of the market volatility where the Romanian market was characterized by high vulnerability to foreign shocks.

2. MARKET EVOLUTION FOR 2008-2011

In 2008 the economic and financial environment changed drastically in comparison to previous years and this had an obvious impact on the capital market. The first three trimesters of the year an important growth of the Romanian economy could was noticed, with the highest hit of +9.1% in the third trimester but with lower values in the last part of the year.

While the most developed countries contributed with important sums of money to the financial stability, the Romanian government acted with prudence regarding

inflation. The Romanian government was concerned about guarding the national currency stability and prudent lower of monetary politics interest, which had as effect fewer foreign investors on the local capital market. At international levels, the monetary authorities supported indirectly the activities underdone within the stock exchange by lowering interest rates.

Table 1. Extent of the stock exchange capitalization in GDP

Indicator	Year							
	2004	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
GDP (bil. lei)	246.47	288.18	344.65	416.00	514.65	491.27	485.38	568,09
Stock exchange capitalization (bil. lei)	42.14	64.27	84.05	110.4	57.8	92.4	113.27	81,01
Extent of GDP capitalization (%)	17	22	24	27	11	18.8	23.34	14,26

Source: working of the author based on available data from B.S.E./N.S.I. (www.bvb.ro, www.insse.ro)
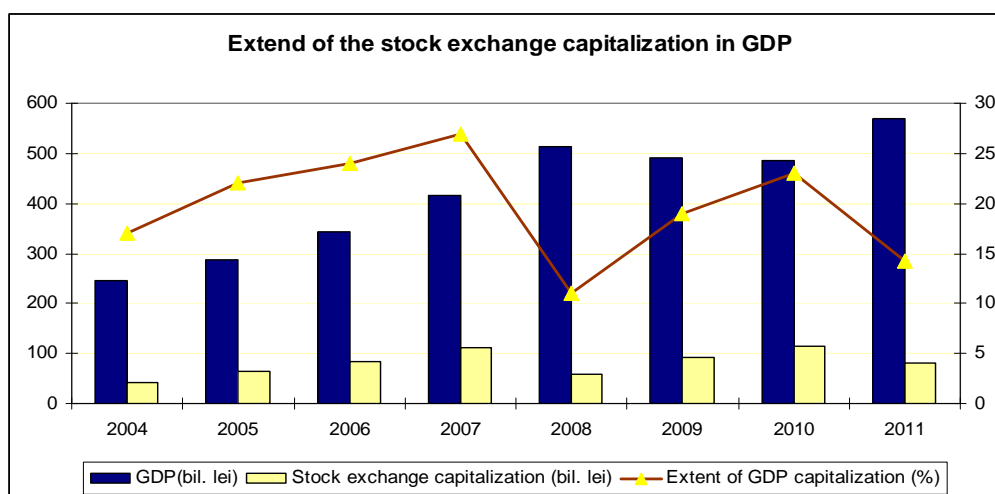
Source: working of the author based on the results in table no. 1

Figure 1. Extend of the stock exchange capitalization in GDP

Although along the year 2008 the shares issued by 9 new trading companies were introduced for transaction on the regulated market by the Bucharest Stock Exchange. At the same there were admitted for transactions the first shares issued by a foreign company, Erste Group Bank and over 20 series of titles. By the end of the last transaction of the year, the total value of the stock exchange capitalization on the market was of 57.8 billion lei, with over 50 billion lei below the index of 2007. The fall of capitalization reflects the downward alterations of the reference prices for most titles

transitioned by B.S.E. in the absence of significant enlisting during that period. In the same time, the value of the transactions at BSE dropped by 53% in comparison to the previous year, which is considered the most dramatic and steep fall of the last 10 years.

The volatile stock exchange indexes have highly risen during September - October of 2008, as a result of the important instability of the international financial markets. In December, the BET index was 70% below the start value of January and the loss recorded by the market indices of BSE had the highest level on the European markets.

Starting 2008, on the background of the turbulences that affected the international financial market, the investors' antipathy towards risk raised, there was higher interest for the financial instruments with fixed income. This orientation was eased by listing the first state-owned titles, 33 in number.

By comparison to the previous year, at the end of 2009 all the BSE recorded significant appreciation. The most important rise was for the sector indices BET-FI (+ 90 %) and BET-NG (+ 71 %).

BET has a downward trend in the first two months of the year, but in March the BSE indices negative evolution was stopped. These indices went upward and recorded a growth of 61.7% by comparison to 2008, and the composite index BET-C has raised by 37.3%.

Table 2. Dynamics of BSE indices BVB in 2009-2011

B.S.E. index	Value at 31.12. 2009 (points)	Variations of the index in 2009 (%)	Value at 31.12. 2010 (points)	Variation of the index in 2010 (%)	Value at 31.12. 2011 (points)	Variation of the index in 2011 (%)
BET	4,690.57	+61,68	5268.61	+12.3	4.336,95	-17,68%
BET-XT	461.95	+ 66,55	470.61	+1.8	405,62	-13,81%
BET-C	2,714.77	+37,31	3111.17	+ 14.6	2.621,41	-15,74%
BET-FI	23,885.96	+90,33	21980.58	-7.9	19.341,50	-12,01%
BET-NG	596.16	+71,10	771.97	+29.4	612,35	-20,68%

Source: working of the author based on available data from B.S.E. (www.bvb.ro)

The indices appreciation was determined by the trend imposed on the Romanian market by the main European stock exchanges even if in certain classes BSE was over the European average values. Thus, the Romanian stock exchange market was one of the most dynamic stock exchanges besides the stock exchanges of Vienna, Luxembourg, Oslo and Stockholm. Still, the nominal value of the total stock exchange capitalization of BSE is much under the Romanian capital market.

Till the end of 2010 the index BET of BSES recorded a growth of 12.3%, BET-C 14.6%, and BET-FI dropped by 7.9%.

In 2009 without taking into account the admission for transaction of new shares, the stock exchange capitalization was only influenced by the transaction price evolution of the already-listed real estate. But the growth recorded at the end of 2009, by comparison to the last year, was generated by the market value of the sole foreign company whose shares are admitted for transactions on the local exchange market – that is Erste Group AG. The state-owned titles transaction could bring a plus of value for the local stock market but it did not come to an end successfully and it turned into

an imitation of the activities carried on by the commercial banks on the monetary market.

The evolution of capitalization based on the GDP estimated at the end of 2010 was of 23.24%, with a value of 113.27 billion lei by report to the 92.4 billion lei at the end of the previous year. The evolution of the local stock market in 2009 suggests the fact that it is before a new stock exchange cycle.

In 2010 there were listed 7 new credit titles issued on the BSE segment downward than in 16 of 2009, but the transaction value recorded was the highest until the present day. The total number of the bonds transactions was of 543 downward by comparison to the 965 transactions of 2009.

From the point of view of the issuers on the Rasdaq segment and the regulated market, the Bucharest Stock Exchange recorded a rising trend starting 2006. Although linear, the growth contributed to positive evolutions of the stock exchange, one of the objectives of the local stock exchange being to attract higher numbers of issuers.
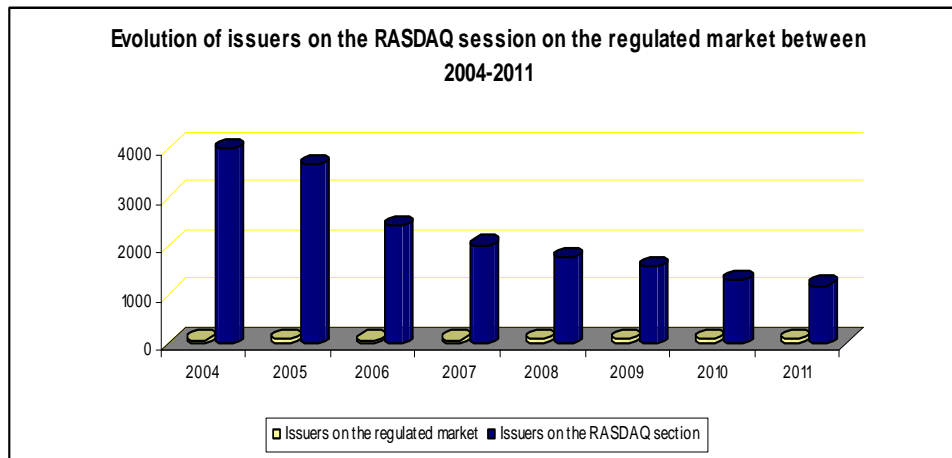
Table 3. Evolution of issuers on the RASDAQ session on the regulated market between 2004-2011

Year	Issuers on the regulated market	Issuers on the Rasdaq
2004	60	3998
2005	64	3683
2006	58	2420
2007	59	2019
2008	68	1753
2009	69	1561
2010	75	1309
2011	79	1183

In comparison to the capitalization of the stock exchanges in the Czech Republic, Hungary, Slovakia, Bulgaria, the capitalization of BSE in 2010 knew significant appreciation of 20.1% (EUR), while the stock Exchange in Poland remains regional leader with a growth of 35% and capitalization of 141,918 million EUR. The stock exchanges of Greece and Bulgaria recorded significant lows both of capitalization and transactions while the stocks of NYSE Euronext and Deutsche Borse knew significant growth for both indices. The highest growth was recorded by the Oslo Borse with a capitalization growth of 39%.

In 2010 the investors placed their available funds in mutual funds bonds which were considered as low risk financial instruments, to a greater extent than in 2009: 93% of the institutional investors and 74% for individual investors.

In 2011 there were confirmed the growth predictions regarding the growth of market liquidities and the investors' interest regarding the capital market by listing at the stock exchange of the Property Fund. The interest grows more once the state lists the energetic companies.

Source: working of the author based on available data from B.S.E. (www.bvb.ro)

Figure 2. Evolution of issuers on the RASDAQ session on the regulated market between 2004-2011

In the same year, the total transaction value of BRS over passed 11 billion rising 32.1% by comparison to 2010. This plus was generated by certain active classes highlighting a change of transaction of stock turnover. Over 90% of the stock turnover was registered as listed shares. The value of the exchanges was 9, 93 billion lei, rising 77.5% by comparison to 2010. Thus, this segment represented the main engine for the growth of the transaction values.

The performances of the year were recorded due to the important induction of the listings of the Property Fund, first class issuer which determined high interest of the resident and non-resident investors.

The bonds recorded a steep fall of 80% of investments. The trend was determined by the insignificant role played in the stock turnover during the last two years by the corporatist and municipal bonds.

The reduction of the state-owned bonds transaction could be the result of behaviour of hoarding.

If at world level the developed stock markets have approached the level of 2007, locally, BSM has not succeeded to recover neither the loss of the last four years neither regarding prices nor the volume of financial titles proceedings.

As the volatile foreign markets will have later effects on the local market, the intern stock exchange is still among the sectors of economy most affected by the economic and financial crisis.

In the present economic state, Romania cannot protect itself from the impact of a possible break from the Euro area as it has not developed own development forces as have other countries such as Czech Republic and Poland. In these circumstances, the local stock market is expecting both the listings of the state-owned companies and the stock launch of other issuers interested in new listings and/or corporatist bonds in view of growth of market liquidity and stock capitalization. We all know that the local capital market needs a strong drive in this moment. This drive is hoped –owned

companies. The capital market of Romania can benefit by the privatization programme planned to create a virtuous circle made of extended offer, investors' higher interest and more liquidities.

In the future, the operations with financial assets will focus on the most dynamic markets – Hong Kong, Singapore, Warszawa, and BSM will become a peripheral stock exchange where the local brokers will find it hard to exist.

3. CONCLUSIONS

The financial crisis proved that, once again, the financial markets are deficient form the point of view of surveillance and regulation of activities. In this case, the situation highlighted the need to reformulate and regulate the institutions. At the moment, the whole European system of financial surveillance is passing a difficult process of legislation and institution reorganization and consolidation of the means and mechanisms of surveillance. The European authorities realised that the negative elements which slow the future development of the capital market belong to implementation of reforms in economy and the lack of stability of the financial legislation.

The development of an effective capital market is hard in the present Romanian environment. The great extent of the state sector, ignoring of market rules by the decision factors from the Government and the central bank, lack of transparency of the listed issuers, lack of powerful financial agents who can place titles on the retail networks, lack of cooperation between the commercial Banks and financial agents, breach between the monetary market and the financial market, ignoring from the Finance Ministry for stock Exchange mechanisms, population's low income and many other factors situate the Romanian capital exchange market under the level of development.

The stock exchange should be seen more and more as an active instrument for the foundation of companies, where issuers should appeal first, as it is the cheapest source. Unfortunately, we are not witnessing a growth of the Primary Public Offers and I believe there should be done more by presenting the benefits of listing to entrepreneurs.

The Bucharest Stock exchange follows to develop the forward transactions, in a sense of extending the range of derived financial products transaction and adapted to the quality growth of trading and clearing models. Also, there are high efforts for attracting new listed companies and new IPOs, as their representatives recognised that that the IPO – vital instruments for the mobility of financial resources in the real sector – are almost inexistent.

In this respect, there are underdone intense activities to identify new possible issues. They have to be serious issuers and their abilities should contribute to the stock exchange capitalization and liquidity of the regulated market. They should familiarize themselves to the service offered by the BSE as well as to the advantages of listing and the possibility to attract finance through the capital market.

After a partial recovery in 2009, stagnation in 2010 and decrease in 2011, the Romanian stock exchange market will make efforts to solve the crisis issues and

encourage economic growth with the support of both stock exchange market authorities and the companies listed on the Stock Exchange through certain activities aiming at attracting new issuers or promoting stock exchange and financial investments among the large audience.

In conclusion, we would like to highlight the fact that the capital market reflects the real economy. Without political support regarding the structure change and sustained effort for successful implementation of a stable macroeconomic implementation, the Romanian capital market will not reach the performance it had recorded before the international financial crisis.

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THE ROLE OF PRODUCT AUDIT POLICY IN INCREASING ORGANIZATIONAL PERFORMANCE

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ABSTRACT: *In terms of markets more competitive, competitive advantage becomes a problem getting increasingly more difficult. Offer organization is the first element that can provide differentiation from competitors, the organization should regularly monitor the performance of their products in the market to achieve its objectives. Marketing decisions regarding product policy of the organization should be made after a comprehensive analysis within specific steps of strategic marketing planning. It is necessary, therefore a thorough analysis of the product portfolio of the organizations. In this regard an important role hold product audit policy and brand audit. This paper aims to present the steps and methods to be used for effective analysis of the product portfolio of the organization to effective competition on the relevant market.*

KEY WORDS: *strategic marketing planning; marketing audit; product audit; brand audit portfolio planning model;*

1. INTRODUCTION

Formulation of marketing strategy is a complex process that requires a strategic approach to marketing planning as the organization seeks to achieve clearly defined objectives.

Thus, setting goals, establishing strategies that adequate and appropriate marketing mix choice requires managerial decisions based on an audit conducted in all parts of the organization's marketing policy.

In the process of formulating marketing strategy, marketing objectives should be established in conjunction with the overall objectives of the organization, which are

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specified for each product and for each chosen target market. Marketing objectives concern both products and markets and are expressed quantitatively (eg, growth in sales, attract a greater number of consumers etc.) and qualitative (eg, improving the image of the product, brand or organization).

Marketing strategy assumes a vision, a perspective or a course of action, so it can be taken accidentally, but only by careful strategic planning conducted.

According to Cook (1998), strategic planning reflects the vision of the organization on its market position and future role assumed.

Organization's vision on customers, competitors and the activities to be undertaken will guide management decisions towards achieving a competitive advantage. Therefore, the purpose of strategic planning is to give the organization a competitive advantage on the relevant market. Based on this idea, organizations wishing to hold a competitive position must be able to constantly adapt to market changes and try at the same time, satisfy customers by applying the principle of market-oriented strategic planning. In view of Kotler (1998), strategic planning can be defined by the following three aspects:

- the organization's activities are considered as constituting investment portfolio and therefore the organization will be the one to decide what activity will be extended, maintained, seized or removed;
- correct assessment of future profit potential of each activity, taking into account the rate of market growth and market position within the company;
- developing a strategy for each activity in order to achieve objectives.

In conclusion, purpose of strategic marketing planning is to identify and create competitive advantage. Strategic marketing planning is a logical sequence and also includes a series of activities leading to setting goals and formulating marketing strategies and tactics to achieve objectives with financial consequences arising from the application of the proposed strategies. (McDonald, 2007). Since in practice it is useful to know the place and role of marketing audit in the strategic planning process were a lot of other theoretical approaches. Author David Parmerlee (2000) considers marketing audit tool which measures the value, risk and effectiveness of marketing efforts and can increase data acquisition efforts aimed at organizational performance.

So marketing audit should be considered one of the most important stages of the strategic marketing planning process by assessing the current situation and potential of the organization from a marketing perspective.

2. PRODUCT AUDIT POLICY

In the strategic marketing planning, an important role is held by product audit policy of the organization. Performance of a product in the market is conditioned by a number of elements that make this product audited.

As a tool in product evaluation and control it using a set of quantitative methods that can be evaluated product performance - revenue from product market share, total profit contribution, and qualitative methods which can be considered a series of factors such as emotional and subjective about the product - its image, brand

value, customer satisfaction, etc. Product audit policy follows a number of issues, such as:

- Consistency between objectives of product and market objectives and the organization;
- Analyze product portfolio to determine which products should be maintained, supported or removed;
- Examine the possibility to market new products and their potential;
- Study positioning products on the market and consumer attitudes about the quality, features, brand their products and competitors;
- Correct formulation of product strategies to achieve objectives.

Before taking any decision on the policy management product analysis is required of the product. This analysis can be done analyzing different aspects such as: (1) study the organization's internal and external sources, (2) study the product's contribution to company sales and profits, (3) identify growth potential relative to the market and competition, (4) studying product and brand image among consumers.

An important role in the analysis of existing products is auditor must determine what contribution range / line of products in total sales and total profit, and each line in the range and each product in the line. Thus the internal documents of the company (as sales and profits) identify which are the most profitable products, both in the range and in the product line. This analysis should be performed and total, and each distributor, geographic area or type of customer. Figure 1 shows graphically report sales and profits for the six products within a product line.
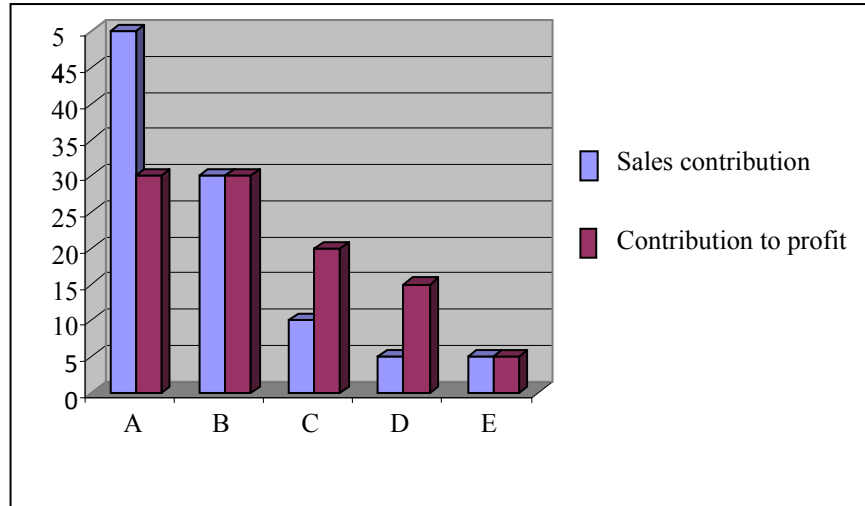
Source: Kotler, Ph.; Keller, K.L, Marketing Management, 13th edition, Pearson International Edition, p. 369

Figure 1. Contribution products in a product line total sales and total profit line

Thus, the product has a 50% share of total sales and 30% of total profit, while product B accounts for 30% of total sales and 30% of total profit. If these two items are then attacked by competing products may cause a sudden drop in profit, imposing close

monitoring and protection products A and B. On the other hand, the product E contributes only 5% to achieve sales and profit, so product manager should consider the option of removal. But if it has high potential for growth, then the decision will be to maintain the product portfolio.

It is recommended that this analysis be related to product life cycle analysis for products in the launch and growth phase requires much higher costs, their contribution to profit was lower than in the case of products adulthood.

Furthermore, all organizations are no products varies marginal rate of return, taking into account the total sales and promotion expenses, making the decision to keep or eliminate one of the products is difficult.

