



ISSN 1582-5949

<http://www.upet.ro/annals/economics/>

annals.up.economics@gmail.com

*Universitas Publishing House
Petroșani - Romania*

**ANNALS
OF THE UNIVERSITY OF PETROȘANI
~ ECONOMICS ~**

VOL. XII - PART II

2012

*From 2009 the journal is classified in the B+ Category (code 23) by the
National Council for Scientific Research in Higher Education from
Romania (CNCSIS).*



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

ADVISORY BOARD

- | | | |
|--|---|--|
| <ul style="list-style-type: none">• Prof. Ioan ABRUDAN Ph.D.
Technical University of Cluj-Napoca, Romania• Prof. Crișan ALBU Ph.D. Academy of Economic Studies, Bucharest, Romania• Prof. Ionel BARBU Ph.D. „Aurel Vlaicu” University of Arad, Romania• Prof. Mircea BARON Ph.D. University of Petroșani, Romania• Prof. Constantin BĂGU Ph.D. Academy of Economic Studies, Bucharest, Romania• Prof. Maria BOLDEA Ph.D. West University of Timișoara, Romania• Prof. Petre BREZEANU Ph.D. Academy of Economic Studies, Bucharest, Romania• Prof. Sorin BRICIU Ph.D. „1 Decembrie 1918” University of Alba-Iulia, Romania• Assoc. Prof. Ovidiu BUNGET Ph.D. West University of Timișoara, Romania• Prof. Laura Mariana CISMAȘ Ph.D. West University of Timișoara, Romania• Prof. Ioan COSMESCUI Ph.D. „Lucian Blaga” University of Sibiu, Romania• Prof. Horia CRISTEA Ph.D. West University of Timișoara, Romania• Prof. Tatiana DĂNESCU Ph.D. “Petru Maior” University of Tg. Mureș, Romania• Prof. Ioan Constantin DIMA Ph.D. “Valahia” University of Târgoviște, Romania• Prof. Elena DOBRE Ph.D. „Ovidius” University of Constanța, Romania• Prof. Luigi DUMITRESCU Ph.D. „Lucian Blaga” University of Sibiu, Romania• Assoc. Prof. Codruța DURA Ph.D. | <ul style="list-style-type: none">University of Petroșani, Romania• Assoc. Prof. Valentina FETINIUC Ph.D. International Center for Research into Economic Transformations, Republic of Moldova• Prof. Jaime GIL ALUJA Ph.D. Royal Academy of Economics and Finance, Barcelona, Spain• Prof. Janusz GRABARA Ph.D. Czestochowa University of Technology, Poland• Prof. Constanța IACOB Ph.D. University of Craiova, Romania• Assoc. Prof. Claudia ISAC Ph.D. University of Petroșani, Romania• Prof. Mihaela KELEMEN Ph.D. Keele University, United Kingdom• Prof. Mariana MAN Ph.D. University of Petroșani, Romania• Prof. Gheorghe MATEI Ph.D. University of Craiova, Romania• Prof. Arnaldo MAURI, Ph.D. University of Milano, Italy• Assoc. Prof. Ilie MITRAN Ph.D. University of Petroșani, Romania• Prof. Vladimír MODRÁK Ph.D. Technical University of Košice, Slovakia• Prof. Aladár NAGY Ph.D. University of Miskolc, Hungary• Prof. Jozef NOVÁK-MARCINČIN Ph.D. Technical University of Košice, Slovakia• Prof. Adriana OLARU Ph.D. “Dunărea de Jos” University of Galați, Romania• Prof. Dumitru OPREAN Ph.D. „Babeș-Bolyai” University of Cluj-Napoca, Romania• Prof. Natalia PASHKEVICH Ph.D. St. Petersburg State Mining Institute, Russia | <ul style="list-style-type: none">• Assoc. Prof. Francesco PASTORE Ph.D. Second University of Napoli, Italy• Prof. Marina PESHKOVA Ph.D. Mine University of Moscow, Russia• Prof. George POEDE Ph.D. „A.I.Cuza” University of Iași, Romania• Prof. Mirjana RADOVIĆ MARKOVIĆ Ph.D. Institute of Economic Sciences, Belgrade, Serbia• Assoc. Prof. Ilie RĂSCOLEAN Ph.D. University of Petroșani, Romania• Prof. Oleksandr ROMANOVSKIY Ph.D. National Technical University of Kharkov, Ukraine• Prof. Bruno SCHÖNFELDER Ph.D. Technical University of Freiberg, Germany• Prof. Elena Claudia ȘERBAN Ph.D. Academy of Economic Studies, Bucharest, Romania;• Prof. Aurelia-Felicia STĂNCIOIU Ph.D. Academy of Economic Studies, Bucharest, Romania• Prof. Ion STEGĂROIU Ph.D. “Valahia” University of Târgoviște, Romania• Prof. Ovidiu STOICA Ph.D. “Alexandru Ioan Cuza” University of Iași, Romania• Assoc. Prof. Alexandru STRATAN Ph.D. Institute of Economy, Finance and Statistics, Republic of Moldova• Prof. Emilia VASILE Ph.D. “Athenaeum” University of Bucharest, Romania• Prof. Yuriy VILKUL Ph.D. - Technical University of Krivoirot, Ukraine |
|--|---|--|

EDITORIAL BOARD

Editor-in-chief: • **Prof. Mariana MAN Ph.D.**, University of Petroșani, Romania

Deputy Editor-in-chief: • **Lecturer Imola DRIGĂ Ph.D.**, University of Petroșani, Romania

Associate Editors	<ul style="list-style-type: none">• Lecturer Oana DOBRE-BARON Ph.D. University of Petroșani, Romania• Lecturer Alin MONEA Ph.D. University of Petroșani, Romania	<ul style="list-style-type: none">• Lecturer Mirela MONEA Ph.D. University of Petroșani, Romania• Lecturer Dorina NIȚĂ Ph.D. University of Petroșani, Romania
Editorial Secretary	<ul style="list-style-type: none">• Assist. Prof. Oana-Carmen RĂVAȘ University of Petroșani, Romania	<ul style="list-style-type: none">• Assist. Prof. Ana-Petrina STANCIU University of Petroșani, Romania

Language Reviewer: • **Assoc. Prof. Gabriela DUMBRAVĂ Ph.D.**, University of Petroșani, Romania

Technical Editor: • **Assist. Prof. Marian FOAMETE** University of Petroșani, Romania

Contents

Achim, M.L. Decisional Methods Applied in Insurance Area	5
Achim, M.L. Mathematical Methods Used for Calculate Insurance Premium to the Property Insurance	14
Anghel, M. Management Experiments According to the Institutional Prospect of the Jiu Valley Mining After 1989	21
Avram, M.; Țogoe, G.D. Main Coordinates of Accounting Profession Co-Operational Model	29
Avrămescu, T.C. A Multifactorial Statistical Model for Development Regions Hierarchy in Romania	39
Bâldan, C.; Ungureanu, E.; Burcea, F.C. Economic Competition Environment in the European Union	47
Bălțeanu, C.; Bărbulescu (Șeitan), O. Qualitative Marketing Research Regarding the Impact of the Crisis on the Activity of the Leasing Companies	55
Bărbulescu (Șeitan), O.; Bălțeanu, C. The Analysis of the Brașov Consumer Behavior Regarding the Use of the Leasing Services	63
Botea, M.; Nedelcu, M.; Ioanăș, C.; Gruiescu, M. Actuarial Techniques to Assess the Financial Performance. Insurance Applications	71
Bușe, G.F. Aspects of the Manager Activities within the Future Competitive Environment	77
Ciobanu, D. The Horizon of Prediction for Exchange Rate EUR-LEU	85
Ciuhureanu, A.T. The Dualism of the Accounting Activity of the Company. Characteristics of the Managerial Accounting and Implications in the Management of the Company	93
Ciuhureanu, A.T. Involvement of Managerial Accounting in Ensuring the Company's Competitiveness on the Market	105
Croitoru, E.L. Analysis of Pension Reforms in EU Member States	117
Dimitriu, D.S. Customers Categories and Types of Banking Services	127
Fleșer, A.; Criveanu, R.C. Some Consequences of the Economic Crisis in Romania	135
Isac, C. The Quantifiable Component of Quality Management in Energetic Industry	143
Man, M.; Răvaș, B. The Manner Financing Influences the Performance of European Union Health Systems – A Case Study: Romania	151

Militaru, D.N. The Cost of Population Aging on the Public Pension System in Romania	163
Oprîțescu, E.M. Regional Development Vs. Innovation – The Main Engine of Economic Growth	171
Pătruțescu, M.; Simion, D.; Șerban, C.; Armășelu, S. Advantages Obtained by the Small Companies by Appealing to Managerial and Financial Consultancy in a Competitive Environment on the Tourism Services Market	179
Pop, M.G.S. The Investment Process and its Financing	193
Popa, C.E. Globalization and Integration into the Economic and Monetary Union-Challenges for Banks Operating in Romania	205
Popp, L.E. Opportunities for Human Resources Development by Professional Integration / Reintegration	213
Popp, L.E. Promotion of Active Measures and Employment Stimulation	223
Prodanciuc, R. Social Institutions	236
Prodanciuc, R.; Ciocodeică, V. The Voters' Priorities for the 2012-2016 Mandate of the Local Government in a Jiu Valley Community	244
Răscolean, I.; Pârvulescu, I.; Pleșa, R.; Lăcătușu, C. Assessment of Study Conditions and Programs by University Graduates at the Level of Petroșani University and at National Level, in View of Insertion in the Work Market	257
Škoda, M. How Appraisers Develop Fair Value	273
Vătavu, S. Trade-Off Versus Pecking Order Theory in Listed Companies Around the World	285
Book Review	293

DECISIONAL METHODS APPLIED IN INSURANCE AREA

MARIAN-LUCIAN ACHIM*

ABSTRACT: *Mathematical models applied in the insurance field, represent an ongoing concern for people that work in actuarial departments, serving this way fundamental informations to their managers when they have to adopt economic decisions. This work approaches a synthetic manner both mathematical models of decision making under conditions of risk and uncertainty, as well as a practical application of qualitative risk analysis in the insurance of goods domain.*

KEY WORDS: *risk; uncertainty; risk management; insurance.*

JEL CLASSIFICATION: *G22*

1. RISK AND UNCERTAINTY

Globalization of the world economy can be defined as being the most dynamic process of national states interdependences growth as a result of the enlargement and deepening transnational connections broader and more varied spheres of economical, political, social and cultural life and having as implication the fact that the problems become rather global than national, asking for a solution rather global than national.

The economic world, social, political and natural environment in which they live, work and develops people is full of uncertainties. Currently they admit more and more that a system which works in order to obtain a result in future, operates by definition, in a situation of uncertainty, even if specific situations are characterized by different degrees of risk, uncertainty or even indeterminacy. Risk and uncertainty are not the subjects of choice, they are simply part of being human.

The terms "risk" and "uncertainty" are often used to express the same thing, but it is claimed in the specialized literature, there is a clear difference between them. Uncertainty is the fact of not knowing what will happen in the future, and the risk is considered as a characterization of uncertainty degree; the greater the uncertainty is, the more pronounced risk and vice versa, most human actions have a certain degree of

* Lecturer, Ph.D., "Titu Maiorescu" University of Bucharest, Romania, achy1978@yaohoo.com

uncertainty and risk, which is due, on the one hand, to the one who acts, on the other hand, to some environmental factors. Uncertainty is therefore the lack of certainty respectively uncertainty, doubt, hesitation. Uncertainty induces the opportunity to reach to some danger, to have to face a danger a trouble, to support a possible loss, which means to have a risk. The risk is, in fact, consciously expose yourself to a higher or lower risk. The risk is therefore the possibility of a loss as a result of the occurrence of unpredictable events and phenomena. The notion of risk was and is still used mainly in insurance field, but lately has found increasing application in many areas of human activity, each trying to obtain the best performance by managing it correctly.

Based on these definitions variety they express their opinion, fully justified that the risk draw up a series of characteristics that can be considered but also that meanings can be assigned as follows; means the probability of an undesirable event occurrence; expresses the variability of the result under the environmental pressure; has significance only when trying to estimate the possible fluctuations of the profitability rate in the provisional analyzes; risk analysis is a systematic analysis of any business risk. As such, the risk involves:

- a) strategy adopted - the selection of a variant from several data;
- b) the state of nature - minimum conditions that depend the adoption of some strategies;
- c) result of the action - the gain or loss, evaluated in monetary units;
- d) matrix of the earning - the results associated action to the multitude of combinations between the strategy adopted and the state of nature.

It is essential the fact that with the development of the economic system, with its increasing complexity uncertainties are multiplied, therefore, it becomes more vulnerable. Risk is part of the economic and social life, as he is in the form of commercial risks (the risk of absolutization products, competitive risk, price risk etc.), social risks and production risks. Given the reality of risk and uncertainty, substantiating the decisions will require deep and timely knowledge of both environments, internal and external, in which economic agents operate. Rationalization of human actions and decisions is not so much avoiding risks and uncertainties removal, but also in controlling risks and their consequences in reducing uncertainty and indeterminacy to acceptable levels in a given situation. Man always coexists with risks, but their consequences were amplified and agravated once the society advanced from the lower to the higher level.

2. RISK MEASUREMENT METHODS

Estimating the size of the risk and and its consequences as well, can be achieved only under the conditions of the probability knowledge and extent of the effects, the period in which they manifest and their dynamics. The criteria for classification and estimation of the effects are grouped by some authors, according to three dimensions: size (complexity, number of variables), importance (time factor) and probability (level of uncertainty).

Making a real measure of the size of risk, especially in terms of comparability, involves conversion based on equivalents of the qualitative aspects in the quantitative

aspects, using this particular method of aggregation (eg, by using the typical scale +, 0, -, for large positive influences, null influences large negative influences).

Researchers consider that size and risk measurement mode is given by the attitude towards risk, of how a decision maker thinks and takes into account a risk. (Iosif, 1997)

In assessing risk, there is no certainty and rationality is often determined by the amount of time horizon in which decisions can be taken, resulting probability that a risk and attitude towards of a decider may be brought in many alternatives:

- a) **Comparability** implies the existence of two probabilities of risk occurrence, **A** and **B**. The decision maker will prefer either situation **A** to **B** ($A > B$) or the situation **B** to **A** ($B > A$), or he is indifferent to two situations ($A = B$);
- b) **Transitivity** requires the existence of preference relations and indifference or transitivity relations, meaning if we have $A > B$ and $B > C$ appears that $A > C$. Similarly if $B > A$ and $C > B$ we have $C > A$;
- c) **Continuity** means that in case of three probabilities that $A > B$ and $B > C$, there is a probability $D = (P, A, B, C)$ where we have $D = B$;
- d) **Independence** means that if an individual is indifferent to the two events (**A**, **B**) and if one of these events is a win of a compound probability (**C**), it can be replaced with another (**D**) without change the preference for the probability of event occurrence, so when $A = B$ and $C = D$ we have $(p, A, C) = (p, B, D)$;
- e) **Monotony** concerns the fact that if two probabilities appear starting from the same results, the decision maker will prefer that result that is likely to occur, even if the other probability is preferred.

The distinction between risk and uncertainty is the fact that in case of risk probabilities of each possible alternative are known, while in situations of uncertainty, probabilities of alternatives are unknown. The significance of the distinction between risk and uncertainty has been reduced considerably by the introduction of subjective probabilities derived from the impossibility of full knowledge of phenomena, being in return for objective probabilities in which the comments are real and are based on statistical data, obtained through observations over a period of time. Therefore any uncertainty can be transformed into one risk by associating of subjective probabilities to possible alternatives.

Decision-making process, the notions of uncertainty (medium of risk) and certainty (abstraction of risk) can not be opposed, but a gradation can be achieved according to the quality of informations that affect the quality of economic decisions. As a result of studies in this regard it was concluded that the decision problems depend not only on the profile, size and time horizon in which risk situations are manifested, but also existential space. These spaces (universes) can be: determined, uncertain, accidental or hostile.

The determined universe is that space where decisions are made knowing all the details of a problem, in which decisions are close to reality, deviations being relatively small, insignificant.

The uncertain universe is a set of circumstances or decisions that lead to the possibility of finding known ways in order to exit from the state of instability, but without being able to know the probability of identified phenomena appearance

objectively or the probability of decision correctness of in these the circumstances, in determining the optimum decision making are used several criteria:

- **Laplace criterion** or "equal opportunities" criteria identifies with the situation where the theoretical probability of the occurring risk can be considered equal ($\frac{1}{3}, \frac{1}{3}, \frac{1}{3}$), area and the probability of influence being theoretically the same.
- **Wald criterion** or "maxi-min criterion" is pessimistic criterion which establishes that the best decision is one that maximizes the minimal gains. Applying this criterion limits consciously obtaining better results in the desire to achieve full safety of the result that corresponds to the chosen variant.
- **Hurwicz criterion** is a criterion that applies to optimistic, pessimists decision makers or those who are situated between these two extremes. This situation is measured using an index whose value depends on the decision maker aversion towards risk and it is therefore a subjective criterion.
- **Savage criterion** is based on the phenomenon of opportunity cost, using as calculation formula the difference between the result corresponding to a certain decisions, but random and the best possible result that can be achieved if the event had not occurred.
- **Maxi-max criterion** is an optimistic criterion where whatever event occurs, the decision maker will act in a way that he will get the best result. The decision maker will choose the maximum output for each alternative result, and then the maximum value of these peaks. This decision criterion is risky especially in the long term.

Random universe expresses a set of circumstances that have a statistical stability which allows the implementation of probability models based on random variables behavior. Optimal decision making can be determined using the following models:

- **The statistical stability model** according to which the behavior of variables or events can be modeled as laws of probability having as fundamental law, the law of large numbers.
- **The Hope - Variation model** which has as main function a variable characterized by the average variation. After calculating hope and deviations from the average can be compared and decisions can be chosen.

Hostile universe is that existential space in which risk existence is certain and the occurrence probability of others is very high.

3. PROPERTY INSURANCE, A WAY TO PREVENT A DESTRUCTIVE RISK ACTION

In the insurance field, risk is defined as a future and uncertain event, this concept being associated with two dimensions: the probability of occurrence and physical and financial consequences. (Constantinescu D.A., 2004)

The probability of occurrence can be determined using mathematical statistics. We consider, for example, auto accidents. If we refer to a single driver, it is very difficult to say when and how he will have an accident and,

especially, which will be the consequences of this accident. But if we refer to a region or country and a certain period of time, then we can analyze some statistics on automobile accidents and determine their probability of producing under similar conditions.

Another dimension of the risk (material and financial consequences) is as important as the first. We used to pay attention only to events that have a higher frequency of realization and to neglect those who have a unique frequency. In the category of rare and very rare accidents we find the field of aviation and fluvial transport, sea and ocean, but whose consequences are very serious, awareness and assessing these risks both at the individual and the social levels are absolutely necessary.

To these two dimensions associated with the concept of risk, you should add a third: the perception of risk. This is necessary because the way we are aware of dangers differs from one individual to another. For example, we can consider that for a smoker, the risk of developing cancer is much higher than for a non-smoker. Ironically is that the smoker has a tendency to underestimate or even ignore this risk. Therefore, in the analysis and especially, in the interpretation of natural and technological risks we are exposed to, psychosocial component associated to the concept of risk has an essential role in the design and development of means of protection against these risks.

Production of this kind of phenomena or events may cause material losses to cause discomfort in the economic activity, to jeopardize human life or bodily integrity. As a result, man is subjected to multiple and varied threats caused by natural forces, by using technology or certain social or social - economical factors.

This causes which generate damages in economy can be grouped into two major categories: independent of the will of people, which include earthquake, drought, lightning, landslide, hurricane, storm, torrential rain, hail, flood, frost, death and so on, and dependent on the will of man, which include accidents, burglaries, disability, floods, fires, explosions, accidents during transport.

Through the specific means available, insurances help create conditions for realization of the objectives regarding the development of national economy, the expansion of foreign economic relations, tourism etc. Insurances contribute to the achievement of economic and social progress, of the country by maintaining the continuity of the production process, by protecting and defending the integrity of public property, private, cooperatives, personal, by creating for the population additional means of provision and savings.

Along with the development of production factors and relationships that are established between people in the production process, there was also a

continuous evolution of used insurance forms of goods and people insurances, both in terms of content and scope, as well as speaking of used insurance forms.

As a conclusion, in an economy of uncertainties, the insurance favors the passing of public savings to financial market, economic uncertainties can favor or disfavor the evolution of future economic agents wealth and insurance contract appears as a conditional debt emitted by the insurer and purchased by the insured person.

After the field covered by, insurances can be grouped as follows: insurances of goods, personal insurances and civil liability insurances.

4. ADDITIONAL PROCESS IMPROVEMENT USING RESOURCES AUTOMATIC FOR EVALUATION AND SUBSCRIPTION OF RISKS IN THE INSURANCE AREA

The application "RISK ANALYSER" is an assistance information system of decisions in the insurance of assets and people. The usability of this application can be seen in more directions: the accomplishment of objective risk analysis, eliminating so a part of subjectivity of underwriting risks from the company officials of insurance; the possibility of closing some of this insurances by the untrained sell staff complete in this, because the process is largely automated and not least, the possibility to make portals in order of on-line subscriptions of this type of insurance (Figure 1). (Achim, 2008)

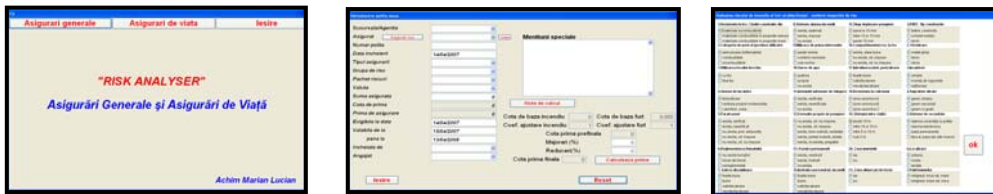


Figure 1. Informatics systems usable in insurance area - „RISK ANALYSER”

Design approach and the realisation of a system for assisting decision in the insurance business, is to convince certainly that the introduction of information technologies in the management organisation and, especially, interactive assistance of decisions suppose an detailed knowledge and a laborious effort of modelling all processes involved in the business of underwriting of risks in the insurance companies.

Knowing that, this area of insurance, provides jobs in which the salaries of employess is made directly proportional to income, under this impulse is possible to performe superficial risk analysis or even subjective, only from desire of maximize their own earnings. Computer science application have one of the main objectives eliminate bias risk assessments and underwriting policies exclusively on objective principles.

Another sphere of action of application refers to the fact that in Romania, until now, there is an extremely alert pace in the direction of stability employees in the insurance companies. Because of this, almost always there are employees with rather low experience which are in the stage of accumulation of knowledge. Underwriting risks, especially in property insurance, will be made after a prior training about two-three months, under a close monitoring. This application, doesn't eliminate the preparation of the theoretical part of employee, but offers practical support to allow that underwriting activity can begin from the first days of work.

Also, going on the principle of good faith of the insured (thing that happens in life insurance contracting), with this application can lay the groundwork on-line subscription of this type of shields, work performed by most banking companies.

Subsequent will be performed the inspections risk of field, by the insurer representatives, for comparing the insured statements with reality and will be made the possible adjustments to insurance premium, going even to the cancelling of the contract if the declarations made by the insured are largely inaccurate.

From the perspective of evolution on the society based on knowledge, I consider that soon the implementation stage of field inspections risk will be exceeded, the shields will be closed based on facts from future electronic databases held by the service planning from the local governments, and in this moment the perspective of subscription complete on-line, will be a definite reality.

In the developed countries, insurances represent a part of education, of tradition even to life, while in Romania, in present, we're far from talk of an education to the entire population in this area. In particular, in the conditions of our country, besides the lack of tradition are included and other factors objective financial, the offers are least adapted to market conditions and less flexible. There is no other developed system of financial services (credits, mortgages), which binds to a poor infrastructure, of a payment system ponderous and inconvenient.

The extend of the risks of all categories, who affect an increasing number of people, natural or legal, impose as a strict necessity increase of insurance activity. The share of some phenomena or events can cause material losses, to hamper economic activity to put in danger the life or physical integrity of people.

Dangers and risks to which man is subjected generate damage and therefore, he must know them so he can put the shelter their effects and act against them.

Analysis of these risks must be well done, in addition to quantitative criteria, on basis of qualitative which can be for insurers fundamental criteria in adoption of insurance decisions. A special attention should be given aggregation models of resulting indicators of risk analyzes.

5. CONCLUSIONS

A support system from decisions is a powerful tool and must be an integrated component of work decision who can expand the ability of marker to process quickly available informations and to approach complex problems, time consuming, decreasing the time of decisional process, improving reliability of decisional process, of the process of exploration and learning, and create an strategic advantage or competitive

for organisation. The advantages obtained by using a decision support system are not identified in all situations or from all decision makers, but depend on the suitability between decider, decisional content and decision support system.

The need for information is felt at all levels, the content and the dynamic activities specific insurance companies reflect a big need for information looking at the companies' financial status, the confidence in the approved budget and the degree of implementation of the development strategy.

Without an informational system and the evidence well done, syncopé and shortcomings in activity may occur, that can be known only based on the analysis and by studying information on time.

In supporting this approach to realise an informatical system for decision support regarding risk exposure of assets belonging to legal persons and persons, in life insurance, we took, beginning from the most complete solutions underwriting of insurance market, two models which include the analysis of insurable character in terms of some groups of indicators.

So the insurance decision, in the case of goods, will be taken only after analysis of 28 qualitative parameters, aggregated in 2 indicators, and according to the obtained score, the corresponding decision will be generated. (Figure 2)

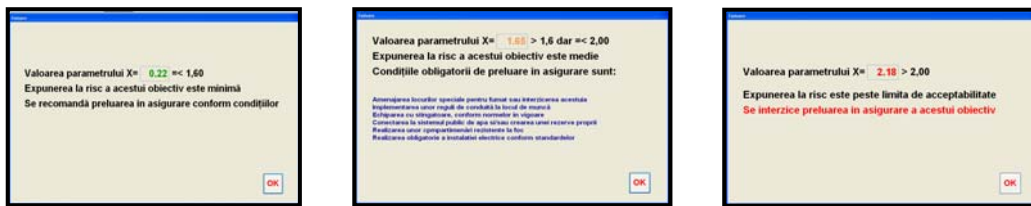


Figure 2. Adopting economic decisions

Regarding life insurance, underwriting risks is quite delicate, being involved more factors, especially medical terms, which will determine the insurable character of a person. In this regard, not being able to create a system which can try to analyse alone this character, I realised an algorithm to assist the writer close to the final decision.

Such an informatical system, specialised in risk evaluations in the insurances, must represent an instrument that allows users to control the decision-making process and have the ability to give information, both in terms of reasons for not accepting the insurance and the potential ways to solve these problems.