Kotler (1998) believes that a company's products can be classified into four categories:

- Commodities with high volume sales and high costs of promotion, so the marginal rate of return low;
- Complementary products role to help increase product quality, has a lower value of sales promotion expenses but not so with a higher marginal rate of return;
- Special products with low sales volume, but can be highly promoted or generate income as a result of associated services - delivery, installation and so on; Accessories with a high volume of sales, but poor promotion. This leads to a high rate of return, consumers tend to purchase them from the same place.

In analyzing the product, should be given attention and rotation of stock for each product, especially for slow moving products that affect the firm's total costs. In this analysis will take into account the seasonal nature of some products. An analysis focused only on sales and profit development does not provide a complete picture of products / product lines of which are recommended methods of analysis taking into account market developments and competitive situation.

Among the analytical methods used for this purpose are specified BCG method and product positioning map. or products. Analyzed products can be placed in the 4 quadrants corresponding to distinct BCG matrix. Products in quadrant "Question marks" is produced which acts on a fast growing market, however in terms of competition have a significant position. Their evolution is considered uncertain because it is during launch and need cash. Products "Stars" acts on a fast growing market and managed to become the market leader. As a result, contributes to the organization's annual business and improve its image. Products placed in quadrant "Cash cows" are products occupy a leading position in a market in a slow growth, stagnation or even decline, accounting for certain values of the organization, in that they provide liquidity to finance other products located in other quadrants. "Dogs" are products on the market to slow growth, stagnation or decline and failing to have leadership. They do not contribute to profit enterprise or to improve its image, considered products in declining stage of the life cycle. Since liquidity needs arises their maintenance or abandonment, but only after a thorough analysis of all aspects of economic and financial (ie their share in the total turnover of the organization).

An effective method of analysis and research of the product is the product - a separate component of market research, which signifies a diagnostic analysis, such as highlight both the strengths and weaknesses of the product line or range of

manufacturing. The research product can achieve its position relative to competing products based on the most important attributes. These attributes are set based on information from interviews and surveys conducted among consumers in order to investigate their opinion about the different product features and other elements of brand association. The importance attached to these items for the consumer is a significant element as product analysis.

Because the product or brand positioning was called by some marketing experts and "competitive placement" (Bruhn, 1999), the organization will expand the product range according with consumer demand using the map positioning. Positioning will be communicated to the target audience so that it can easily perceive the benefits of that product or brand. It is recommended to avoid positioning errors such as:
- Inefficient positioning, characterized by failure to identify clear benefits to consumers of the product or brand promoted;
- Confused positioning situation where the product image or brand is confused due to wrong communication messages transmitted;
- Excessive position when focus is mainly on a particular product or brand of the organization at the expense of other products and brands in its portfolio.

When using positioning maps chart will be positioning the angle between the axes is directly proportional to the percentage of client attribute importance. To determine whether objectives were met, positioning achieved compared to an ideal model, that the organization wants it for product or brand and thus determine the extent to which consumers perceive the product / brand seen in the way you want organization. This analysis is done by comparing the two graphs and mathematical models by calculating the areas of the two squares (Pelau, 2008). Way, as the surfaces of the two graphs tend to overlap with the product is positioned closer to the desired level.

Product audit not only aims to determine the position of a product in the market or within the organization but to determine which are the possible causes of its underperformance. Of methods that can be used for this purpose, may be mentioned:
- consumer opinion research on product characteristics and packaging, services that accompany the product;
- research customer complaints, the main source of information is this:
  - Stores - are the first units to which they are addressed customer complaints, as they provide information about the reasons for returning the goods;
  - Sales service - which provide the auditor with information about the causes of failure products;
  - Sales force is an important source of information for consumers is through direct contact with their complaints about the company's products, but also performed a comparative analysis of competing products;
  - Internet - is now a powerful source of information through various websites and discussion forums consumers express their opinion about certain products or services are benchmarking etc.
- research among experts both within the company and outside it;
- making visits to retailers to determine storage conditions and product presentation within the store.

The audit also produce, monitor and analyze the possibility of introducing new products and potential market their new product requiring significant investments that will be even bigger and riskier as the product is new and the market will be is introduced later. The causes of failure are often related to lack of research and a robust control system. The audit will follow as, risk analysis it generates lack of information in new product launch and potential lack of coordination between marketing and R&D department, it effectively represents an important barrier in the way of innovation.

3. BRAND AUDIT

As we know, consumers strongly associate the product with the brand name assigned to it. Brand, acorporală component of the product may constitute an important criterion in the decision to purchase. Consumers buy brands strongly supported by promotion rather than no-name products. Therefore, organizations have to invest in the business of brand image building products and carefully manage this portfolio of brands.

Brand audit aims therefore to periodically review brands under which the organization sells its products in the market, thus mark a decisive factor in choosing a product.

Use and brand management by organizations is today a necessity for at least two reasons, on the one hand gives brand identity products, product mix or organization and help to create an image on the other side of the consumer and the brand performs a distributor series of fundamental functions.

Trademarks analysis can be performed from two main levels: at the consumer level, when analyzing brand equity (*brand equity*) and power mark (*brand strength*) and the organization, when considering the value of the brand (*brand value*).

Brand awareness refers to the awareness of the brand (if known consumer brand) and its image (how consumers perceive the mark). Measure brand awareness of the brand in the consumer's mind and availability can be determined by studying the level of brand recall (*brand recall*) and recognition of its (*brand recognition*).

In the context of strategic planning, brand audit to find answers to questions about the brand's contribution to the financial value of the organization. The term used for this purpose is "*brand valuation*" (Mooradian et al., 2012).

In the measurement of brand image can be used Brand Asset Value analysis model developed by Young and Roubicam agency. This model proposes a brand image assessment based on five dimensions (Kotler & Keller, 2009):
- *Differentiation* - the extent to which a brand is seen as different from another;
- *Energy* - measures the significance of the mark at a time;
- *Relevance* - measuring the extent of attraction mark;
- *Assessment* - measures how well regarded and respected brand;
- *Knowledge* - assesses emotional and symbolic benefits of the brand.

The first three features - differentiation, energy and describe the relevance of brand strength, which can be assessed based on the future value of the brand. The last two features - the appreciation and knowledge creates brand status, and past

performance is an indicator of the mark. Based on the two criteria, marks can be classified into six categories (Kotler & Keller, 2009):

- new brand entrants who have power but are not known,
- undeveloped brands, which have very low values in all five criteria - are not supported in their development and hence does not pay;
- increasing trademarks or acting on niche markets characterized by low incomes but with great potential;
- market leaders are brands that bring significant revenues and have great potential;
- major brands that were being overtaken by competitors leaders bring significant revenues but have a low potential;
- eroded brands that are known but not have power, have low potential and bring low income.

Brand management thus becomes a complex problem for the organization because you have to choose appropriate strategies to build and strengthen those marks which are really valuable for development and to target consumers.

4. CONCLUSIONS

To achieve high performance, efforts should be directed towards knowledge organization existing business opportunities and realizing them as good.

At the managerial level there are a number of problems that can be solved through marketing audit. Because marketing audit is a valuable tool for assessing and controlling marketing activities carried out within the organization, then can be analyzed through its approach issues related to the organization of the market, the products offered by the market and efficiency marketing actions and tactics implemented in the reference market.

Analysis of micro and macro organization, marketing objectives and strategies are specific steps of strategic marketing planning.

The organization initiated a marketing audit to correct any failures between objectives and strategies appropriate marketing mix and to draw lines in marketing future action.

Therefore, the the product policy, product and brand audit is to analyze the performance achieved by the product, its position relative to other competitive products on the market and development potential of existing product portfolio correlated with the overall objectives of organization. It is recommended that this analysis be performed riorously by specialists from outside the organization who can capture an objective view of marketing activities undertaken.

Applying concepts related to strategic planning, competitive advantage, analysis methods applied product portfolio will contribute substantially to the success of marketing audit for the purposes of identifying strategic directions for action to be pursued by the organization.

Need for product audit is supported by the competitive context in which the organization operates. Orientation competitors business requires careful analysis of competitive strengths held by them at the product level. Knowledge of issues related to the strengths and weaknesses of competing products into a significant managerial

competence aimed to determine success in the field. Development of its product range or restriction are marketing decisions to be taken only after careful product audit conducted. All the information submitted as a result of the product audit will be based of marketing strategies implemented by the organization.

Therefore, creating a comprehensive marketing audit and efficient the product policy analysis involves its correlation with the other components, so the market organization - customers, competitors, socio-economic factors etc.- and with the objectives and strategies of the three levels of strategic planning because although product policy is managed by the organization, product market success depends on circumstantial situation it is released or is at any given time.

Finally should be mentioned, the importance given to product audit specialists, their ability to recognize the achievement of effective analysis and description of relevant marketing tactics.

In the context presented, the article aims to present several methods which can be assessed organization and performance of the product in the market and the organization, which is very helpful both as theoretical basis for developing science of marketing audit and in practical terms, for all those who want to conduct an audit of the product policy.

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PREDICTIVE ANALYSIS SOFTWARE FOR MODELING THE ALTMAN Z-SCORE FINANCIAL DISTRESS STATUS OF COMPANIES

ILIE RĂSCOLEAN, REMUS DOBRA, GABRIELA CORINA SLUSARIUC [*]

ABSTRACT: *Literature shows some bankruptcy methods for determining the financial distress status of companies and based on this information we chosen Altman statistical model because it has been used a lot in the past and like that it has become a benchmark for other methods. Based on this financial analysis flowchart, programming software was developed that allows the calculation and determination of the bankruptcy probability for a certain rate of failure Z-score, corresponding to a given interval that is equal to the ratio of the number of bankrupt companies and the total number of companies (bankrupt and healthy) interval.*

KEY WORDS: *scoring method; bankruptcy risk; predictive flowchart; LabView software.*

JEL CLASSIFICATION: *D50; G32.*

1. INTRODUCTION

An organization may have temporary or occasional difficulties caused by the incapacity of covering claims within a major or accelerate payments in a period of rapid increase in activity. In this case, payment difficulties arise as an expression of a time inconsistent that doesn't affect the company image. Simple solutions can allow crossing and restore the continuity of payments difficulties: obtaining additional terms from suppliers, deferred debts, obtaining short-term loans.

Permanence difficulty of paying obligations is the expression of a structural economic and financial fragility, which can generate restricting, reducing the number

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of employees, management restructuring or very severe cases and loss of the business. The method used by the financial media for their own credit assessment method is "scores" based on the "Z", which allows rapid positioning bankruptcy risk posed by borrowers.

The scoring method calls for consideration of relevant economic and financial indicators, with great power of synthesis of economic phenomena both from a static and dynamic point of view and the importance weight of selected indicators. On this basis and on mathematical relationships between indicators there can be determined a total score, according to which the company in question is assessed in terms of its viability in the competitive environment.

Following the application of the discriminated analysis, the Z score is obtained for each company, which is a linear function of a set of ratios. The distribution of different scores allows distinguishing between „healthy" enterprises from enterprises in difficulty. Z score attributed to each enterprise is determined by means of the following function:

$$Z = \alpha_1 x_1 + \alpha_2 x_2 + \ldots + \alpha_i x_i + \ldots \alpha_n x_n + \beta \qquad (1.1)$$

where: α_i – represents ratios involved in analysis;
x_i – percentage coefficient of each ratio.

2. ALTMAN BANKRUPTCY PREDICTION MODEL

In the financial and economic methods of analysis, the function Z is considered as part of an overall assessment, analysis and critical appreciation supplemented with the following elements: business management, financial management, reporting accountants, relations with creditors, media statements; conditions under which the activity, and so on.

Model		Variables	Acronym	Financial rates/Z score
ATMAN Model	Stock exchange listed companies	Working capital	**WC**	*X₁: Net liquidity assets relative to total capitalization (X1=WC/AT)*
		Total Assets	**AT**	*X₂: Cumulative profitability in relation to total capitalization (X2=RE/AT)*
		Retained earnings	**RE**	*X₃: True productivity of the firm's (X3= EbIT /AT)*
		Earnings Before Interest and Taxes	**EbIT**	*X₄: Gap at which assets can decline in value before they are exceeded liabilities (X4=MVDLT)*
		Market value equity	**MV**	*X₅: The ability of a firm's assets to generate sales (X5=Tov/AT)*
		Debts On Long Term	**DLT**	*$Z_{Al} = 1,2 \cdot X_1 + 1,4 \cdot X_2 + 3,3 \cdot X_3 + 0,6 \cdot X_4 + 0,9 \cdot X_5$*
	Stock exchange unlisted companies	Turnover	**Tov**	*$Z_{Al} = 0,717 \cdot X_1 + 0,847 \cdot X_2 + 3,107 \cdot X_3 + 0,42 \cdot X_4 + 0,998 \cdot X_5$*

In economic theory and practice there were several developed analysis models based on score function of which we shall approach Altman model, and investigate their suitability for different types of companies. Following the customization model of bankruptcy risk ratios, further is treated the Altman model which use the score technique and are a five rates depending function, as shown in Table 1.
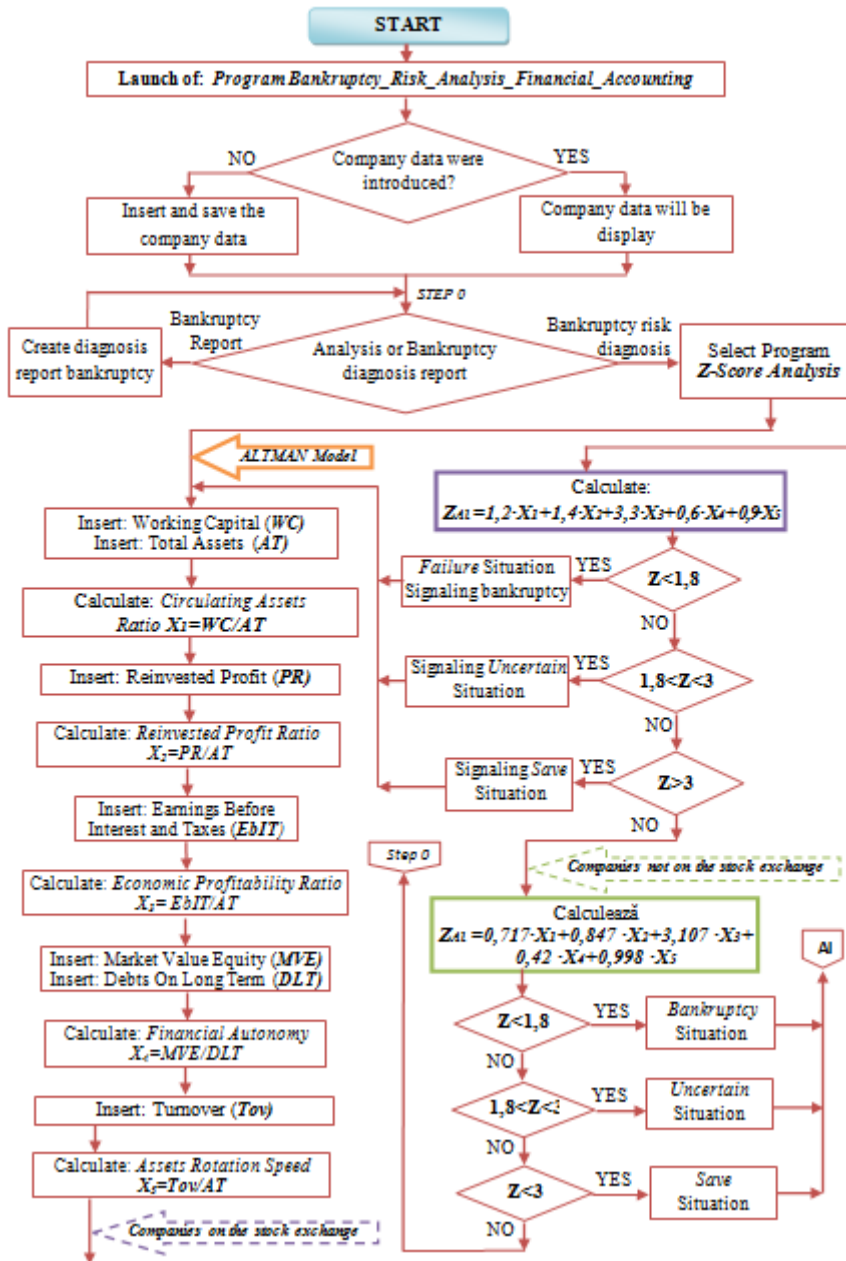

Figure 1. Risk of bankruptcy prediction flowchart using Altman Z-Score

The following is an example of creating a synthetic flowchart analysis and of bankruptcy risk prediction, which accurately models a method belonging to Altman analyst. The diagnosis flowchart sequentially travels through the programmed steps, in order to calculate the bankruptcy risk indexes required by the chosen method.

Also, in the prediction flowchart were added subroutines dedicated for interpretations of the obtained results, as shown in figure 1. All programs consist in a few modules linked between them, the end of one representing the start for another.

This bankruptcy risk prediction flowchart is based on some rates (indicators) determined statistically weighted to certain coefficients in a mathematical model can determine some likely future health of the company. Based on this risk analysis algorithm a software can be develop to allow the initial data entry company to be analyzed, then from 0 label program allows bankruptcy risk analysis itself or create a risk analysis report bankruptcy which can be printed and made available to interested persons. After selecting, the scores analysis program will introduce all the variables required by the Altman method, taking into account the typical firm analyzed of the bankruptcy risk. Depending on the outcome of bankruptcy Z index, the program will display a financially favorable or less favorable situation.

Nr.	Variables	Acronym	Analyzed Period		
			First year	Second year	Third year
1.	Total Assets	AT	173.893.878	189.137.161	211820738
2.	Turnover	Tov	121.495.052	136.028.515	163497747
3.	Debts On Long Term	DLT	14.506.999	4434342	1825211
4.	Working Capital	WC	104.751.871	108154522	126.224475
5.	Earnings Before Interest and Taxes	EbIT	11.863.805	12.424.687	19678661
6.	Retained Earnings	RE	16.077.551	17576961	23724855
7.	Market Value Equity	MV	77.440.000	194898000	438976000

Table 2. The company's real data

This method is a tool for detecting risk of bankruptcy for a company and its implementation requires observing a group of companies consists of two distinct groups: a group of companies with financial difficulties and a group of companies without financial problems. For each of the two groups established a set of rates and then determines the best linear combination of rates that distinguish the two groups of firms.

3. LABVIEW SOFTWARE FOR FINANCIAL BANKRUPTCY RISK DIAGNOSIS

In the modeling stage, computerization facilitates customization of specific diagnostic analysis model based on information available at this stage. According to these criteria analysis invalidates the model considered irrelevant or supplemented with other criteria analysis not accounted for in the specific model. In this chapter we will determine the company's bankruptcy risk taking into account the rate method. This method results in determining a score function that considers the company's financial difficulties in a period of three years analyzed.