Primary aim of analysis of decisions isn't primarily resolving, in order to provide solutions, various decision problems but to help and stimulate the decider to think, give structure to the problem to understand it better, to clarify the set of objectives and to identify the action alternatives to assess.

Although it is an inexorable necessity, which doesn't have an alternative in the present, the informatisation supposes firm and explicit options, transposed in systematic actions both at macro and microeconomic level, claiming a strategic employment, on long term, in promoting and supporting information technology with sufficient resources. Approaching informatisation has as results, improving performances and

accentuation of the intelligent character of activities benefiting from the assistance of the computer, the satisfaction of his final users requirements in superior conditions from the recourse situation at traditional information technologies.

Business decision-making environment must integrate a whole experience and beliefs of decision makers with the techniques and decision support systems used. Currently, the business informational environment is becoming more complex due to the increased amount of information relevant to business, the number of information resources and the number of technologies used for accessing and storing data.

Decision support systems should serve as the main vehicle for policy makers in order keep up with the exponential growth in size, complexity and speed with which businesses need to be led. A decision support system should be an integral component of the decision process, that extends the ability of decision maker to process information quickly and to approach the complex , time consuming issues, reducing the time spent in this process. It will also improve the reliability of decision making process encouraging the exploration and learning process, thus creating a strategic competitive advantage for the organization.

REFERENCES:

- [1]. **Achim, M.L.** (2008) *The insurances by properties and person in the knowledge economy*, Economica Publishing House, Bucharest
- [2]. **Batrancea, M.** (2003) *Risk and failure*, Dacia Publishing House, Cluj Napoca
- [3]. **Bistriceanu, D.G.** (2003) *Small encyclopedia of finance, currency, insurance*, Universitară Publishing House, Bucharest
- [4]. **Ciurel, V.** (2011) *Insurance and reinsurance - A Global Perspective*, Rentrop&Straton Publishing House, Bucharest
- [5]. **Constantinescu, D.A.** (2005) *Treaty of insurances*, Tehnica Publishing House, Bucharest
- [6]. **Filip, G.F.** (2004) *Decision support systems*, Economica Publishing House, Bucharest
- [7]. **Iosif, G.N.** (1997) *The insurances system in Romania*, Tribuna Economica Publishing House, Bucharest
- [8]. **Stancu, S.; Mihail, N.** (2005) *Economic decisions under uncertainty: applications for financial market*, Economica Publishing House, Bucharest

MATHEMATICAL METHODS USED FOR CALCULATE INSURANCE PREMIUM TO THE PROPERTY INSURANCE

MARIAN-LUCIAN ACHIM *

ABSTRACT: *The most important task of the actuarial department is to provide well grounded charges for specialized departments and sales departments subsequently. For the stringency of these calculations will depend in future the economic performance of an insurer, by a mathematical estimate as close to reality existence. The method presented in this work is a quantitative one, later charges will support certain adjustments in terms of quality.*

KEY WORDS: *property insurance; risk management; premium risk for property insurance.*

JEL CLASSIFICATION: *G22*

1. THE NECESSITY AND THE CONTENT OF THE INSURANCES

Since ancient times, the economical agents have searched to discover and to apply various means of protection against various risks at which their production and commercialization were exposed, as the persons who were performing such activities. Right now, the remarkable progress in science and technique lead to the economical and social development, to the growth of the work's productivity, generating this way a wide range of risks.

The insurance contract represents a legal act by which the insured is obliged to pay to the society of insurance a premium, this one forcing to take the risk of the occurrence of a certain event and to pay to the beneficiary (who can be the insured or a third person a compensation within the established limits). (Constantinescu, 2004)

Speaking of the legal aspect, the insurance contract is developed based of some principles which, even though aren't specifically mentioned in the policy, they must be known and respected by the two parts:

a) **The principle of compensation** it is the most important principle which provides that the compensations granted by the insurer can't be placed over the value of the

* Lecturer, Ph.D., "Titu Maiorescu" University of Bucharest, Romania, achy1978@yaohoo.com

losses offered by the insured. In other words, no person can't benefit from the insurance, having the role to return the insured persons in the financial situation, that they had before the sinister, the subjective risk by the removal of the interest for the profit being reduced. Analyzing more closely three available principles at the grant of the compensations can be distinguished:

The principle of the proportional liability, where the rapport between compensation (D) and damage (P) can't be higher than the rapport between the granted amount (SA) and the real value (VR) of the insured thing (1.1 relation). In this case, the compensation will be equal with the damage only in the case of the total damages.

$$\frac{D}{P} = \frac{SA}{VR} \leq SA \leq VR \quad (1.1)$$

The principle of the first risk which provides that the compensation is equal with the damage eve though the thing was insured to another amount than the real value, specifying that the damage will not overcome nor the insured amount nor its real value.

$$D = P \leq SA \leq VR \quad (1.2)$$

The principle of the limited liability, according to which the compensation is granted only if the damage overcomes the default value. Thus, a part from the damage will fall, in the charge of the insured, part which is named franchise (F). The franchise is of two kinds: touched (simple) and deductible (absolute). In the case of the simple franchise, the insurer covers integral the damage if it is above the level of the franchise, otherwise everything being supported by the insured (relation 1.3). The deductible franchise is deducted from the amount of the damage, no matter of its level (relation 1.4).

$$\begin{cases} D = 0, \Leftrightarrow P \leq F \\ D = P, \Leftrightarrow P > F \end{cases} \quad (1.3)$$

$$\begin{cases} D = 0, \Leftrightarrow P \leq F \\ D = P - F, \Leftrightarrow P > F \end{cases} \quad (1.4)$$

b) The principle of the insurable interest exists in the moment when a person can suffer a prejudice or a financial loss in the moment of occurrence of an insured risk. This principle supports the principle of compensation, stipulating that the benefits of the insurance may cause to those a financial loss, and only in the limit of these damages. The court can not compel an insurer to pay compensations to ar in the interest of the insured, if the insured does not have an insurable interest.

c) The principle of subrogation it is aplyed in the moment when the insurer is obliged by the insurance police, at the payment of some compensations because of the fault of a third person. The right of subrogation is based on the common law or on regulations, and insurers often have the right to subrogation even though this things is not provided expressly in the policy.

2. PROPERTY INSURANCE

This type of insurance plays an important role in protecting the mobile and imobile savings of which a person has and it covers a large gama of risks, favoured by the diferent disasters of nature or by accidents, or which creation can cause big material damages. The modern economy, being subjugate to some continous changings regarding the introduction of some new technologies, the developement of earth mevement, air circulation, marine trafic and world commerce, as well as the apperance of some new domain of activity, imposes the giving of a bigger attention to this type of insurance.

The object of insurance is represented also by the buildings thet belong to the insured and also to their contents, fixed means (machines, equipements, tools, inventory, objects etc.), circulant means (the marchandises, substances, materials and another circulant means). By exception there are assimilated also in the insurance building, the instalations and equipements that guarantee the good work building too: thermal centrals, elevators, sanitary objects etc. We will not include here the cars, the animals, agricultural cultures, those making the object of other types of insurance, presented separately.

The risk for which the insurers offer protection, are in general the same, but the type of arrangement in disimilar packets of risks, are different. In general there are three packets of risks surmise:

- **the standard packet**, also known as FLEXA¹, including the risks of fire, lightning, explosion and aircraft;
- **the extended standard packet** which means a selective or cumulative extension of standard packet on some risk: earthquake, floods and silts, storm, down pour rain, hail-imediate effects, the burglary;
- **the all risks packet** where are included all the risks of the two packets above, plus the vandalism, the fall down or/and sliding of the ground created because of natural causes, the burden of snow and /or the ice, boom² sonic, avalanches, the accidental falling of parts, strikes and civil disturbances.

In the base of some special clauses and with the paymnt of additional insurance, it also can odder covers for the next risk: the flood caused as a following of accidental breaking of water conducts, the specific risks of breakable goods from the plan of buildings; mobile or transportable means which can be found on another adress too than the one which reviewed in the policy of insurance; damages of consequences, produced as indirect material damages, as a follow of producing risks, accidental damages produced to the goods as a follow of high tension, electrical arc, magnetic introductory, short circuit.

In the policy of insurance ,despite the risks of insurance, are showed the excluded situations of insurance too. The main exclusion, for which the insurers don`t odder protection are:war revolution, rebellion, insurrection, military ditactorship, take from owning, nationalization, kidnapping, atomic explosion, radioactive radiation or

¹ FLEXA is the English acronym of "Fire, Lightening, EXplosion and Aircraft"

² Shock wave caused by aircraft

infections, poluations, oxidation, smoking, spotting, the action of bugs, rodents, fungi, birds and of another pests: infiltration, the soil mapping, the damage or the fall down of buildings as a following of designing errors and/or execution errors, the big fault of the insured or his presumtives.

A very important aspect, from which it depends the subscribe uprightness of a saving insurances it's represented by the evolution of risk, regarding the insurance. In this way will be made an analysis by the representant of insurance society, from two sights: the value for which the risk will be taken in the insurance and the sum which will be payed for taking this risk into the insurance.

The insurance premium (P_a) represent the sum of money that the insured will be payed to the insurer, in the exchange of taking the risks from the insurer, and it establishes as a percent from the insurance sum (SA) (relation 2.1).

$$P_a = SA \times C_p \quad (2.1)$$

The establishment of the rate level of the tariff premium, upon which is determined the amount of premiums which will be paid by insurers, have a major special importation in insurance activity. To ensure the goods belonging to legal persons, mostly collected premiums are used to pay claims. Part of the premium, which is destined compensation coverage is called the net premium or share. To this adds additional premium destination which has to cover the costs incurred by the establishment and administration of the insurance fund, financing of preventive measures, establishing reserve funds and making a profit by the insurer. To calculate the net premium it starts from annual compensation index (I_k) that shows compensation paid by the insurer within one year, calculated as the ratio between the total amount of compensation (S_k) and the total amount of insured amounts determined by multiplying the number of insured property (N_k) and the average amounts provided (V_k) (the relation 2.2.)

$$I_k = \frac{S_k}{N_k \times V_k} \quad (2.2)$$

Biginning of an annual compensation index, the annual average index of compensation can be calculated, index which is an arithmetic average of annual compensation index. By comparing average compensation index with annual compensation index is found deviations, plus or minus, hub if the net premium would be calculated according to the average rate of compensation, revenues from insurance premiums would not cover damage produced at a time. To eliminate such a possibility, the index average of annual compensation will be corrected with the addition of risk that is obtained by calculating the standard deviation.

Calculating standard deviation, it is recommended to give up at the average index of compensation, because using simple arithmetic average is not appropriate only when damages would be uniform frequency. Relative frequency (f_k) is calculated as

the ratio between the number of goods compensated in K year (x_k) and the total number of the compensated goods in the reference period (n).

Average value of the compensation index (i) can be calculated with the 2.4 formula now, being known both annual compensation index, and relative frequency.

$$f_k = \frac{x_k}{n} \quad (2.3)$$

$$i = \sum_{k=1}^n I_k \times f_k \quad (2.4)$$

Dispersion (σ_1^2) is calculated using the 2.5 formula, and standard deviation (σ_1) is just the square root of the variance (relation 2.6).

$$\sigma_1^2 = \sum_{k=1}^n (I_k - i)^2 \quad (2.5)$$

$$\sigma_1 = \sqrt{\sigma_1^2} = \sqrt{\sum_{k=1}^n (I_k - i)^2} \quad (2.6)$$

Therefore, the net premium index (p) is obtained by adding the average index of annual compensation or standard deviation, 2.7 relation, and gross index (P) is calculated by adding together the first net premium index and the addition of index (a), the 2.8 relation.

$$p = i + \sigma_1 \quad (2.7)$$

$$P = p + a \quad (2.8)$$

To determine the rate necessary for creating reserve fund is used inequality Binayme - Cebâsev, where X is a random variable, and m is the average value of the random variable. (2.9 relation)

$$P(|X - m| < \varepsilon) > 1 - \frac{\sigma_1^2}{\varepsilon^2} \quad (2.9)$$

Insurance premium calculated with relation (2.5) can be paid either in advance and fully, in which case some insurers offer discounts or in a number of installments. In the case of contracts forefront in several installments, the validity of this is directly related to compliance deadlines for payment of premium rates, otherwise insurers are not obliged to honor claims.

Franchise is another important element of the insurance contract, which has the following functions (Constantinescu, 2004):

- It encourages risk control measures: some insured are not willing to spend the time, energy or money to prevent damage which, if they occur, will be paid by the insurance company. For example: a person may give up installing an alarm system against burglary, when he knows that the insurance company will cover damages resulting from theft. If, in the insurance policy provides for a franchise, the insured will be encouraged to install such a system because he is aware that, in case of theft, he will have to bear part of the damages.

- It reduces costs incurred by the insurer in connection with compensation: most times, if low value claims, the insurer's administrative expenses incurred to settle the case for compensation may be greater than the amount actually paid as compensation insured; existence of franchises involves reducing the number of claims, facing the insurance company because compensation claims are eliminated for damages of little value.
- It reduces the insurance premium that the insured must pay: because deductible reduces costs incurred by the insurer in connection with compensation, this also determines the reduce of the value of premiums by the insured.

Property insurance usually contracts for a period of one year and at the request of the insured may be concluded for periods for least than a year. An exception to this rule are the insurances concluded for stuffs which are the subject to guarantees (bank loans) in this case the policies can be concluded for multi-period up to expiry has been established warranty (full repayments of the loan).

3. CONCLUSIONS

Economic, social, political and natural world in which people living, acting and evolving is full of uncertainties, increasingly acknowledging that a system that works to get a result next set operates in a situation of uncertainty, even if specific situations are characterized by varying degrees of risk. But the risk and uncertainty are not optional topics, they are part of the human condition.

To cope with risks, so you can control and to counter or mitigate their negative consequences, man invented the plane, a tool that predicts the future milestones of the work he performs essential correlations between factors production and proportions of their combination and substitution at the micro level and the fundamental priorities of the national economy, allocating a significant part of material resources, money and manpower and directs economic activity. Plan contributes to widening the scope restriction certainty and uncertainty in a given economic space and time horizon. By recognizing risks and uncertainties, businesses improve their behavior and increase their knowledge improves, and thus they are able to conduct their work more efficiently or even exploit them.

By specific means that they have available, the insurances help create the necessary conditions for realization of the objectives of the national economy, the expansion of foreign economic relations, tourism etc. They contribute to socio-economic progress of the country by maintaining the continuity of the production process by protecting and defending the integrity of public property, private, cooperative personal by creating for population additional provision and saving means.

In an economy of uncertainty, providing a unique favors the flow of household savings to end the financial market. Uncertainties in the economy can favor or disfavor the evolution of future wealth of economic agents and the insurance contract is a conditional debt issued by the insurer and purchased by the insured.

Increased economic efficiency of various organizations is dependent upon the scientific leadership. Management is based on a good knowledge of economic laws, fast and accurate knowledge of supply and demand of domestic and external dynamics

of prices and tariffs, technological trends, and how to use the resources available to them.

REFERENCES:

- [1]. **Batrancea, M.** (2003) *Risk and failure*, Dacia Publishing House, Cluj Napoca
- [2]. **Bistriceanu, D.G.** (2006) *Small Encyclopedia of Finance, Currency, Insurance*, University Publishing House, Bucharest
- [3]. **Ciurel, V.** (2000) *Insurance and Reinsurance: Theoretical Approaches and International Practices*, All Beck Publishing House, Bucharest
- [4]. **Ciurel, V.** (2011) *Insurance and reinsurance - A Global Perspective*, Rentrop&Straton Publishing House, Bucharest
- [5]. **Constantinescu, A.D.** (2004) *Treaty of Insurance*, vol. I + II, Economic Publishing House, Bucharest
- [6]. **Dobrin, M.; Tanasescu, P.** (2003) *The Theory and the Practice of Insurance*, Economic Publishing House, Bucharest
- [7]. **Stancu, S.; Mihail, N.** (2005) *Economic decisions under uncertainty: applications for financial market*, Economica Publishing House, Bucharest
- [8]. **Vacarel, I.; Bercea, F.** (1999) *Insurance and Reinsurance* - second edition, Expert Publishing House, Bucharest

MANAGEMENT EXPERIMENTS ACCORDING TO THE INSTITUTIONAL PROSPECT OF THE JIU VALLEY MINING AFTER 1989

MARIANA ANGHEL *

ABSTRACT: *The hereby paper approaches certain aspects regarding the present circumstances that regard management experiments in the context of the social, economic, and political changes after 1989. Institutionally, and having as a background such changes, mining activities are continuously transforming and adapting to the requirements of the European Union. Institutional social and economic performance is determined by the assertive potential of the institution as an authority in the field as well as by the competitiveness of the mining units or of subordinated units. Management experience has been both influenced by the restructuring, turning to good account, and endowing with new technologies of the mining units as well as by the process of transition towards a functional market economy.*

KEY WORDS: *restructuring; turning to good account; endowing with new technologies; change management; institutional analysis; institutional adapting.*

JEL CLASSIFICATION: *A14*

1. INTRODUCTION

The starting point of the hereby paper is the process of transition towards a functional market economy from an institutional point of view that involves a series of structural, functional, and legislative adjustments of our under development country which have to be synchronized with those belonging to other countries having a developed economy. Accordingly, after 1989, Romania, as a country under development, has undergone a continuous process of economic, social, and political changes. Considering this perspective, one may state that the Jiu Valley had also witnessed such changes, especially when taking into account the fact that it is a mono-industrial region; the industry of the Jiu Valley as well as the industry of the entire district was strongly influenced by certain specific phenomena that accompanied the

* *Assist. Prof., University of Petroșani, Romania, marry_amy2007@yahoo.co.uk*

process of transition. Among these phenomena, let's cite the following ones: the process of restructuring of the mining field accompanied by massive employees leaves, the need of investments in the endowment with new technologies with a view of optimizing productive activity, and the improvement of the use of material, financial, and human resources.

The social and economic effects of re-structuring the mining field are quite important and require well-elaborated social measures in order to create a favorable milieu demanded by the development of the business environment and of an economic competition background capable to provide a positive perspective to a functional market economy.

According to Aurel Iancu, the transition towards a market economy represents a period that includes two main economic processes:

- *The change of economic mechanism* that includes various processes, such as: privatizing, decisional decentralizing, prices liberalizing, foundation of new, adequate economic devices, and change of the part played by the State through turning it into an economic agent;

- The second process regards the *restructuring of economic units* and includes processes regarding the re-modeling, modernizing or endowing economic units with new technologies. (Iancu, 1992)

This period of transition towards market economy represents a series of processes similar to privatizing and/or economic decentralizing; the new mechanism that is going to be founded should provide a highly performing functioning of the national economy.

The sociological analysis of management experience within management activity according to an institutional prospect ranges within the management practice of industrial units. Institutional evolution regards the fact that institutions are founded and develop according to a certain social, economic, and political environment with a view to meeting certain social needs. They are proved to be useful as long as *the need of meeting the targeted needs exists* and as long as the *required resources exist* in order to match those needs. In case major changes come out at the level of the society – such as: shifting from one political regime to another, globalization, economic crisis – they determine a factual crisis and influence, to a certain extent, the coming out or termination of certain institutional units or structures.

The state of crisis represents the condition of malfunctioning and decline, of paralysis, blockage, recession or regress reached by a certain institution, structure, human group or activity belonging to the structure of a society. Deficiency and decreased evolution potential represent features of the state of crisis. All manifestations of crises within socially useful activities begin with a slow or sudden cease of the previous rhythm and the appearance of elements of disorganizing or disorder; then follow the decrease and termination of resources (material, financial, human, management resources) that continue up to the blockage or interruption of the activity, temporarily or definitively. Under certain circumstances, the crisis may determine the termination of an activity organized and maintained by a certain institutional structure or may be over-passed owing to the efforts of re-organizing, re-financing and adapting to the new demands of social practice (Otovescu et al., 2011, p. 90).

The improvement of the activity of economic units under crisis condition can be done according to a medium or long term plan that should notice the adapting capacity to the demands of the economic and social environment within a certain context.

At present, in Romania, management is associated with change while management culture may be one of the privileged sources of settling present and future issues due to the fact that human beings are agents of performing innovation of social actions. The deep restructuring of tendencies, ideals, and mentalities determines the ranging of human resources in the first position of no matter what project of normative reconstruction of organizational structures. Change management represents the strategy of systematic and planned change whose implementation requires the influencing of organizational structure, of organizational culture, and of individual behavior (Buzarnescu, 2008)

2. DIMINISHING MINING ACTIVITIES AS A VIABLE ALTERNATIVE OF THE INSTITUTIONAL RECOVERY OF MINING

In an article bearing the title “Institutional birth rate and mortality in post ‘89 Romania: a sociological prospect”, we have emphasized certain aspects regarding the management experience of restructuring the mining activity of the Jiu Valley (Anghel, in Stefanescu et al., 2012, pp. 89-91)

Economic restructuring, that includes employees restructuring, during the process of transition, has been considered a viable alternative of industrial enterprises; nevertheless, no plan of professional conversion or real alternative of absorbing labor has been elaborated.

The restructuring of the mining activity was necessary with a view of determining the improvement of certain mines and the termination of others along with a social program that could accompany or emerge before the economic restructuring process with a view of decreasing mining economic cost which represented a real State issue in Romania. According to the calculations of the specialists belonging to the Ministry of Industries and Trade, during the period 1991 – 1998, over 4 billion dollars were lost in the coal and ores extractive industry. Let’s only mention that the National Pit Coal Company in Petrosani registered losses of almost 2 billion dollars out of which more than 1 billion dollars represented subsidies. Accordingly, “economic cost” represents in the mining field the ratio between incomes and expenditures in order to get one ton of brown coal or of net extracted pit coal; the “social cost” afferent to the mining activity regards the human resources spent in order to restructure the industry, including the leave of certain employees; to this, one should also add the secondary negative aspects that implicitly come out of such an operation: unemployment as a major factor of poverty (Boboc, 1999, pp. 3-4).

Beginning with 1990, the profound restructuring of the mining industry materialized according to several coordinates: technological restructuring of production that has had as a result the decrease of underground production and the increase of the share of surface exploitation production; the increase of the share of energetic pit coal supplies and the decrease of the amounts of pit coal prepared in order to get coke; the

increase of the activity of extracting and preparing copper and precious metals ores and the beginning of the activity of modernizing large quarries; the organizational and management restructuring that consisted in *externalizing* certain complementary activities of the mining units and their organizing as distinct companies; the restructuring of the employees belonging to the mining units owing to outsourcing certain activities and organizing as companies; anticipated retirements, decrease of labor time and leaves accompanied by with compensatory payments; decreasing or ceasing productive activity in case of certain mines displaying exhausted geological reserves, extremely hard geological conditions or increased production costs (Stegar, 2007, pp.73-74).

The mining industry of the Jiu Valley has had a strong influence upon the whole economic and social life of the region. At its turn, it has witnessed economic pressure from other economic branches, a reason owing to which mining went through a period of significant quantitative and qualitative changes, both institutional, management, and technological and regarding life quality. Romanian State is the one that has supported mining production owing to budget allocations meant for investments and subsidies due to the difficult exploitation conditions and to the high production costs of both surface quarries and underground exploitations.

At a European level, they estimate that 100,000 jobs directly or indirectly depend on mining; they are mainly located in the Ruhr region - Germany, the North-Western part of Spain, and The Jiu Valley in Romania. According to the internal rules of the European Union, governments are not allowed to give subsidies to inefficient industries due to the fact that such a thing would represent an advantage of such industries as compared with those that do not get any support. Inefficient mines should be closed and their workers should be professionally trained for other fields while State allocations should be gradually decreased until 2018. Mines supply 5.1% of Europe's electricity; in the case of Romania coal share within the amount of electricity production represents about 40%, out of which mostly pit coal.

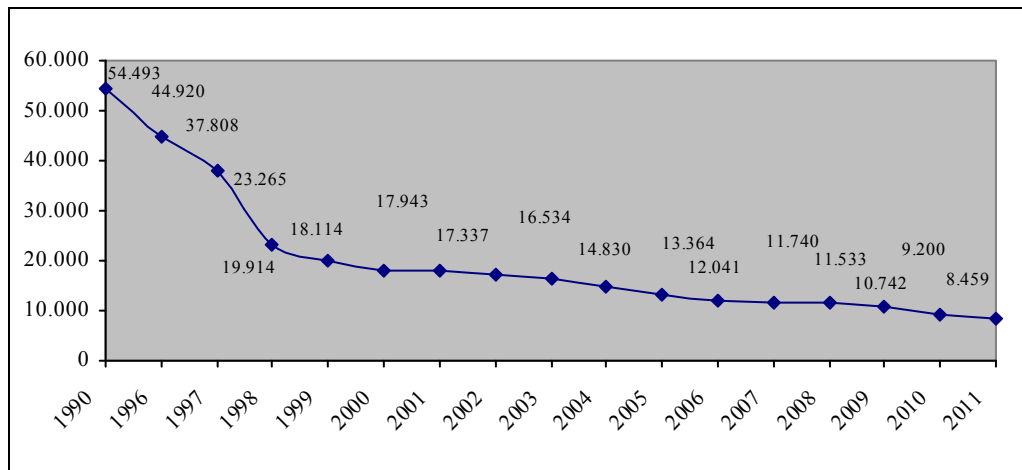
As regards the energetic strategy of the World Bank, the European Parliament is worried to find out that the World Bank goes on investing important sums of money in coal electric plants determining the blockage of under development countries within an energetic context relying on coal during the next decades; at the same time, multilateral financing given to financial intermediaries is poorly monitored. These should have clear objectives of development, financial performance as well as solid social and environment guarantees. The European Union should also urge the World Bank to invest more in regenerating and efficient energy, to support alternative, decentralized, and smaller energetic projects capable to take into account the needs of local communities and the economic reality of various countries.

3. THE CONDITION OF THE EMPLOYEES OF THE JIU VALLEY MINING DURING THE PERIOD 1990-2011

In his attempt at setting forth a social policy structured owing to the means of economic policy, Catalin Zamfir emphasizes two sub - periods: *the first one* belongs to the years 1990-1996 when budget efforts were made in order to protect jobs, while the

second one represents the years 1997-2000 when the policy of supporting jobs preservation was abandoned.

The elimination from the field of salaried labor of important social and professional groups employed in economic branches that were to be restructured through a drastic decreasing mainly in the mining field represents the second sub-period which starts in 1997 and is still in force. Accordingly, one may notice (Figure 1.) the decreasing trend of the number of employees in the Jiu Valley mining field.



Source: C.N.H., Department of Human Resources (average number of employees)

Figure 1. Evolution of the number of employees in the Jiu Valley mining field during the period 1990-2011 (thousand persons)

Figure 1. shows a negative trend of the evolution of the number of employees in the Jiu Valley mining field during the period 1990-2011 determined to a large extent by the leave decisions taken in this field and, to a smaller extent, by retirements owing to age limit. In fact the above figure displays the decreasing trend of mining activities that allows the out - coming of the so-called “phenomenon of institutional mortality” in the mining field.