The main information source is the financial performance analysis of profit and loss account plus the balance information. We analyze the probability of bankruptcy using the Altman method and in table 2 are presented the analyzed company real data, whereby software designed to calculate the index Z. From figure 2 it is observed that Z score for analyzed company obtained is 2.95 at the end of the first year analyzed (smooth bankruptcy), the company has a good financial standing, posing a risk of bankruptcy less than 10%, and the trend is widening its favorable situation.
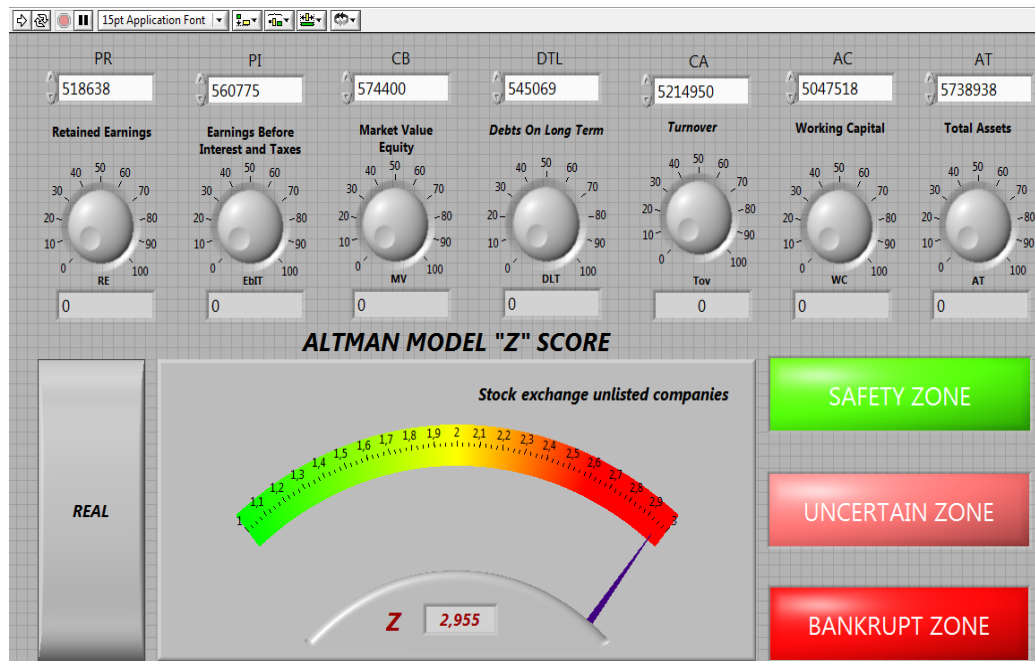

Figure 2. Graphical interface of the preventive diagnostic software based on *Altman model*

To perform this analysis should launch the LabVIEW graphical program designed, developed under financial forecasting algorithm described in Figure 3.
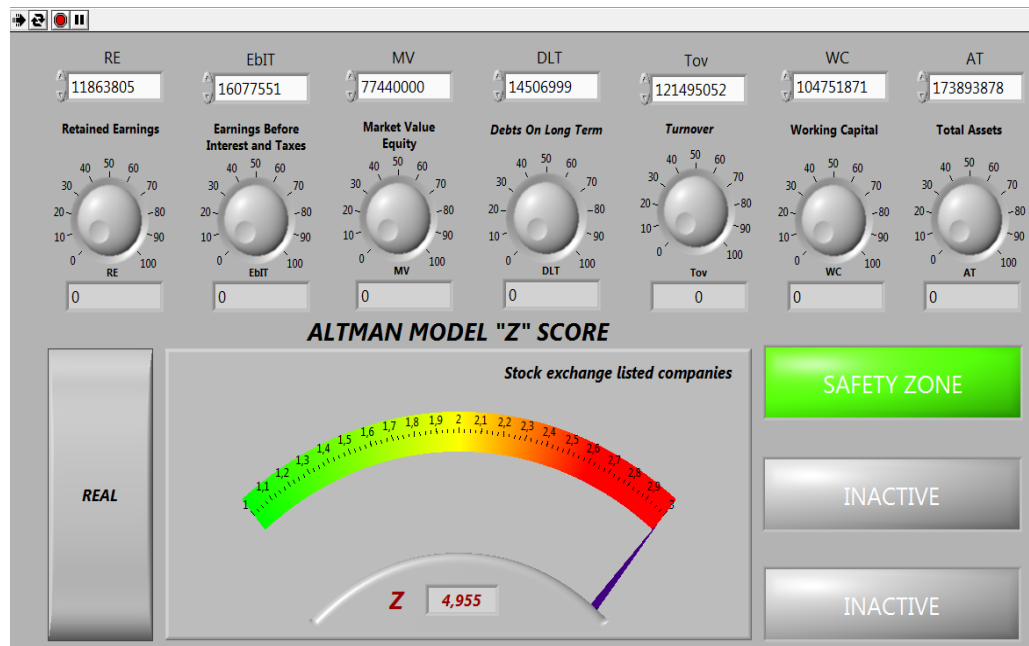
Figure 3. Graphical interface of the preventive diagnostic software based on Altman model (First year)
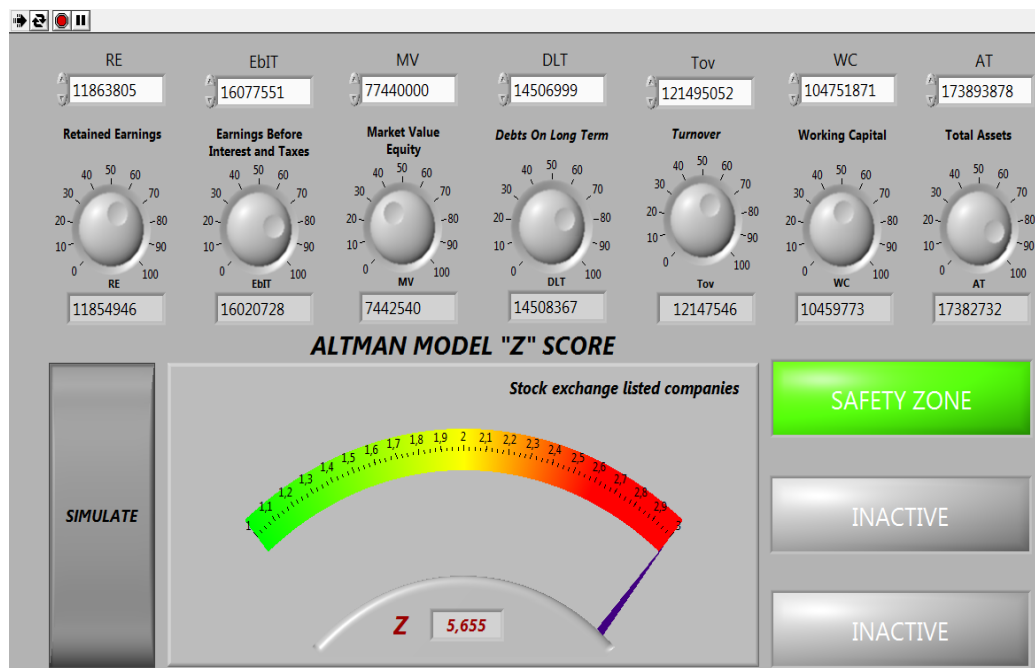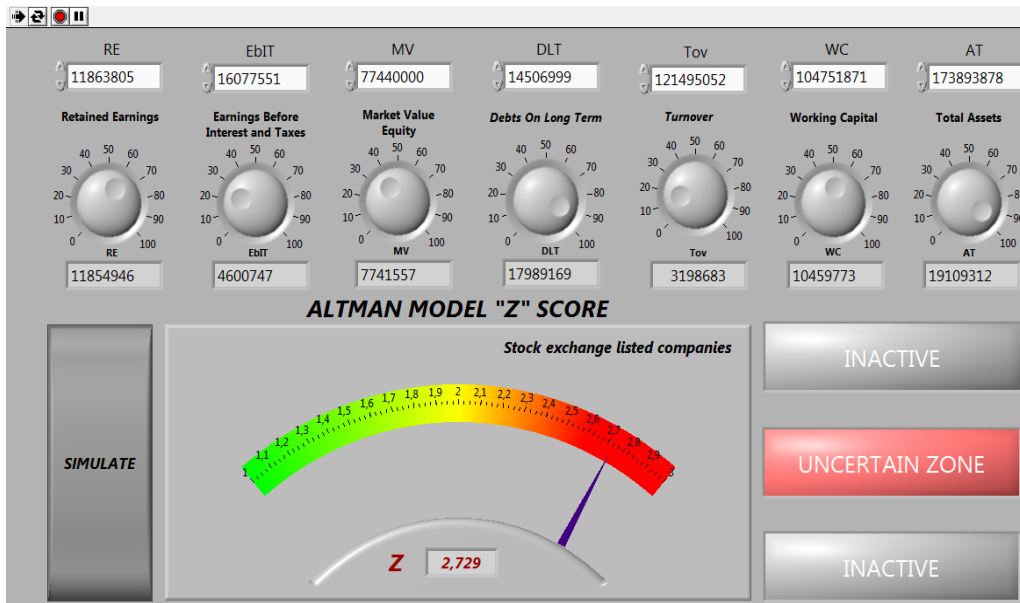

Figure 4. Graphical interface of the preventive diagnostic software based on Altman model (First year – Simulated model 1)

We have used actual values taken from the balance sheet of the company, i.e. the Profit and Loss Account shall be entered in the top of the program. At this stage for the program to automatically calculate Z score index must be select the "Real". Interface shown in figure 4-6 is a software simulation designed, by pressing the "Simulate" each of the 9 variables can be varied between a minimum and maximum n imposed.

Figure 5. Graphical interface of the preventive diagnostic software based on Altman model (First year – Simulated model 2)

For example in the figure below is simulated a situation where personal expenses wave grow to 130 million, in which case the probability of bankruptcy risk is between 10 and 30%.

The models that are considered in this paper are developed by using specific statistical techniques, namely univariate and multivariate approaches or step-wise multiple discriminate analysis. Step-wise multiple discriminate analyses gives weight to the system of financial ratios used in order to differentiate or discriminate failed enterprises from successful enterprises that are being analyzed. The calculate Z ratio for Altman model is displayed in the center of graphical interfaces using Numeric Indicators. Using the developed graphical program the operator will be able to insert the company variables in the static values. By pressing the "Start" button the program allows modification of these variables between a minimum and a maximum value.

Financial statements may be issued in various forms (in addition to those covered by the legislation in force) and are usually meant to emphasize only certain aspects of the overall financial situation all these purposes based on certain rates and ratios are calculated as that it is possible to compare the different periods of business activity to highlight its trends over time and that these results, obtained in the form of

rates to be comparable with results of other economic entities competing in order to determine the position or its market value.
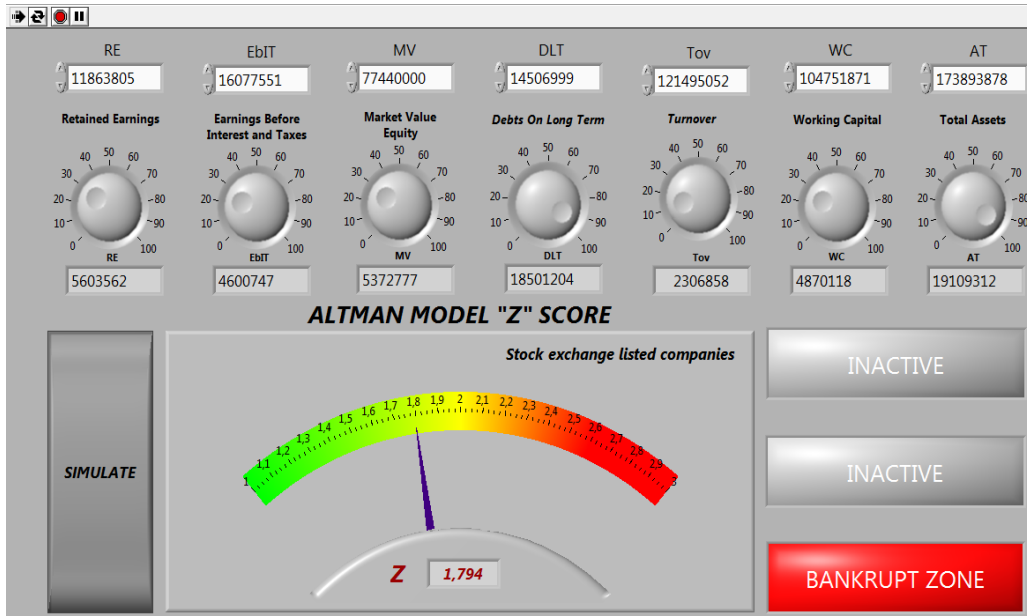

Figure 6. Graphical interface of the preventive diagnostic software based on Altman model (First year – Simulated model 3)
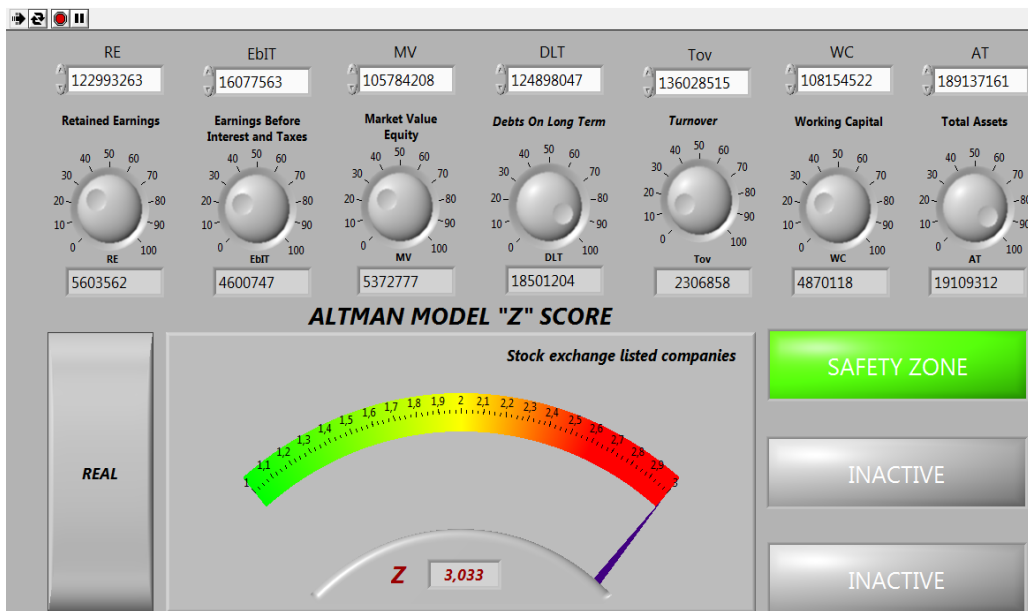

Figure 7. Graphical interface of the preventive diagnostic software based on Altman model (Second year – Real model)

Information that we provide financial analysis are very important and suggestive administrators considered economic entities so that they are able to take preventive measures to improve or maximize profitability by reducing business activity that possible unprofitable activities and balance and financial stability. Detailed analysis, financial statements and information upon which they draw their limited access, which is why speculation appear OTC options, are of particular interest for brokers, and investors tend to transform financial potentialities capabilities economic exercise so that funding be mutually beneficial and low risk.

4. CONCLUSIONS

All analysis models of the bankruptcy risk have at their basis a score function according to which it is determined with approximation whether the company would get bankruptcy or would have performing economic results, in a period immediately following the analysis. The manner used is the statistical technique of analyzing the financial features of normally functioning societies and of the companies with difficulties in economic and financial administration. A company's capacity to adjust the obligations in time is estimated according to specific economic and financial conditions in which they operate. In close correlation with economic risk and financial risk falls to enterprises bankruptcy. Financial risk is a function of debt ratio, financial risk depends on the ratio between fixed costs and variable costs range. Generally speaking knowledge of certain risk rates allows detection of an enterprise failure.

In the paper was modeled a main method of analysis and prediction of bankruptcy risk in using Z-Score Altman method. For bankruptcy risk identification a project was synthesized in order to carry out real or simulated data company variables. A Z-Score prediction system on Altman model was developed by using LabView graphical program. By developing the principle of virtual programs in economical systems, we are opening new opportunities limited by the imagination of the application architect, in order to realize intelligent instruments capable to simulate and to analyze data concerning the prediction of bankruptcy risk. Based on the reasoning that permanently maintain solvency appears as a major constraint, we can conclude that a correct and complete bankruptcy risk diagnosis flowchart, allows removal of the risk of bankruptcy and implicitly avoiding the enterprise disappearing.

Current methods presented in the economic literature used in enterprise level risk analysis uses a number of strategies that have been crystallized in several models Diagnostic and bankruptcy risk analysis: static analysis based on patrimonial balance, functional analysis based on functional balance, dynamic analysis, strategic analysis, analysis of scores etc. Since financial results "degrade" very quickly, is increasingly obvious need for more accurate information about the future, the risk of bankruptcy. As a practical response to these requirements, researchers have been concerned with developing a method for predicting the risk of bankruptcy, called scoring method, which is undoubtedly traditional enrichment analysis by installments.

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SOCIAL-ECONOMIC ASPECTS REGARDING EMPLOYMENT AND ACTIVITY OF HIGHER EDUCATION GRADUATES FROM THE UNIVERSITY OF PETROŞANI AND AT NATIONAL LEVEL

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ABSTRACT: *The paper presents the problems met by the graduates of the bachelor program in Petroşani University and at national level, promotion 2009, in looking for employment and finding a job.[*] The correlation/lack of correlation between the academic offer of professionals and demand on the market is also observed. The demand is much under the offer, the employment market absorbing in the respective professional education only 15% of the graduates at institutional level and 27% at national level.*

KEY WORDS: *workplace; competency; work contract; profession; salary; property.*

JEL CLASSIFICATION: *I23*

The aspects analyzed in this paper are comparatively shown between the appreciations of the graduates of the University of Petroşani and those at national level.

The situation after graduation is different between the two batches of graduates, regarding employment in a corresponding field of education, those at national level are more apt to be employed in places where they might have an activity corresponding to their education in the bachelor study period (Figure 1). A little more

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than a quarter managed to find a corresponding job, while only 15% of those at institutional level managed to put to good use the accumulated competencies.

Meanwhile, the share of those employed in the field is rather small, the graduates being forced to continue their former activity or to look for a new field of employment.
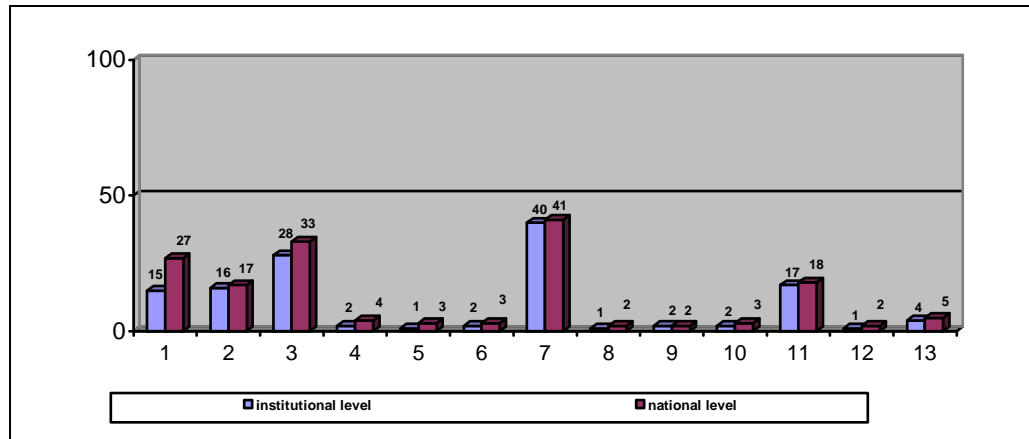
Figure 1. Situation after graduation (%) (multiple answers)

1 – my job corresponds to my licence program
2 – I am employed in a different job
3 – I continued my former activity
4 – I started my own business
5 – I performed a stage of practical activities out
6 – I started to work as volunteer
7 – I attended master or other post-graduate courses
8 – I am PhD student
9 – I am on maternal leave
10 – I used to be a housewife
11 – I looked for a job but I couldn't find any
12 – I went on along journey
13 – other

A significant share of the respondents are either employed in the field, or did not succeed in getting a job, or continued their master or other post-graduate studies .

Table 1 shows the situation per fields of study.

Table 1. Estimation of development of competencies after graduation, per fields of study (%)

Development of competencies	Exact sciences		Social and political sciences		Economic sciences		Engineering sciences	
	I	N	I	N	I	N	I	N
In very small degree	--	2	--	1	--	1	--	1
In small degree	--	5	4	4	7	4	5	4
In adequate degree	9	19	13	18	28	20	25	22
In great degree	27	36	38	33	28	33	37	35
In very great degree	64	38	45	44	37	42	33	38
Total	100	100	100	100	100	100	100	100

I – institutional level
N – national level

Most of the subjects - at both levels - expressed their desire to find a job, already before graduation and then afterwards, this preoccupation being almost abandoned in the period of their studies. One third of those at institutional level and one fifth of those at national level resigned from one reason or other, to keep looking for a job (Figure 2).
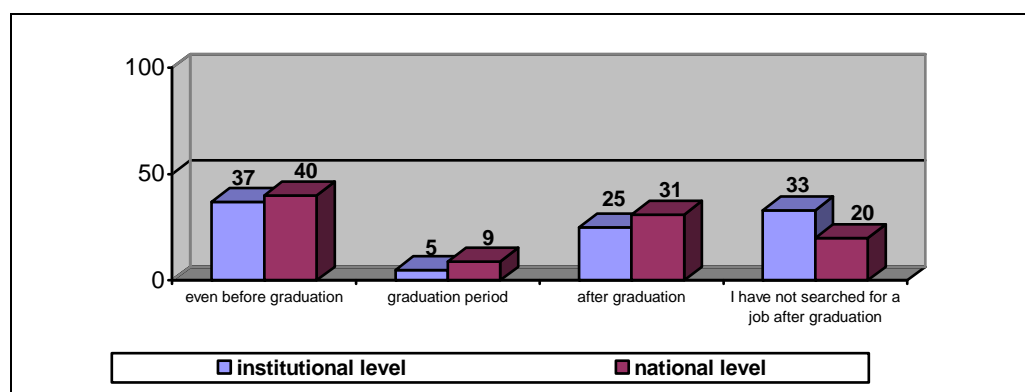
**Figure 2. Beginning of looking for a job at institutional and national level (%)**

The range of methods used in looking for a job after graduation was very wide, but the frequency of approach was very different (Figure 3). Between the institutional and national level there are no special discrepancies regarding the method used, the greatest being 9% in favor of national level in using online job portals. As a matter of fact, this method is on the first place at national level (38%), followed by family, friends or connections assistance (37%), and submitting applications for a vacant position (36%).

At institutional level, the most frequently used methods were:

- application for a vacant position 37%;

- assistance from family, friends, connections 37%;
- online portals for jobs 29%.

A significant share was contacting employers, used by one quarter of the graduates at both levels
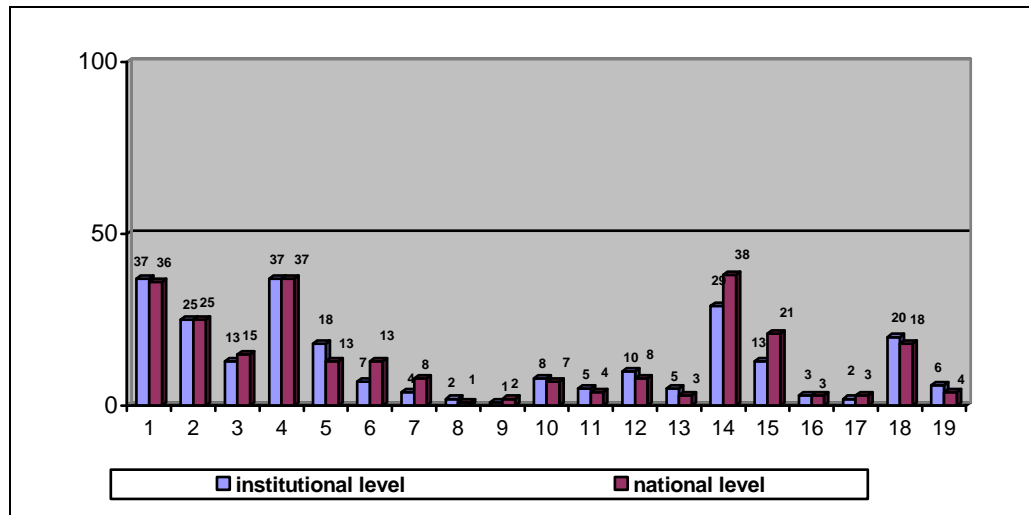
Figure 3. Modalities used to find a job after graduation, at institutional and national level (%, multiple answers)

1 – I submitted an application for a vacant

2 – I contacted employers from my own initiative, without knowing of any available job.

3 – I was contacted by an employer.

4 – with the help of the family, friends and connections.

5 – by public employment agencies(ANOFM).

6 – by private recruitment and placing agencies.

7 – by County School Inspectorate.

8 – by employment during academic studies.

9 – with the help of the university.

10 – by means of online professional social networks.

11 – by means of online social networks.

12 – by means of discussion groups and e-mail lit on the internet.

13 – by means of blogs.

14 – by means of portals for online jobs.

15 – by means of work fairs.

16 – I work for family business.

17 – I started my own business.

18 – I work for the same employer as before graduation.

19 – other

Per field of study, at institutional level, the situation is the following (Table 2): Exact sciences:

- submitting application form 56%;
- online job portals 33%.

Political and social sciences:

- application for employment 40%;
- with the help of the family, friends or connections 37%.

Economic sciences:

- with the help of the family, friends or connections 48%;
- application for employment 35%.

Engineering sciences:

- application for employment 36%;
- online job portals 33%.

The situation at national level is almost identical.

Table 2. Modalities used to find a job after graduation at institutional level, per fields of study (%, multiple answers)

Modalitie used to find a job	Exact sciences	Social and political sciences	Economic sciences	Engineering sciences
I submitted application form for a vacant job	56	40	35	36
I contacted employers of my own initiative, without knowing if there were vacant jobs	22	11	24	30
I was contacted by an employer	0	11	10	17
With the help of family, friends, connections	22	37	48	32
By public employment agencies(ANOFM)	22	9	15	22
By private recruitment and placement agencies	0	3	6	9
By County School Inspectorate	22	6	4	1
By employment during academic studies	0	0	3	2
With the help of the university	0	0	0	2
By professional social networks (ex. LinkedIn)	11	3	10	8
By online social networks(ex. Facebook)	22	3	6	4
By internet discussion groups and e-mail lists	0	11	6	13
By blogs	0	3	7	4
By online job portals	33	26	25	33
By job fairs	11	6	15	13
I work for family business	0	0	4	4
I started my own business	0	0	0	4
I work for the same employer as before graduation	11	14	24	20
Other	0	11	6	6

The most efficient method was, for both levels, the "relational capital" (family, friends, connections), credited by one fifth of the respondents, followed by "application for a vacant job" (Figure 4).

That is, not only at the level of perception, but in term of efficiency as well, the "relational capital" is still on the first place in finding a job, in detriment of competency. It is true, that mentalities change slowly, but in regard to the aspect

referred to, one can say that one cannot notice at least a slight attenuation. In Romania, democracy is written in theory, but in practice it is proscribed.
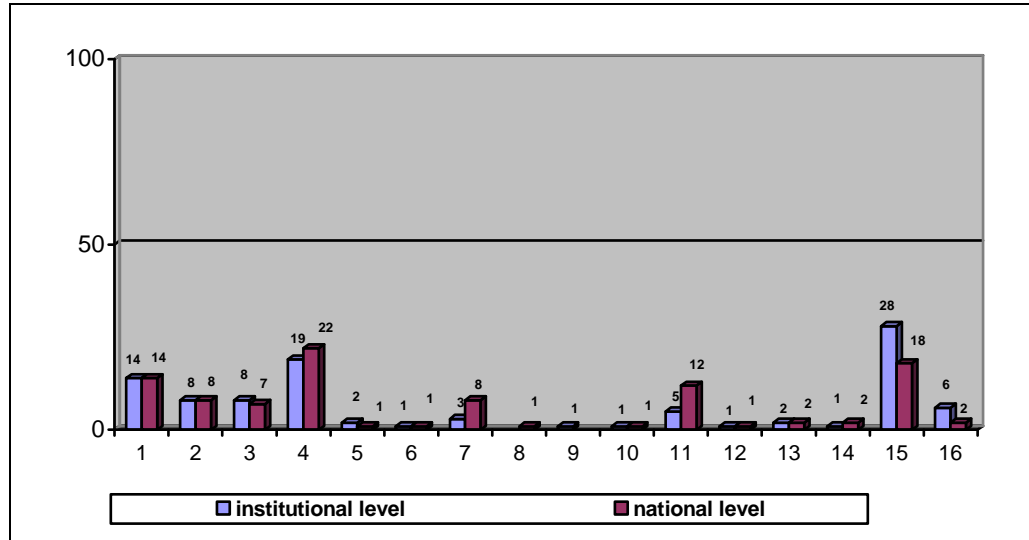
Figure 4. The most efficient method of getting a first job after graduation, at institutional and national level (%)

     1 – I applied for a vacant job
     2 – I contacted employers of my own initiative without knowing of an available job
     3 –I was contacted by an employer
     4 – With the help of family, friend, connections
     5 – by public employment agencies(ANOFM)
     6 – by private recruitment and placement agencies.
     7 – by County School Inspectorate
     8 – with the help of the university
     9 – by online social networks
     10 – by internet discussion groups and e-mail lists
     11 – by online job portals
     12 – by job fairs
     13 – I work for the family business
     14 – I started my own job
     15 – I work for the same employer as before graduation
     16 – other

At institutional level, by fields of study (Table 3), the graduates of exact sciences did not benefit from relational assistance, this being major for engineers and economists. The university assistance at institutional level is non-existent, so is at national level (1%). If beginning with this study, the universities seem to be interested in the situation of the graduates, they may find a way to help with their insertion in the job market.

More than half of the graduates (who found jobs) were employed in the first year after graduation (2009) at both levels (54% at institutional level and 58% at national level, respectively), the others in the following year.

Table 3. The most efficient method of getting the first job after graduation, at institutional level by study field (%)

The most efficient method of getting a first job	Exact sciences	Social and political studies	Economic sciences	Engineering sciences
I applied for a vacant job	40	26	11	11
I contacted employers of my own initiative, without knowing of an available job	0	9	5	10
I was contacted by an employer	0	9	7	9
With the help of family, friends, connections	0	9	20	22
By public placement agencies(ANOFM)	0	0	5	0
By private recruitment and placement agencies	0	0	2	1
By County School Inspectorate	40	4	2	1
By online social networks(ex. Facebook)	0	0	2	0
By internet group discussions and e-mail lists	0	4	0	0
By online job portals	0	4	2	8
By job fairs	0	4	0	1
I work for family business	0	0	5	1
I started my own business	0	0	2	1
I work for the same employer as before graduation	20	22	35	25
Other	0	9	2	9
Total	100	100	100	100

The motives/criteria on which they were employed are shown in Figure 4, where it is seen that the graduates assume the main role, by their personality, in getting a job, besides other criteria as well, among which the field of study and the program/specialization, which tend as value towards "in a great degree". Previous work experience was also important, as well as the reputation of the university. if the personality of the graduates is on the first place in their personal success, the role played by the program of study in the structuring of the personality should also be taken into consideration.

It is interesting to notice that the most efficient method in getting a job after graduation, for both batches of subjects, was "with the help of family, friends, connections", which we conversed into "relational capital", as a paradox, as success criterion in obtaining a job is less important.

What is difficult to understand, and has to give food for thought, is that some basic aspects such as the theme of the projects developed during the study period, the theme of the bachelor graduation paper, and more surprisingly, the grades obtained along the period of the study, mattered less in getting a job. This evaluation - in fact under-evaluation – can lead to a certain demobilization in obtaining good results during the studies.

As it is seen from the data in Figure 5, there are no significant differences between the two levels - institutional and national - regarding the evaluation of criteria that led to obtaining a job.
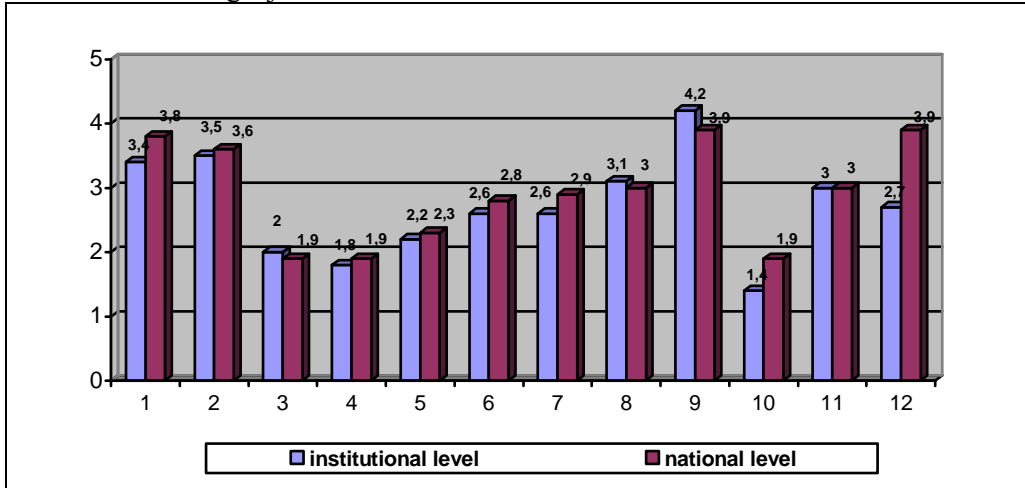

Figure 5. Criteria in obtaining a job at institutional and national level (arithmetical mean)

1 – field of study
2 – specialization/program of study
3 – theme of bachelor graduation paper
4 – theme of projects made during the studies
5 – grades obtained along the study period
6 – university reputation
7 – reputation of the faculty/department
8 – precious work experience
9 – my personality
10 - experience abroad
11 – my relational capital
12 – other

By field of study, we notice the following aspects:
At institutional level:
Exact sciences:
- on the first place is the graduate's personality (5), followed by the relational capital (4);
- not significant:
  - theme of the bachelor graduation paper
  - theme of projects
  - grades obtained along the study period
  - reputation of the university and faculty/department
Social and political sciences:
- on the first place is the graduate's personality (4,2), followed by the specialization/program of study (3,5);

- on the opposite side there are:
  - experience abroad
  - theme of the bachelor graduation paper and projects along the years of study

Economic sciences:

- personality of the graduate is still on the first place (4,5), followed by the specialization/ program of study (3,8);
- not significant are experience abroad, theme of project an grades obtained along the years of study

Engineering sciences:

- personality stays unbeatable as well as in other fields (4), followed by the area of study (3,4) an specialization (3,4);

At national level:

Exact sciences:

- it is the only situation for both levels, and all four domains, where the personality is no longer on the first place, being substituted by the field of study (4,1) and specialization (3,9). Without being judgmental, this s the situation that "should be the right one";
- As in institutional level, experience abroad and the theme of the bachelor graduation paper and project are almost totally unimportant.

Social and political sciences:

- on the first place is personality (4), followed by study an specialization (3,4);
- the same criteria mentioned for other domains are poorly estimated.

Economic sciences:

- on the first places are personality (4,2), followed by fields (3,6);
- discredited are the theme of the bachelor graduation paper, the theme of the project and experience abroad.

Engineering sciences:

- personality was "heavily weighed" (4), followed by field (3,8) and specialization (3,6);
- appreciated in a "small degree" are experience abroad, the theme of the bachelor graduation paper and projects.

Parallel jobs have only 9% of the graduates at institutional level and 7% at national level.

As far as the type of the work contract is concerned, at the first employment after graduation, for both levels, contracts for undetermined period are the most.

The situation stays the same in the field of study as well, no significant discrepancies being noted at both levels.

The share of the other situations is insignificant (Figure 6).
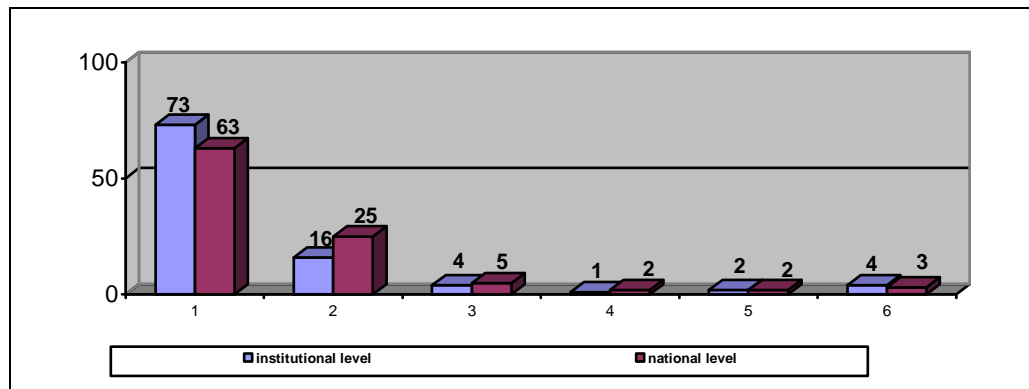
Figure 6. Type of work contract at institutional and national level, after graduation of the study program (%)

1 – for undetermined period
2 – for determined period
3 – without contract
4 – free-lancer
5 – own business
6 – other form of contract

Figure 7 shows that there is a relative balance regarding brute income of employees at the two levels, the most significant being in the range of 1001-1500 lei (in favor of the national level).
        Joining the two income ranges, it results that:
- up to and including 1000 lei approximately one third of the graduates are found for each level;
- between 1001-2000 lei, the institutional level has a share of 39%, and the national one 47%;
- up to and including 2000 lei approximately three quarters of the graduates are found.
        One can notice a rather low brute, as well as net income. (Figure 8)
        Thus :
- almost half of the graduates have up to and including 1000 lei (both batches);
- one third at institutional level and 40% at national level benefit of sums in the range of 1001 and 2000 lei;
- the share of those who gain more than 2000 lei is rather small, with the specification that those at institutional level are 5% more than those at national level.
        It is beyond any doubt, that more than half of the graduates employed have financial difficulties, not to mention those who have no jobs whatsoever.
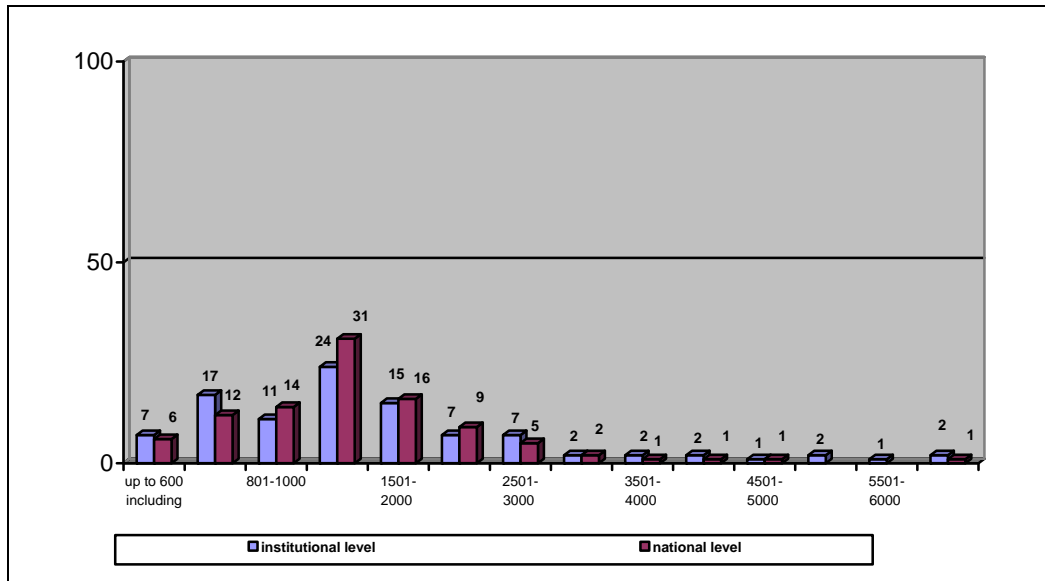
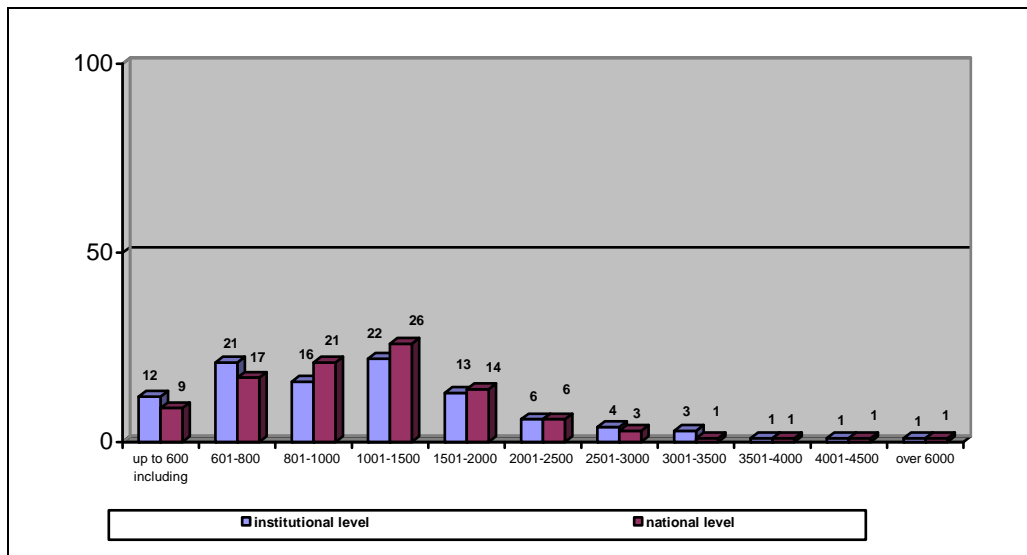**Figure 7. Brute income at the first job after graduation (%)**

Figure 8. Net income at the first job after graduation (%)

The conclusion is that competencies acquired in the years of study are helpful for the graduates even if they do not work in the domain they were prepared for. (of course not in the same degree as if they worked in the field).