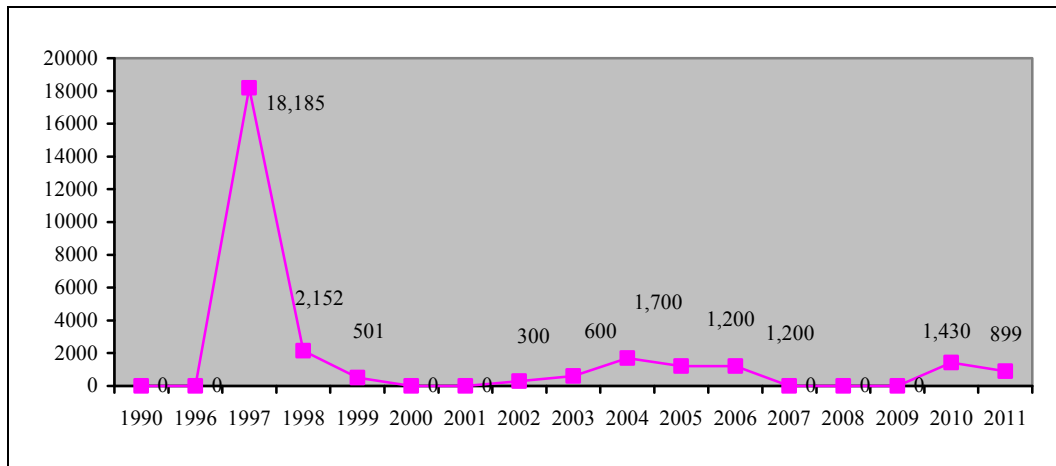
The reason a new economic re-organization of the mining activity was required was the fact that mining was considered an inefficient activity that used to register losses of billion dollars in the case of the National Pit Coal Company (C.N.H.) in Petrosani (former Autonomous Pit Coal Administration). The company is an economic organism that coordinates the Jiu Valley’s mining activity. As a result of the economic crisis, the results of a research made in 2009 at the request of the World Bank, shows that Romania exhibits the highest rate (17.6%) of the companies closed between 2008 and 2009. Another effect of the economic crisis is the increase of the number of companies that are debtors to the State budget. Among the 10 most important debtors to the State budget let’s cite the National Pit Coal Company with 1, 467 billion Lei (Otovescu et al., 2011, pp. 130-132).

One of the most important components of the process of transition in Romania is the reform of the mining field. Besides the favorable effects of the reform upon the

increase of the degree of efficiency of mining units and the diminution of the losses of national economy, the process of reform also has negative effects upon the miners and their families, upon the communities whose existence is structured, to a certain extent, by mining activities, upon the individuals that work in other fields depending or not on the mining industry, and upon local infrastructures. Among the negative effects, let's cite the following ones: increase of unemployment rate and lack of professional insertion (re-insertion) alternatives; decline of living standards; deterioration of local infrastructures and public services.

An effect of restructuring Romanian metallurgical industry is the partial abandoning of the use of the Jiu Valley coal in favor of imports. Pit coal demand dropped from 10.9 million tons in 1989 to 5.7 million tons in 1997; in 2009 it represented 2.5 – 2.6 million tons. Coal production was meant for the two important beneficiaries: Paroseni power-station and Mintia power-station. In 2007, due to the restructuring of extractive industry, to the decrease of the number of employees, and to the total or partial termination of the mining units belonging to the Jiu Valley basin, extracted production represented 2.63 million tons; accordingly, it was 75.8% smaller than in 1989 and 63.2% than in 1996.

Mining nevertheless went on being one of the fields that were most subsidized in Romania; consequently, over 50% of the total amount of State subsidies were directed towards the Autonomous Administrations in the mining industry. Such subsidies should have been directed towards technological modernizing; yet, they mainly targeted the periodical increase of salaries and of the other incomes of the miners or of their leaders.

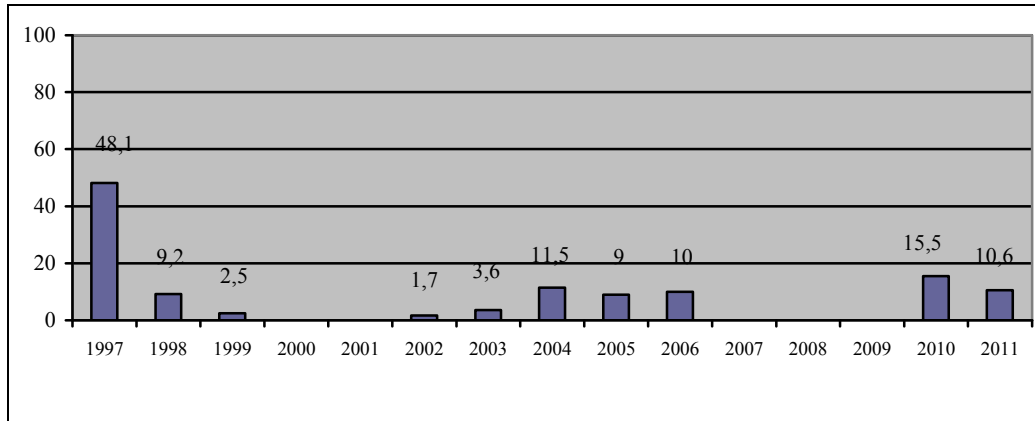


Source: C.N.H., Department of Human Resources (average number of employees)

Figure 2. Display of the decrease of the number of employees during the period 1990-2011 (number of persons)

Under such circumstances, the restructuring of the mining field has become a national demand that determined resorting to the solution of leaves according to two Orders (significant from a quantitative point of view, as Figure no. 2 shows): Order

9/1997 addressed to the employees to be fired by autonomous administrations and State companies, irrespective of their type of activity, and Order 22/1997 which displayed a special treatment of the miners that left their jobs “on demand”. According to the stipulations of the last order, the miners leaving their jobs were given “compensatory payments” that represented between 12 and 20 net average salaries specific to their branch (Dobre-Baron, 2009, pp. 232-237).



Source: C.N.H., Department of Human Resources (average number of employees)

Figure 3. Decrease of the number of employees owing to dismissals (%)

We have emphasized the two orders due to the fact that during that period the most important decrease of the number of employees in the Jiu Valley’s mining field was registered; it represented almost half of the number of employees (Figure no. 3), although the leave program of the labor in the mining field stipulated that only 15% of the employees were to leave the field as a result of implementing Order 22/1997. Let’s notice that the restructuring programs of the mining activity through dismissals went on during the following years and represented smaller percents which, nevertheless, were numerically significant.

4. CONCLUSIONS

The results of the researches undergone upon economic and social costs show that the Jiu Valley will always be a reference area for political, economic, and social experiments, due to a wrong social policy having a negative impact on Romania’s image world-wide; the Jiu Valley will always represent a trust test for all political powers to come (Boboc, 1999, p. 36).

Social actors and social knowledge represent key elements that enable the understanding of the content and of the patterns of institutionalizing processes; they might explain social institutions, not only in terms of their need of coming out, but also in terms of their concrete structural forms (Pop, 2003, pp 61-62).

Irrespective of the level of the analysis of social environment, social knowledge – its type, manner of foundation, evolutionary characteristics – is essential in

outlining the major tendencies of social policies and strategies that are going to be adopted. The drawing out of priority issues and of the manner of their social processing, according to a certain context, determines the display of the types of social policies as well as of the processes of their institutionalizing.

Mining restructuring may represent a viable solution from an economic perspective within the process of institutional recovery of adapting, improving, and making flexible the new structures; it may also support the development of other fields of activity in order to create concrete alternatives of labor absorption. And, according to a research of the National Federation of Mines and Energy on Romania's mining activities, past experience clearly shows that there were difficulties in reintegrating fired employees in the labor field.

REFERENCES:

- [1]. **Buzărnescu, Ș.** (2008) *Sociologia conducerii*, Western Publishing House, Timisoara
- [2]. **Boboc, I.** (1999) *Costurile sociale ale restructurării mineritului în România. Studiu de caz Valea Jiului*, „Protector” Institute of Social Researches - AS Bucharest
- [3]. **Dobre-Baron, O.** (2009) *Securitatea socială în contextul integrării României în Uniunea Europeană*, Universitas Publishing House, Petrosani
- [4]. **Iancu, A.** (1992) *Tratat de economie*, (vol. 3), Expert Publishing House, Bucharest
- [5]. **Otovescu, A.; Motoi, G.; Frăsie, M.C.; Otovescu, D.** (2011) *Criza mondială*, Pro Universitaria Publishing House, Bucharest
- [6]. **Pop, L.M.** (2003) *Imagini instituționale ale tranziției: pentru o sociologie a retro-instituționalizării*, Polirom Publishing House, Iasi
- [7]. **Stegar, I.** (2007) *Valea Jiului – Probleme și politici sociale*, Focus Publishing House, Petrosani
- [8]. **Vasiluță Ștefănescu, M.** (ed.) (2012) *Discovering current research trends in doctoral and postdoctoral sociological studies*, Brumar Publishing House, Timisoara
- [9]. **Zamfir, E.; Bădescu, I.; Zamfir, C.** (coord.) (2000) *Starea societății românești după 10 ani de tranziție*, Expert Publishing House, Bucharest
- [10]. **Federația Națională Mine Energie**, *Minerit modern în România. Dezvoltarea durabilă locală și regională în context European*, [Online], Available at: http://fnme.ro/_files/Minerit%20modern%20in%20romania.pdf, [Accessed 09.06.2012]
- [11]. <http://www.europeana.ro/index.php/2010/11/19/deputatii-europeni-dezbat-inchiderea-minelor-neprofitabile> [Accessed 21.05.2012]
- [12]. <http://www.europeana.ro/index.php/2010/11/23/ajutoarele-de-stat-pentru-minele-de-carbune-trebuie-reduce-gradual-pana-in-2018/> [Accessed 21.05.2012]
- [13]. <http://www.europeana.ro/index.php/2011/02/20/strategia-energetică-a-bancii-mondiale/> [Accessed 21.05.2012]

MAIN COORDINATES OF ACCOUNTING PROFESSION CO-OPETITIONAL MODEL

MARIOARA AVRAM, GRETI DANIELA ȚOGOE *

ABSTRACT: *The accounting profession fulfills a vital role in the development of modern economy, contributing to the thorough knowledge of business environment, the improvement of economic performance and solving some of the many problems the post-modern society is facing. Accounting profession fulfills a vital role in modern economy, contributing to a thorough knowledge of business to improve economic performance and to resolve some of the many problems facing post-modern society. Currently, the accounting profession is characterized by the expansion of information technology, internationalization of businesses and professional specialization which has made possible the creation of several professional bodies. Against this background, it becomes urgent to discover new perspectives on strategies able to maintain and increase business success, based on the simultaneous combination of the elements of cooperation and competition, which involves a new type of relation, called by the North - American literature "co-opetition".*

KEY WORDS: *accounting profession; co-opetitional model; professional accountant; professional body; partners.*

JEL CLASSIFICATION: *M40; M41.*

1. INTRODUCTION

At present, the accounting profession is characterized by the expansion of information technologies, the internationalization of business and professional specialization all these factors have made possible the development of several professional bodies (CECCAR, CAFR, CCF, ANEVAR). The need for new perspectives on strategies to maintain and increase businesses' success in this economic environment becomes urgent. Audit, accounting and tax consultancy firms are currently facing the same challenges as other types of businesses, although operating in a strictly regulated background. In this field of activity, more companies

* *Prof., Ph.D., University of Craiova, Romania, marioaraavram@yahoo.com
Ph.D. Student, West University of Timisoara, Romania, greti_togoe@yahoo.com*

have international activities beyond the borders of their country of origin, while trying to be financially prosperous. Therefore, strategic planning is becoming increasingly important.

However, few academic studies have tried to focus on providing a strategic perspective on the accounting profession. On the other hand, few of them have provided an integrated perspective on the accounting profession that should include not only the professional accountant's relationship with the client, but also the interactions with competing companies, accounting professional bodies, investors and creditors, the government, as well as universities and institutions providing training and qualifications.

“Professional accountants have an important role in society. (...) The attitude and behavior of professional accountants (...) have an impact on the economic welfare of their community and country.”¹

2. ACCOUNTING PROFESSION'S CO-OPETITIONAL MODEL

The market economy works and reproduces itself based on a series of structural elements, including the following:

- manufacturers (for service providers) autonomous under the law;
- consumers free to choose the offer of their choice;
- a generalized system of competition;
- relatively free formation of market prices, depending on supply and demand.

At first glance, dominant market relationship between manufacturers or providers sharing a certain segment of the market is that of competition. Natural selection of producers or suppliers is achieved by competing and the competitors who do not meet quality standards or are not able to reduce their costs, so their price is in concordance with the one recognized on the market, disappear and remain those who improve the quality of their products and services and reduce their costs relative to competitors.

However, since the Middle Ages, once the guilds appeared it was obvious that the relationship between those who share the same market segment can be one of cooperation, promotion of their profession to the public, recognition of quality standards and continuous improvement of those, based on the desire to provide quality products and services to beneficiaries.

The above emphasize the dual relationship between cooperation and competition: cooperation is needed to create value and competition is required to maintain the value. Professors Brandenburg and Nalebuff² have introduced the concept of *co-opetition*, their main argument being that these two seemingly contradictory phenomena – the competition and cooperation among firms - are not mutually exclusive³. In contrast, a business relationship can include both elements of

¹ CECCAR (2006) Professional Accountants National Code of Ethics

² Brandenburger, A.; Nalebuff, B. (1996) *Co-Opetition: A Revolution Mindset That Combines Competition and Cooperation*, New York, Doubleday

³ Luo, Y. (2005) *Toward co-opetition within a multinational enterprise: a perspective from foreign subsidiaries*, Journal of World Business 40, pp. 71–90

cooperation and competition, and firms can compete and cooperate at the same time. The simultaneous existence of elements of cooperation and competition between firms involves a relationship called co-opetition. Consequently, pure inter-organizational competition and pure inter-organizational cooperation is in fact a utopia because, in reality. There are various hybrid forms of co-opetition relationships, so that pure cooperation, being treated as a monopolistic understanding, may be sanctioned based on existing regulations on the protection of competition while "blind" competition, without respecting the rules of ethics and the law, can be punished as unfair competition.

Understanding the co-opetition behavior is facilitated by understanding the concepts of competition and cooperation. Competition arises when more companies offer the same products or similar products and fight for the same customers and suppliers. Against this background, companies tend to gain value by obtaining full control over their resources and attracting the customers, thus excluding the collaboration with other companies. In pure competition, there is a clear delineation of boundaries between competitors. On the contrary, pure cooperation implies frequent exchanges between the partners, including the exchange of business ideas and social information. Cooperation determines the creation of strong links between firms in order to share skills, assets and complementary interests. According to a position common in the specialized literature, the competition has only negative effects, while cooperation has only positive consequences. Contrary to this opinion, in the case of co-opetitional model, it can be assumed that both competition and cooperation are necessary and desirable in running a business since both can bring benefits to a company⁴.

Joining the accounting profession's ethical principles and values provides for professional accountants sufficient reasons for guild solidarity and common defense of the profession's interests but, at the same time, the need for performance, competition by fair means, signifies accepting competition, implicitly its rules and principles, with the winners and losers.

As can be seen in the figure above, the professional accountant plays a central role in the mechanism used for ensuring the safety and predictability of the business environment. The main actors of accounting profession services are: partners, clients, competitors and legal basis.

⁴ Barretta, A. (2008) *The functioning of co-opetition in the health-care sector: An explorative analysis*, Scandinavian Journal of Management 24, pp. 209-220;

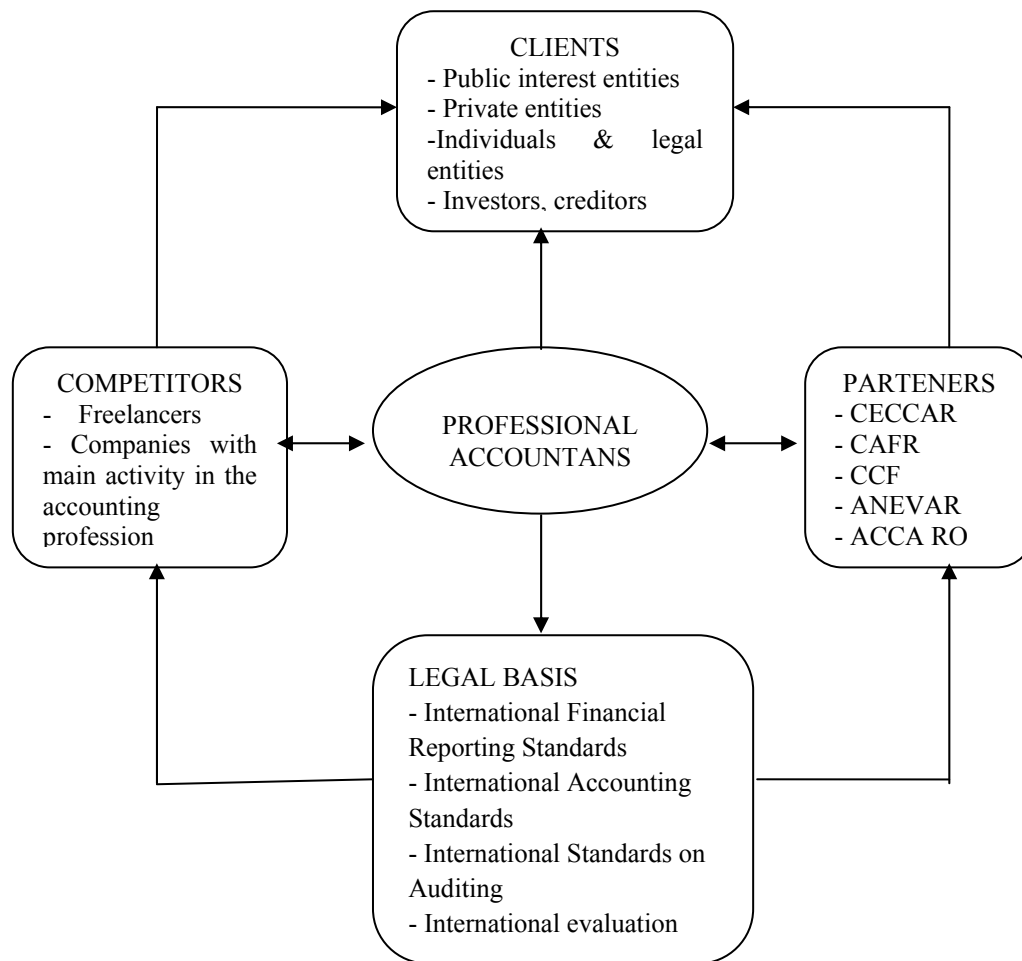


Figure 1. "Value Net" of Professional Accountant Scheme

Source: Own Projection (adaptation of the scheme developed by Brandenburger & Nalebuff)

Partners

The Body of Experts and Licensed Accountants of Romania (CECCAR) is the main organism that manages the accounting profession in Romania, having a strong international recognition and being autonomous, non-governmental, and non-profit and of public interest.

An accounting specialist, permanently found at the heart of an enterprise in which interests of shareholders, customers, suppliers and employees are often divergent, aims to provide a synthetic view of firms' activity, based on the financial statements, that is translated into numbers and supports management decisions.

Conducted on principles, concepts and rules, the activity of the professional accountant is indispensable for the 21st century' business man since he contributes to

the success and development of the company by the mean of his knowledge and professional judgment, in the spirit of a code of ethics.

Tasks performed by CECCAR members are:

- Record keeping and oversight of accounting documents, as well as preparing, checking and signing financial statements based on a contract;
- Carrying out financial and economic analyzes and economic evaluations based on contract;
- Carrying out judicial audit or expertise on the basis of judicial or extrajudicial institutions, under a signed contract;
- Censorship of companies and NGOs on a mandate of General Meeting of Shareholders;
- Offering specialized assistance for the establishment and reorganization of companies, under a signed contract;
- Performs professional services involving accounting knowledge.

Chamber of Financial Auditors of Romania (CAFR) mission is to build on a solid basis the identity and public recognition of financial auditor profession in Romania, having as main objective the sustainable development of the profession and its strengthening with the Auditing Standards and Code of Ethics for professional financial auditing, by full assimilation of the International Standards and of the IFAC Code of Ethics, allowing auditors who are members of the CAFR to provide financial audit services of high quality in the interest of general public, in general, and business community, in particular.

Tasks performed by CAFR Members are:

- Financial Audit;
- Internal Audit;
- Financial-Accounting and Tax Advice;
- Providing financial and accounting management;
- Specialized training in the field;
- Auditing;
- Evaluation;
- Judicial reorganization and liquidation.

Chamber of Tax Consultants (CCF) is a professional organization of public interest, non-profit legal entity, with its own patrimony and budget.

The independent exertion of tax advisor quality is achieved only on the basis of legal civil and commercial relations with individuals or legal persons to whom he provides advice and has no direct or indirect material interest, except for fees payable for work as such.

Tax advisory activity signifies to provide expert assistance in the preparation of statements of taxes, other tax issues and budgetary claims, such as: fines, penalties and increases, with the consideration of legal provisions in force, and representation before fiscal bodies.

Tax advisers and tax consulting companies can perform, besides tax advisory work, under the conditions stipulated by the legislation in the field, the following activities:

- Auditing;
- Financial Audit;
- Training and development in the field of taxation.

National Association of Valuers in Romania (ANEVAR) was established as a professional, non-profit, non-governmental, independent association, acting in the public interest and promoting evaluation methods and techniques through specific means; this professional association has been included nowadays in the Appraisers National Union of Romania.

Tasks that an ANEVAR evaluator can perform:

- Assessment of business;
- Evaluation of real estate;
- Property valuation;
- Valuation of financial instruments.

An effective collaboration with local government and other third parties can lead to the development of a professional body that respects the needs of the administration, profession and public interest. For the realization of the objectives of the profession's members, individually and as a group, professional bodies must be able to act effectively as a professional speaker on accounting, tax and financial aspects in the relation with the government, the public and other interest groups. A professional body earns public respect when it shows commitment to maintain and improve the quality of services provided by its members and when its public position and statements are perceived to be of public interest.

A professional body must not only manage the current interests of members, but must have a clear vision by which:

- to promote knowledge, skills and competence of members;
- to make public statements on public policy, with accounting, auditing or tax implications;
- to provide proof of transparent processes for providing membership, qualifications and regulations;
- to decide on disciplinary offenses committed by their members.

Accounting services market has grown significantly in recent years, but if someone would like to know the actual size of the market for professional accountants' services in our country, he would be confronted with many obstacles and a lack of transparency incomprehensible for such a profession. The most difficult obstacles are: the ability to perform accounting services under several professional organizations, the possibility to perform accounting services outside professional organizations as an employee of various entities and, what is worse, being able to perform accounting services especially in the field of illegal accounting, under the responsibility of the company's administrator.

Based on available data at the end of 2010, we have planned an investigation of the accounting profession's services market in terms of number of active members, individuals or legal entities, as shown in Table no.1.

Table 1. Situation of accounting services market in 2010

Nr.	Professional Body	Active Members Individuals	Members Commercial Entities	Income from contributions - lei -
1	CECCAR	31436	6175	41.780.983
2	CAFR	3134	893	7.043.949
3	CCF	4234	459	5.985.361
4	ANEVAR	4417	299	5.797.446
	TOTAL	43221	7826	60.607.739

Own processing after data published by professional bodies

Note that both active members individuals and businesses can be part of one or more professional bodies, having the same type of activity, CAEN Code 6920 "Accounting and financial auditing activities; tax consultancy".

To get an insight into the volume of accounting profession's services market in Romania, based on revenues collected by professional bodies in respect of contributions, in 2010, in conditions of an average rate of 1.5% , fixed and variable fee, a total turnover of 4.040.515.933 lei, about 950 million euro, results at the rate used in December 2010.

In reality, accounting profession's services market is much larger because it includes the activity of staff working in economic companies, in central and local state administration, under employment contract or contract for provision of services.

Clients

Accounting profession began offering services to a diverse range of beneficiaries, increased the degree of awareness and education of the general public so that, if 30 years ago, accounting was understood only by a few initiates, nowadays the public needs clear, reliable and appropriate financial - accounting information, obtained in a reasonable time and at non-prohibitive costs.

Among actual or potential customers are: investors, creditors, suppliers, state by its specialized agencies, supervisory and regulatory authorities, individuals etc.

Investors are represented by capital bidders and their financial advisors who are interested in the inherent risk of trading and the benefits of their investments. Their information needs are to receive information that will enable them to decide when to buy, sell or hold parts of the capital. They are also interested in information which enables them to assess the company's capacity to pay dividends. They are seen as providers of capital and related risks and, in this respect, they are interested in finding the right decisional time when to purchase, hold or sell equity.

Lenders are interested in information which enables them to determine whether loans and their interests will be repaid at maturity.

Suppliers are interested in information that enables them to determine whether the amounts owed to them will be paid at maturity. They are also interested in the business for a shorter period of time than creditors, unless they are dependent on the continuity of business activity or when it is a major customer.

Government and its institutions are interested in the allocation of resources and thus in enterprises' activity. Information requested by those aim to regulate their activity so to determine fiscal policy and macroeconomic indicators' calculation. The public is interested in a variety of ways, namely: contribution to the local economy, number of employees, collaboration with local suppliers, recent and future developments in business activity, field of activity.

Individuals, as plaintiffs or defendants, need judicial and extrajudicial accounting expertise, provided by professional accountants with high professional and moral integrity, which can be the basis of well-founded legal judgments.

Competitors

Competitors are freelancers or companies, members of professional bodies who have earned the right to practice according to the rules of each professional body requirements while respecting the appropriate ethical code. Accounting profession's services market is now influenced by both disloyal competition, meaning people who do not meet the quality standards set by the professional bodies, and excessive regulations, which can be translated in professional bodies issuing regulations on all the activities that make the accounting profession.

Internationally, the discussion on the report that should be between regulation, deregulation and self-regulation has not yet been concluded: while the continental model imposed in France and Germany is focused on strict regulation, the British model prioritizes deregulation in the sense of reducing the scope of the regulations, the American and Australian model concentrates on self-regulation, each professional body having the opportunity to promote their own rules with the obligation to make them known to the public.

Cultural differences between nations can lead to different interpretations:

- • "is allowed what is not forbidden";
- • "is allowed only what is stipulated as such";
- • "is forbidden and what is allowed".

Legal Basis

For the profession to grow and gain public recognition there must be a legal and regulatory framework to properly govern it. This framework must respect the fundamental principles of the accounting profession. Also, all measures must be taken to avoid imposing excessive regulatory obligations on professional accountants or limitations of professional body's authority which are unnecessary or inadequate.

Professional standards governing the accounting profession are:

- International Accounting Standards (IFRS, IAS) - the purpose of these standards is the adoption and application of international accounting standards in order to harmonize the financial reports submitted by companies. It's about a high level of transparency and comparability of financial statements.

- International Standards on Auditing (ISA) - their purpose is to outline the basic principles that represent the practice of audit, provide a framework for implementation and support of a wide range of audits that generate added value, to serve as a reference against which the results of audit to be evaluated, to stimulate the improvement of company's processes and operations.
- International Valuation Standards - aim to facilitate international transactions, contributing to the sustainability of global markets and promoting transparency in financial reporting.

3. CONCLUSIONS

Due to globalization of business, the accounting profession is going through a conversion process to the formation of an "universal" professional accountant who will produce and disseminate firm's accounting image and should be guided in this activity by a referential accounting normative applied worldwide and having as purpose to provide a quality financial information that can enable the proper functioning of markets.

The responsibilities of accounting profession should focus on protecting the public interest by ensuring compliance of financial reporting, comparability of financial - accounting information, fiscal prudence in terms of public spending and showing the contribution of accounting professionals to the organizational performance growth of different entities by:

- Providing financial and business reports to satisfy stakeholders
- Facilitating financial and audit comparability between different jurisdictions and periods,
- Reducing economic uncertainty in the market by increasing transparency of information,
- Applying high standards of ethical behavior and professional judgment
- Establishing appropriate education measures and continuous professional training.

As far as the continuous training, an obligation of all professional accountants, regardless of the professional body to which they belong, it is necessary, based on the principles of co-opetition, that those members who are part of several professional bodies to have this fact recognized as continuous training based on reciprocity.

There are currently cooperation agreements between CECCAR and ANEVAR, and between CCF and CAFR being desirable a stronger cooperation of all bodies managing the accounting profession.

REFERENCES:

- [1]. **Avram, M.** (2010) *Management contabil*, Editura Universitaria, Craiova
- [2]. **Avram, V.; Avram, C.D.** (2010) *Gestiune, contabilitate și audit bancar*, Editura Universitaria, Craiova
- [3]. **Brandenburger, A.; Nalebuff, B.** (1996) *Co-Opetition: A Revolution Mindset That Combines Competition and Cooperation*, New York, Doubleday

- [4]. **Bunget, O.C.; Almasan, A.C.; Dumitrescu, A.C.** (2008) *Expertul contabil: o profesie cu întrebări și răspunsuri*. Contabilitate, Editura Mirton
- [5]. **Danescu, T.; Todea, N.; Prozan, M.; Danescu, A.C.** (2011) *Studiu privind armonizarea rezultatului contabil cu rezultatul fiscal*, Revista Audit Financiar, Nr. 2
- [6]. **Mateș, D.; Feies, G.C.** (2010) *The Necessity of Accounting Information in the Management of the Communitarian Services of Public Utilities*, Annals of the University of Petrosani – Economics, Vol. X, Part III, pp. 225-234
- [7]. **Radneantu, N.; Gabroveanu, E.; Stan, R.** (2010) *From Traditional Accounting to Knowledge Based Accounting Organizations*, Annals of the University of Petrosani – Economics, Vol. X, Part I, pp. 307-318
- [8]. **Toma, M.** (2011) *Drumuri prin memoria profesiei contabile*, Editura CECCAR, București;
- [9]. **CECCAR** (2006) *Codul etic național al profesioniștilor contabili*, Ediția a III-a revizuită, Editura CECCAR, Bucuresti
- [10]. <http://www.ceccar.ro> [Accessed 15 September 2012]
- [11]. <http://www.cafr.ro> [Accessed 15 September 2012]

A MULTIFACTORIAL STATISTICAL MODEL FOR DEVELOPMENT REGIONS HIERARCHY IN ROMANIA

TIBERIU CRISTIAN AVRĂMESCU *

ABSTRACT: *Hierarchy of administrative units using an index of development is particularly important in measuring of economic disparities between the Romanian regions. Knowing regional disparities, we can determine accurately regional development policy priorities and provide supports for regional development strategies achievement. To achieve this hierarchy, we used a set of six indicators relevant to express the development level of a region and we realized the hierarchy using two methods: ranks method and relative distances method.*

KEY WORDS: *regional development; regional disparities; regional policy; development index.*

JEL CLASSIFICATION: *C43; R11; R12.*

1. INTRODUCTION

Since its establishment, the European Community proposed as a priority a harmonious, balanced and sustainable development of economic activities, a high level of employment and social protection, growth of living standards, solidarity and economic and social cohesion for European countries.

Thus, regional policy target is to reduce social disparities and to express solidarity with disadvantaged social groups (vertical cohesion) or to reduce regional disparities and to express solidarity with people in declining areas (horizontal cohesion). Through this policy, financially supported by structural funds, the EU helps undeveloped regions and supports the conversion of industrial areas in difficulty, diversification of rural economic activities and urban regeneration of cities (Constantin, 2010, p. 138).

* Lecturer, Ph.D., University of Pitești, Romania, cristiavr@yahoo.com

Disparities in levels of development of different regions are the result of "equipping" their natural resources and human differentiated, and the teaching of evolution relatively specific (economic, technological, demographic, social, political and cultural) that shaped his development throughout history (Biriescu & Butuza, 2011, p. 21).

2. ROLE OF STATISTICS IN SPATIAL ANALYSIS

Regionalization is an important objective for European integration, because it allows a zonal monitoring of socio-economic development. Europe is in a continuous change, economic and social development evolutions require a statistical system adaptable to change, that it can cope with the development of European policy. The priorities of statistics at European level relate to (Ștefănescu et al., 2003, p. 69):

- development of relevant indicators to describe the situation of the environment, in support of sustainable development policies;
- development of quality indicators, required by strategic spatial planning problems at European level;
- particularization of statistical data concerning to labor market trends at the regional level, in accordance with continuous changes of economic activity, in occupational and spatial terms.

Statistics provide the conceptual and methodological framework for analysis in spatial terms (regional). Existence of regional imbalances is a reality, due to differential allocation of natural and human resources and different conditions of development (economic, technological, demographic, social, political and cultural).

Regional statistical system must have an interactive relationship with users, so that, by its attributes, to inform the society members about its evolution.

To quantify the level of economic development of a region, an important instrument is *global development index*, with an important role in the hierarchy of administrative units. Elaboration of global development requires several steps (Tacu, 1998, pp. 29-38):

- *identifying indicators and their structure* in groups of indicators. This phase is particularly important, the main objective is establishing of indicators system that reflect better reality and comprise the most significant aspects of the socio-economic development process. In this phase should be considered to ensure the comparability of indicators and availability of statistical data in present and future;
- *determination of criteria and calculation methods* according to logical evolution of phases, for obtaining the global development index, as a generalizing index;
- *sensitivity analysis* of this index variation at other indices or indicators variations, that the global index depends naturally. This analysis can be approached both in terms of dynamic and spatial or territorial aspect.

Rigorous evaluation of regional development is part of the requirements of modern statistics, designed to give those who use it opportunity to know exactly what happened and to outline general trends. Based on these requirements, I propose to present the main methods of multifactorial statistical hierarchy of administrative units.

I shall use this methods to make a classification of Romanian development regions, because multifactorial hierarchy of regions is particular importance to measure gaps and to prepare development strategies.

The hierarchy starts with identification and selection those statistic indicators who provide complex characterization of each territorial unit, using for this purpose a set of indicators. First, we can do provisional classifications by each chosen indicator and then we can use an aggregated method in a single indicator through which is achieved proper hierarchy. (Popescu, 2004, p. 203)

Table 1. Indicators used for Romanian development regions hierarchy

Region	GDP per inhabit. (lei current prices)	Average net monthly earnings (lei current prices)	ILO Unemploy. rate (%)	Gross investments of active local units per inhabit. (lei current prices)	Local active units at 1000 inhabit.	Total expenditure from research - development activity per inhabitant (lei current prices)
North-West						
1998	1539,7	95,08	5,4	435,92	15,30	3,14
2009	21297,4	1161	5,6	3467,24	27,51	71,37
Center						
1998	1689,7	98,83	5,9	404,67	14,54	6,54
2009	22618,8	1223	10,7	4508,20	25,74	67,32
North-East						
1998	1223,3	94,28	7,6	381,93	10,28	2,85
2009	14649,3	1207	6,0	1600,48	15,64	42,46
South-East						
1998	1630,9	108,36	6,3	476,69	14,56	2,74
2009	18738,2	1255	7,5	3146,17	22,11	32,49
South Muntenia						
1998	1427,8	103,61	6,0	428,57	11,07	5,70
2009	19913,7	1294	8,0	3203,56	17,31	67,31
Bucharest Ilfov						
1998	2845,3	125,24	6,0	2170,61	27,82	45,78
2009	55079,3	1817	4,0	16279,84	56,52	602,55
South-West Oltenia						
1998	1452,7	109,33	4,6	642,05	12,33	2,38
2009	17752,8	1308	6,8	3419,33	16,95	33,54
West						
1998	1780,6	97,09	6,2	410,79	13,07	3,44
2009	25602,4	1270	6,0	4874,02	26,01	46,26

Source: calculated by Romanian Statistical Yearbook, 1999, 2000, 2010 and 2011

To make this hierarchy, I chose a set of indicators that I consider relevant to characterize the development level of a region. The indicators were chosen so as to

take into account the most relevant elements that contribute to regional development. Thus, the knowledge of the hierarchy of development regions allows to determine accurately the regional development policy priorities. Thus, we can allocate resources to undevelopment regions in terms of the economic development level.

The selected indicators are:

- Gross Domestic Product per inhabitant (lei current prices);
- Average net monthly earnings (lei current prices);
- ILO unemployment rate (%);
- Gross investments of active local units from industry, construction, trade and other services per inhabitant (lei current prices);
- Active local units from industry, construction, trade and other service at 1000 inhabitants;
- Total expenditure from research - development activity per inhabitant (lei current prices).

To reveal the changes occurring over time and effects of regional policy in Romania, I decide to make a double hierarchy: one for 1998 (year of publication of Law no. 151 concerning regional development) and one for 2009.

The proposed model aims an easy hierarchy of development regions, starting from the premise that ease of use was one of the causes of success for Human Development Index. For this, I proposed a set of indicators whose values are available and easily accessible to national and regional statistical system.

Further are presented datas for indicators who will contribute at Romanian development regions hierarchy.

3. RANKS METHOD

This method presents a classification of territorial units, successively, according to each indicator included in the analysis. Rank **one** is assigned to the unit with the highest quality performance and highest rank, equal to the number of territorial units investigated, is assigned to the unit with minimum quality level. For each territorial unit, it calculates the ranks assigned to each indicator and it obtains the total score depending on which is determined the final rank.

Using ranks method, first position in 1998 is held by Bucharest-Ilfov region, followed by the Centre, North-West and South-West Oltenia regions. In 2009, the Bucharest-Ilfov region retains first position, West, North-West and Centre regions being on next positions.

Table 2. Romanian development regions hierarchy using rank method, in 1998 and 2009

Region	Ranks assigned by						F I N A L S C O R	F I N A L R A N K
	GDP per inhabit. (lei current prices)	Average net monthly earnings (lei current prices)	ILO Unempl. rate (%)	Gross investments of active local units per inhabit. (lei current prices)	Local active units at 1000 inhabit.	Total expenditure from research - development activity per inhabitant (lei current prices)		
Norht-West								
1998	5	7	2	4	2	5	25	3
2009	4	8	2	4	2	2	22	3
Center								
1998	3	5	3	7	4	2	24	2
2009	3	6	8	3	4	3	27	4
North-East								
1998	8	8	8	8	8	6	46	8
2009	8	7	3	8	8	6	40	8
South-East								
1998	4	3	7	3	3	7	27	5
2009	6	5	6	7	5	8	37	7
South Muntenia								
1998	7	4	4	5	7	3	30	7
2009	5	3	7	6	6	4	31	5
Bucharest Ilfov								
1998	1	1	4	1	1	1	9	1
2009	1	1	1	1	1	1	6	1
South-West Oltenia								
1998	6	2	1	2	6	8	25	3
2009	7	2	5	5	7	7	33	6
West								
1998	2	6	6	6	5	4	29	6
2009	2	4	3	2	3	5	19	2

Source: calculated by Romanian Statistical Yearbook, 1999, 2000, 2010 and 2011

4. RELATIVE DISTANCES METHOD

Deficiency of ranks method depend on the double smoothing of variable size of differences between regions, in this case by replacing them with an arithmetic progression with ratio one. To remove this deficiencies, we shall use for hierarchy a much more efficient method: relative distances method. The method involves, first, the establishment of a ideal unit whose characteristics presents maximum quality performance in analyzed colectivity, then, selection of a procedure for measuring the distance between the real unit and this ideal unit for every studied characteristics and

determination, finally, an aggregation process of obtained information from each real unit.

Table 3. Romanian development regions hierarchy using relative distances method, in 1998 and 2009

Region	Relative distances (%) according to						Average synthetic Index* (%)	RANK
	GDP per inhabit. (lei current prices)	Average net monthly earnings (lei current prices)	ILO Unempl. rate (%)	Gross investments of active local units per inhabit. (lei current prices)	Local active units at 1000 inhabit.	Total expendit. from research-developm. activity pe inhabitant (lei current prices)		
North-West								
1998	54,11	75,91	91,30	20,08	54,99	6,90	37,66	5
2009	38,66	63,89	80	21,29	48,67	11,84	36,65	3
Centre								
1998	59,38	78,91	85,86	18,64	52,26	14,28	42,13	2
2009	41,06	67,30	41,56	27,69	45,54	11,17	34,26	4
North-East								
1998	42,99	75,27	67,39	17,59	36,95	6,22	30,96	8
2009	26,59	66,42	75	9,83	27,67	7,04	25,15	8
South-East								
1998	57,31	86,52	81,52	21,96	52,33	5,98	37,49	6
2009	34,02	69,06	56,25	19,32	39,11	5,39	28,52	6
South Muntenia								
1998	50,18	82,72	84,78	19,74	39,79	12,45	38,85	3
2009	36,15	71,21	50	19,67	30,62	11,17	30,87	5
Bucharest Ilfov								
1998	100	100	84,78	100	100	100	97,28	1
2009	100	100	100	100	100	100	100	1
South-West Oltenia								
1998	51,05	87,29	100	29,57	44,32	5,19	38,04	4
2009	31,14	71,98	65	21	29,98	5,56	28,26	7
West								
1998	62,58	77,52	82,60	18,92	46,98	7,51	37,25	7
2009	46,48	69,89	75	29,93	46,01	7,67	37,01	2

* Aggregation of coordination size for each region in a average synthetic index was obtained using geometric mean.

Source: calculated by Romanian Statistical Yearbook, 1999, 2000, 2010 and 2011

Expression of observed distance for every studied characteristics was made as a coordination relativ size, calculated for each element of community and compared with the unit with maximum quality performance. Basis of comparison, being

maximum variation for each characteristic, the comparisons between units were limited from 0 and 100 percent.

As other Eastern European countries, Romania started the transition process with a relatively low level of regional disparities compared to countries with traditional market economy. These disparities have grown rapidly, especially between Bucharest-Ilfov region (including the capital of Romania) and other regions. Most foreign investors were attracted to this region, which offers many advantages. Potential investors are not attracted by the poverty of the region. As a consequence, they are reticent on setting up new businesses here (Niță & Drigă, 2008, p. 37).

As can be observed from the data presented for period 1998 – 2009, there were changes in the development regions hierarchy in terms of development level. Bucharest-Ilfov region retains in 2009 its position of most developed region of Romania, too. Also, the North-East region is in 2009 the last in this hierarchy, position held in 1998, too. In 2009, the Western region is second, in comparison with sixth place held in 1998. This is region with the most significant evolution in the analyzed period. A positive performance had North-West region, it occupies third position in 2009, in comparison with fifth position in 1998.

5. CONCLUSIONS

Analyzing regional dimension, we can understand the development trends across the country, these being mainly influenced by the urban dimension, where growth is concentrated in major cities (Bucharest being the most visible example of this phenomenon) and market access (especially the west) - the foreign direct investment and economic growth are positively influenced by easy access to western markets. In contrast, natural barriers proximity for trade (Danube) or undeveloped markets in Eastern Europe (Ukraine and Moldova), usually hindered development. Thus, regions who in 2009 are in the first four positions, have major cities and international airports or are located near or on the western border transport axis (Bucharest Ilfov, West, Centre, North-West).

In contrast, regions that are most serious problems of underdevelopment (Northeast, South West), are either the Danube riverside or are located near the border with Ukraine or Moldova. These regions have a clear decoupling of economic growth. Also, it is important to note that development poles is focused around some cities, usually large.

From this analysis, we can see also two very important aspects: studying average synthetic index values, we can observe that the value decreased in the analyzed period in all regions (except Bucharest Ilfov). This is due to rapid development level of the region Bucharest-Ilfov, the disparities between this region and other regions, exacerbating in the mentioned period.

The concentration of economic growth around Bucharest has become a characteristic of the Romanian economy. It is obvious high dependence of growth to FDI volume. Foreign investment in Romania oriented depending on accessibility to the western markets and urban character of the targeted areas, including the availability of adequate facilities and services for expatriates. Thus, differences in development

between Bucharest-Ilfov region and other regions increased significantly in the analyzed period.

I notice also that the differences between regions were not significantly attenuated. It is obvious that regional development programs and measures that they have proposed are far from achieve to the main target of regional development policy: stimulation of balanced development and mitigation of regional imbalances.

REFERENCES:

- [1]. **Biriescu, S.; Butuza, A.** (2011) *Regional development – past, present and future in Romania*, Annals of the University of Petroșani, Economics, 11(1), pp. 17-32
- [2]. **Constantin, D.L.** (2010) *Economie regională. Teorii, modele, politici*, Editura ASE, București
- [3]. **Niță, D.; Drigă, I.** (2008) *The integration of the Jiu Valley's economy on regional and national level*, Annals of the University of Petroșani, Economics, 8(2), pp. 31-40
- [4]. **Popescu, I.D.** (2004) *Metode de ierarhizare multifactoriale în studiul statistic al dezvoltării regionale*, “Dezvoltarea regională și echilibrul structural al economiei naționale”, lucrările celui de-al patrulea simpozion național al Asociației Române de Științe Regionale, Editura Oscar Print, București, pp. 203-208
- [5]. **Ștefănescu, D.; Dumitrescu, I.; Wagner, P.** (2003) *Statistică regională: instrument esențial pentru fundamentarea politicilor regionale*, Dezvoltare regională și integrare europeană, lucrările celui de-al doilea simpozion național al Asociației Române de Științe Regionale, Editura Oscar Print, București, pp. 69-75
- [6]. **Tacu, A.** (1998) *Global Index of Development – an important instrument in regional analysis*, Anuarul Institutului de Cercetări Economice “Gheorghe Zane”, Iași, Tomul 7, Editura Academiei Române, 1998, pp. 29-38
- [7]. **National Institute of Statistic** (1999, 2000, 2010 and 2011) *Romanian Statistical Yearbook*, Bucharest
- [8]. *Regional Operational Programme 2007-2013*, [Online], Available at: http://www.fonduri-structurale.ro/Document_Files/Regional/00000026/0562v_ROP%20Final%20Version.doc

ECONOMIC COMPETITION ENVIRONMENT IN THE EUROPEAN UNION

**CRISTINA BÂLDAN, EMILIA UNGUREANU,
FELIX-CONSTANTIN BURCEA ***

ABSTRACT: *For realizing the paper “Economic Competition Environment in European Union”, I considered the analysis of antitrust norms appliance, the economic concentration control and the control of state aids in the European Union. From the beginning of the global financial crisis, in the autumn of 2008, the European Commission has offered detailed orientations concerning criteria’s of establishing the compatibility of temporal aid measures in the context of crisis in favor of financial institutions, in the base of the article 108, paragraph 3, letter B from the Treaty concerning the functionality of European Union, under the form of state guarantees, of recapitalizations or measures for saving the actives, but also orientations concerning the restructuring measures necessary for banks that are in difficulty. By applying the norms concerning the state aids, the European Commission ensured a limitation at the minimum of competition degradation in the internal markets, despite the important sums of state aid, and restructuration of beneficiary banks, after case.*

KEY WORDS: *competition environment; antitrust norm; economic concentration; state aid; regional aid.*

JEL CLASSIFICATION: *D42; D43.*

1. INTRODUCTION

Competition represents a mobilizing factor of the market next to the demand, offer and price. In a free economy, this notion is looked as a global concept which determines an alignment of all competition laws to a common scope: the one to ensure a high degree of production quality and products that are designated to the final consumers.

* Lecturer, Ph.D., University of Pitești, Romania, baldan.cristina@gmail.com
Prof., Ph.D., University of Pitești, Romania, emiliaungureanu@yahoo.com
Ph.D. Candidate, ASE Bucuresti, Romania, felixburcea@yahoo.com

In the contemporaneous market economy, the competition and his protection problem is a pretty complex subject and of high actuality. Being a progress factor, the competition needs to be known, understand and mainly maintained in legal limits by the economic agents from the economic competition environment, were they develop their activity.

From those hypothesis it is necessary to be promoted a competition policy that needs to be adapted to the market rules, which offers next to an efficient utilization of specific instrument for combating especially anti-competition practices, protection of participants at the economic life and also bringing to the knowledge of them the risks that are expose to for not being victims of non-respecting the competition laws.

Today, a competition protection through knowledge and promoting the culture in this domain present a special interest at national economic level but also at European level that has documented and will document abuses of dominant position, anti-competition agreements, economic concentrations, non-loyal practices that are negatively impacting the normal competition environment.

By applying the norms for state aids, European Commission has ensured the limitation at a minimum level of competition degradation on the internal markets, despite the important sums of state aids, and the restructuration of beneficiary banks, after case.

2. ANTITRUST NORMS APPLIANCE

2.1. Exception regulation by category applicable to vertical agreements

On 20 of April 2010, the European Commission adopted a revised exception regulation by category and orientations concerning vertical agreements, i.e. the agreements between the sellers and the buyers which are operating at different levels of production chain and of distribution for providing and distributing products and services. (http://ec.europa.eu/competition/index_en.html)

The base principle of revised regulations stay's the one that the companies with limited power on the market are free to decide on the mode in which they distribute their products, with the condition that they will not sign accords which will contain restrictions for pricing and other serious restrictions. (Bâldan, 2011)

The rules have been revised to keep in mind the power that the buyer and the sellers can have on the market, so all the parts of the accord will have a market share of under 30%, and also for the category exception to be applied.

Also, the regulation and orientations that are accompanying it take into consideration the rapid development of internet as a force utilized in online sales and the trans-national commercial exchanges which are increasing the opportunity for buyers to choose, and also the price competition.

Due to the clear character and more predictable one for the new regulations, the distributors are benefitting of more visible stimulants for developing online activities with the scope of reaching and to be more accessible for UE customers, ensuring a full realization of internal digital market.

2.2. Exception regulation by category applicable to horizontal agreements

On 14 of December 2010, European Commission adopted new rules and orientations for evaluating the horizontal cooperation agreements, i.e. the agreements between companies which are operating at the same level of the supply chain, and the cooperation agreements for research and development, production, acquisition, commerce, standardization and information exchange.

This new regime has two applicable regulations of exception by category for the agreements regarding research and development agreements, but also for the agreements of specialization and common production, and the horizontal orientations attached.

The European Commission approach, visible in the new rules, is to give to companies the maximum degree of freedom of cooperation and to protect, in the same time, the competition in the case of cooperation that are violating the dispositions of article 101 from UE Functionality Treaty, for example the fact that they bring prejudice to consumers. (http://ec.europa.eu/competition/index_en.html)

The European Commission point of view on the cooperation between competitors has fundamentally modified comparing with the precedent regulations from 2000. Even so, the new rules for horizontal agreements of cooperation are more detailed, easier to use and more clear than the older one.

Two from the essential aspects of the reform includes the introduction of a new chapter for information exchange and a substantial review of the chapter concerning the standardization.

The second aspect clarifies, especially, the essential conditions for ensuring competitive process for establishing standards and contributes at the objective accomplishment of creating a system of standards more efficient for Europe, as is stated in the emblematic initiative "An integrated industrial policy for the globalizing era" from Europe 2020 strategy.

2.3. Exception regulations by applicable categories on specific sectors

In the insurance domain, on 24 of March 2010 has been adopted the new exception regulation by exception categories in the insurance sector.

On 27 of May, European Commission adopted new rules of competition for the agreements between vehicles producers and their authorized distributors, repair workshops and consumables distributors.

The new regulations align in a big extent the policy from the competition domain on the automobile market with the general regime applied to all sectors.

Appliance at private level of antitrust norms of UE represents an essential completion on efficient appliance of antitrust norms by the European Commission and national authorities from the competition domain.

In the White Book from 2008 concerning the compensation actions of breaking the antitrust norms, the European Commission proposed a series of measures, as the collective recourse and the prejudice quantification produced by violating the antitrust

norms, for offering to consumers and companies more possibilities for obtaining compensations. (http://ec.europa.eu/competition/index_en.html)

The European Commission proposals concerning the collective recourse started an ample public debate which exceeds the antitrust norms domain, focusing on the collective recourse role in the case in which a single violation of UE norms are prejudicing large groups of victims.

The commission decided to organize a public consulting which should contribute at identifying a set of common principles for every future legislative proposal referring to the objective resource. A communication that will present these principles was programmed to be adopted in 2011.

In 2010, European Commission adopted seven decisions for cartels, imposing fees in a total value of over 3 billion EUR to a number of 70 companies and continuing to focus on the actions of efficient applying of legislation, on combating the cartels.

In the context of economic crisis, the seven decisions referring to cartels adopted in 2010 have been followed by 32 applications for reducing the fees that stated “payment incapacity”, from which only two have been approved after a detailed analysis of their financial situation.

In 2010, European Commission solved, under the 101 article from TUFÉ, an important antitrust case from air transport sector, conferring mandatory character from juridical point of view the engagements assumed by British Airways, American Airlines and Iberia.

This decision will bring important benefits to European consumers, ensuring the maintenance of a sufficient competition in the trans-Atlantic flights, especially the ones that departs from London.

In the sector of financial services, the European Commission conferred mandatory character for the engagements assumed by Visa concerning the interbank multilateral commissions applied to trans-national operations with debit cards for immediate consumption, effectuated in SEE, and also the same type of effectuated operations on intern plan, in 9 countries of SSE, by aligning to the unilateral engagements taken on 1 of April 2009 by MasterCard and “the methodology of dealer indifference” at the payment methods.

Finally, but not in the last place, the reserve currency has the advantage to facilitate the comparison of prices in different countries. In the case in which exist more national currencies, the companies can ask different prices for the same product in different countries, by the elasticity of demand price. This monopole power exercised by some companies leads to loosing consumers.

Also, European Commission adopted his first antitrust decision on the health services market.

European Commission gave a contravention of 5 Mil. Euros to French Pharmacists Association, penalizing their conduct on the Clinique services market for laboratory analysis.