And if we recall self-appreciation (own personality), which played the first part in the criteria of employment, then we should emphasize the role of the study program in the structuring/organizing the personality.

The form of ownership of the company/organization where the present job is found (Fig. 9) is both at institutional and at national level, mostly private, with the specification that the share at national level is 13% higher than the institutional level (56% and 43%). Almost one quarter of the employees work in budgeted public institutions.

At a much lower percentage are the public institutions with mixed funding(budget and other sources) and the forms with mixed capital (state and private), with the specification that these attract graduates two and three times more at institutional and national level, respectively.
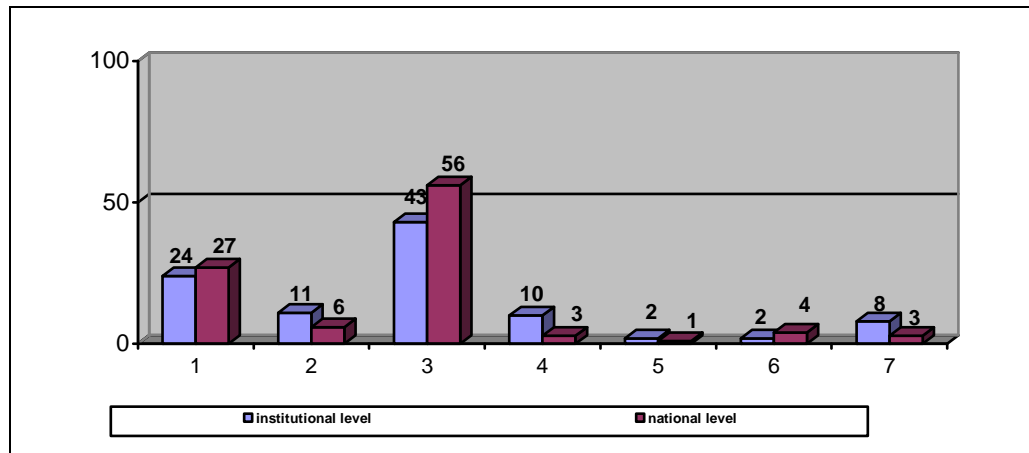
Figure 9. Company/organization form of ownership (%)

1 – budget finance public institution
2 – mixed financed public institution(budget and other sources)
3 – totally private company
4 – company with mixed capital(state and private)
5 –NGO or religious foundation
6 – own company
7 - other

CONCLUSIONS

The following conclusions can be drawn from the analysis of data and interpretation of results, from the entire study performed:

- at institutional level, almost half of the graduates have bachelor studies in engineering studies, one third in economic field and much less in social sciences and exact sciences. The results are normal, considering that there re three faculties functioning within the University of Petroşani: two with engineering profile and a faculty of science, where economic studies are dominant;
- the financing form of the study program is distributed in approximately the same way for the two levels – national and institutional - , with the specification that financing from the budget is less significant for the institutional level;

- out of the graduates that attended paid studies, both at institutional and at national level, the highest shares – more than two thirds – are found in economic sciences, and less in engineering studies;
- the 2009 promotion graduates that participated in the study finalized their studies almost entirely in the standard period, only 5% and 6%, respectively, delayed their study, the main reasons being, at both levels, failed exams and their activity at the workplace;
- as far as teaching-learning method evaluation is concerned, for both levels, the most appreciated method is the professor-student conversation during the course/seminar, with a slight superiority at institutional level, and the least appreciated, also for both levels, the participation in research projects;
- the situation after graduation is different for the two batches of graduates, regarding employment in an adequate domain of study, those at national level benefiting in a larger degree of having activities according to their specialization during the bachelor studies program, they managing to find adequate jobs a little more than one quarter, while at institutional level, only 15% managed to put to good use the acquired competencies;
- the desire of finding a job was manifest, for most of the subject – at both levels – already before graduation, and then after graduation, this preoccupation being almost abandoned during the studies. One third of those at institutional level and one fifth of those at national level, from one reason or other, gave up looking for a new job anymore;
- the duration of looking for the first job after graduation, for the two batches of graduates, is similar, being around 6 months, before and after graduation;
- the range of modalities used to find a job after graduation was very extended, but the frequency of approach is very different. Between the institutional and national level there are no significant differences regarding the method used, the greatest being 9% in favor of the national level in using online job portals. Other frequently used methods were submitting applications for vacant jobs and help from family, friends, connections;
- assessment regarding criteria on which they were employed points out that the graduates assume the main part in getting the job, due to their personality, besides other criteria as well, among which the domain of their study and the program/specialization. Previous work experience also played a part, as well as the reputation of the university;
- the present situation of the job is almost identical for both levels – institutional and national – approximately two thirds of the graduates being employed(including their own employer or in other stages of education), an a little more than 40% were attending post-graduate studies (master, PhD), and one fifth were looking for a job.
- the beginning of the activity at the present job, for those employed at the moment the study was performed, was mostly, for both levels, in the year of graduation and the next (2009 and 2010). In this period they started their activity for a little more than one third at institutional level (30%) and more than half at national level (55%);

- there are no significant differences – for both levels – between the present type of contract and that of the first job after graduation (in most of the cases being a contract for undetermined period); the number of working hours per week for the present job is approximately the same as for the first job after graduation (40 hours);
- this explanation is valid for the brute and net income at the present job compared to the first job after graduation. There is however a slight improvement of the financial situation, in general, in the sense that the share of those with a net income of more than 2000 lei increased by 4% for the institutional level and by 10% at national level;
- the form of property of the company/organization of the present job is mostly, both at institutional and at national level, totally private firm, with the specification that the hare at national level is higher by 13% compared to the institutional level (56% and 43%). Approximately one quarter of the employers work in public institutions with budget funding, a much less percentage work in public institutions with mixed funding(budget and other sources) and mixed capital(state and private), with the specification that these attract two times and three times more graduates at institutional and national level, respectively.

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THE ECONOMICAL IMPLICATIONS OF THE MODIFYING LAW 31/1990 REGARDING THE COMPANIES AND THE NEW CIVIL CODE ON PROPERTY RELATIONS BETWEEN SPOUSES

OANA RĂVAŞ [*]

ABSTRACT: *Matrimonial regime is the synthesis of all the rights and obligations of spouses pecuniary valence, having its origins in the institution of marriage, leaving outside their regulatory and other economic issues that may arise property relationships between spouses, as: maintenance obligation, Liberties rights of inheritance. matrimonial regime, considering that it is the synthesis of all the rights and obligations of spouses pecuniary valence, having its origins in the institution of marriage, leaving outside their regulatory and other economic issues that may arise property relationships between spouses, such as: the obligation maintenance, Liberties, rights of Inheritance. Under company law, spouses are not forbidden to own a company, whether it one partnerships, or that they have an association with unlimited in a limited partnership or limited by shares or a company is limited or become shareholders in a joint stock company.*

KEY-WORDS: *family; mariage; matrimonial property regimes; matrimonial relations; trade company; contribution.*

JEL CLASIFICATION: *K22; K36.*

Marriage is a state law that makes significant changes pecuniary heritage of each spouse.

Property relations between spouses complement personal relationships between them. Common life, common household and raising children causes intertwining property interests of spouses, both in terms of rights and obligations,

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subordinated same finality: providing material support necessary existence and, if possible, the comfort of the family.

New Civil Code governing such property relationships in Chapter VI "The rights and obligations of the spouses 'property' where resumes, according to the former Civil Code of 1864, matrimonial, embodied in marital relations as a reality of the society. This faculty of choice between applicable matrimonial had become imperative and required legal realities faced by spouses in everyday life, economic relations constitute an important element in family life, sometimes at the expense of personal relationships, affection between family members.

Thus, sharing views of doctrine, the deepening of the research start by defining the matrimonial regime, considering that it is the synthesis of all the rights and obligations of spouses pecuniary valence, having its origins in the institution of marriage, leaving outside their regulatory and other economic issues that may arise property relationships between spouses, as: maintenance obligation, liberties, rights of inheritance.

Specific rules provide for matrimonial every mood and how to manage those assets. We are talking mainly about whether each spouse can manage one property of its assets, or if the provision and management rights are concentrated in the hands of a spouse, or they are divided between husband and wife.

The rules established in these procedures refers to the ownership of property, goods or other governing separation of property each spouse composition. Through them you can determine on the one hand, if certain goods that they had wives when the marriage or after they have acquired during marriage, shall remain their individual or in whole or in part in mass commons, on the other hand the rules governing the distribution of patrimonial liability of each spouse.

The form of distribution of goods, assets and liabilities, is specific and depends on each matrimonial importance given to the separatist community spirit by both systems of law governing family law rules and the spouses exercise their faculty choose which matrimonial their conception considers appropriate.

Economic and social factors have an important contribution to the regulation of base that must obey all married couples, which may differ in each country according to local traditions, the perceptions of marriage, but evolving and may even adaptation and change, as happened with the return of the New civil Code regulate matrimonial regimes, which urged the doctrine and the realities of daily market economy changed substantially compared to the previous provision of the Family Code, we can say that it was outdated.

Multitude of situations that lead the spouses as to marriage, putting aside personal emotional side, which theoretically is the engine formalize relationship underpin the design and choice of matrimonial regime governing best property relations between the spouses involved the new status acquired in marriage. Thus, you may encounter situations where the spouses own property consistent with monetary side and professions which contribute to and during the marriage, they can opt for separation of property regime, the confusion wanting them. Also, a spouse may carry high risk occupations pecuniary, which may harm the common heritage and therefore

wives, by mutual agreement, may consider choosing the separatist regime is the best solution for the cohabitation fairness couple.

Under company law, spouses are not forbidden to own a company, whether it one partnerships, or that they have an association with unlimited in a limited partnership or limited by shares or a company is limited or become shareholders in a limited company. Also art. 348 of the New Civil Code expressly regementează common property of the spouses intake to companies, associations and foundations.
Prior to adoption of the new Civil Code has been some controversy about the legal nature of the common property contributed to the establishment of the company, as good contribution becomes the property of the company.

For the first time after returning to the market economy, our law governing the situation of a spouse or spouses participate in the formation of a company, association or foundation with common goods.

Family Code has not considered these issues and contributions of the commons situation was controversial because the wife did not have a fixed quota of good, so I could determine what part of the asset contribution husband's partner or shareholder returns, and was dangerous because if the other spouse has not consented to the formation of the company or association with a common good, he may request the cancellation of articles of incorporation, which seriously affect the safety of civil circuit.

However, case law and doctrine admitted that spouses may be associates or shareholders in any company, even without asking in advance division of joint property. To solve this problem was noted that, according to art. 65 of Law no. 31/1990, assets pledged as contribution in kind in society become its property since its registration in the commercial register, following legal act by which common property is turned over to the company a disposal.

The doctrine also held that if both spouses attend the commons to establishing or increasing the share capital of a company does not raise special problems and, as noted, does not require any separation of patrimonies, as "... the provisions art. 30 para. (2) C.fam.according to which the agreement is null and void any contrary provision contained in that paragraph. (1) of the same text, under which property acquired during marriage (...) are the common property of the spouses have a protective character of each spouse to not be prejudiced by the other, the penalty occurred when decreasing community of goods, the act of one spouse, it would be detrimental to other personal property, in which fraud must be proven "and this can not occur when couples decide together the common good.

In case only one spouse participates in setting up capital of a company with common goods admitted that the document is valid, even without the consent of the other spouse, if the common good is one mobile intake in this case all the real benefits will be achieved common, as are acquired during marriage as civil fruits of the commons. Will have the same legal and proper share of the husband's associate company dissolution or withdrawal times its exclusion from the company. However, if the common good is building and associated husband had the common good without spousal consent clause correlative of contract shall be null and void because they

violated the limits of mutual tacit mandate stipulated in the Family Code, except confirmation document.

Regarding to profit from commercial activities distinguished by analogy with the salary, and argued that as long as profit was not charged, associate husband can not claim because of the dividends is a social fundamental of each associate and can not be alienated except by agreement between the parties. After their receipt by the spouse associated profited in the common heritage of their husbands.

Regarding the liability was concluded that if both spouses are members or shareholders, it will be unlimited joint and several, both its own assets and those common to partnerships and limited companies established equity contribution. If only one spouse is a member, will be his personal responsibility, so lenders will follow their own property, and if they are insufficient, it may require division of joint property. In principle, all these doctrinal considerations remain valid under the new regulations make the empire express provision on the contribution made by companies.

New Civil Code provides that common property can be subject to a contribution to society, association or foundation in the law (art. 348). Reference to the law must be understood as referring both to be governed by special laws establishing civil or commercial companies, associations and foundations, as well as provisions on matrimonial property regime of the spouses.

Since the creation of a commercial or civil companies, associations or foundations get out of the husbands patrimony asset and enter into patrimony of legal entity, the constitutive document or change of legal person is available and act according to art. 346, may be terminated only with the consent of both spouses if its object a shared house or a shared mobile alienation formalities which the law provides advertising.

If the object is a movable joint contribution in order alienation formalities which the law provides advertising, according to the general rule, the memorandum could be signed and by one spouse, the other being presumed consent. in relation to society, however, the legislature imposed a strict co-management so that any common property, movable or immovable can not be contributed to a society without the written consent of the other [art. 349 para. (1) Civil Code].

The applicable sanction documents signed by one spouse without the consent of the other,-when it was necessaryit is relative nullity provided for in art. 347, which can not be opposed to third parties in good faith.

If both spouses participate in the formation of the company or association with a common good, both have the status of partners or shareholders and benefits obtained and the share to be paid on withdrawal or dissolution of the company or the company will be excluded from common property to that comes from turning a common good. In this situation become incidents and provisions of art. 83 of Law no. 31/1990 which states that when social capital contributions to several persons, they are jointly and severally liable to the company and shall jointly appoint a representative to exercise the rights arising from this contribution.

If only one spouse is part of the association, but it will be partner or shareholder, but all the benefits obtained will be increasingly common as civil fruits of a common good.

While art. 348 establishes the principle that the only common goods may be subject to contribution to society, association or foundation in law, art. 349 contains a number of direct applications in the field of company law.

With respect to corporate rights, Romanian legislator has inspired correlative provisions of the French Civil Code, art. 1832-2, provides that a spouse alone can not employ the common good as a contribution to a company without her husband be warned. Being a member is recognized spouse who participated in the constitution, and the other spouse to the extent that the company notify its intention. If this intention is notified after the formation of the company, the spouse will not participate in the vote and its parts are not taken into account in order calculating the quorum and majority. Text is correlated with that of art. 1424, so if the object is a property contribution, a goodwill or other important asset, the consent of both spouses for the goods to enter the patrimony of society.

If your wife or husband's intake is associated with a common good, the Civil Code establishes co-management rule for the conclusion of a contract. This is not an exception itself, for a contract that the company is undoubtedly a disposal since capital goods that are out of the assets of spouses and entering the company's heritage, basically coincides with the general rule contained in Art. 346 of the Civil Code, except with respect to acts of disposal concerning movables whose alienation is free, not subject to any notice procedure. in corporate, cogestiunea is stricter : no common good, regardless of its nature, can not be contributed to a corporation by one spouse alone, it is necessary written consent of the other spouse. The text refers to simple company (joint venture) regulated by the Civil Code and the companies to which a spouse acquires shares or shares.

If one spouse alone and without the written consent of the other, concluded such a contract for the supply of community sanction relative nullity of the act will be done with disregard of legal requirements. Third parties acting in good faith are protected from the consequences of nullity [art. 347 para. (1) and (2) Civil Code].

In the case of companies whose shares are traded on a regulated market, the spouse who has not given written consent to the use of the commons can only claim damages from the other spouse, without affecting the rights acquired by third parties. The provision aims to protect circuit securities markets with public activity, so in these cases act spouse participate in seeking damages from her husband, but can not ask in order annulment of that would be affected rights acquired by third parties in good faith.

Directive 2004/39/EC on markets in financial instruments available in the Preamble Recital 6 : " a market that is only composed of a set of rules that governs aspects related to membership, admission of instruments to trading, trading between members, the notification of the transaction and, where applicable, transparency obligations is a regulated market or a multilateral trading facility for the purposes of this Directive (...). " both Community law, these two organized markets, which both are subject to certain rules are defined separately (art. 4 section 14 - " regulated market " and art. 4 pt 15 - " MTF ") and are regulated separately. term " multilateral trading facility " used by Directive 2004 / R39/route was transposed into national law (Law no. 297/2004 regarding the capital market) as alternative trading system. Are such

regulated market managed by the Bucharest Stock Exchange and the National Securities Commission.

It's about rights in connection with the company's business, such as, for example, the right to verify the company's financial situation, request and receive data on the situation of assets, liabilities, income and losses, and any other data related to the activity social and safeguarded access to its documents.

When a husband alone, but with the written consent of the other, make a contribution to the common good as a society, an associate is recognized only contribution to the common good spouse, but shares or shares are commons. Husband carries one associated rights arising from this quality alone can achieve the transfer of shares or, where appropriate, the shares held. It establishes, therefore, a sole managing partner of a spouse, which is an exception to the general rule that common goods are subject to co-management. Being an exceptional provision, its interpretation must be strict, meaning that only one spouse associate will perform legal acts listed in the text : acts of exercising rights arising from an associate and transfer of shares or shares. By establishing exclusive management aimed at simplifying the transfer of securities to trading activity that would be unduly hampered if there is the necessity of both spouses for movement actions that are common property.

Being a member and spouse can be recognized if it has expressed its willingness to do so. In this case, each spouse has an associate for shares or shares awarded in exchange for half of the property, whether by convention spouses have stipulated other odds - parties. Shares or shares that are personal property each spouse. Regulated situation is: a spouse alone or jointly with a third party is a civil or commercial, his contribution to the common good. Husband participate in the conclusion of the company gives its written consent to the establishment of a shared society and expresses the will to be accepted as an associate. To determine what the common good is for each spouse of share capital contribution equal to resort to the presumption provided by art. 357 para. (2) The last sentence of the Civil Code.

Therefore, each spouse will receive the equivalent of half the value of the property if a convention spouses have provided other allowances. as shares or shares are personal property of each spouse, they will be handled exclusively by each spouse who can exercise all the powers of their ownership. This does not mean that a husband give the other to exercise these rights mandate because they wives may conclude any legal act.

Therefore, we can conclude that economic relations as the basic element of the functioning of the institution of marriage, they met again with reintroduction of family relations in the Civil Code, substantial changes that have fundamentally altered the relationship between spouses, giving them more independence asset and decision, which was hitherto denied them the old regulation, where they were subjected to a single regime, legal, immutable. These changes occur due to multiple requests for reconsideration of the doctrine and realities adapt legislation according to which the provisions of the Family Code no longer corresponded being exceeded, a tributary of communist thinking.

Therefore, freedom of contract, specific to a open, free, together with the principle of equality between spouses underlying all property relations between

spouses, who are only able to choose the matrimonial regime applicable to the three allowed by the current legislation.

The new Civil Code is the most powerful Romanian judicial system reform suffered the last century, came as a response to various issues extensively discussed in the literature and jurisprudence, but we can say that in matters of family relations experienced a real revival, so necessary, reported the daily realities and developments in society, giving them rightful place back where now gone more than half a century, within the civil law, without this specific individualiatea to diminish in family law because family is even mirror transformation of society, requesting these changes.

Relatively short period after the entry into force does not allow us to review the effects of long-term application, but unquestionably a step forward in ensuring individual freedom and equality, while maintaining family unity in diversity relations in the society.

Characterized by flexibility and freedom of choice by giving notice that matrimonial not yet in conscious Romanians, they remained faithful to the traditional version of Community origin both to blame, but that seems harder to get rid or the attachment to the family spirit of communion, which I believe marriage attached either from ignorance, which is visible aspect given the extremely low number of people who chose to enter into a matrimonial agreement, where the draw conculzia despite the desire of doctrinal level introducing a flexible, perhaps Romanian society is not yet ready for such liberalization manifestation of will, the family relationships.

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OPINIONS OF THE INHABITANTS OF THE JIU VALLEY MINING AREA REGARDING FAMILY LIFE QUALITY

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ABSTRACT: *The paper provides regarding an analysis of the perception of the Jiu Valley inhabitants regarding different aspects of family life quality, as a result of an empirical study that is part of an extensive research conducted in the Jiu Valley mining area. This research is an attempt to decipher and analyze the complex problems of the families in this monoindustrial area, generated by the dramatic economic and social changes pertaining to the transition period.*

KEY WORDS: *family life quality; economic and social problems; economic and social restructuring; economic and social changes; transition.*

JEL CLASSIFICATION: *A; A14.*

This paper is based on an empirical study that is part of an extensive research conducted in the Jiu Valley mining area, regarding the way in which local people perceive certain aspects of family life quality. Throughout the years, my research has focused on perception and self – perception within these families, describing, analyzing and interpreting the opinions of the subjects on certain significant aspects of their own family life.

The study is based on a survey conducted on 500 families in the towns of the Jiu Valley, namely: Petroşani, Petrila, Aninoasa, Vulcan, Lupeni and Uricani. The total number of households under investigation is 51,740, and the number of individuals belonging to these households is 145,641[1].

The research methodology used in this study is complex. Besides the field research that involves the direct, face – to – face sociological inquiry, under the form

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[1] As most researchers consider the household an analysis unit, this study has in view the structure of the household, not of the family. We consider the household as the total number of persons that share a living.

of the interview and direct inquiry, other methods were also used, such as the documentation and the observation during the interviews, which ensured the recording of the responses and non – verbal reactions of the subjects while they were expressing their opinions and intentions.   The subsequent analyses led to a series of conclusions on the life quality of the families in the area regarding: family health, living conditions, the income – expenses ratio, poverty, unemployment, family and neighbourhood relations, and others.

1. APPRECIATION OF LIFE QUALITY OF THE FAMILIES IN THE JIU VALLEY

The analysis of the satisfaction of the subjects regarding different aspects of life (table 1) reveals that family satisfaction holds the first place in the hierarchy, very much ahead of other aspects. Family relations offer satisfaction to most of the subjects, 85% of them appreciating these relations as good and very good.

Table 1. Appreciation of family relations and other aspects (%)

	Good and very good	Satisfactory	Bad and very bad
Health	54.2	28.8	17
Family relations	86	10.2	3.8
Household	72.8	17.6	9.6
Neighbourhood relations	77	17	6
Family income	31.2	28.2	40.6

The further analysis of other aspects of life outlines a family model in which inner and outer relations are good and very good, living conditions are acceptable or satisfactory, but family income is appreciated as low or very low. Almost a quarter of the subjects appreciate that the monthly income of the family does not cover even the strict necessities, most of them consider that it covers just the strict necessities or a fairly decent living (decency being perceived much below the limits of real decent life) not enabling them to make expensive purchases (luxury clothes, furniture, etc.), 15% of the subjects manage to buy more expensive objects with great sacrifices, and only 12% can afford „luxury" without sacrifices.

In other words, income is the main reason for dissatisfaction for the families in the Jiu Valley, which is not surprising taking into account that, in the past years, this area has been swept by successive downsizing waves (layoffs) that pushed unemployment to an alarming level and led to the extreme poverty of the region. Today, the Jiu Valley displays a large number of unemployed in search of another job, or of their first job, alongside with new unemployed resulting from the latest downsizing at the Brown Coal National Company Petroşani. If we take into account the unemployed that have not been/are no longer recorded, the situation is much more critical. As a result of the lack of economic alternative, more than half of the active population of the area are unemployed. Consequently, it can be stated that the Jiu Valley population is poor, mostly living at the subsistence limit.

The subjects under investigation appreciated the Jiu Valley as a problematic area. On the whole, they consider that the most serious problems are the following: poverty, unemployment, corruption, downsizing, criminality and child abandonment (table 2).

Table 2. The most serious problems of the Jiu Valley at present (%)

	First choice	Second choice*	Cumulated choices
Poverty	57.6	16.6	74.2
Unemployment	17	37.4	54.4
Corruption	11.6	20	31.6
Downsizing	8.2	13.2	21.4
Criminality	1.8	8	9.8
Child abandonment	3.8	4.4	8.2

The subjects identify the poverty specific to the whole area as the most serious in the hierarchy of family problems (table 3).

Table 3. The main problems faced by the families in the Jiu Valley* (%)

	First choice	Second choice	Third choice	Cumulated choices
Financial problems	51	24.4	12	87.4
Job instability	12.2	22	33.6	67.8
Unemployment	19.2	13.4	17.4	50
Lack of dwellings	10.2	14.2	12.8	37.2
Medical problems	3	17.8	15.6	36.4
Lack of leasure time	4.2	7.8	8.2	20.2

* *Differences up to 100% (in small proportions) represent the „other/others" choice.*

The financial problems of the families in the Jiu Valley are followed, as shown in the table, by a justified fear of job instability, generated by the high level of unemployment in the area and by continuous downsizing. Therefore, financial problems, job instability and unemployment are the permanent problems of the inhabitants of the area.

Although poverty supposedly generates diseases and given the leading position that the Jiu Valley holds in the county regarding HIV/AIDS infections, tuberculosis and professional diseases, medical problems are of the lowest concern for the local people, most of them appreciating their state of health as very good, good or satisfactory. Even families with HIV/AIDS affected children place financial problems on the first place, followed by social problems (the most dramatic of which being stigmatization) and medical problems. The placing of financial problems on the first place is closely connected with the precarious material situation of these families.
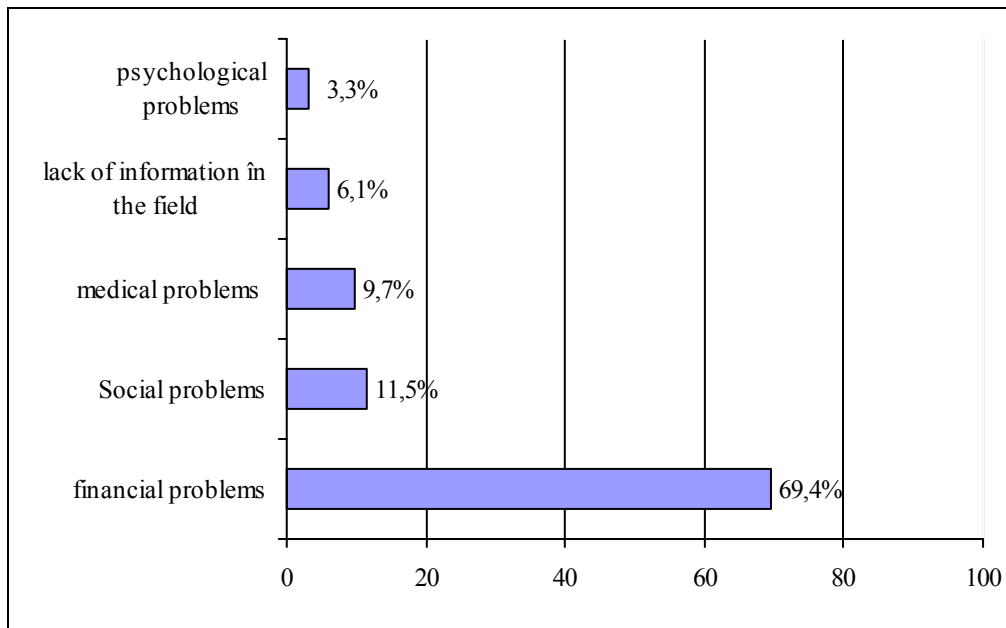
**Figure 1. Problems faced by the HIV/AIDS affected families**

In families with a child with AIDS or HIV infected, special attention should be paid to the living conditions and environment. Almost half of the affected families live in rented dwellings and the living space is insufficient for the number of family members.
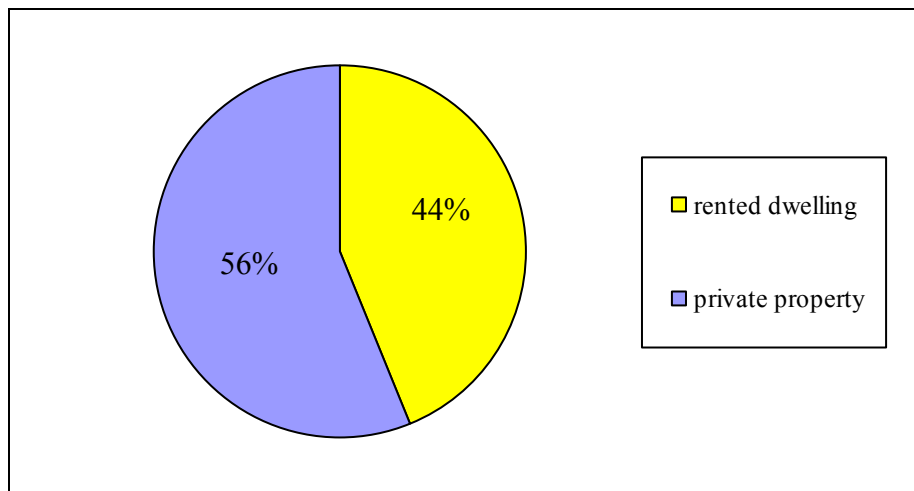
Figure 2. Status of the dwellings of HIV/AIDS affected families

Most of these families live in one – room or two – room apartments. Very few enjoy a living space suitable for the size of the family and its multiple problems. Only

11% of the ill children have their own room, the others sharing their space with one or more persons most of the time. Under these circumstances, it is natural that attending to the needs of an HIV/AIDS affected child is far more difficult, the child not being able to benefit to „enjoy" the peace and the „horizon" that specialists (doctors, psychologists, sociologists) consider essential for an adequate life, as the persons affected by this disease, and especially children, have certain seizures during which crowding should be avoided.
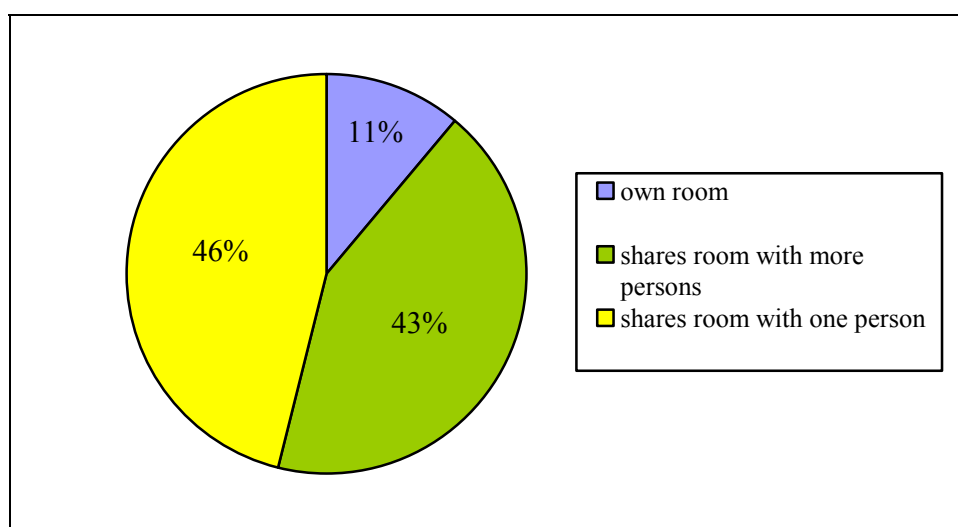
Figure 3. Room sharing

Lack of leisure time does not seem to be a problem at all for the inhabitant of the area, whether they work or not, as the possibility of a second job is extremely limited, the more so it is impossible to employ even the persons who are not involved in the economic environment of the Valley.

By knowing and outlining clearly the local family problems, we have tried to find out what future threats the subjects perceive (table 4):

Table 4. Future threats perceived by the subjects and their families* (%)

	First choice	**Second choice**	**Cumulated choice**
Poverty	17.2	20	37.2
Taxes	15.6	21.4	37
Price growth	15.8	19.4	35.2
Disease	24	7.2	31.2
Unemployment	14.2	13.6	27.8
Corruption	6.2	8.6	14.8
Instability	5.6	6.6	12.2
Other/others	1.4	3.2	4.6

*the other/others choice contains, in order, answers regarding homocide, criminality, war.

As it can be expected, the Jiu Valley inhabitants feel themselves threatened primarily by poverty in the future. The fear of the subjects of a continuous price and tax growth, when the average income barely covers the basic necessities or decent living, derives precisely from their actual state of poverty. Unemployment is situated this time only on the fifth place in the hierarchy of future threats for the subjects and their families, being outranked by disease. These aspects can be interpreted from several points of view:

- hopefully, these people, desperate and discouraged by their present situation, may still have the power to hope that the Jiu Valley will offer new jobs and improve the existing ones in the future, so that unemployment will no longer represent the stigma we are all bearing at this moment;

- on the other hand, this hope is automatically shadowed by the justified fear the low living standard, the poverty specific to the region and the continuous growth of prices, (including household expenses) will lead to a worsening of the situation, with possible medical effects. If today these people ignore, or play down the importance of medical problems, they will end up by being painfully aware of it;

- corruption, homocide, criminality or other widely popularized aspects of national interest do not represent a special problem for the inhabitants of the Jiu Valley, as long as they feel helpless in front of their own everyday problems that overwhelm them more and more.

Precisely the number and gravity of these problems may lead to the orientation of our subjects towards family life, the latter being for them a refuge where they can find peace and satisfaction. The hard life of these families can be a unifying factor for the family members.

Other questions revealed that most of the population considered that life before 1989 was good to very good. For almost half of the population, material conditions between 1990-1997 was appreciated as good to very good, with a significant decline after 1997 and deep dissatisfaction nowadays.

Although this is a positive signal, actually it is a highly subjective assessment that almost disregards such an objective element as the monthly family income in the Jiu Valley. Thus, we have concluded that, in time, due to the difficulties it had to cope with, the population ended up by overrating their lifestyle when they are offered something, no matter of what value.

To reinforce the above mentioned, we mention that we have come across numerous cases when families of four, five or more members appreciated their living as good to very good (not acceptable, on the limit of decency), each member of the family having an income close to the minimal guaranteed income.

A further argument in favour of the above mentioned is the following: even if we didn't take into account of the negative answers, the fact that more than half of the inhabitants of the Jiu Valley declare that their income allow a living on the limit of acceptability is enough to get a clear picture. Adding the third represented by those situated much or very much below this limit, we can outline the image of a poor population which, used to having little, tends to make positive unjustified assessments

of the quality of their material life when provided with something (social or emergency support).

By correlating the numbered of employed persons with the category of monthly family income, we conclude that there are cases when none of the family members works, but the family still has a certain income. Far from being impossible, this situation has several explanations. The most plausible one is that one person in the family works abroad, sending money back home. Another explanation is that of seasonal jobs, the minimal guaranteed income, etc. Working on the black market can also provide an explanation. The following detailed situation validates and supports these hypotheses:
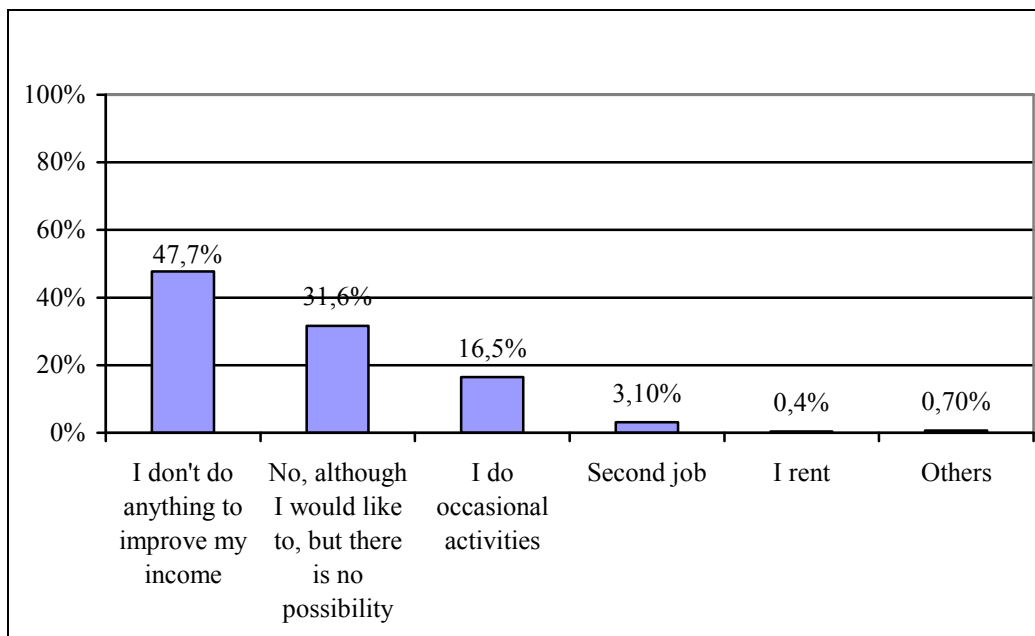
Figure 5. Initiative for income improvement

31.6% of the active population would like to have other jobs in order to add to their income, but they have no possibility. We consider that this is an indicator of a still unstable economic situation, with very poor dynamics. If persons with monthly family incomes of more than 3,000 lei can be understood if they decide not to get extra jobs, we cannot say the same about the families with low incomes, most of which adopting an attitude meant to confirm the so – called „culture of idleness". Without giving farfetched explanations, we appreciate that this is about the trajectory of this population after repeated massive downsizings. Job leaving as a result of sustained and aggressive state propaganda at the time, accompanied by compensatory payments, unemployment, social and emergency support, doubled by an offer of few and often poorly paid jobs, generated in the collective mentality the belief that one can live on what the state provides, the more so as we are talking about the same state that,

according to the population's belief, no longer needed people able to work, conferring to them new statuses, such as: layoffs, unemployed, poor.

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THE PERCEPTION OF THE JIU VALLEY INHABITANTS REGARDING THE IMPORTANCE OF FAMILY

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ABSTRACT: *The paper analyzes the perceptions of the Jiu Valley inhabitants regarding certain psycho – social aspects of family life as a result of an empirical study that is part of an extensive research on the families in the Jiu Valley. The research developed in this sense was an attempt to decipher and analyze the opinions of the family members on the concept of happy marriage, the important elements of family life, desirable behavior or attitudes, etc.*

KEY WORDS: *marriage; family; psycho-social aspects of family life; family behavior; desirable.*

JEL CLASSIFICATION: *A; A14.*

The paper is based on an empirical study that is part of an extensive research on the families in the Jiu Valley regarding the perceptions of their members regarding certain psycho – social aspects of happy marriage. The research developed in this sense throughout the years is an attempt to describe and analyze the opinions of family members regarding: the most important aspects of happy marriage, important elements of family life, their position towards certain undesirable behavior and attitudes and towards the parents – children relationship, etc.

The study is based on a research conducted on a number of 500 families in the Jiu Valley, in the following towns: Petroşani, Petrila, Aninoasa, Vulcan, Lupeni and Uricani. The total number of households under investigation is 51,740, and the number of individuals belonging to these households is 145,641[1].

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[1] As most researchers consider the household an analysis unit, this study has in view the structure of the household, not of the family. We consider the household as the total number of persons that share a living.

The research methodology used in this study is complex. Besides the field research that involves the direct, face – to – face sociological inquiry, under the form of the interview and direct inquiry, other methods were also used, such as the documentation and the observation during the interviews, which ensured the recording of the responses and non – verbal reactions of the subjects while they were expressing their opinions and intentions.

The developed analyses led to a series of conclusions regarding the opinions of family members on certain psycho – social aspects of family life, including their agreement with certain statements or ideas, some of them belonging to the category of "myths", such as the idea that school is more useful for boys than for girls.

1. THE MOST IMPORTANT ASPECTS OF HAPPY MARRIAGE

In order to capture the most important psycho – social aspects of family life and for the sake of suggestive and concrete presentation, we resort to tables and graphic representations:

Table 1. The most important aspects of happy marriage according to gender* (%)

Aspects	Male	Female
Mutual love	22.2	24.3
Own residence	17.5	14.4
Mutual respect and trust	13.3	15.7
Communication between partners	10.8	13.2
Fidelity	11.1	12.3
Adequate income	13.1	9.5
Sexual compatibility	8.4	7.4
Children	2.9	1.9
Time spent with the family	0.7	1.3

The first choice was taken into consideration

Both for men and women, love is essential for a happy marriage. This condition is followed, at a small distance, by the necessity that the couple should have their own place. A fairly high percentage was displayed by (in order): mutual respect and trust, communication between the partners, fidelity, whereas the other aspects – among which, surprisingly, the existence of children – gathered very few votes. Nowadays, having their own residence is a dream very difficult to fulfill for most young families. The financial crisis of the past few years has made it impossible for young families to live on their own, the only option being to share a living space with several generations, which is harmful for a happy marriage.