In the energetic sector, European Commission act in the base of sector investigation results from 2007, adopting 4 important antitrust decisions, by which the proposed engagements by companies, to try to stop the competition norms violations, have become mandatory. These decisions are referring to operators from France,

Sweden, Germany and Italy that blocked the access to energetic markets by different means, as long terms contracts, with restrictions for reselling or capacity limitations for transport or export one's available in the energetic networks.

First, it wanted to use the market mechanisms to create a competitive market that would be more effective and would result in an interconnected market due to trans-European energy networks. Despite the small steps taken over a quite long period, today's progress in creating an efficient and competitive common European energy market is significant even if the process is estimated to be far from finality. Energy and gas market liberalization is an example of the EU's efforts towards promoting the interests and welfare of citizens within this area. Ensuring lower and more transparent energy prices, more rights for consumers, protection against the precariousness of energy supply is precarious arguments redoubtable in dedicated approach liberalization of energy markets in all EU countries. (Niță & Drigă, 2009)

On the TIC market, the European Commission initiated procedures against IBM, for assumed abuses of dominant position on the mainframe computer market, but also against Google Inc., for assumed abuses of dominant position on the online search market, online commercials and intermediate online commercials.

European Commission lunched two preliminary investigations for business practices of Apple concerning the iPhone products and services. Both investigations have been closed after Apple proposed changing those practices.

3. ECONOMIC CONCENTRATION CONTROLE

In 2010, because of the economic crisis, the number of noticed concentration has been reduced. In total, to European Commission have been notified 274 transactions, were adopted 16 decisions under the reservation of some conditions and was not adopted any forbidden decision.

The big majority of notified concentrations have been approved without conditions, in the framework of normal procedures, but also in the simplified one, representing 55% from the total number of notifications.

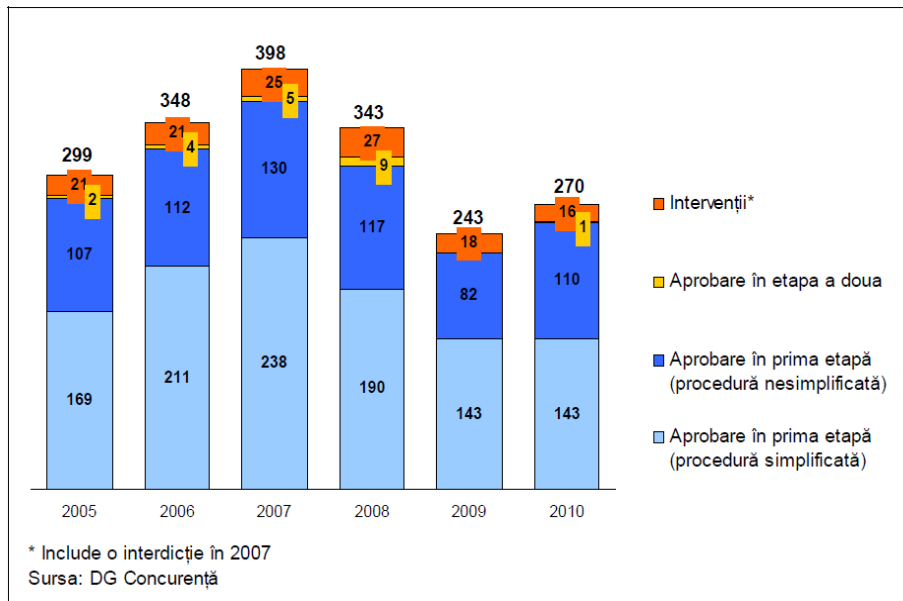
European Commission had adopted three decisions in 2010, after a deep analysis in the second stage of investigations referring to Oracle/Sun Microsystems, Monsanto/Syngenta and Unilever/Sara Lee Body concentration. (http://ec.europa.eu/competition/index_en.html)

In 17 November 2010, after a deep investigation, European Commission approved the acquisition by Syngenta company from Switzerland of an international division of sun flower of an American company Monsanto, with the condition of assigning the sun flower hybrids from Monsanto, commercialized or being in a probation stage in Spain and Hungary, and also the mother production lines, utilized for the creation of those hybrids or being in a development stage for creating hybrids for Spain and Hungary. (http://ec.europa.eu/competition/index_en.html)

Also, European Union approved, on the same date, the planned acquisition by the British-Dutch company Unilever of the body care division and tailor division of Sara Lee Corp from United States, under the reserve of complying with certain conditions.

The deep investigation revealed that through the respective concentration Unilever will obtain a very strong leader position on many markets of deodorant, by combining the brands from the two parts, especially Sanex with Dove and Rexona, which presently are competing.

For taking out those issues, the participant countries at the concentration have offered to assign Sanex to Sara Lee and the associated division from Europe.



Source: http://ec.europa.eu/competition/index_en.html

Figure 1. The number of final decisions concerning economic concentrations

4. STATE AID CONTROLE

Most of the approved aids in 2010 have been chained to horizontal objectives of common European interest, and also the culture and preserving the heritage, regional cohesion, environment protection, research, development and innovation and damage compensations produced by natural disasters, besides the aids accorded in the context of economic-financial crisis. (Bâldan, 2011)

The member states utilized a lot the offered possibilities by the general regulation for category exception (RGEC), according to which the aids that meet the established criteria's can be accorded without a prior notification from European Commission.

In 2010, European Commission was informed for the introduction of a number of 414 new measures from the member states.

Concerning the authorised aids value, the numbers are presented in the indicator tables related to state aid with a delay of over one year. The total value of aids, excluding the legal crisis measures, has reached the level of 0.62% from GDP in

2009 or 73.2 Billion Euros, being at a bit higher level comparing with 2008 (0.58% from GDP). (<http://www.consiliulconcurentei.ro/en/publications/magazines.html>)

As an average, 84% from the aids accorded to industries and services have been directed to horizontal objectives of common interest.

Year 2010 has been the first full year in which have been applied the simplified package. This package contains a Code of good practices and a Communication concerning a simplified procedure, both having as objective the efficiency, transparency and procedure forecast in the state aid domain improvement. (Bâldan, 2011)

First results of Good practices Code have been encouraging, especially concerning the contestation administration, a highly number of entities being informed about their demands status.

Application of state aids legislation by the national instances

According with a recent study, more and more cases are presented in front of national instances.

In 2010, the Commission has continued the efforts for adding value to the appliance system of the state aids law at private level in the member states, concentrating on the communication consolidation with national judges.

In October 2010, the Commission published a manual named “EU Legislation appliance concerning state aids by the national instances”, with the scope of supporting national judges in solving the cases that refers to state aids.

Ex post monitoring of aid measures

For ensuring an efficient application of state aids norms, European Commission launched periodic exercises for ex-post monitoring starting with 2006, for not-notified aid measures which have been given through RGEC or other schemes of approved aids.

In 2010, ex post monitoring included the measures raised by RGEC, and also other state aids under the capital risk form, accorded aids in the transport sector, large band communication, cultural aids and the one’s for naval construction sector.

The results for the exercises highlights the fact that exception by category schemes and regulations function in a satisfactory mode.

5. CONCLUSIONS

By applying the state aid norms, European Commission ensured the limitation at a minimum level for competence degradation inside the national markets, despite the important sums of state aids, and restructuration of beneficiary banks, after case.

In the period 1 October 2008-1 October 2010. the European Commission adopted over 200 decisions that are referring to state aid measures for the financial sector, accorded for repairing the serious economic perturbations of member states. Over 40 aid schemes have been authorised, modified or prolonged and individual decisions have been taken for over 40 financial institutions.

In 2009, the nominal value for accorded aids to member states for the financial sector was 1.107 Billion Euros (9.3% from EU GDP), and in 2008 the number was situated at about 1.239 Billion Euros.

During the crisis period, the availability of state guarantees have proved to be an efficient instrument for improving bank's access to financing and to re-establish the trust in the market.

The utilisation of re-capitalisation schemes was limited in 2010, year in which have been made some ad-hoc interventions. Even so, the reality demonstrated a reduction of state capital injection utilisation in 2010 comparing with 2009; also the beneficiary banks of measures for active's salvation or recapitalisation in 2009 and 2010 have been obliged to restructure.

The restructure of many European Banks represented one of the main challenges in 2010 and followed 3 basic principles:

- a) Re-establishing the long term viability without state aids, based on a solid restructured plan;
- b) Duties separation between the bank/shareholders and the state;
- c) Limiting the competition degradation, usually by structural measure (assignments) and behaviour (acquisition prohibition or limiting the aggressive commercial practices).

These measures are including the introduction of a modified legislation with the scope of eliminating the restrictions for commerce and protected sectors, which will eliminate the actual exclusion of certain sectors from the national law appliance sphere in the competition domain and to have a bigger discouragement impact for anti-competition practices.

REFERENCES:

- [1]. **Bâldan, C.** (2011) *European Competition policy*, Sitech publishing, Craiova, pp. 79, 131, 150
- [2] **Niță, D.; Drigă I.** (2009) *Prospects of coal exploitation against the liberalization of european gas and electricity markets*, Annals of the University of Petroșani, Economics, Vol. IX – Part IV, 2009, p. 119
- [3]. **Pascal I.; Deaconu Ș.; Nicolae F.** (2003) *Policy in the competition domain*, Economic Publishing, Bucharest
- [4]. **Prisecaru, P.** *Common Policies of European Union*, (2004) Economic Publishing, Bucharest
- [5]. **Profiroiu M.; Profiroiu I.** (2004) *European Policies*, Economic Publishing, Bucharest
- [6]. **Schwartz, R.; Byrne, J.; Colaninno, A.** (2008) *Competition in a Consolidating Environment*, Editura Springer
- [7]. http://ec.europa.eu/competition/index_en.html, [Accessed 15 September 2012]
- [8]. <http://www.competition.ro>, [Accessed 15 September 2012]
- [9]. <http://www.consiliulconcurrentei.ro/en/publications/magazines.html>, *Competition Survey – Studies, Researchs and Analyses Relating to Economic Competition no. 1/2011*
- [10]. http://ec.europa.eu/dgs/competition/economist/economic_policy.pdf
- [11]. http://ec.europa.eu/competition/speeches/text/cpi_5_2_2009_en.pdf, *Competition Policy and the Global Economic Crisis, Autumn 2009, Vol. 5, No. 2*

QUALITATIVE MARKETING RESEARCH REGARDING THE IMPACT OF THE CRISIS ON THE ACTIVITY OF THE LEASING COMPANIES

CRISTINA BĂLTEANU, OANA BĂRBULESCU (ȘEITAN) *

ABSTRACT: *The financial crisis has caused the economic system both direct and indirect effects. Negative macroeconomic shocks have had a direct impact on the results of leasing companies, and effects such as panic and "nervous breakdown" also had major repercussions. The purpose of this paper based on a qualitative marketing research is knowing, on the one hand, the effects of the crisis on the consumption of leasing products/services and, on the other hand, the factors that caused these effects. The study also aimed to outline the possible evolution of the leasing services offers over the next three years, taking in consideration the measures taken by leasing companies in order to restart the financing process through this system.*

KEYWORDS: *crisis; leasing market; in-depth semi-directive interview; finance.*

JEL CLASSIFICATION: *M31; G14.*

1. INTRODUCTION

Holding an important position in the modern economy, *the leasing made possible the meeting, in the same market, of the capital owners with those who need it in order to streamline their activities* (Vintilă, 2004, p. 1). In this context, the relations between the parties involved were strictly regulated both in legal and fiscal terms. However, the manifestation of the first effects of the economic – financial crisis generated the restriction of the activity of capital users and implicit, the suspension of the leasing contracts, creating large imbalances in the management of the bidding companies.

This paper shows, on the one hand, the implications of the crisis on the behavior of consuming the leasing products and services, and on the other hand, the

* Lecturer, Ph.D., Babeș Bolyai University of Cluj-Napoca, cristina_balteanu31@yahoo.com
Lecturer, Ph.D., Transilvania University of Brașov, oana.seitan@unitbv.ro

strategic measures adopted by the leasing companies in order to reduce the number of non-performing contracts and to revitalize the financing activity. Beginning with the second section there was presented some theoretical aspects specific to the leasing sector and in the third one there was made an analysis of the Romanian leasing market. The fourth and the fifth sections include the objectives, the methodology and the synthesis of the marketing research results.

2. DEFINING ELEMENTS OF THE LEASING

Leasing is a commercial and financing form through which specialized financial companies or even producers rent the goods to customers who don't have sufficient own funds to buy them or have to borrow themselves to make those acquisitions (Ciobanu, 1997, p. 224).

From a legal perspective, leasing means a transaction through which one party, called the lessor or financier, send to another party, called user, for a certain period of time, the right to use a good in exchange of a certain sum of money, called lease rate (Nițulescu, 2008, p. 111).

At the end of the agreed period of using the goods, the financier committed himself to respect the user's option right to acquire the good property at a residual price, to extend the leasing contract or to terminate the contractual relations (Clocotici & Gheorghiu, 2000, p. 15).

In the recent decades, leasing has proven to be one of the most effective ways to finance investments in manufacturing sector and not only, providing high security to the capital holders (Georgescu, 2002, p. 271). Thus, he became an alternative preferred by 80% of the companies from developed regions, reaching to represent 70% of the "wealth" of these companies. The main reasons of using the leasing as a form of financing reflects that his philosophy refers to the fact that:

- the profit is generated by the effective use of the assets and not by their ownership;
- the ownership by companies of old or obsolete equipment is, in most cases, a real disadvantage;
- the obtaining of the right of using modern and performant equipment, with minimal capital investment, leads to the increase of the business volume and implicit, of the activity, leading, ultimately, to a higher level of profit.

The analysis of leasing operations indicates that there are 4 categories of leasing, namely: financial leasing, operational leasing, direct leasing and leaseback.

3. THE CHARACTERISTICS OF THE ROMANIAN LEASING MARKET

In response to the first signs of the economic crisis, the Romanian leasing market recorded, in 2009, a decline of 72% in comparison with 2008, reaching 1.33 billion euros, a value also registered in 2004. The largest decrease occurred on the equipment segment, registering a decline of 75.9% in 2009 in comparison with 2008 and representing, in terms of value, only 261.16 million euros compared with 1.082 billion euros, value recorded in 2008. Also, the financings of vehicle acquisitions have

experienced a bigger decrease than the market average, respectively with 75.2%, totalizing only 839.6 million euros compared to the 3.38 billion euros in 2008.

Also, in 2009, the real estate leasing decreased with 33.9%, reaching to 232.65 million euros, compared to the 351.84 million euros from 2008. The financings of the real estate sector were dominated by the category of industrial and commercial buildings with a total of 36% and by that of office spaces class A, B and C, with 26%. The financings of lands represented 4%, while the remaining 34% went to hotels, residential and apartment buildings. (Zilișteanu, 2010)

From the total of financings, 91% were attracted by corporate clients, 8% by the retail component, and 1% by the public sector. Regarding the duration of the leasing contract, the most common periods were: over 5 years – 26%, between 4-5 years – 24%, between 3-4 years – 23%, followed by these intervals: 2-3 years – 18%, 1-2 years – 5% and 1 year – 4%.

In 2010, the leasing market registered a decrease of 14%, reaching the value of 1.12 billion euros. Most of the financings were used for the vehicles acquisitions, 61% of them being used for buying cars, 15% for light commercial vehicles, 23% for heavy vehicles and 1% for other types of vehicles (Iacob, 2011).

In the real estate sector there were both increases and decreases in comparison with 2009. Thus, the financing for the office spaces rose to 37% vs. 26% in 2009 and those from the retail outlet category at 31% vs. 21% in 2009. Significant financing reductions were recorded for industrial buildings (17% vs. 36% in 2009) and hotels (to 1% from 6% in 2009).

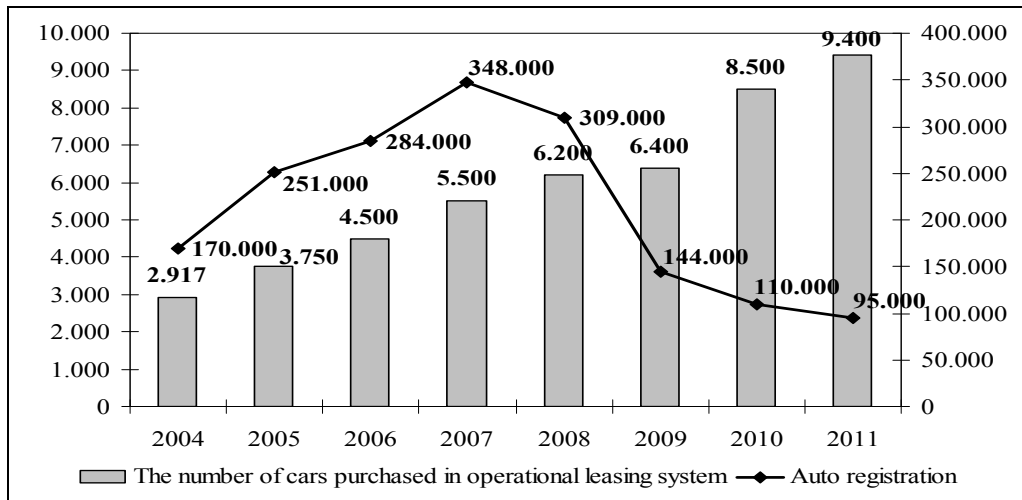
In 2011, the Romanian leasing market reached 1.35 billion euros, up 20% over the 2010 level. The members of the Association of Financial Companies (ALB Romania) funded assets totalizing 1.24 billion euros (92% of total), and affiliated companies – 107 million (8%). (Dumitrache, 2012)

The leasing companies – subsidiaries of banks held the largest market share, namely 67% of the total, being followed by captive companies (19%), respectively, by independent companies (14%).

The evolution of the financings used in the transport industry shows maintenance of the relatively constant share of the main vehicles categories, but also a slight increase in the case of heavy commercial vehicles. Thus, the car segment held a share of 57%, that of heavy commercial vehicles – 29% (with 6% more than the value registered at the end of 2010), light commercial vehicles category – 13% of the total, and the other types of vehicles – 1%.

Overall, the financing for the automotive segment recorded a value of 917 million euros in 2011, up from 2010 when they totaled only 712 million euros.

The evolution of the number of cars purchased in operational leasing system, compared with the total number of auto registrations, shows, for the period 2004 – 2011, significant increases of auto purchases through leasing, till the first year of economic crisis, namely 2008, when the number of auto registrations registered a significant decrease (Figure 1).



Source: ASLO (2011) Meeting presentation –press, 18 October 2011, [Online], available at: <http://www.aslor.ro/statistici>, [Accessed at: 20 February 2012]

Figure 1. The number of cars purchased in operational leasing system, compared with the total number of auto registrations (2004 – 2011)

In 2011, the financings of the equipment used in various economic sectors registered a positive development. Thus, the construction sector had a share of 19%, up 6% over the 2010 level, electrical equipment sector had a share of 10%, compared to 4% in 2010, and the agricultural sector recorded a considerable advance from 8% to 24%. Corporate clients have attracted the largest share of total financings (96%), followed by the retail component (3%) and public sector (1%). In terms of the financing period, in 2011 the most common period was 4-5 years (24%), followed by 3-4 years (22%), 2-3 years (21%), over 5 years (19%), 1-2 years (9%) and 1 year (5%). (Stanciu, 2012)

According to the forecasts of Financial Companies Association (ALB Romania), in 2012, the Romanian leasing market will keep an upward trend, the advance being of 10-15%.

4. THE OBJECTIVES AND THE METHODOLOGY OF THE LEASING MARKET RESEARCH

In order to identify the main factors that led to constant changes of the leasing market, in the period October – November 2011 there was made a qualitative marketing research, among eight managers of leasing companies from Brașov. Five of the sampled companies were leasing companies – subsidiaries of banks, two of them were independent companies and one company was captive to a car dealer. The purpose of this qualitative research was to identify the opinions of these managers regarding the impact of the economic – financial crisis on the leasing market. From the multitude of the techniques of qualitative research method it was chosen the *in-depth semi-directive interview*.

Regarding the objectives of the qualitative research, they were set in order to allow knowing in detail the opinions of the managers of leasing companies about the mentioned aspects. In this respect, the major objectives were focused on:

- the effects of the crisis on the consumption of leasing products/services;
- the measures taken by leasing companies for restarting the process of financing through the leasing system;
- the managers' opinions regarding the possible development of the leasing services offer, over the next three years.

In the next section there was presented a brief content analysis of the results of *in-depth semi-directive interview* conducted among managers of the leasing companies.

5. THE IMPACT OF THE ECONOMIC – FINANCIAL CRISIS ON THE LEASING MARKET

The effects of the crisis on the consumption of leasing products/services.

The economic – financial had a major impact on the activity of leasing companies, materialized mainly in the reduction of the number of concluded contracts. This effect was due to the fact that the financings for the auto sector dominated the portfolios of leasing companies and the decreasing of the demand for these financing significantly has affected the most financiers, given its high exposure to this segment. In addition to the decrease of sales volumes, most of the managers have identified other effects of the economic – financial crisis, such as:

- the increase of the number of non-performing contracts, with the consequence of increasing the number of repossessed goods;
- the increase of the number of ongoing contracts in which was required to reschedule the leasing rates;
- the change of the new customers' behavior, not only in terms of increasing their vigilance when signing the contract, by carefully checking the contractual clauses, but also in terms of trying to negotiate the cost of financing;
- the change of the customers' behavior, who already have contracts in progress, in the situation of having difficulties in paying the rates, some of the customers who have ceased to comply with the contract terms and the payment terms have presupposed that the leasing company was not interested to recover the property because the fleet size increased significantly in the recent years.

The measures taken by leasing companies for restarting the process of financing, through the leasing system. The main measures taken by most managers interviewed, in order to decrease the number of non-performing contracts and subsequently to restart the process of leasing financing referred to:

- the development of certain measures of prudence; this aspect does not refer to the necessity of a larger number of documents to be examined, but to the intensification of checking the potential users, after receiving the requests for financing, in various databases such as:
 - CCRR (Central Credit Risk Register) for individuals and corporate customers and PIR (Payment Incidents Register) especially for legal entities;
 - the database of National Tax Administration Agency (NTAA);

- the databases of lawsuit processes of the jurisdiction where those companies seeking for financing have their headquarters;
 - the Insolvency Bulletin;
 - the Register of Commerce, in order to determine if the shareholder who requests the financing owns other companies, these also having to be checked in the Insolvency Bulletin.
- the removal of certain leasing products from their offer, such as financing with zero down-payment or offers for newly established companies;
 - the strengthening of the process of recovering the debts, in the conditions of increasing the number of non-performing contracts and the organizing of an efficient exploitation of the park of goods repossessed.

A few managers considered as essential the review of internal procedures of leasing companies by introducing new work procedures and implementing additional control of costs.

The possible development of the leasing services offer, over the next three years. Regarding the possible development of leasing services offer, over the next three years, the opinions of most managers converge to retain the existing users, but also to attract new ones by:

- promoting certain offers designed in collaboration with the insurance companies in order to reduce the costs incurred by the users for the good insurance;
- launching new leasing products, such as fixed-rate products, products denominated in domestic currency in order to avoid the exchange rate differences and refinancing without granting fee;
- drawing up different campaigns and promotions for individual consumers;
- designing new promotional campaigns for the clients of auto market, based on a return to growth in the automotive sector;
- rethinking the bonus schemes in order to stimulate the sales representatives from showrooms.

The managers of the leasing companies – subsidiaries to banks will focus on the taking over the customers of the bank to which the leasing company is affiliated.

A few respondents have proposed the identification of new economic sectors where economic growth is expected to generate increased financing requirements and therefore the possibility of creating partnerships with the suppliers from those sectors.

On the other hand, taking in consideration the appearance of changes in the behavior of the buyers of leasing products, in the sense that a small number of them are approaching the leasing companies only for information, some managers intend to rethink the promotion strategy through strengthening the sales force of the companies, represented by sales agents who will get in contact with the potential consumers. However, the same managers pay a bigger attention to the virtual meeting with consumers, the customers could immediately know the conditions of obtaining the financing through the websites of the leasing companies.

Some managers consider that the individuals' market represents an uncovered niche. This is because, currently, individuals don't have enough information about the leasing system, which is a cheaper form of financing than the credit, regardless of the value of goods for which financing is requested. Thus, if the asset value is below

€10,000, the loan interest is bigger because it is treated as personal loan, and if the asset value is above this limit, the loan interest is lower, but there are required additional guarantees which significantly increase the cost of financing. Also, individuals should be advised that although in the payment schedule the leasing companies present the monthly cost of leasing by highlighting the capital rate + interest + VAT + CASCO insurance, unlike the banks which show only the rate and VAT, this doesn't mean a higher cost of leasing, but a clearer evidence of the amount that has to be paid monthly. The rate calculated by the bank includes the interest charged by it, and the CASCO insurance, which isn't charged on loans without mortgage, is found in the higher interest practiced by the bank, but not highlighted separately.

Another opinion, a singular one, is that those leasing companies which will choose cheaper sources of refinancing such as issuing bonds will benefit of a competitive advantage in the future.

6. CONCLUSIONS

The results of the qualitative marketing research confirmed the statistical data which showed that the economic – financial crisis had a major impact on all leasing companies regardless of type and size. This was felt especially in terms of lower sales volume.

Until now, the leasing companies have undertaken several measures to relaunch the process of financing, the most important being: the increasing of prudence, the removal of certain leasing products from their offer, the strengthening of the process of recovering the debts and the review of internal procedures of leasing companies by introducing new work procedures.

Taking in consideration the appearance of some important changes in the behavior of the buyers of leasing products and services, most of the specialized companies aimed at developing and implementing a new promotion strategy in order to strengthen the sales force. However, a bigger attention is paid to the virtual meeting with consumers, the customers could immediately know the conditions of obtaining the financing through the websites of the leasing companies.

The opinions of the managers interviewed may be concluded in the fact that the offer of the leasing companies is dominated by the purchase of vehicles by individuals. It can thus be said that the orientation of the Braşov consumers is prevailed by the individual consumption and not by the purchase of equipment which represent an investment that creates jobs and a real source of development. In this context, leasing companies should be concerned with finding ways to stimulate the purchases of equipment, systems and tools to the development of the investment process, considering the fact that leasing has proven to be an effective method of financing for productive investments.

Besides the fact that leasing is a viable alternative to conventional loan, it also can be a way to remobilize the immobilized capital, referring to lease – back operations which are found only in the offer of a few leasing companies. Therefore, leasing companies should diversify their offerings through introducing this type of operation in order to increase the sales volume.

The strengthening of the leasing sector by increasing the number of contracts based on a diversified offer of the leasing companies, namely through a better promotion of the services of these companies, encourages, indirectly, the production of goods that are the object of the leasing contracts, leading to the development of certain sectors of activity. Therefore, leasing may be considered a real mean to revitalize the economy.