In comparison with men, women give more importance to such subjective aspects of family life as love, mutual respect and trust, communication, fidelity and even the existence of children, whereas men connect a successful marriage with private residence, adequate income and sexual compatibility. These options can also be determined byt the way in which the subjects perceive the assumption of roles in the family. Thus, the model identified in this sense is a modern one, in which mutual love,

respect and trust, communication and fidelity are of utmost importance, adapted to the conditions of transition – adequate income and especially a private residence also holding an important position.

It is surprising that the existence of children is attributed such low importance for a happy marriage, which can be identified with the fear of not being able to provide the necessary condition for adequate upbringing. Besides the children, sexual compatibility and the time spent with the family – postmodern conditions of a relation, are considered less important for a happy marriage.

2. THE SUBJECTS' AGREEMENT WITH CERTAIN STATEMENTS REGARDING FAMILY LIFE

The importance of the family for the subjects is shown by the fact that more than half of them consider that happiness necessarily involves being married or having a stable relation, and most of them disagree with the statement that family is an obsolete institution. But is it, then, possible that the subjects should perceive a childless marriage as happy?

Table 2. The subjects' agreement with the following statements (%)

Statements	Da	Nu
Marriage is an obsolete institution	13.2	86.8
To be happy, one must necessarily be married or in a stable relation	36.4	63.6
To be happy, a woman must necessarily have children	48.6	51.4
A man must have children in order to feel accomplished	54.6	45.4

Once again, the presence of children in a marriage does not seem to be very important, as only half of the subjects think that women's happiness and men's accomplishment do not depend as much on the existence of children as they do on being married or having a stable relationship. Knowing the families in the Jiu Valley, this is all the more surprising, as many of them have three or more children. These are the same families that face the most problems (poverty, unemployment, etc.) which determine the parents to consider that it is better not to have kids than not to be able to provide them with elementary living conditions.
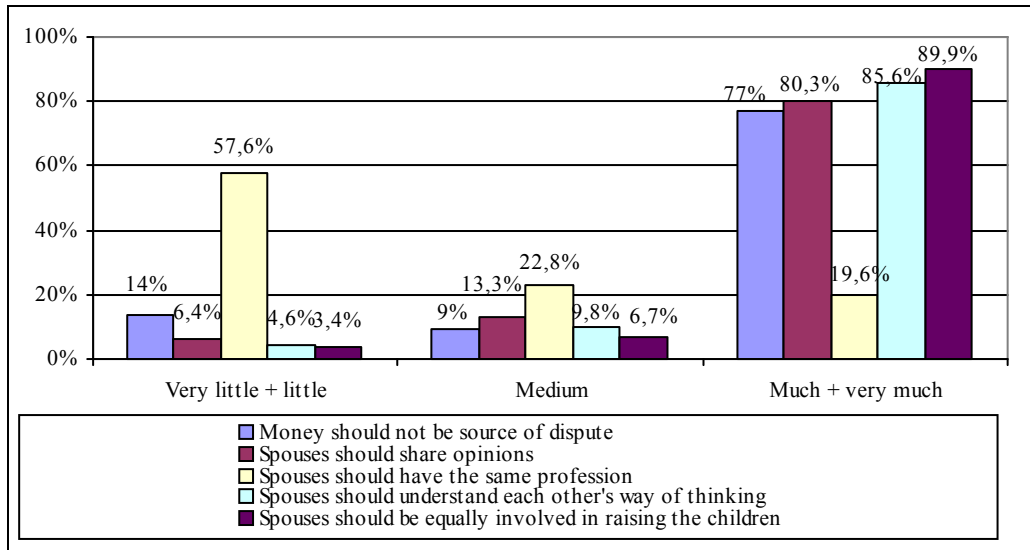
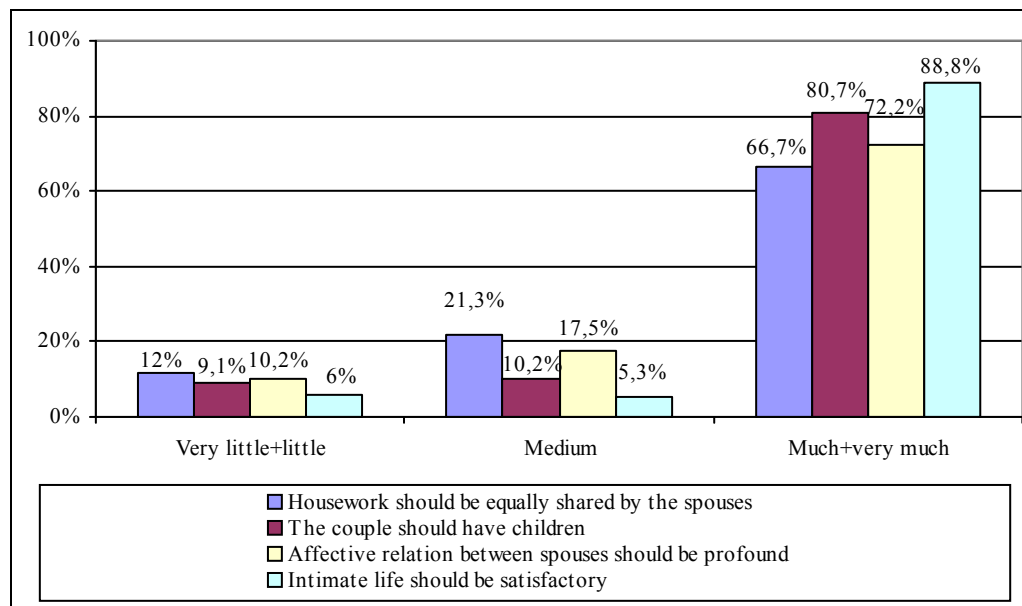**Figure 1. Important elements of family life (1)**

Figure 2. Important elements of family life (2)

The only aspects whose absence seems not to influence the good development of family life is the shared profession of the spouses, the absence of all the other elements having a major negative impact on the family.

The tensions of family life may lead to its dissolution. We have already shown certain elements whose presence or absence can have a negative or a positive impact on family harmony. However, social reality also includes undesirable elements, of

which some, even if not legally sanctioned, leave dramatic traces in the personal history of each family. We are going to identify these elements, alongside with the opinion of the inhabitants about them, expressed by agreement or disagreement:
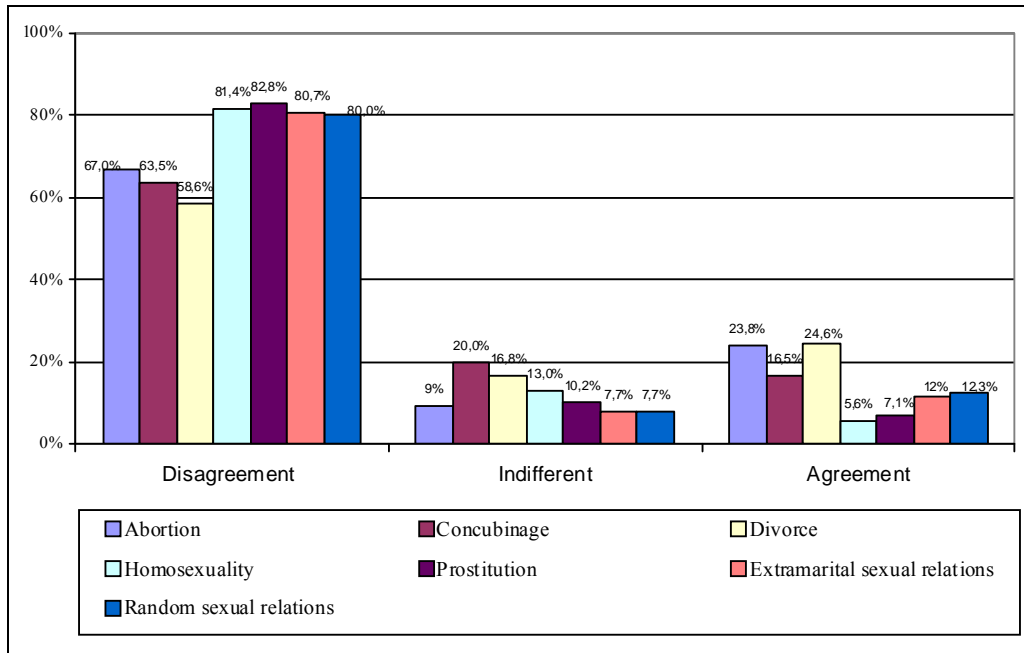
Figure 3. The inhabitants' position towards certain deviating behavior

The only elements of social reality that the inhabitants agree with, in a proportion of almost a quarter, are divorce and abortion. The other aspects are incriminated in proportions of over 50%, prostitution (82.8%) being almost as much incriminated as homosexuality (81.4%). Therefore, we may say that the Jiu Valley community is strongly connected with the values of christian morals.

The traditional labor division within the family is in continuous change on a national level. The separation of roles is still valid, but the situation undergoes a structural change, involving a higher flexibility of the partners. In our case, the situation is as in table 3.

As expected, most of the subjects (with no significant gender differences) consider that the man's duty is to earn money for the household, and the woman's duty is to take care of the house and bring up the children. Thus, the traditional role distribution is predominant in the families in the Jiu Valley. The subjects support traditional roles and perceive the necessity of assuming them for several possible reasons. In the Jiu Valley, the number of jobs is limited and the employment possibilities, especially for women, are extremely limited. As in many families (even in the ones with many children) only the husband works, it is somewhat natural that the man is attributed the task to provide for the family, whereas the woman, who supposedly has more time, is perceived as the one who should look after the household

and the children. On the other hand, the subjects, regardless of their gender, may consider that the woman is more skillful in most household activities, and even in the raising of children. In this context, it is obvious that the change of mentality, the modern (or postmodern) attitude regarding role distribution within the family is not yet very present among the local people.

Table 3. The subjects' agreement regarding the following statements (%)

Statements	Agree ment	Neither agreement, nor disagreement	Disagree ment	Do not know/ Do not answer
It is more the duty of men than of women to provide for the family	81.4	11.8	6.2	0.6
It is more the duty of women than of men to do the housework and raise children	68.8	16.4	14	0.8
Regardless of the qualities and defects of their parents, children must love and respect them	90.2	5.8	3.6	0.4
The parents' duty is to do what is best for their chidren, even if this means giving up their own happiness	82.2	12.4	4.4	1

Regarding the parents – children relationship, the great majority of the subjects consider that children must respect and love their parents no matter what qualities and defects they might have, and the parents' duty is to do everything in their power for their children, even if this means giving up their own happiness. This perception of the parents – children relationship can be connected with the situation before 1989, when all the parents were investing almost exclusively in their children, because there was nothing else to invest in, their children becoming the embodiment of their own unfulfilled expectations. Parents, precisely because they are aware that they cannot offer more to their children, consider that their efforts in this sense, even if they involve giving up their own happiness, will somehow make thier children love and respect them regardless of their defects.

We have also tried to determine the mentality of the Jiu Valley population, whether people agree or disagree with certain ideas or myths such as, for example, the idea that school helps boys more than girls. We have chosen again to represent graphically the data gathered in the field through the questionnaire and processed with frequency tables:
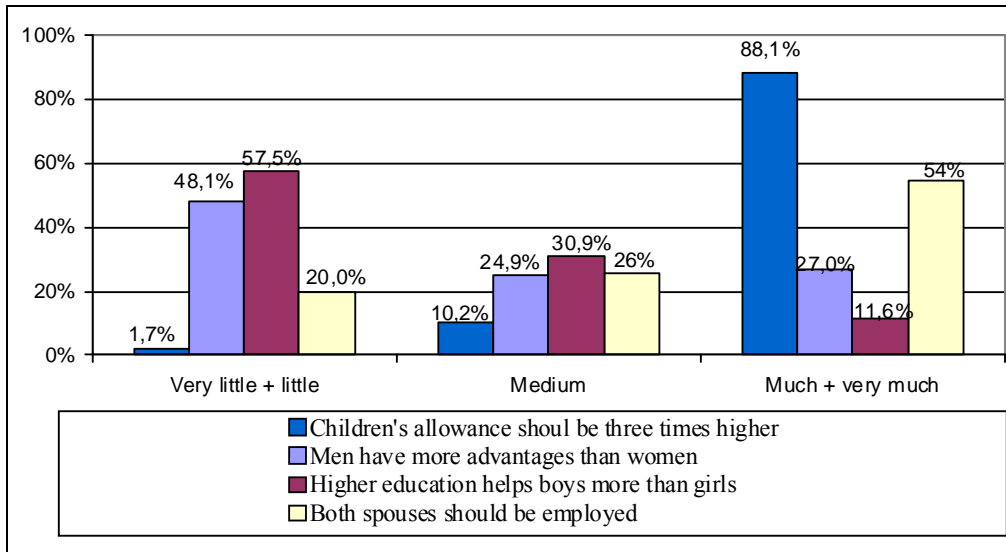
Figure 4. The subjects' agreement with certain ideas (1)
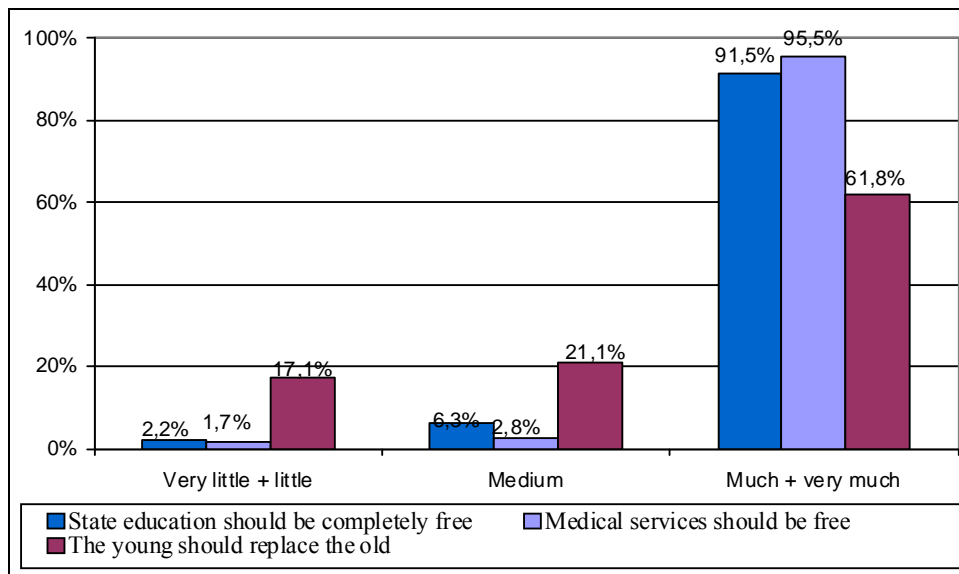

Figure 5. The subjects' agreement with certain ideas (2)

As in the previous case, we rank the agreement, the figures being suggestive as they show the choices in detail: free medical servicese (95.5%); free state education (91.5%); children allowance three times higher (88.1%); the young should replace the old (61.8%); both spouses should be employed (54%); men have more advantages than women (27%); higher education helps boys more than girls (11.6%).

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NON BANKING FINANCIAL COMPANIES AND INDIA'S RURAL ECONOMY - WITH REFERENCE TO SAHARA GROUP

SUKANTA CHANDRA SWAIN [*]

ABSTRACT: *Sahara India Group has diversified business in the areas like finance, real estate, media and entertainment, tourism and services. Its business in finance, as usual, comes under the purview of Reserve Bank of India (RBI) jurisdiction. Its two financial institutions (FIs) – Sahara India Investment Corporation Ltd (SIICL), a non-banking finance company (NBFC) and Sahara India Financial Corporation Ltd (SIFCL), a residuary non-banking finance company (RNBC) have been coming under RBI scanner. While the registration of SIICL has been recently cancelled by RBI in spite of a net profit in 2006-07 against a loss in 2005-06, SIFCL has been under the threat of winding up the business owing to regulatory concerns of RBI. Thus time will come when Sahara India Group will no more be there in the financial sector. However, it will not allow the resources withdrawn from these two FIs to be idle. As it has been a prominent player in the real estate industry of India, it is clearly visible that it will reallocate the resources in favour of real estate. That way, the profitability of Sahara India Group will never be undermined. But can we say with confident that the economy will never lose anything by this 'move by coercion' of Sahara India Group? Certainly no, because other FIs are yet to penetrate into rural areas what SIICL and SIFCL had been doing successfully. Therefore the twin objective – Mobilization of rural savings and eradication of rural poverty will definitely be in jolt because of this. This paper tries to analyze critically this 'move by coercion' of Sahara India Group in the perspective of rural poverty, the ultimate problem of Indian Economy.*

KEY WORDS: *financial institutions; financial sector; real estate; rural economy; rural poverty.*

JEL CLASSIFICATION: *G23*

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1. INTRODUCTION

News flashes like Indian stock markets crashed and rupee touching all times lows have been very familiar for last couple of weeks or so. Before trying to uncover the ways to divest ourselves of those, it is apparent to explore what is happening in the market that is pulling the sensex downhill and forcing rupee to touch unprecedented lows as this scrutiny may endow with better elucidation for the current predicament in the Indian economy.

One of the most important causes behind the present market catastrophe in India is the extraction of Foreign Institutional Investments (FIIs) causing substantial outflow of Dollar and demand crunch in equity market. Many foreign institutions and hedge funds have become bankrupt in their domicile countries forcing them to vend Indian assets at offhand prices pulling our market down and depreciating our currency. Now the point is "Why do we rely on them so enormously that any setback of them creates identical or even further knotty state of affairs for us?" The answer is so simple. In the pursuit of growth and development we covet to be in leading edge but our domestic savings and investment volumes are not adequate for the reason. So there is no way out to accomplish our intent of elevated growth rate except for soaring dependence on foreign investment. Foreign investment in the form of Foreign Direct Investment has been proved advantageous for Indian economy in many fronts but foreign institutional investment has been daunting lot many negatives in our economy as compared to positives. And our economy in recent years has been a very superior destination of foreign institutional investors because of incredibly strong macroeconomic rudiments catering favorable ambiance for them. As we have invited those, it is our duty to endure any sort of adversities there from.

On the exterior any one can effortlessly say that we are short of domestic savings and investments but if we strive to envisage intuitively, we may unearth the reality which may diverge radically from the accessible piece of information. It is not that the size of savings we do have now accurately represents our optimum latent. In rural areas still people are there who have savings potential but because of non-availability of financial institutions and/or lack of financial transaction habits they don't go for ceremonial savings. As an alternative they prefer hoarding or conspicuous consumption which is economically and socially unwanted for them, which can also be treated as an economic waste. Some instances are there where miniature depositors in rural areas keep their slight leftover earnings with their professed masters/zamindars who in return charge something from them. That is how emblematic reverse interest rate becomes operative. If we could give our savings potential the shape of savings and channelize those in proper way probably our dependence on foreign investment would have been nil or miniscule and hence the present crisis would have been easily avoided. In this context the financial institutions (FIs) have a massive responsibility to execute. But most of our FIs fancy to concentrate in urban and sub-urban areas as business in those areas are safer and cost effective as compared to business in rural areas. On the other hand, the FIs concentrating in rural areas, examples are the Sahara India Group led two institutions – Sahara India Investment Corporation Limited (SIICL) and Sahara India Financial Corporation Limited (SIFCL), are alleged to

function not in line with the Reserve Bank of India's guidelines. So those will die out from Indian financial market because of the RBI scanner. With the egress of FIs like SIICL and SIFCL, not only the problems of equity market and exchange rate will be unsolved but more intensively the hitch of poverty will exacerbate as they were working for the deprived and by the deprived too. While our focus now is on financial inclusion and micro finance in order to alleviate poverty, the sudden termination of institutions working for the same purpose, i. e., mobilization and channelization of surplus earnings of rural masses, will definitely furnish a gust to our splendid objective.

The idea of this paper is not to appraise the role of RBI being ruthless on those FIs rather on the economic upshot there from. In fact, this paper will explicitly focus on the effect of the immature demise of SIICL and SIFCL due to regulatory concerns of RBI on poverty alleviation and current market problem. It is a fact that those who are not in line can never be tolerated but can't we think of something without going for their absolute desertion. Can't we imagine of bringing them in line as opposed to banning them? If the response is even very small yes, then we have to put all our efforts to stumble on the ways behind that yes so that we can contribute something in fulfilling a composite objective - poverty easing, exchange rate stabilization and equity market stabilization.