Despite the specific limits of this qualitative research, such as the small number and the short duration of the interviews, the impossibility of extrapolation of the results to the population studied, due to their unrepresentativity, the analysis of the responses provided by the interviewed managers led to the conclusions, that constituted a reference point in the efforts of deepening the theme by designing a quantitative research. Thus, the results of the in-depth semi-directive interviews realized among the managers of the leasing companies from Brașov offered important information, which correlated with the results of the ongoing quantitative marketing research, among the potential and effective customers, can be used successfully for the substantiation of the marketing policy and strategies, in the context of the current market strongly affected by the economic – financial crisis.

REFERENCES:

- [1]. **Ciobanu, Gh.** (1997) *Economic relations and international transactions*, Risoprint Publishing House, Cluj – Napoca, p. 224
- [2]. **Clocotici, D.; Gheorghiu, Gh.** (2000) *Leasing operations*, Lumina Lex Publishing House, Bucharest, p. 15
- [3]. **Dumitrache, A.** (4 April 2012) *Last year the Romanian leasing market grew with 20%, to 1.35 billion euros*, [Online], Available at: <http://www.zf.ro/banci-si-asigurari/piata-de-leasing-din-romania-a-crescut-anul-trecut-cu-20-la-1-35-miliarde-euro-9476783>, [Accessed at: 23 April 2012]
- [4]. **Georgescu Goloșoiu, L.** (2002) *Business of Banking, vol. 2: Banking in the International Environment*, ASE Publishing House, Bucharest, p. 271
- [5]. **Iacob, S.** (24 March 2011) *In 2011, the leasing market will grow with 10%*, [Online], Available at: <http://www.ghidtransport.ro/resurse/leasing/piata-leasingului-va-creste-cu-10-in-2011.html>, [Accessed at: 28 February 2012]
- [6]. **Nițulescu, G.** (2008) *Financiar – Bank Guide of Romania, realized under the auspices of the National Bank of Romania*, Third Edition, House of Guides Publishing, p. 111
- [7]. **Stanciu, M.A.** (4 April 2012) *Leasing market grew last year by 20%, above expectations*, [Online], Available at: <http://www.wall-street.ro/articol/Finante-Banci/119173/piata-de-leasing-a-crescut-anul-trecut-cu-20-la-1-35-mld-euro.html>, [Accessed at: 23 April 2012]
- [8]. **Vintilă, A.** (2004) *Theoretical and practical aspects of leasing (II)*, in *Current Law Journal*, 7th year, no. 1 – 2 (16 – 17), p. 1, [Online], Available at: http://revcurentjur.ro/arhiva/attachments_200412/recjurid041_29F.pdf, [Accessed at: 28 February 2012]
- [9]. **Zilișteanu, I.R.** (9 March 2010) *Dramatic decrease of the Romanian leasing market in 2009 with 72%*, [Online], Available at: <http://reflectieconomice.zilisteanu.ro/2010/03/scadere-dramatica-pietei-de-leasing-din.html>, [Accessed at: 23 February 2012]
- [10]. **ASLO** (2011) *Presentation of press meeting 18.10.2011*, [Online], Available at: <http://www.aslor.ro/statistici>, [Accessed at: 20 February 2012]

THE ANALYSIS OF THE BRAȘOV CONSUMER BEHAVIOR REGARDING THE USE OF THE LEASING SERVICES

OANA BĂRBULESCU (ȘEITAN), CRISTINA BĂLTEANU *

ABSTRACT: *The leasing market is in a constant diversification, the services provided within having the role, on the one hand, to stimulate the sales of high quality goods, and on the other hand, to reduce the flows of cheap and poor quality goods. Thus, if, initially, the use of leasing services had as a main purpose the acquisition of vehicles, now there is a growing demand for the financing of the equipment and buildings. Under the effect of the economic – financial crisis, the Romanian leasing market registered significant decreases across all customer segments. In this context, it appeared the necessity of drawing up some market researches in order to investigate the using behavior of the consumers of leasing services, their results could be using in the development and implementation of the marketing strategies adopted by the companies from the leasing sector.*

KEYWORDS: *leasing; the consumer behavior; in-depth semi-directive interview.*

JEL CLASSIFICATION: *M31; G21.*

1. INTRODUCTION

The behavior is a set of external reactions through which some individuals respond to stimuli. If from a psychological perspective, the consumer behavior represents what is objectively observable in the global response of the individual, regardless of what he states and independent of his mind and psychological attitudes (Brătucu, 2007, p. 98), in a sociological sense, it represents the *subject's activity in a given social situation* (Mâlcomete et al., 1979, p. 72).

In a narrow sense, the consumer behavior can be defined as *a human behavior in the case of buying and/or consumption of goods and services* (Florescu et al., 1992, p. 156).

* Lecturer, Ph.D., Transilvania University of Brașov, oana.seitan@unitbv.ro

Lecturer, Ph.D., Babeș Bolyai University of Cluj-Napoca, cristina_balteanu31@yahoo.com

The study of the consumer behavior allows a wider and more complex analysis of the phenomena that occurs within a market and also the development of appropriate strategies and the implementation of marketing actions in conditions of maximum efficiency. For example, the study of the Romanian leasing market shows a preference of the customers for financing the vehicles that *totalized 647.27 million euros, up 51% over the same period last year, while the financing of equipment rose by 30%, reaching the value of 265.5 million euros* (Radu, 2001).

Also, the corporate clients have attracted the largest share of total financings (96%), being followed by the retail component (3%) and public sector (1%). In terms of the financing period, in 2011 the most common period was 4-5 years (24%), followed by 3-4 years (22%), 2-3 years (21%), over 5 years (19%), 1-2 years (9%) and 1 year (5%). (Stanciu, 2012)

Therefore, the study of behavior of purchasing and consumption the leasing services represents, for managers of the leasing companies, an important source of information that can be used to substantiate the market strategies, that managers seek to plan and implement in order to increase the efficiency of the activity of their companies.

The achievement of this study is not possible without drawing up a marketing research that allows outlining the main features that define the customer segments targeted by the organization.

This paper aims on the one hand, to identify the main features of the decision making process of the Brașov customers, users of leasing services, and on the other hand, to draw up a behavioral profile of accessing and using these types of services. The first part presents the main aspects regarding the designing of marketing research, and in the second part the results obtained in this study are analyzed and interpreted.

2. ISSUES REGARDING THE DESIGNING OF MARKETING RESEARCH

In order to know better the behavior of users of leasing services from the City of Brașov, in the period October – November 2011 a marketing research was conducted for *identifying the views of managers of leasing companies regarding the behavior of Brașov consumers of leasing products and services*.

Taking in consideration the main objectives of the study, there was chosen to design a qualitative marketing research, which could provide *certain answers to questions like "why?" and "how?" and also to questions regarding the main causes of the attitudes, motives, behaviors, preferences of the respondents and the subjective, emotional or unconscious elements which lied behind them* (Lefter, 2004, p. 36).

From the many techniques of qualitative research methods it was chosen the *in-depth semi-directive interview*, which required the achievement of several interviews, the respondents *being good connoisseurs of the problem approached and the used sample reflecting the population characteristics* (Brătucu, 2006, p. 49).

Thus, the qualitative research was conducted among the managers leasing of the companies from the City of Brașov in order to identify their opinion regarding the behavior of the Brașov users of leasing services. The selected managers and the companies they represented are found in the following table:

Table 1. The identification data of the interviewed managers

	The position in the leasing company	Name of leasing company	Category	Oldness in the Romanian market
Manager 1	Chief Executive Officer	Leasing company no. 1	Leasing companies – subsidiaries of banks	10 years
Manager 2	Chief Executive Officer	Leasing company no. 2	Leasing companies – subsidiaries of banks	6 years
Manager 3	Chief Executive Officer	Leasing company no. 3	Leasing companies – subsidiaries of banks	5 years
Manager 4	Chief Executive Officer	Leasing company no. 4	Leasing companies – subsidiaries of banks	18 years
Manager 5	Chief Executive Officer	Leasing company no. 5	Independent company – large company	15 years
Manager 6	Chief Executive Officer	Leasing company no. 6	Independent company – small company	6 years
Manager 7	Chief Executive Officer	Leasing company no. 7	Leasing companies – subsidiaries of banks	9 years
Manager 8	Chief Executive Officer	Leasing company no. 8	Captive to a car dealer	7 years

* the names of the interviewed managers and those of the leasing companies were not mentioned in order to maintain the confidentiality of their identity.

Regarding the objectives of the qualitative research, they were set in order to allow a more detailed knowing of the views of the managers of leasing companies about the behavior of the Braşov consumers of leasing products and services.

In this respect, the main objectives considered were the following ones:

- describing the decision making process of the Braşov customers who purchase the leasing products and services;
- identifying the Braşov customers' behavior of purchasing the leasing products and services.

To achieve the objectives of this research, in accordance with the requirements of the specialty theory and practice, there were developed the necessary tools, namely a questionnaire for the selection of potential respondents and a list of the themes and subthemes of in-depth semi-directive interview.

In the process of developing the selection questionnaire there was taken in consideration the use of some questions which could allow the inclusion in research of certain respondents who are representative for the research objectives, namely managers of the leasing companies from the City of Braşov.

In the selection questionnaire, there were also introduced a factual question regarding the oldness in the Romanian market of the leasing companies, and a question about the oldness of the respondent as the manager of the leasing company they represented. A particular importance has also been given to the category of the leasing companies included in the sample. The responses of the interviewees were recorded with a recorder, being stored in electronic files. These files were then transcribed and

the data have undergone a primary qualitative data processing technique called the *content analysis*.

3. THE SYNTHESIS OF THE RESULTS OF MARKETING RESEARCH

In this section are summarized the results of the content analysis stemming that were obtained from the in-depth semi-directive interview conducted among the managers of the leasing companies.

The decision making process of the Brașov customers who purchase leasing products and services. According to most managers who participated to the in-depth semi-directive interview, the most important source of information used by Brașov customers in order to purchase leasing products and services is the sales representative of the provider or dealer. The sources of information such as acquaintances, magazines, Internet, media, leaflets and street billboard exercise a little influence on buyers regarding the choosing process of the leasing company. The motivation of the sales representative of the dealer or supplier to influence the customers represents a consequence of the fact that they are financially stimulated by the leasing companies in order to promote their offers.

Regarding **the reasons why customers choose to use the leasing financing, most of the managers interviewed believe that the most important are:**

- the fiscal advantages related to the deductibility of some components of the leasing rate, particularly important advantages especially in the process of procurement of vehicles for which leasing is the only way to deduct 50% of the VAT;
- the rapidity of obtaining the financing, compared to the bank credit; this is due to the fewer documents required for the file under review, and to an easier procedure of granting the financing which consists of a relatively short circuit that the financing file of the customer has to go through;
- the lack of the additional guarantees, the guarantee of the financier being the good purchased in the leasing system, the leasing company remaining the owner of the good until the end of the contract;
- greater flexibility, consisting, on the one hand, in the possibility of choosing between several types of financings, and on the other hand, in the options had by the user at the end of the leasing contract;
- the preservation of the working capital and the possibility of planning the cash-flow represent the reasons that make even the customers who have the necessary capital to purchase the good by cash to use the leasing, this offering them the possibility of an effective management of financial resources by transforming the investment costs in a monthly rate;
- the facility of granting financings compared with the traditional lending, leasing specificity consisting of relatively small number of documents required for drawing up the file, due to the fact that the credit risk management in the financial leasing is set by two issues: the progress and the nature of the financed asset; thus, in the case of a credit, the financing is denied to the applicant if he doesn't prove the payment of rates, however, but in the case of

leasing a higher advance is required (up to 50%), so that the financed amount is less than the market value of the good.

A small number of respondents consider that the possibility of replacing the good and the specialty counseling offered by the specialized staff of the leasing company to the user, in the moment of purchasing the equipment, are the key factors in choosing leasing as a form of financing.

Among **the reasons why the Braşov consumers don't choose the financing in leasing system**, preferring the bank credit, most managers have indicated: that users don't have the ownership of the good by the end of the leasing contract, the obligation of insuring the goods purchased, this representing the guarantee of the leasing company, the period of financing which doesn't exceed 5 years, the impossibility of paying leasing rates in other currency than the national one, and the fact that some customers want to buy different goods without paying an advance (the advance is zero), which is possible only in the case of credit, in certain conditions. Last but not least, the users invoke the apparently higher financing costs in the leasing system. This is because, currently, individuals don't have enough information about the leasing system, which is a cheaper form of financing than credit, regardless of the value of goods for which the financing is requested. Thus, if the asset value is below €10,000, the interest of the loan is higher because it is assimilated to the personal loan, and if the asset value is above this limit, the loan interest is lower, but there are required additional guarantees which significantly increase the cost of financing. Only one of the managers mentioned that the real estate leasing is discouraged by the fact that the user is obliged to pay VAT and notary fees twice, while another manager believed that the lack of the financing products in leasing system with no advance made some customers to prefer the bank credit.

Most of the managers interviewed highlighted the fact that the sales representative of the dealer or provider has a great influence on buyers regarding the choosing process of the financier, recommending that financier who offers him the greatest financial reward. Only one quarter of the respondents believed that, in the decision making process of purchasing goods in leasing system, customers are influenced by the companies' accountants or by the managers of the financial departments of the companies that they represent.

However, some managers have expressed their concern about the fact that only a few customers appreciate the leasing companies in terms of communication and flexibility, issues that the independent companies have improved during the subsequent period of the crisis, unlike the leasing companies – subsidiaries of banks that during this period focused more on the portfolio management and less on the increasing of the sales.

The Braşov customers' behavior of purchasing the leasing products and services. The goods for which the financing is requested most often in the leasing system are the cars, followed by the industrial machinery and equipment. In most cases, users choose the financial leasing. Operational leasing is preferred mainly by the fleet customers because of the additional benefits regarding the provision of maintenance that leasing company is obliged to offer. Regarding the buildings, they often are only the object of the lease-back contracts, because in the case of the new

buildings the banks have better offers than the leasing companies, which makes the banking groups that have affiliated a leasing company to be not interested in promoting the real estate leasing in order to avoid the overlap between the products of the bank and those of the leasing company. The largest independent leasing companies have also diversified their portfolio, including in their other credit products such as credit and mortgage loans.

With regard to the particular acquisition process of products and services offered by the leasing companies in relation to the offer of the credit institutions, all managers interviewed pointed out two aspects: the first concerns the way in which the consumers compare the offers of the leasing companies with those of the credit institutions, and the second aims to outline some features of the customers behavior, before or after signing the leasing contract.

Regarding the first aspect, most of managers believed that, in general, customers who are on the first purchase for which they request the financing make several compares of the offers, but follow the recommendations of the sales representatives of the dealers or suppliers. Instead, those customers who are familiar with this area require the offers of several financial institutions (leasing companies or banks) mainly comparing the interest, the possible management fees and the fees for the anticipated reimbursement, but rarely taking into account the costs implied by the warranties requested additional to loans. This leads to a wrong opinion that leasing is more expensive than credit. Only those customers who carefully compare the cost of financing in the leasing system with the cost of the financing through credit, taking into account that the evaluation of the property, that is the cost of the mortgage required as a guarantee to the credit, exceeds most of the times, the difference between the higher interest practiced by the leasing company and the lower interest loan applied by the bank, understand that leasing is a financing technique more cheaper than the credit loan.

Regarding the second point, half of the managers have pointed out the tendency that exists among the buyers to negotiate the financing offers with the leasing companies. If by 2008, this happened only to customers who purchased vehicle fleet or high value equipment, once the first effects of the economic – financial crisis made their presence felt, this desire of negotiating became also a feature of small customers.

Regarding the difficulties encountered by the customers of the leasing companies in obtaining the needed financing, most respondents considered that, in general, clients meet the criteria for granting the financings. There are, however, certain situations in which, after further checks made by the leasing company in various databases, there are identified some irregularities in the clients' activity, such as delays in CRR (Central Credit Risk Register), which change the conditions of granting the financing or stop the granting of financing.

4. CONCLUSIONS

Taking in consideration the results of the qualitative research, it appears that managers from the leasing sector consider that the decision of the Braşov consumer to proceed with financing in the leasing system is influenced by certain reasons, among

which the most important are: the tax advantages, the rapidity of obtaining the financing, the lack of the additional guarantees, greater flexibility in terms of financing options and the preservation of the working capital and the possibility of planning the cash-flow.

The analysis of the awareness of the decision making process of the Braşov customers who purchased leasing products and services pointed out the fact that the managers interviewed had a nearly unanimous opinion about the *sources of information used by the buyers* and the factors influencing the decision making process, highlighting the important role of the sales representative of the supplier or the dealer.

It can be appreciated that in future those leasing companies that will focus on visits to the clients' headquarter, made by the sales representatives of the financiers in order to present the offer in detail, will have a competitive advantage.

The vertical analysis of the information provided and especially the horizontal synthesis reveal some differences between the opinions of managers in terms of the perception of relevant variables that define **the Braşov customers' behavior of purchasing the leasing products and services**. These differences are the result of the fact that each of the eight managers has a specific way of perceiving the customer behavior, and this is reflected in the marketing strategies used by the leasing companies. These different approaches of the managers are explained by the fact that although 5 of the 8 leasing companies are subsidiaries of banks, they are in different stages of integration in the banking group:

- two of the five companies were integrated from the beginning in the general strategy of the bank;
- other 2 companies started as independent companies, the integration process beginning after a certain period of time, and being completed in the present;
- one company has started as an independent one, competing with the bank from the group in which it is included, the integration process between the two entities having been started but not yet completed.

The main issues highlighted by the managers regarding **the Braşov customers' behavior of purchasing the leasing products and services** are:

- in most cases, the users opt for the financial leasing, the operational one being preferred mainly by the fleet customers;
- in general, the customers who are on the first purchase for which they request the financing make several compares of the offers, but follow the recommendations of the sales representatives of the dealers or suppliers;
- the customers who are familiar with this area require the offers of several financial institutions mainly comparing the interest, the possible management fees and the fees for the anticipated reimbursement, but rarely taking into account the costs implied by the warranties requested additional to loans;
- there is a tendency that exists among the buyers to negotiate the financing offers with the leasing companies;
- the most important difficulties encountered by the customers of the leasing companies in obtaining the needed financing arise from the additional checks, which points out certain irregularities in their activity.

Regarding **the way in which the three types of leasing companies are operating on the Romanian market**, the managers interviewed pointed out that:

- **the leasing companies – subsidiaries of banks** have the supremacy, with the largest market share;
- **the leasing companies captive to the producers** have, in general, a portfolio formed of the customers of the supplier or dealer from the group to which they belong;
- **the independent leasing companies** are generally small companies, more flexible in providing the financings, having the possibility of taking greater risks because their work is not very strictly regulated by the legislation in force.

Although this qualitative research involved a certain number of limitations such as the small number of interviews, their relatively short duration, the frequent interruptions of the interviews, the unrepresentative character of the results at the level of the population studied, the conclusions drawn from the answers provided by managers represented a reference point in the process of approaching the quantitative research. Consequently, the information obtained through the in-depth semi-directive interviews conducted among the managers of the leasing companies from City of Brașov, in correlation with the results of the ongoing quantitative marketing research, among the potential and actual customers, provide an optimal context for developing and implementing effective marketing policies and strategies, in order to create a competitive advantage in the context of permanent changes in the leasing market, due to economic – financial crisis.

REFERENCES:

- [1]. **Brătucu, G.; Brătucu, T.O.** (2006) *Qualitative methods used in the market research*, Management & Marketing Journal, no. 1, The Economic Publishing House, Bucharest, p. 49
- [2]. **Brătucu, T.** (2007) *The consumer behavior*, in the Scientific Bulletin of the „Dimitrie Cantemir” Christian University, Infomarket Publishing House, Brașov, p. 98
- [3]. **Florescu, C. et al.** (1992) *Marketing*, Marketer Publishing House, Academic Group of Marketing and Management, Bucharest, p. 156
- [4]. **Lefter, C.** (2004) *Marketing Researches – Theory and applications*, Infomarket Publishing House, Brașov, p. 36
- [5]. **Mâlcomete, P. et al.** (1979) *Marketing dictionary*, Junimea Publishing House, Iași, p. 72
- [6]. **Radu, A.** (17 November 2011) *Financial leasing market grew by almost 30% in 9 months. Only the real estate continues to suffer*, [Online], Available at: <http://www.dailybusiness.ro/stiri-finante-banci/piata-de-leasing-financiar-a-crescut-cu-aproape-30-la-9-luni-doar-zona-de-real-estate-continua-sa-sufere-70823/>, [Accessed at: 3 March 2012]
- [7]. **Stanciu, M.A.** (4 April 2012) *Leasing market grew last year by 20%, above expectations*, [Online], Available at: <http://www.wall-street.ro/articol/Finante-Banci/119173/piata-de-leasing-a-crescut-anul-trecut-cu-20-la-1-35-mld-euro.html>, [Accessed at: 23 April 2012]

ACTUARIAL TECHNIQUES TO ASSESS THE FINANCIAL PERFORMANCE. INSURANCE APPLICATIONS

**MIHAELA BOTEA, MARINEL NEDELUȚ, CORINA IOANĂȘ,
MIHAELA GRUIESCU***

ABSTRACT: *The XXI century was marked by the convergence and harmonization, this century is distinguished in that it lays the foundation of accounting actuarial, which is characterized by up to date values and actuarial calculations . Actuarial accounting is reflected best in insurance system. In the market economy, insurance system is on one hand a means of protecting the business and property of citizens, on the other hand a business that generates profits. From this context, we can say that the subject of actuarial accounting is the measurement and recognition of assets and result of the change in time value of money. Time is an important variable considered in any economic decision investing and financing.*

KEY WORDS: *present value; actuarial calculations; assessment; insurance; maximizing enterprise value; fruiting factor.*

JEL CLASSIFICATION: *C10; G22; M41.*

1. INTRODUCTION

Up to date value or capitalized is an estimate at the present time of the value based on future benefit flows that occur in the normal course of business, meaning updating a value that becomes available later. General appeal to the IASB, the up to date value is defined in terms of future cash flows at the present time, the basic principle adopted is "a penny earned today is worth more than a penny earned in the future."

* *Assoc. Prof., Ph.D., Academy of Economic Studies, Romania, mihaela.botea@yahoo.fr
Assoc. Prof., Ph.D., Financial Banking University Bucharest, Romania, nedelut@yahoo.com
Prof., Ph.D., Academy of Economic Studies Bucharest, Romania, corina_ioanas@yahoo.com
Assoc. Prof., Ph.D., Romanian American University, Romania, mgruiescu@yahoo.com*

In this regard, the company as an independent element of the economic system interacts with business partners, with budgets from different levels, capital holders and other subjects, a process that makes possible the emergence of financial relations. In these circumstances, the role of accounting is to provide objective and accurate information to all users, especially business owners and capital investors.

The actuarial accounting:

- measure and record possible variations of interest rates and inflation;
- quantify in monetary terms the risk of economic activity;
- estimation using actuarial calculation, measurement and recognition of assets and profitability
- using actuarial calculation to maximize enterprise value

The concepts of up to date value, present value and future value, insurance premiums, annuity factor of fructification, mortality tables, switching numbers, technical reserves, mathematical reserves, solvency, solvency margin, the insured risk, risk management, actuarial calculations, accounting hedging, time periods, immediate/deferred payments-collections, anticipated/ordinary annuity payments-collections from accounting of commitments to the accounting for treasury, the capital adequacy rules, all forms the actuarial accounting content. To these are added the following structure: assets as strategic investments, working capital needs as functional investment, treasury investment that equilibrium equity financing and equity financing raised.

2. ACTUARIAL ACCOUNTING MODEL FOR ESTIMATING, RECOGNIZING AND ASSESSING LIFE INSURANCE PREMIUMS

In life insurance the insurer's concern is to ensure the stability of the financial results of their activity. He must work in order to fully cover on account of premiums received, the obligations assumed to policyholders. Premiums must cover the costs of contracting, purchasing insurance premiums collected, and so forth. For this reason the technique of setting insurance premiums and mathematical reserve is particularly important.

The calculation of life insurance premiums is the loss distribution principle of a person who has suffered as a result of insurance where, among many policyholders who have not suffered any damage. If payments are made from the fund arose format all insured as a result of payment of the insurance premium. The amount of the insurance premium is the expected value of insurance payments accruing to an insured person for the duration of the insurance. Insurance payments in the form of sum insured, the insurance company back and are made if life insurance as a result of death of the insured during the period of insurance or its survival until the expiry of that period.

Thus, to calculate insurance premiums need to be known: number of deaths, the number of survivors and the present value of the amount to be paid in the future (the amount required to be collected by the insurer from the insured to cover future payments death or survival to a certain age, provided that the proceeds are invested, for example capitalized). It follows that, in determining insurance premiums, start to

fructification data obtained from insurance funds and the data in the tables of mortality in the country analyzed.

3. FRUCTIFICATION INSURANCE FUNDS

To satisfy its obligations to policyholders, the insured sum payment on death or on expiry of insurance (survival) insurer creates the account premiums received from policyholders, a fund, capitalized as bank deposit in circuit economic or other investments, produce income. Of insurance proceeds by leveraging these funds are taken into account in calculating insurance premium size and depend on the amount of premiums paid into the fund, the retention time in the economic cycle and fruiting factor.

3.1 Determination of final value using the exploit technique

A sum of money paid to fruition over a period of n years, at the end of that period is:

$$S_n = S_0 (1 + i)^n \quad (1)$$

- S_n - the amount obtained after fructification;
- S_0 - Amount deposited to fruition;
- $(1 + i)$ - Factor of fructification;
- n - the number of years the amount is deposited to fruition.

Example:

A person aged 25 years insure that is to receive over 10 years, if alive, the amount of 15,000 lei. The interest rate is 10%.

- To ensure survival with maturity over 10 years single net premium is as follows:

$$P_{m1} = S \cdot \frac{D_{x+n}}{D_x} = 15.000 \cdot \frac{D_{35}}{D_{25}} = 15.000 \cdot \frac{3.311,70569}{8.777,62631} = 5.660 \text{ lei} \quad (2)$$

- If appropriate premium amount would be deposited in the bank for the same rate of interest and the same time, then at maturity would get the following amount:

$$SF = 5.660 (1 + 0,1)^{10} = 14.680 \text{ lei} \quad (3)$$

Amount obtained from capitalizing bank deposit is less than that obtained from purchase to ensure survival. As a result, that person is more advantageous to conclude ensuring survival.

3.2 Determination of present value technique using update

In insurance the interest is to determine the present value of amounts to be paid or received over a number of years. In other words, we can calculate the amount to be

deposited to fruition now, at a certain interest rate, so that over a number of years to reach the level expected.

The present value is calculated by updating technique as follows:

$$S_0 = S_n \cdot \frac{1}{(1+i)^n} \quad (4)$$

$v = \frac{1}{(1+i)^n}$ is the discount factor so the formula to update the monetary unit is:

$$S_0 = S_n \cdot v^n \quad (5)$$

v^n - represents the present value of 1 lion will pay or receive over n years, under an interest rate i

Discount factor indicates how much must be invested with an effective interest rate i and over a year to get the 1 leu.

Example:

An insurance company wants to have the amount of 1,000 lei over five years, by depositing an amount X to a credit institution where the interest rate offered is 5%.

For this it is necessary to determine the present value of the amount of 1,000 lei (lei):

$$S_0 = S_n \cdot \frac{1}{(1+i)^n} = 1.000 \cdot \frac{1}{(1+5\%)^5} = 784 \text{ lei} \quad (6)$$

Therefore, the company must submit to fruition today the amount of 784 lei with interest at 5% over 5 years to have the amount of 1,000 lei.

4. MORTALITY TABLES AND SWITCHING NUMBERS

Mortality tables include a number of demographic indicators determined based on the number of survivors and deaths, by year of birth and age for men, women and both sexes can also be prepared on demographic region or socio-professional categories. For some needs, starting either from general mortality tables (complete) or using estimation functions are constructed abbreviated tables, means tables for different intervals between ages (for example from 5 to 5 years). To facilitate the study and use of the mortality table to calculate insurance premiums, actuarial science Actuarial use an International System of Symbols.

Insurance premium calculation in life insurance requires demographic indicators of mortality table and data update factor values obtained from financial tables updated. In practice it is desirable to estimate the actuarial premium rates for each age and duration of insurance accepted by the insurer, which contributes to the enormous performance of arithmetic operations based on large data sets.

To simplify calculations premium rates, life insurance technique uses a number of auxiliary quantities called **switching values** that are part **numbers switching table**. These values are obtained by combining indicators included in the financial tables of

mortality tables and updating. Thus, substitution occurs (switching) figures in these two tables with different values and their aggregation into a single table.

Calculations predetermined switching table numbers, taking into account the sum insured base equal to one.

Table 1. Switching values obtained with the number of survivors (l_x)

Formula	Explanation of the formula
$D_x = l_x \times v^x$	Present value of the product of the number of survivors to age x and sum insured unit.
$N_x = D_x + D_{x+1} + \dots + D_\omega = \sum_{t=x}^{\omega} D_t$	Present value of the product of the number of survivors and the sum insured unit.

Table 2. Switching values obtained with the number of deaths (d_x)

Formula	Explanation of the formula
$C_x = d_x \times v^{x+1}$	Up to date value of the product of the number of deaths by age x and sum insured unit.
$M_x = C_x + C_{x+1} + \dots + C_\omega = \sum_{t=x}^{\omega} C_t$	Up to date value of the product of the number of deaths and the sum insured unit.

5. CASE STUDY ON ASSESSMENT, RECOGNITION AND MEASUREMENT OF PREMIUM LIFE INSURANCE

A person under the age of 30 years makes a life insurance, the insurance company "AVIVA" SA by insurance agent, which is to receive the end of each year the amount of 2.000 lei lifetime. Insurance agent contract between the insurance company and agent commission set was 10% of premiums earned. In these conditions:

- First single net is as follows:

$$P_{nu} = S \cdot a_{30}^p = S \cdot \frac{N_{x+1}}{D_x} = 2000 \cdot \frac{N_{31}}{D_{30}} = 2.000 \cdot \frac{50.418,87600}{5.403,27964} = 18.663 \text{ lei} \quad (7)$$

According to legal provisions, the insurance agent commission due, the company calculated, withheld and remitted state budget a 10% advance tax accounting (18,663 x 10% = 1866.3 lei).

6. CONCLUSIONS

Underlying problem that appears in the literature in Romania is caused by the fact that at present there is no up to date accounting, customized for system evaluation, recognition and calculation. Therefore, the value of the work is to develop a new

concept - the actuarial accounting - that would help improve the methodological basis of accounting insurance companies in Romania, which will:

- inclusion in income of insurance companies only portions of the first obtained from direct insurance and reinsurance won so will exclude cases of distortion of information in the financial statements set for those operators;
- better estimation of insurance risk, which makes the information presented in the financial statements is closer to the principle of true and fair view;
- stability of the financial results of activity due to the full coverage premiums received on account of obligations to policyholders and costs related to signing contracts and premiums collected;
- fructification and updating techniques in determining the final value and the actual value;
- taken into account in determining insurance premiums in the number of deaths, number of survivors, the current value of the amount to be paid in the future (the amount required to be collected by the insurer from the insured to cover future payments on death or survival to a certain age, provided that the proceeds are invested, for example capitalized);
- use mortality tables and numbers switching to a better estimate of premiums;
- use the method "pro rata" in calculating unearned premium reserve at the end of the reporting period by insurance organizations in Romania . Using this method raises the level of accuracy of calculation of actual income earned from insurance business during the reporting period, excluding cases where the insurer, in the period of the insurance contract, has no means the unearned premium reserve and guarantee the performance by it the obligations assumed under the conditions stipulated in insurance

REFERENCES:

- [1]. **Epstein, B.J.; Mirza, A.** (2005) *IFRS 2005 – Interpretarea și aplicarea Standardelor Internaționale de Contabilitate și Raportare Financiară*, București, BMT
- [2]. **Cenușă, G.; Burlacu, V.** (2000) *Bazele matematice ale asigurărilor*, Ed. Teora, București
- [3]. **Ciurel, V.** (2000) *Asigurari si reasigurari: abordari teoretice si practici internationale*, Ed. All Back, București
- [4]. **Daykin, C.D.** (1992) *The Developing Role of the Government Actuary's Department in the Supervision of Insurance*, Journal of the Institute of Actuaries, vol. 119, part II, no. 473
- [5]. **Daykin, C.D.; Pentikainen, T.; Pesonen, M.** (1993) *Practical Risk Theory for Actuaries*, Chapman&Hall
- [6]. **Dobrin, M.** (2005) *Contabilitatea specifică domeniului asigurărilor*, Ed. Bren, București
- [7]. **Gart, A.; Nye, D.J.; Harrison, C.M.; Gibbons, R.J.** (1994) *Insurance Company Finance and Investments*, Insurance Institute of America, Malvern, Pennsylvania
- [8]. **Murray, A.; Gohil, H.; Buckley, K.; Burke, J.** (2004) *Mind the GAAP: Fitch's view on Insurance IFRS – Special report Fitch Ratings*
- [9]. <http://www.cea.assur.org>
- [10]. <http://www.actuaries.org>
- [11]. <http://www.jia.com>
- [12]. <http://www.iasb.com>

ASPECTS OF THE MANAGER ACTIVITIES WITHIN THE FUTURE COMPETITIVE ENVIRONMENT

GHEORGHE FLORIN BUȘE *

ABSTRACT: *The first decade of this century was unsettled regarding the management concepts and instruments. From the points of view of the total quality projects, product development time, product power, adapting management, behaviors and values, teams, networks and alliances, this incertitude represents a permanent seek of the ways to deal with the significant competitive discontinuities. Although every initiative may contain important elements which go through the essence of things, until now there was no consensus related to the managerial changing nature. The sole conclusion after these studies is that the managerial work will be different in the future.*

This paper underlines the most important competitive discontinuities and draws a model of the future managerial work.

KEY WORDS: *manager; managerial work change; competitive discontinuities; competitive environment; specialist evolution.*

JEL CLASSIFICATION: *M12*

1. THE NATURE OF THE COMPETITIVE ENVIRONMENT

All the activities below have a flow influenced by a series of discontinuities (Verboncu & Zalman, 2005):

- *From commodity to competition.* Everywhere in the world, the pressure for privatization and settlement represents a major discontinuity for activities like public services, communications, air transports, medical system, financial services and education. The managers are forced to deal with new transformations regarding the qualifications, attitudes, management processes and economic models. The stage of mastering the offer level, the prices, profits, investments and technologic evolution models based on secret negotiations between managers and bureaucrats leaves place to

* *Lecturer, Ph.D., University of Petroșani, Romania, manag_bgf@yahoo.com*

the respect for client and market options. This transformation doesn't mean efficiency in the current game but implies inventing a new game and gaining efficiency there – meaning transformation into something different. The task of traditional company refurbishment in short time complicates the problem. Leaving the past behind and adapting to the present represents a challenge.

- *From local to global.* More and more, the clients, competition and opportunities become global. These global opportunities creates new symmetries for existing companies. The quick asian growth combined with the slow or non-existing western european growth and with the sudden appearance in the United States of the new companies based on knowledge, make geographic asymmetries regarding opportunities arise. As a result, the geographic development of a company resource will modify significantly over the following decade. For example, most occidental and japanese companies will see that more than 50% of their actives and incomes are in Asia. The reconfiguration of the resources on this scale will change the center of gravity for the most multinational traditional companies.

Even businesses considered until now purely local, i.e. cleaning services, will be subject of global competition. Moreover, the globalization will not concern only the big companies with significant investments. I.e. small software companies discover that they can become global even with small incomes. They can sell their goods anywhere in the world and often may reallocate a part of their work developing products anywhere they want. There will be created multinational companies of all sizes, since globalization does not take into consideration too much the business nature or the size of the company.

- *From „like me” to „like others”.* The competitive environment dynamics modifies significantly in most domains. I.e., in the past 20 years, most domains were characterized by a small number of global competitors. The latest big change in the „club of global companies” was in `60s-`70s when the japanese competitors appeared. Nowadays, the competitors from South Korea and Taiwan break in the club and others will follow. Also, the competition is not only between the leaders and challengers, it exists also between the traditional companies and the ones developing. Lets analyze today's picture. In the products industry we can identify four groups of competitors, as in figure 1.

For example, globally, between 1968 and 1988, traditional multinational companies as Philips NV and Matsushita Electrical Industrial Company, competed in the electronics industry, in the domains of TVs, Hi-Fi components or VCRs. They are challenged by companies like Samsung Group and Daewoo Corporation. In fact, Samsung occupies the first three spots in most domains of the electronics industry. In the next decade, the indian and chinese companies will become challengers in these domains. Then, in the new full evolution industry of electronics like computers, PC-TVS, cell phones, printers, the new multinational companies like Nokia Corporation and Acer Group Taiwan, compete with LM Ericsson, NEC Corporation, Philips and Matsushita.

<i>New multinational companies</i>	Nokia (c) Motorola Acer	Samsung (b) Daewo Goldstar
<i>Traditional multinational companies</i>	IBM (d) NEC Ericson	Philips (a) Thomson Matsushita
	<i>New electronic products</i>	<i>Traditional electronic products</i>

Figure 1. Evolution model for global competition

Traditional computer companies, like IBM, try to compete for franchises on their own territory. The need to grow and desire to master the evolution of their traditional products, as the transformation of PCs in TVs or electronics, force these companies to get to an unfamiliar battlefield. This battle between leaders and challengers in both old and new domains brings to the field familiar or unfamiliar enemies. Products as TVs or VCRs are unfamiliar to companies like Ericsson or IBM, just like computers are for Philips or Matsushita. Every group benefits by different advantage sources, everyone realizes that this game is not one where you compete with „someone like you” but one where you compete with „others different from you”.

- *From clear domain borders to undetermined borders.* In many domains, the traditional borders become irrelevant. Traditional borders, like specialized products or common products, free time, enjoyment and work, home time and work, communication, entertainment, education and computer operation are no longer valid. The expanding digital technology makes these traditional borders disappear. Lets consider the common personal computer. Is this a specialized product or a common product? Is it used for work or for enjoyment, for education or for entertainment? Even the traditional borders of the domains disappear quickly, the contours of the new domains are not yet defined. For example, the traditional communication companies and software companies compete and cooperate to create businesses which will combine the computer, TV, remote control and communication functions. Due to this combination, the companies will compete both to find the ways to new opportunities and to define new businesses. This competition is complex, forceful and different from the competition for final products or services.

- *From stability to fluctuations.* Considering the unknown things around the domains, the ways which lead to new occasions and to customer expectations, the companies will have to experiment new products and services. These market experiments are characterized by uncertainty. A product might be a big success or a total failure. Lets consider the fluctuations which result for products like office printers

– the problem of raising and lowering the price and the speed of launching new products. The requirements managers have to handle due to the fluctuations in the expansion domains are significantly different from the ones imposed by stable domains, i.e. chainsaw or beverage products.

- *From agents to direct access.* A systematic process might be developed to reduce the number of links between producers and customers. Together with the development of some companies like Quicken for the banking system, Charles Schwab Corporation for brokers, Dell Computer Corporation for internet e-commerce distribution and services, it puts accent on removing the inefficiency and costs which appear in product and service distribution from producer to customer. This tendency will be accelerated together with the internet and World Wide Web. The capacity to connect directly the producers and customers reduces the barriers for new companies and modifies significantly the cost structure and business model for existing companies. Inevitably the business speed and rhythm will change. The logistic management starts to gain a core role within the competition strategy.

- *From vertical integration to specialists.* Henry Ford, George Eastman and Du Pont family were proud of their vertical created empires. In the last decade, the companies gave up their past and reallocated the useless activities. Now they confront with two interesting tendencies. In the first place, the component suppliers are often competitors on the good markets. American Airlines supplies the reservation system used by other airlines they compete with. Toshiba supplies liquid crystal display panels for their competitors from the laptop market. The competitors often trade components and basic sub-systems. The commercial balance between competitors might become an important dimension of the competition as the national commercial balance.

Another tendency is the evolution of specialists from the common products domain, like Intel Corporation. The access to the suppliers of the basic product is essential for anyone who wants to become an important competitor on the final product market. For example, personal computers. The value chain in the personal computer domain is fragmented geographically and legally. The specialists (for example, the ones who supply processors, LCD panels and monitors) and the ones who have the product knowledge are scattered geographically. USA, Japan, Taiwan, Singapore and Malaysia became geographic nodes. Moreover, this geographic fragmentation does not belong to the same company. Every company is a distinct legal entity. As a result the coordination in the domain of personal computers, which includes the product development, logistic, product volume, production timing and price determination must go over geographic borders and a chain of legally independent companies, but dependent strategically.

- *From one to more intellectual patrimonies.* The collision of multiple technologies imposes new requirements for the managers of traditional companies. The integration of the chemical technology in electronics and software (i.e. Eastman Kodak), of the mechanic technology in electronics (i.e. Ford Motor Company) and the pharmacy in fashion (i.e. Revlon) force the managers not only to accept a new intellectual patrimony, but to actively work to integrate it in the traditional activity of the company. Also, traditional companies oriented on professional activities (engineering) become operators on the common product market (i.e. Hewlett-Packard

Company). The need of integration and development of some products or services, like Photo CDs for Kodak, creates a new challenge: managers must learn to adapt to and exploit different rational processes.

We may add easily other radical changes – the fight for standards in most domains, ecologic requests and the competition for funds. The purpose is not to be exhaustive, but to show that changes taking place are not gradual tendencies but discontinuities.

2. FUTURE MANAGER WORK

The manager work is a sequence of decisions or actions done in order to apply the decisions taken by a superior manager, all of them belonging to the functions of the management processes: prediction, organization, coordination, training, control-evaluation. (Simionescu, 2002; Nash & Nash, 2001)

The problems of the managed domain – organization, department, section – multiplied, their complexity and difficulty raised, their impact on the results obtained amplified considerably. These situations, common for companies, strains the managers, no matter of their place in the hierarchy (superior, medium or inferior level). (Görg, 1997; Iacob & Simionescu (Buşe), 2010)

The evolving competition suggests that the requests managers have to handle in the future will be different. Managers will have to admit the fact that they are forced to be able to make their companies ready (Clegg & Birch, 2003) for:

- *Planning and implementing complex strategies.* Today's strategies are focused not only on the market share and profits, but also upon influencing the evolution of industrial standards, of the ways which lead to new opportunities of breaking into the new markets. Strategies are followed individually by the company and in cooperation with the suppliers, customers and competition, regarded as a whole. The strategic thinking needs to include cooperation agreements of any kind. As a result, the available independence degree of any group of managers to act individually is significantly reduced. However, in case they are used cleverly, these relations may increase considerably the resources and influence of the company in the competition battles.

- *Sharing and protecting the intellectual property.* Unlike the traditional production domains, current companies base on invisible actives – competences, patent portfolio, commercial brands, logistics and reputation. Protecting the intellectual property is more difficult than protecting the knowledge already used for physical actives.

- *Managing the public – private interface.* Although privatization and deregulation evolves quickly, the governments may still influence the economy. Moreover, ecologist consumers, human rights activists, investors and employees request higher transparency and responsibility from managers. Current controversy related to human rights violation and improper work conditions offered by corporations from textile and shoes industry from countries like Honduras and China is a proof of higher demands for managers.

- *Offering intellectual and administration management.* In a period with high discontinuities, employees, clients and investors are in desperate need for intellectual

leadership. Managers have to anticipate the future and offer a whole image of it. This might be the signal which motivates and pushes simultaneously the company and the activity domain; they have to prove the needed management to guide the company in case of important changes of professional requirements, attitudes, behaviors and business models.

We may easily figure out that the companies will become global, acting in multiple places of different cultures, imposing multiple qualifications and perspectives. The accommodation with new concepts, technologies and markets will be essential; however, to get here they will need maybe a large variety of cooperation agreements, which is why sharing knowledge and learning from others has to go together with protecting the main qualifications. The speed will be also a main issue in developing the product, obtaining the competence and exploiting the opportunities, but most important, making basic changes in company orientation.

For the next decade, the main manager work, affected by these discontinuities, will be based on:

- *Creating a competitive picture shared by the entire organization.* This scheme will be shared to the employees, actual and potential customers, suppliers, cooperators and investors. The future point of view must be convincing, directional and motivational. As the organization starts to share its competitive picture, the leading managers will afford to share decision taking. The distributed knowledge, as network, needs a mutual node. The leading managers will have to define the general direction but not the direction of every activity. The inferior level managers, closer to the customers and competition, may define appropriate product-market strategies.

- *Focusing on changing the domain dynamics and influencing the company resource efficiency.* The objective is to reconfigure the current domains and to create new ones. For this, the organization will have to focus on gaining and increasing the efficiency of the resources more than proper use of resources (current manager concern). Managers will have to look behind the existing resources from their companies and to exploit creatively the resources from suppliers, partners, competition and clients. They will become multipliers of available resources inside companies.

- *Creating a flexible system which may reconfigure the resources in order to benefit from the upcoming opportunities.* For most companies, the organization becomes an obstacle in front of a quick reaction. The ability to preserve and reallocate quickly the resources represents an essential capacity for the future. This implies quick learning, leaving behind old habits, removing the borders and focusing on becoming market leader.

- *Developing global capacity.* This means that the organization has to think and act as a whole and have access to clients, suppliers and talents from the entire world. The organization has to become a meritocracy where the race and origins should not matter.

3. FUTURE MANAGER

These objectives have low chances to come true if they will not be promoted by the managers of the future. He has to present the following features (Nash & Nash, 2001; Shome & Tondon, 2010):

- *Systemic thinking*. In a period full of discontinuities, the capacity of synthesizing the entire activity and see the connection between parts, to be able to predict the future, will become essential. The future manager must organize the information, combine the analysis and intuition and create a balance between private and public interest.

- *Intercultural competence*. As the companies become a part of the global market and increase their dependency on other cultures (markets, suppliers, employees and investors), the intercultural competence becomes a significant advantage. The managers must pass from their concern about individual competence to those about inter-personal competence and then intercultural. Recognizing the fact that other cultures do not necessarily share the same values and beliefs represents an essential active. Knowing foreign languages, deep understanding of history, religion and art facilitates the development of intercultural competences.

- *Extensive and continuous training*. Knowledge explosion, together with discontinuities and globalization, suggests us that managers need to face permanently new ideas, technologies, business practices and cultures. „The valid time” of the current knowledge has become extremely short. Managers need to find occasions for continuous education.

- *Personal and behavior standards*. No global organization can survive without clear behavior standards. Managers have to create a system which establishes minimum value and behavior standards for the global organization – but, most important, they have to be responsible by accomplishing higher personal professional standards. Professionalism means substantial knowledge of business, performance commitment and responsibility, suitable activity concerns, interpersonal and intercultural sensibility and training others.

The manager of the future will not be only an active person but also a deep thinker. (Vasilescu, 2003)

4. CONCLUSION

The discontinuities from managers’ activity, presented in the paper, influence every domain of activity in a company.

It will be hard to develop an integrated conception on the manager of the future without taking a consideration the nature of competition discontinuities. They offer a base for identify the new requirements which companies and managers, fighting to survive and to gain income, will have to handle. The future manager tasks come from this understanding.

The new decade will be full of occasions for the ones willing to learn, share and change. Those opposing the change will be left behind and lose the opportunity to create the future.

The evolving competitive environment suggests that the requirements the future managers will have to handle will be various. Therefore, we shortly presented in the paper, the need for managers to create a series of capacities for their companies.

REFERENCES:

- [1]. Clegg, B.; Birch, P. (2003) *Arta de a-i conduce pe alții*, Editura Polirom, Iași
- [2]. Görg, B. (1997) *Viitorul managerilor. Managerii viitorului*, Institutul European, Iași
- [3]. Iacob, C.; Simionescu (Bușe), S. (2010) *Necessity and Reality between Information Transparency in Performance SMEs to Track*, Annals of the University of Petrosani - Economics, Vol. X, Part IV
- [4]. Nash, J.C.; Nash, M.M. (2001) *Practical forecasting for managers*, London, Arnold
- [5]. Shome, S.; Tondon, S. (2010) *Balancing Human Development with Economic Growth: A Study of ASEAN 5*, Annals of the University of Petrosani – Economics, Vol. X, Part I
- [6]. Simionescu, A. (coord.) (2002) *Management general*, Editura Dacia, Cluj-Napoca
- [7]. Vasilescu, I. (coord.) (2003) *Eficiența economică și performanța managerială a organizației*, Editura Economică, București
- [8]. Verboncu, I.; Zalman, M. (2005) *Management și performanțe*, Editura Universitară, București

THE HORIZON OF PREDICTION FOR EXCHANGE RATE EUR-LEU

DUMITRU CIOBANU *

ABSTRACT: *For the chaotic systems, the fact that they are deterministic does not make them predictable. However, the predictive power in the case of chaotic systems can be improved and this can be illustrated by weather system for which predictions for short periods have reached to a very good accuracy. A positive Largest Lyapunov Exponent indicates the presence of chaos in the evolution of a time series and it is used to establish a correct horizon of prediction.*

KEY WORDS: *chaos; Lyapunov Exponent; exchange rate; horizon of prediction.*

JEL CLASSIFICATION: *C53; G17.*

1. INTRODUCTION

Chaotic systems are in fact complex deterministic systems with a large number of variables that influence the evolution of the process making it impossible for humans to simulate it and therefore making them to seem unpredictable. This, also, makes it impossible to determine the initial state of the system knowing just the final state.

Most processes and systems found in nature involve the interaction of many factors that allow us to catalog them as chaotic systems. Thus, chaos is met in solar system dynamics, evolution of populations, the weather, chemical reactions, etc.

In addition, the economy can be seen as a chaotic system, a factor that brings a huge number of variables is direct involvement of people. The chaos from complex systems is known as chaos deterministic.

For the chaotic systems, the fact that they are deterministic does not make them predictable. However, the predictive power in the case of chaotic systems can be improved and can be illustrate by weather system for which predictions for short periods have reached to a very good accuracy.

* *Ph.D. Student, University of Craiova, Romania, ciobanubebedumitru@yahoo.com.*

We must emphasize the fact that the emergence and development of chaos theory could not have taken place before the invention of computers as simulation of complex systems with many variables could not have been done without their help.

An important feature of chaotic systems is Sensitive Dependence on Initial Conditions (SDIC). This tells us that two initially close trajectories depart exponentially in a finite number of iterations, sometimes very quickly. In such a system, prediction is impossible except maybe the prediction for very short periods. The most used tool for identifying these processes from dynamical systems theory or experimental series is Lyapunov characteristic exponent (LCE).

Although chaos is fundamentally deterministic, in reality it is unpredictable except for short periods. Approximate time limit that can get accurate predictions for a chaotic system is a function of the largest Lyapunov exponent (Frison & Abarbanel, 1997)

$$\Delta t_{\max} = \frac{1}{\lambda_{\max}}.$$

2. MAXIMAL LYAPUNOV EXPONENT

Consider a model and two neighboring points $x_1(0)$, $x_2(0)$ at the time $t=0$, starting points for two trajectories in phase space. Denote the distance between these two points $d(0)$. At the time t , that is after moving the two points along their trajectories, distance between points is measured again and denoted $d(t)$.

Using a different terminology, we can say that we applied a flow Φ_t to both points and after the time period t we measured the distance between the two points, $d(t)$.

The evolution of the relationship between the two distances is monitored.

$$\frac{d(0)}{d(t)} = e^{\chi t}$$

When t tends to infinity, χ converges to a value. The value of this limit is Lyapunov characteristic exponent.

If $\chi > 0$, it is said that the two orbits, initially close, diverge exponentially under the action of the flow. It also says that the Lyapunov characteristic exponent measures the rate of divergence of the system (Georgescu, 2012).

After calculating the Lyapunov maximum exponent or the determination of its approximations, we make assumptions about the nature of the system:

- $\lambda < 0$ The system generates a stable fixed point or a stable periodic orbit. Negative values of Lyapunov exponent are characteristic to non-conservative or dissipative systems. The higher the absolute value of the Lyapunov exponent the more stable is the system. A superstable fixed point will have a Lyapunov exponent that tends to minus infinity.
- $\lambda = 0$ A system with such an exponent is conservative.

- $\lambda > 0$ In this case, the orbits are unstable and chaotic. Points, initially very close, diverge to arbitrary values over time. A graphical representation is similar to a cloud of points without a distinct path.

2.1. Maximal Lyapunov Exponent for a differentiable function

Lyapunov exponent, $\lambda(x_0)$, measure the gap between the trajectories. Let x_0 and $x_0 + \varepsilon$ be two neighboring points. Lyapunov exponent satisfies the equality

$$\varepsilon e^{n\lambda(x_0)} = |f^n(x_0 + \varepsilon) - f^n(x_0)|.$$

Separating Lyapunov exponent and passing to the limit we obtain

$$\lambda(x_0) = \lim_{n \rightarrow \infty} \lim_{\varepsilon \rightarrow 0} \frac{1}{n} \ln \left| \frac{f^n(x_0 + \varepsilon) - f^n(x_0)}{\varepsilon} \right| = \lim_{n \rightarrow \infty} \frac{1}{n} \ln \left| \frac{df^n(x_0)}{dx} \right|.$$

Because $x_i = f^i(x_0)$ and $f^n(x_0) = f(f^{n-1}(x_0))$, we have

$$\frac{df^n(x_0)}{dx} = f'(x_{n-1})f'(x_{n-2}) \cdots f'(x_1)f'(x_0),$$

and for $\lambda(x_0)$ the calculation formula is written

$$\lambda(x_0) = \lim_{n \rightarrow \infty} \frac{1}{n} \sum_{i=0}^{n-1} \ln |f'(x_i)|.$$

2.2. Maximal Lyapunov Exponent for a trajectory

For a trajectory $\{x_0, x_1, x_2, x_3, \dots\}$ of points from \mathbb{R}^d determined by an unknown

differentiable function $\Phi : \mathbb{R}^d \rightarrow \mathbb{R}^d$, can be estimated Lyapunov maximum exponent of

Φ at x_0 by iterative selection of non-negative integers $s(0), s(1), s(2), \dots$ until the sequence of averages

$$\frac{1}{n} \sum_{t=0}^{n-1} \ln \frac{\|x_{s(t)+1} - x_{t+1}\|}{\|x_{s(t)} - x_t\|},$$

Show signs of convergence. The limit of this row would represent an estimate for the largest Lyapunov coefficient of the trajectory.