The sketch of this paper is as follows. While section-2 of this paper highlights Sahara India Group (specifically SIICL and SIFCL) as a catalyst in lessening reliance on FII and eradicating poverty, section-3 heaves light on facts concerning RBI scanner on SIICL and SIFCL. However, the Effects of RBI scanner on Sahara India Group and on economy are sited in section-4. Last but the imperative facet of this paper, i.e., conclusion and suggestions are incorporated in section 5 of the paper.

2. SAHARA INDIA GROUP AS A CATALYST

Indian conglomerate Sahara India group with the market value of assets at more than $50 billion has been a major unit in the corporate world and has diversified business in the areas like finance, real estate, media and entertainment, tourism and services. However its business in financial sector is the center of attention of this paper. Its two FIs – SIICL and SIFCL, which have been under sturdy surveillance of RBI, can precisely be interpreted as a catalyst in shrinking India's reliance on FII and fighting out poverty.

2.1. Sahara India Investment Corporation Limited (SIICL)

SIICL, a non-deposit taking non-banking finance company (NBFC), is one among a handful investment companies in India which had been operational in rural and semi-urban areas in collecting investment resources. In the vicinity of financial investment, it is not that uncomplicated for a private unit to mark its identity where many gigantic public players are already there. Because for winning the confidence of people, some deep-rooted agency or body is required in order to be professed as the guarantor of people's investible funds. In case of public units, government is

considered as the guarantee in the mind of customers. Therefore, without having a deep-seated body as the guarantee, SIICL started its investment business with preliminary losses as it was unable to be appreciated by people. But slowly and steadily it entered into the market and started gaining people's confidence and reported a net profit in 2006-07. In the process of mobilizing investible funds, it was also catering a good amount of employment opportunities to educated youth of rural areas in the form of agents, who were otherwise unoccupied. Thus it was channelizing both capital and manpower in prolific lines. Although the contribution of SIICL to economy's investable fund and employability was very insignificant, on the basis of the way it was marching, something immense could have been anticipated in near future. But before establishing its credibility and at a very precipitate stage, the exit door had been shown to it, the detail story of which is elucidated in next section.

2.2. Sahara India Financial Corporation Limited (SIFCL)

SIFCL, a residuary non-banking finance company (RNBC) that accepts public deposits, is the earliest RNBC of India to be granted a certificate of registration by the RBI. In raising public deposits, the RNBCs have an exceptional track record and so also in customer service. Many types of investors prefer them to banks albeit they do not get tax concessions or a significantly higher interest rate. The following table clearly exhibits how the RNBCs are having edge over other FIs in raising public deposits.

Table 1. Data on performance of RNBCs in India

		Rs crore
Item	**NBFCs**	**Of which RNBCs**
Number of Reported Companies	466	3
Total Assets	57453	21891 (38.1)
Public Deposits	22842	20175 (88.3)
Net Owned Funds	6663	1183 (17.8)

Source: Trend and Progress of Banking in India, RBI-November 14, 2006.
Note: 1. Figures in brackets indicate percentages to respective total of NBFCs. 2. NBFCs include miscellaneous non-banking companies, unregistered and un-notified nidhis.

As evident from the table, while a very small number of RNBCs (although 3 in number, in reality, only two - Sahara & Peerless) has merely 17.8% of Net Owned Funds of NBFCs, they have bagged 88.3% of the total public deposits of NBFCs. It clearly shows two things. First, they are easily reaching to the people who are deprived of accessing modern banking facilities. Second, people are having tremendous confidence on them.

For the investors' security, the company maintains the invested scrips in safe custody with a nationalized bank and withdrawal takes place only for emancipation of liabilities to the depositors. It does not prefer speculative investment in order to afford definite return to the investors. It has invested only less than 1% of its total assets in

listed equity shares. Again its attention on red carpet investment has been proved useful as it has only 0.04% non-perfoming asset ratio. Most imperative facet of its burly rudiments, which congregates the poise of public, is its capital adequacy ratio. While the statutory requirement of capital adequacy ratio is only 12%, SIFCL has been able to uphold it at 28.78% as on 31.03.2008. Its strong and strict fundamentals as mentioned above are mainly responsible for its wide popularity. It has already been well-accepted by the public and has also offered very good number of employment in the economy. With the help of 6.85 lakh workers in business promotion and 1508 service centers, it has been able to create 3.94 crore deposit accounts.

The target investors of the SIFCL are the common man – middle class, lower middle class and lower class of the society. The company has succeeded largely in inculcating the savings behavior among the common man even with a bare minimum daily deposit of Re 1. It has also been contributing to the national economy for the overall development of the country through money invested in government securities, banks and institutions.

SIFCL as a catalyst in solving the problems of poverty and present market munch can be well decorated on the basis of facts mentioned above. In the perspective of deposit accretion, SIFCL is a very proverbial name among the common masses as it gets to the depositors' doorstep through its large number of trained agents and collects the deposits from them at their convenience, that too, after proper motivation. In fact, because of this innovative scheme of collecting deposits, it has been succeeded winning the hearts of the public. The amount the SIFCL is collecting as deposits from common masses has zero opportunity value as the next best use of that would be either wasteful consumption or expenses on unsocial activities like gambling. By doing this, the company is securing the future of the poor as the amount kept with it may be spent by the depositors during their rainy days and restraining them from doing unsocial acts. Addiction to anything insists to do many things. As people are now captivated with the saving habits initiated by SIFCL, they are trying to keep up that habit by earning more. It is a reality that minute depositors in rural areas are competing themselves to deposit more and that is mostly because SIFCL. In this way they are adding a lot in their productivity and lessening their unnecessary spare time. That way SIFCL is a genuine catalyst in mitigating poverty among common man.

By the way of providing employment to rural educated youth in the shape of agents, the company is contributing to the society in three ways – reducing the unemployment problem, lessening the pinch of poverty and most importantly denouncing the unsocial and anti-social activities. Educated unemployed are proved hazardous as they use their intelligence in disparaging activities out of poverty and annoyance. Most of the unsocial and anti-social activities including terrorism are happening because of this community. For the sake of meager earning they are easily getting ready to do anything and the terrorist organizations are taking the advantage of that by making use of them for their reason. By recruiting some of them in business promotion activities of the company, SIFCL is helping them and the society too.

If the companies like SIFCL come forward and try to tap the unexplored section then huge amount of deposits, which are otherwise idle or waste, can be extracted and diverted towards investment – both direct and institutional. If it happens,

time will come when we will be no more relying on foreign investment and facing the problems inherited there from. So the job of SIFCL is not only praiseworthy but also to be imitated for the sake of macro economic benefit.

3. SIICL AND SIFCL UNDER RBI SCANNER

As the monetary authority of the country RBI has the responsibility of ensuring the smooth functioning of the monetary sector. Smooth functioning also includes making out whether the depositors' money are protected or not with the FIs. In order to do this, RBI has been watchful on the operation of all FIs. Specifically it keeps an eye to know whether the private players in financial markets are doing their jobs within the framework prescribed. If it finds any anomaly in their way of working, it becomes harsh on them and forces them to quit the market. Two of the FIs of Sahara India Group is now the victim of RBI scanner.

3.1. Scanner on SIICL

On the basis of scanned result, on August 11, 2008 RBI cancelled the registration of Sahara India Investment Corporation for carrying on the business of a non-banking financial institution as it felt that the company was more like a paper company. Since there is cost involved in regulating NBFCs, RBI feels that it is just to spend on those which are adhering the RBI guidelines and not to allow others. Therefore all NBFCs were merely asked to file their annual statements so that the credibility of the companies can easily be traced. In fact, to distinguish the paper companies from the companies in reality, RBI initiated that step. Because of this, many of the NBFCs voluntarily exited and SIICL also did the same. It is because; the assets of SIICL were not immediately available. RBI' step in cancelling the registration of SIICL is justified as it has been done to keep public money safe.

3.2. Scanner on SIFCL

On the other hand, Residuary Non-Banking Companies (RNBCs), a special type of NBFCs, are treated as a perplexing breed in the Indian financial system with almost certainly sparse RBI custody. While the monetary authority had approved them the liberty to take public deposit in the form of daily deposits, recurring deposits and fixed deposits devoid of any limit, the financial markets have been reasonably scratchy with their survival as the markets are oblivious of their financial status. As per the RNBC regulations, these companies are allowed to access borrowing from banks, financial institutions and corporate but they have only tapped public deposits and are performing stupendous in gathering public deposits. The maneuver of these companies had caused supervisory concerns to the RBI in the past. As RBI feels that they are not moving in line with the directions meant for them, it has become harsh for them by outlawing them to collect public deposits and withdrawing their discretionary investment power. The RNBCs are not free in the context of investment pattern like other NBFCs. They are required to invest only in the directed line of investments.

Earlier, the discretionary investments of RNBCs were 20% but because of unscrupulous expansion in deposit accretion, the RBI, apprehending unfavourable circumstances for the depositors in the future, has denied them to have any discretionary investments. In fact, the idea of withdrawing RNBC's discretionary investments power was to channelize their investment in approved securities to lessen treacherous & grievous consequences.

There are three RNBCs in India out of which one is a miniature setup and the rest two are giants in their size. So while anybody speaks of RNBCs, they only mean these two giants; Sahara India Financial Corporation Ltd., Lucknow and Peerless General finance & Investment Company Ltd., Kolkata. They are now required to invest 100 per cent of their deposits in approved securities which comprise government bonds, fixed deposits with banks and mutual funds. In continuation with the extraction of discretionary investments power and the banning of raising public deposits, the RBI has also asked the two RNBCs to put forward alternative business plans. Peerless has already streamlined its alternative courses of action but for the sake of wrapping up the business of RNBC and finalizing a suitable new business model, it had asked the RBI to allocate some more time. And Sahara has made representations to the RBI for relaxation of its norms. But the RBI is determined to mess up the two RNBCs to assure depositors of their principal, if not interest.

However, RBI has asked SIFCL to have zero liability by June, 30, 2015 and has permitted the company to go for investing deposits that mature in three years.

4. EFFECTS OF RBI SCANNER

SIICL has already exited the market and SIFCL is just counting its days. Their untimely demise, when they were in full swing, will definitely have some effect on the Sahara India Group and on the economy too.

4.1. Effects on Sahara India Group

Like any private business house, being motivated by profit appropriation, Sahara India Group will never tolerate the assets deployed in these two FIs to be redundant. It will undeniably come across the alternative mode to channelize the resources withdrawn or to be withdrawn in near future in a healthier way. From its up to date courses of action it is clearly discernible that the Group will revolutionize its objective from finance to real estate, where in it has been a prominent player in India as it has a massive land reservoir in the country. Under its possession 217 townships ranging from 100 acres to 300 acres each are in the course of development. It has its own three entertainment television channels, one national news channel, 36 regional news channels and various newspapers and magazines in Hindi, English and Urdu as well. Thus it has scores of alternatives to fit the spare resources from these two FIs. Keeping the prospective of different sectors and the competency of Sahara India Group in mind, any one will certainly foretell that the Group (i.e., Sahara India Group) will reallocate the resources in favour of real estate. That way, the profitability of Sahara India Group will never be undermined.

In order to compensate the loss of business in the form of losing two of its FIs, the Chairman of Sahara India Group Subrata Roy has recently visited UAE to explore business and investment opportunities in that country. During the visit he had also met there prominent business people and industrialists and eyed at potential projects in various sector. Thus, the problem the Sahara India Group faced due to the RBI Scanner is just temporary and it would never impose any negative effect on the Group as many alternatives are open for it. It is just a matter of time. The group just needs some time to wind up the business in financial sector and to concentrate in best possible alternatives. It is now passing through a transition period and it will stretch for little more time as wrapping up a long-drawn-out business is not that simple. Materially it may not lose anything but definitely some real cost it has to put up with until it exits the financial sector.

4.2. Effects on Indian Economy

4.2.1. Shrink in employment opportunities

As mentioned in previous subsection of this section, if the Sahara India Group will not keep the resources withdrawn from those FIs idle and will go for reallocation of those, from exterior, one may question: how can it shrivel employment opportunities? But in reality, it can. May be the amount of funds reallocated will be the same as the amount withdrawn but the employment opportunities in new heads of investment may not be as much as it was in financial sector. If the Group reallocates the withdrawn resources, as guessed, in real estate where it has already a recognized set up, definitely it will try to apt the economies of scope and hence very nominal employment opportunities may be created. Thus, there will be a sizeable shrink in the employment opportunities of the economy.

Again, this move of the Group from financial sector to real estate sector will cause a shift of employment opportunities from rural and semi-urban to urban areas. Basically in financial business of the Group, educated youth of rural areas, who are very conversant with the rural living style, get employment. As the Group changes the sector, for the sake of corporate social responsibility, it may try to help the old employees out. But its trial may not take the real shape for two reasons. First, employees of financial sector may not be fitted into the real estate sector, i.e., the problem of accommodation from the Group's side. Second, Even though the Group takes the responsibility to train them afresh in new line of requirements then also the objective may not materialize as the rural educated youth may not adapt themselves to the city life and may not cater as per the requirements of city jobs, i.e., the problem of accommodation from the employees' side. As in India, the incidence of poverty is highly concentrated in rural areas, if we want to reduce the gravity of poverty from the economy; we have to focus on employment generation in rural areas, where as this shifting of sector by the Group goes against it.

In the backdrop of the problems mentioned above, it is obvious that the transformation of the Group's objective towards real estate leaving the financial sector, which is just a move by coercion (from RBI's side on regulatory ground), will certainly

have threats on livelihood of lakhs of people. That way it will aggravate the rural poverty too.

4.2.2   Distortion in Deposit accretion

We feel proud for the fact that our country has been performing considerably well since last couple of years in our economic front. It is genuine as our rate of growth is getting augmented year by year and the country's foreign exchange reserve is accumulating rapidly. At the same time, we should not forget to attribute our economic success to the foreign capital which is the main factor behind it. Our dependence on foreign capital fingers two alternatives. Probably our domestic savings & investments are not enough to accumulate sufficient capital so as to meet the huge demand of massive population. Or probably we do have potentials to save & invest but our financial system is not well-diversified to mobilize those. But in our context both these alternatives are non-mutually exclusive. That means we lack in savings or saving potentials and also whatever small potential we do have is not properly tapped. Our limited saving potentials, as is inherited from our massive poverty & huge population, needs lot of things to do for its improvement. But mobilizing the existing potential is not a great task and can be easily done by a sound financial system. If we are unable to do so that means there is something lacking in our financial system. We speak a lot on retail banking and up gradation of banking services in India. But the point to see is whether all these are conducive for mobilization of saving potentials of the country. If we consider FIs excluding RNBCs, probably our answer will be no. That can be substantiated from the following facts.

As per the RBI's Handbook of Statistics on the Indian Economy (2006-07), there were 30,639 rural branches of Scheduled Commercial Banks (SCBs) in 2007, which were 4,750 less than the number in 1993. In an average, 26 bank branches in rural areas blackout each month. In other words, on every working day there is closure of one bank branch in rural areas. But branches in metros shot up from 5,753 to 11,826 in the same period, where as in other urban areas, the number climbed from 8,562 to 12,792 in this period. It clearly depicts that, modern banks for the sake of maximizing profits, are providing updated services with competitive offers to their sophisticated customers of urban areas neglecting the rural masses. They are least bothered about the savings of rural areas. Their expansion seldom solves the problem of mobilization of resources.

Deposit accretion will definitely be lowered after the exit of SIFCL from the financial market. Slow deposit accretion will in turn be a cause of poverty because when FIs are not available and/or not interested to collect deposits from the surplus income holders how can they be encouraged to give loans to the needy people over there in rural areas. Therefore the poor but potential investors will be deprived of getting funds and hence the supply side of the market in those areas will be sticky. Further, the spending of surplus income, which were supposed to be saved, on consumption heads owing to lack of savings facilities will be resulted in augmentation in consumption demand. While in one hand, the supply in rural market will deteriorate because the potential investors can not go for production due to lack of funds resulted

from less deposit accretion, the demand in rural market will surge for extra spending by the surplus income holders. This mismatch between the market demand and supply will stimulate the cost of living and undermine the standard of living of rural people. Thus the poor will be poorer. Further, it will have negative impact on the efficiency of rural depositors too. For the sake of depositing considerable amount, some of the rural people might have fascinated to earn more by improving their efficiency and reducing their wasteful leisure time. In that way they must have acquainted with the financial transactions through the agents or advisors who know them very well. When they miss the services they were getting previously and don't find the FIs to deposit their surplus income, their zeal to earn more will definitely be spoiled. By this, they will lose their competence and will also involve themselves in many unsocial and anti-social activities as they will get much spare time to use for those purposes. However, the concept of micro finance may to some extent neutralize this effect and can help the poor but to what extent it can manage alone, that the time will say.

5. CONCLUSION

If anything is established as bad, that is to be banned. If it is doing bad but the hope of improvement is there, that is to be regulated. But if it is doing well but not in proper line then that is to be promoted for development by bringing that into the predetermined track or by determining a track specifically for that so as to cope up with its line of functioning. FIs of Sahara India Group, particularly SIFCL and SIICL are coming under last type. They are doing well so far as their services & confidence of the customers are concerned. But only problem with them is that they are not in line with the norms of the authority. If bankers and other financial institutions, in spite of functioning in proper line, are not able to do something which is important that these two FIs are doing with their interest and are also succeeding, the authority of the country should give them the status that is given to other FIs or it should create a special status for them with the power of raising deposits and discretionary investments.

As RNBCs like SIFCL are a good source of mobilizing the resources which are otherwise idle, they are to be encouraged. Encouragement to them does not mean to make them free. Rather they are to be given the facilities that are appropriated by other FIs and at the same time they are to be regulated by the regulatory authority. To solve the composite problem of resource mobilization, poverty alleviation and safety of the deposits of the public, the RBI should go for two authorities – development authority and regulatory authority. For the development of RNBCs and other FIs, the development authority should cater all possible facilities without any discrimination and to forbid any sort of deviation and exploitation in their functioning, the regulatory authority should apply all possible checks without hampering their development. However regulation should follow development. But the recent move of the RBI in the context of SIICL and SIFCL does not foresee development, nor dare to confirm regulations but strong enough to spoil. This is the right time for the RBI to think over the issue in order to show the concerns for development.

SIICL has already been stopped and if RBI is determined to stop SIFCL for its careless approach towards the RBI guidelines, nobody will find any scope to utter a word against the authority, provided it does this after arranging some alternatives by which the rural segment will not impede. While we speak a lot on financial inclusion and its importance in Indian context, where maximum inhabitants are rural and are excluded financially for one or other reasons, by denouncing the FIs like SIICL and SIFCL, we are fairly favouring financial exclusion. Although micro finance is one means of financial inclusion, there is doubt in its sustainability as in this way we are trying to help the rural poor without taking the help of their untapped resources, which may lead to sub-prime crisis. So this is the right time for the authority to focus on rural areas through bilateral transactions. Because of exhaustion of corporate clients, the Indian banking sector is as such facing problem in finding borrowers. Still the banks are not keen to bank upon rural sector because of lack of credit worthiness. In the name of modernization most of the banks are expanding urban branches and catering ultra modern facilities but at the cost of rural branches. Thus if the banks prefer to be away from the rural sector for risk reason and the NBFCs and RNBCs are forced to be away from it for regulatory reasons, then how can we fight out poverty, the basic problem of Indian economy.

Poverty eradication is the ultimate challenge before the policy formulators of India. While the incidence of poverty is primarily concentrated in rural areas, poverty in urban sector is due to the emergence of slum population in towns and cities which is due to the migration of rural population to urban areas for sake of living and livelihood. To combat poverty, the focus of our government should be on rural areas. Accordingly many programmes have been initiated for the purpose but looking into the gravity of pauperization, the effort puts forth seems inadequate. As the rural sector have the maximum resource reservoir of the country, without making use of those, how long and how effectively the government can keep on helping the poor. This way of doing something for the poor is also backed by many allied problems like inflation, laziness and may be unsocial activities. Therefore, it is essential to utilize the resources of rural sector to upgrade its standard of living. Sahara India Group with its two FIs was doing the same. They were tapping the potential of rural sector in financial front. If they are banned because of their misaligned functioning, they are to be well substituted by some other institutions what has not happened so far in India. If at all the RBI encouraged and gave green signal to any institute to carry on the job of Sahara India Group in financial sector but under the RBI guidelines, who can guarantee that the new player will abide by every checks and balances? As an alternative, if the authority put efforts to bring the banned and would be banned FIs back to the track prescribed by it then we can give justice to the rural underprivileged and guiltless employees.

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