The row of averages estimate the global Lyapunov exponent of application Φ at x_0 relative to the direction $x_{s(0)} - x_0$, that is most likely the largest Lyapunov exponent for trajectory.

With the notation $x_{s(t)} - x_t = y_t$, we have

$$\frac{\|x_{s(t)+1} - x_{t+1}\|}{\|x_{s(t)} - x_t\|} = \frac{\|\Phi(x_t + y_t) - \Phi(x_t)\|}{\|y_t\|}.$$

The following present the way how can be chosen the values $s(t)$.

We consider two thresholds, one negative z^- and one positive z^+ , by which we identify the distances too small and too large. It is chosen $s(0)$ so that the distance $\|x_{s(0)} - x_0\|$ to be as small as it can but greater than the minimum threshold z^- .

Is chosen $s(t)$ different from t and so that

$$x_{s(t)} = x_t + \delta_t (x_{s(t-1)+1} - x_t).$$

with δ_t small enough in absolute value to allow the estimation

$$\Phi(x_{s(t)}) - \Phi(x_t) \approx J(\Phi, x_t)(x_{s(t)} - x_t)$$

but large enough that the distance between $x_{s(t)}$ and x_t exceed the minimum threshold for noise removal, z^- .

It is considered the set $C_t = \{x_k \mid z^- < \|x_k - x_t\| < z^+\}$.

If $x_{s(t-1)+1} \in C_t$, $\delta_t = 1$ is small enough to satisfy the conditions and choose $s(t) = s(t-1) + 1$. Otherwise, consider all the candidates from the set $\{x_{s(t-1)+1}\} \cup C_t$. From this set is chosen $s(t)$ so that $x_{s(t)} - x_t$ approximates a multiple of $x_{s(t-1)+1} - x_t$ which is small in absolute value.

All multiples of $x_{s(t-1)+1} - x_t$ are on a line passing through the origin. Also, all multiples of $x_k - x_t$ are on another line passing through the origin. Cosine of the angle between the two lines is

$$c_t(k) = \frac{(x_{s(t-1)+1} - x_t) \cdot (x_k - x_t)}{\|x_{s(t-1)+1} - x_t\| \|x_k - x_t\|}.$$

This quantity has values between -1 and 1. The choice of k for which $x_k - x_t$ is a good approximation of $x_{s(t-1)+1} - x_t$ must be such that the value of cosine to be as close as possible to 1.

Is ordered candidates for $s(t)$ using a partial order defined by the relation $\|x_i - x_t\| \leq \|x_j - x_t\|$ and $c_t(i) \geq c_t(j) \Rightarrow i \succ j$. Is chosen $s(t)$ as the largest element according to this partial order.

2.3. Maximal Lyapunov Exponent for a time series

For a finite sequence $x_0, x_1, x_2, x_3, \dots, x_N$ of points from \mathbb{R}^d coming from an

unknown differentiable function $\Phi: \mathbb{R}^d \rightarrow \mathbb{R}^d$, is proceeded as described previously

only is no longer expected that the sequence of averages

$$\frac{1}{n} \sum_{t=0}^{n-1} \ln \frac{\|x_{s(t)+1} - x_{t+1}\|}{\|x_{s(t)} - x_t\|},$$

to show signs of convergence but simply the elements of this row are considered as approximations of the maximum Lyapunov exponent for the function Φ at x_0

3. MAXIMAL LYAPUNOV EXPONENT FOR THE TIME SERIES OF EXCHANGE RATE EUR-LEU

I used the time series of exchange rate EUR-LEU. Historical values of foreign exchange are available for download on the website of National Bank at <http://www.bnr.ro/Baza-de-date-interactiva-604.aspx>. For time series modeling and simulations I used MATLAB (R2011 a) and tstoil Toolbox (time series tools).

The considered time series contains 3881 records during 04.01.1999 - 25.09.2012 and consists of exchange rate quotations of EUR-LEU established by National Bank of Romania for weekdays.

From the graphical representation (Figure 1.) we can see that in the case of the exchange rate EUR-LEU we deal with strongly nonlinear process. Nonlinearity does not necessarily imply chaos but any chaotic process is nonlinear.

The working mode for highlighting chaos in time series is sinking them into a multidimensional space.

Transition from one-dimensional time series to the corresponding d -dimensional series in state space is done using Takens theorem.

We embed one-dimensional series in a d -dimensional space by building vectors of length d as follows:

$$x_t^d = (x_t, x_{t+\tau}, \dots, x_{t+\tau(d-1)}), \quad t = 1, 2, \dots, N - \tau(d-1),$$

where τ is the number of time delays.

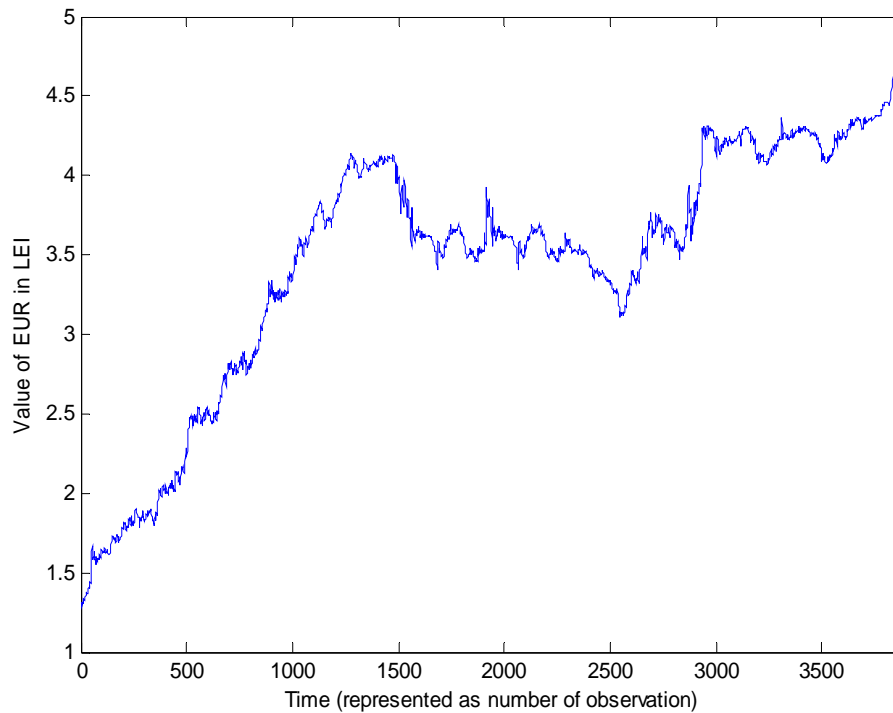


Figure 1. The evolution of exchange rate EUR-LEU over time

Identification of a suitable time delay is done by building auto-mutual information function and finding his first local minimum. I have conducted several simulations for different values of the embedding dimension and I have obtained values between 12 and 21. The most common value for the delay time was $\tau=19$.

Using Cao's method for determining the embedding dimension I obtained values between 5 and 7. I decided that minimum embedding dimension is 6, the value most often indicated by tests.

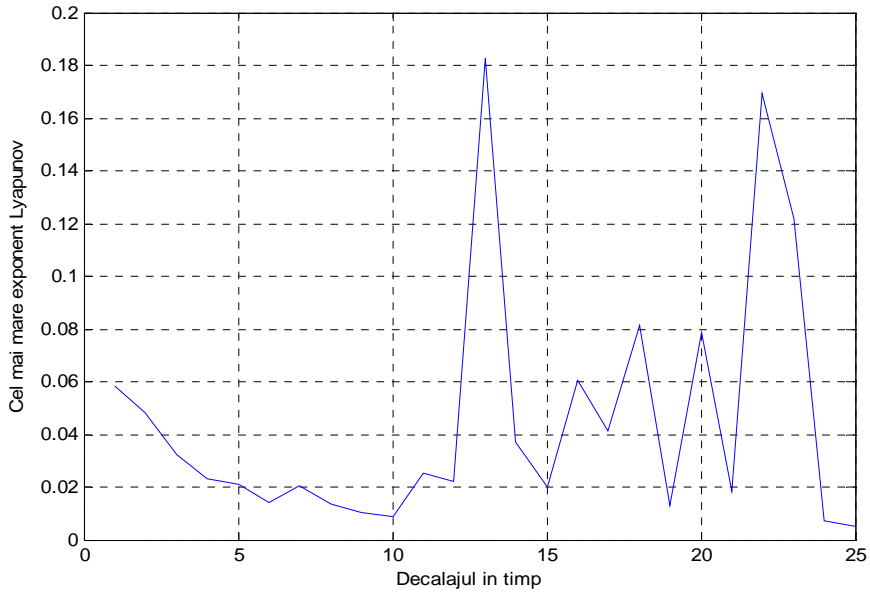


Figure 2. The Largest Lyapunov Exponent versus time delay

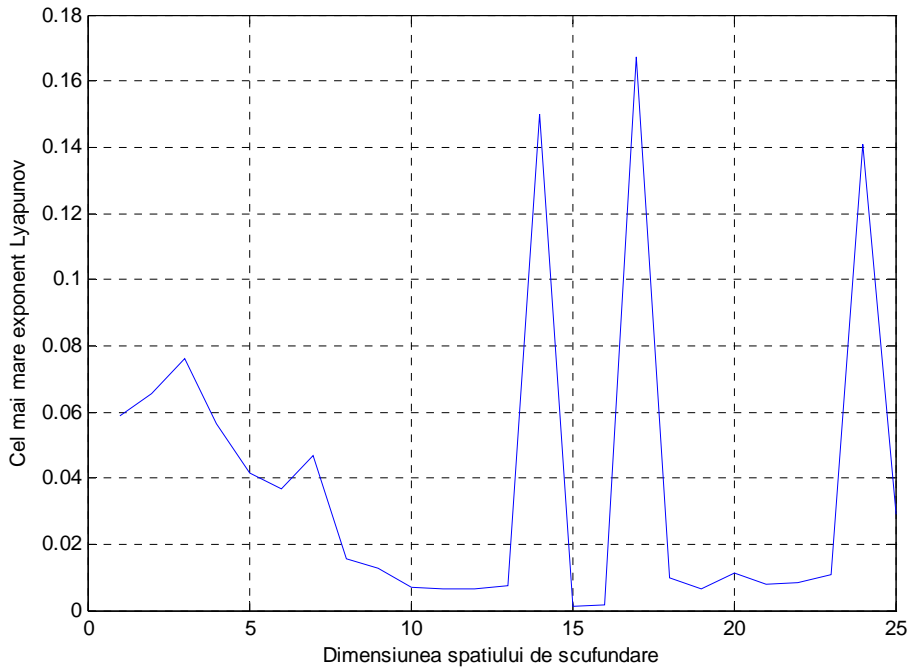


Figure 3. The Largest Lyapunov Exponent versus embedding space dimension

Figures 2 and 3 show the evolution of the largest Lyapunov exponent versus time delay respectively versus embedding space dimension. Positive values obtained are an indication of chaos for exchange rate time series of EUR-LEU.

4. CONCLUSIONS

In the case of the time series of the exchange rate between the euro and leu, simulations indicate the presence of chaos. With a maximum Lyapunov exponent of about 0.025, theoretically acceptable predictions are possible for a number of about 40 steps. Thus, remains open the problem of determining the model that simulates reasonably well the time series of the exchange rate, so that the predictions for first steps to be within acceptable error margin.

Determination of chaotic behavior is important to establish a correct prediction horizon

REFERENCES:

- [1]. **Abarbanel, H.** (1996) *Analysis of observed chaotic data*, Springer, New York
- [2]. **Cao, L.; Mees, A.; Judd, K.** (1997) *Modeling and Predicting Non-Stationary Time Series*, International Journal of Bifurcation and Chaos, Vol. 7, No. 8, pp. 1823-1831
- [3]. **Frison, T.; Abarbanel, H.** (1997) *Ocean gravity waves: A nonlinear analysis of observations*, Journal of Geophysical Research, Vol. 102, No. C1, pp. 1051-1059
- [4]. **Georgescu, V.** (2012) *Nonlinear Dynamics Chaos Theory Applications in Finance*, preprint
- [5]. **Goldsmith, M.** (2009) *The Maximal Lyapunov Exponent of a Time Series*, A Thesis in The Department of Computer Science, Concordia University, Montreal, Canada
- [6]. **Lynch, S.** (2004) *Dynamical systems with applications using MATLAB*, Birkhauser, 2004
- [7]. **Rosenstein, M.; Collins, J.; De Luca, C.** (1992) *A practical method for calculating largest Lyapunov exponents from small data sets*, Phisica D, Vol. 65, pp. 117-134
- [8]. **Stuparu, D.; Vasile, T.** (2009) *The Electronic Commerce in the Globalisation Era*, Annals of the University of Petroșani, Economics, 9(2), Universitas Publishing House, Petroșani, pp. 301-306
- [9]. **Turkes (Vint), M.C.** (2010) *The Globalization of the Banking and Financial Crisis on International Level*, Annals of the University of Petroșani, Economics, 10(1), Universitas Publishing House, Petroșani, pp. 349-362
- [10]. **Vasilescu, M.; Mungiu-Pupăzan, M.C.** (2010) *Inflation Targeting - Between Theory and Reality*, Annals of the University of Petroșani, Economics, 10(3), Universitas Publishing House, Petroșani, pp. 357-364

THE DUALISM OF THE ACCOUNTING ACTIVITY OF THE COMPANY. CHARACTERISTICS OF THE MANAGERIAL ACCOUNTING AND IMPLICATIONS IN THE MANAGEMENT OF THE COMPANY

ALINA-TEODORA CIUHUREANU *

ABSTRACT: *The diversity of accounting information need led to the construction of two representations of the same reality: an “internal” representation and an “external” representation. Formally speaking, this dual representation consists of two elements of the accounting system of the enterprise: the financial accounting – “the external face” of the entity – and the managerial accounting – “the internal face” of the entity. The organisation of managerial accounting activity is up to each entity, but it is essential to realize its importance because it provides confidential information to managers for the evaluation, control and future management of the businesses. The practical activity of cost calculation and analysis should be by excellence a major component of the company’s management that would ensure the realisation of competitive costs so that the pricing decision competes at obtaining a profit that would lead to the possibility of the company’s future development.*

KEY WORDS: *managerial accounting; financial accounting; cost; management; centre; information.*

JEL CLASSIFICATION: *M41; M10.*

1. MANAGERIAL ACCOUNTING: CONCEPT AND OBJECTIVES

When the market belonged exclusively to the manufacturer due to the shortages of goods by demanded by consumers, the role of managerial accounting may be resumed to calculating the costs in order to allow manufacturers establish the prices. Over time, due to the increasing competition and consumers’ importance on the market, as well as due to new ways of management, the accelerating technological evolution etc., accounting becomes managerial accounting. The priorities of the

* Assoc. Prof., Ph.D., Romanian-German University of Sibiu, Romania,
alinaciuhureanu@yahoo.com

competitive companies are manifested through the ability to provide quality to their products, deliver them on time, ensure high performances of the products, provide attractive prices, etc. Managerial accounting is for the organisation the one that shall control production factors in order to get appropriate products and services in terms of quality and at reasonable cost; it serves as a tool for making decisions by the managers of the company. In Romania, the term of costs and works accounting is still employed (influence of the French accounting system), but we consider that managerial accounting reflects better its importance to the company's management, for taking the proper decisions in view of overcoming some obstacles related to the current competitive environment.

This is exactly why, we consider that the definition given by the Institute of Management Accounts - IMA) regarding the managerial accounting is very relevant: *“the process of identification, measurement, analysis, processing, interpretation and transmission of financial (and non-financial) information used by the management to carry out the functions of prediction, evaluation and control within the organisation and to ensure the proper usage and description of its resources”*.

In another approach, managerial accounting is *“a branch of accounting which aims to track, calculate, analyze and control the analytical costs and results in terms of the specificity of the economic entity's components (departments, workshops, activities, etc.) consuming and producing useful economic effects”* (Neamțu & Teiușan, [online]).

According to Professor Oprea Călin, managerial accounting can be defined *“as having as objective mainly the reflection of all operations of collection and distribution of expenses by destinations, i.e. products, works, services, orders, manufacturing stages, activities, departments etc., the settlement of obtained production, and also the calculation of production cost of manufactured products, works and services performed, including the production in progress”*. (Oprea, 2002, p. 15)

Managerial accounting is the analytical representation of internal processes of the company which bring both quantitative and qualitative transformations of the patrimony, provide managers from different organisational levels with information on the effectiveness of the activity they manage and on the factors hindering the managed system. (Briciu cited by Bogdan, 2011, p. 40)

In Romanian legislation (OMFP 1826/2003) it is stipulated that, *depending on the specificity of the activity, managerial accounting shall mainly provide the record of operations regarding the collection and distribution operations of expenses on destinations, i.e. on activities, sections, manufacturing stages, cost centres, profit centres, as appropriate, and also the calculation of acquisition, production, processing costs of the incoming, obtained goods, work performed, services, production in progress, current assets, etc., from the production units, commercial, service, financial units and other fields of activity.*

We believe that this approach is narrower, targeting only the way organisations can organise the financial accounting, depending on the specificity of the activity. However, we consider that the Romanian legislators have understood the importance of financial accounting within the accounting system of the organisation and of the information needs. The activities carried out for the organisation of the managerial accounting can thus result in the collection, processing and presentation of data for

production consumptions, product cost, revenue and expenditure forecasting by preparing budgets, control of budgets through deviations, determining profitability etc. Basically, several processes are considered in the organisation of the managerial accounting, each of which being able to be interconnected to the functions of the general management: identification, quantification, aggregation, analysis, preparation and interpretation, communication (Tabără, 1995, p. 43).

Therefore, we believe that, by organizing the managerial accounting, the accounting activity is more involved in the financial management of the company and provides vital information to internal users in several interrelated areas:

- *Cost analysis and estimation*: it is necessary to answer questions such as “How much did we spend on materials?”, “How much did the manufacturing of product X cost?”;
- *Coordination*. Through managerial accounting, an efficient dialogue between the technical staff and the staff involved in its organisation can be achieved;
- *Forecasting*. Estimating costs, incomes and profit [loss] is a task incumbent on the managerial accounting, in connection with the financial activity, these ones being main suppliers of information to achieve the forecasting function by determining the standard product cost and budgeting;
- *Control*. Through the information provided by the managerial accounting, especially in terms of actual costs, managers may see if there have been significant deviations from the forecasted costs, they can establish influences on the obtained results, take actions to correct the problems;
- *Decision-making process*. Managerial accounting provides the information that stands behind the studies and reasoning that allow making decisions for the future of the company. Moreover, this information may have a strategic importance, being involved in setting certain decisions from the different stages of the product’s life. All managers need exact and relevant information in order to successfully conduct pricing actions, planning, operation actions and take other types of decisions.
- *Performance evaluation* is largely done based on the information provided by managerial accounting. For the evaluation of performances, the company’s position to that of the main competitors will be considered.

Based on the above mentioned, we may conclude that the *functions* performed through the managerial accounting can be summarised as it follows:

- *determining costs* for products, activities and organisational units;
- *collaboration in sales price calculation*;
- *establishing the company’s position from the competitors*;
- *it enables a dialogue* between the “technical” staff and the one involved in the financial management, the accounting activity and the general management;
- *it produces information* for the evaluation of performances at the level of the management, profit, performance centres or products;
- *it provides an meaningful assessment basis* for certain balance sheet items;
- *it explains certain results* based on the costs and sales prices;

- *it contributes to making the forecasts of revenue and expenditure, while systemically tracking and controlling them and studying the deviations;*
- *it provides information for foreshadowing future development of the organisation;*
- *it determines hidden costs, unnoticed through the traditional accounting systems.*

Among the obstacles that stand in the way of organising a real managerial accounting within Romanian companies, we mention (Dumbravă, 2003, pp. 253-254; Dumbravă, 2004, pp. 207-208):

- prolonged process of transition to a market economy;
- financial blockage, lack of competitiveness, genuine competition, proliferation of underground economy led by subjects with group interests, uninterested in transparency, control instruments and mechanisms;
- lack of experience in organizing;
- lack of aggressiveness of professionals who are interested in managerial accounting to emphasize its advantages, change of perception, to limit it only to calculating costs, revealing the products it provides, such as: calculations of costs and prices, evaluation of goods obtained, budgeting and monitoring that they do not exceed preset consumptions, configuration of production for certain profitability thresholds;
- limited computerisation of accounting work, in conjunction with systematic staff reductions from the accounting activity perimeter, which thus forced to overwork;
- lack of firmness in the implementation of certain regulations aiming important objectives of managerial accounting;
- the confusion regarding the compulsoriness to organise and manage the managerial accounting and the malleability in choosing one of the many types of organisation and management, depending on the specificity of the activity.

Although there are numerous obstacles presented, managers and accounting specialists within organisations should also take into consideration the field of managerial accounting, as it provides elements that could clear up the decision making process, being useful for the current Romanian management in view of organising current and future businesses, and all that is related to its uncertainty. During this period of legislative harmonization of the Romanian accounting system, managerial accounting represents an important field which should take the place it deserves as indispensable tool in the information accounting system, widely opening the doors to “business” (Cernuşca, 2004, p. 55).

2. FINANCIAL ACCOUNTING – MANAGERIAL ACCOUNTING INTERRELATION

The separate organisation of the financial and managerial accounting should not be seen as a separation of the accounting system because the two systems are interlaid. The two circuits, although they are structurally and functionally delimited,

they are elements of the same frame, which is the company, and together they should ensure its objectives. Therefore, the functions of the two circuits of the accounting activities management complement each other. The circuit through which the financial accounting is organised mainly caters for external functions of the company, while the managerial accounting activities are for the internal management functions, namely managers on their different hierarchical levels. The documentary basis for the two components is unique. By the support of a single document, where consumption is recorded, the operation is reflected both in the financial accounting and the managerial accounting. Obviously, the way documents are processed in accounting is subject to the requirements of each of the two subsystems of accounting.

The two subsystems of accounting complement each other under the information aspect, as instruments of the decision-making process. A series of aspects that differentiate the two accounting subsystems should however be taken into account (table 1).

Table 1. Particularities in the accounting subsystems

COMPARISON CRITERIA	FINANCIAL ACCOUNTING	MANAGERIAL ACCOUNTING
<i>Primary users of information</i>	External users and internal users.	Internal users and, rarely, external users.
<i>Restrictive rules</i>	Unitary rules, methods and organisation principles, recognised nationally and internationally	Its organisation is imposed by the legislation but its actual way of achievement is left to the company, having great freedom.
<i>Purpose</i>	Presentation of assets, liabilities and equity, financial results and the information provided is related to the results of the financial year.	Providing managers with information for planning, control and management purposes of the activity, and the information provided is related to the operating cycle.
<i>Accounting system</i>	Double-entry accounting system.	In several ways: Single-entry bookkeeping, using only the technical-operational records; as the accounting integrated with the financial accounting by developing the accounts in the financial accounting into distinct analytical accounts; in autonomous system, through the special accounts class (class 9)
<i>Characteristic limitations</i>	It uses past information (historical) and it often departs from the economic reality for legal and tax reasons; it does not notice the realities but under the monetary aspect; the global result calculated provisionally monthly	Unidentified

COMPARISON CRITERIA	FINANCIAL ACCOUNTING	MANAGERIAL ACCOUNTING
	and definite each year, is insufficient for a competitive steering of the company.	
<i>Units of measurement used</i>	Unit of account	Unit of account, natural or conventional unit of measurement
<i>Key part of evidence and analysis</i>	The organisation as a whole	Different structural subdivisions of the company
<i>Information evaluation</i>	In historical data	In historical data but also forecast data
<i>Degree of objectivity</i>	Accurate, verifiable data	Estimative data
<i>Frequency of reporting</i>	Regularly (monthly, quarterly and annually)	Irregularly, at the request of managers or shareholders
<i>Advertising of information</i>	Publishable information	Non-publishable information
<i>Structure of financial statements</i>	Standardised	Non-standardised, influenced by the users' information needs and the type of the business

Source: Sucală, 2004, pp. 822-823; Needles jr. et al., 2000, pp. 856-858; Melyon et al., 1994; Feleagă & Ionascu, 1998

Consequently, even if the two subsystems complement each other under information aspect, the distinction between them is, first of all, a tiebreaker between the information the company is forced to, willing to or interested in disclosing and the information it keeps for itself, exclusive information.

3. CREATING A FUNCTIONAL ORGANISATIONAL STRUCTURE THROUGH THE IMPLEMENTATION OF RESPONSIBILITY CENTRES

To maintain the normal operation and more especially to increase performance, it is necessary to adapt it to the changes of the business environment (Petrescu, 2003, p. 74). Performance is any manager's dream. Performance is equivalent to winning. In essence, managers share the passion to succeed, adhering to the logic of performance. Creating a functional organisational structure within the company may represent the starting point in getting performance. This statement is justified – theoretically and practically – in the fact that achieving the proposed objectives for a particular economic activity requires the rational concentration of all available resources and the efficient coordination of efforts made by the company. Chances of success of the company are greatly increased and, at the same time, controlled, if the company has an organisational structure adapted to the set goals, consistent with the nature and extent of the activity and adaptable to the environmental conditions.

We believe that the company's operation on efficiency criteria are based on its division on *responsibility centres* (Ciuhureanu & Popa, 2009, pp. 32-37), characterised by their own objectives and means or, otherwise said, by a decisional autonomy regarding the use of a part of the allocated resources, within the established policies. Each centre operates as an organisational unit for which it is possible and necessary to define one or more specific missions to the related objectives. It is equally essential to allocate the means that would enable reaching these objectives and delegate responsibilities. This type of organisation will therefore involve the desire to decentralise power, performances being measured mainly at the centre. Therefore, for each field or level of managerial responsibility a type of centre is created, adapted to the company's object of activity, and for each centre financial-accounting statements are prepared, controlled by the manager of that centre.

The responsibility centres can be defined as *a set of the elements dependent between them, which for an organised whole, having a high degree of autonomy in the use and optimization of available resources* (Rusu & Voicu, 2001, p. 15). If a centre has only costs or expenses, it is called *cost centre*, being considered the organisational link where products/services are obtained. Similarly, the *revenue centre* represents the organisational link where the activity is assessed according to income. If the manager is responsible both for the income and for the expenses of a department, section, etc., then there is *the profit centre*. Another category is the *investment centre*, which involves responsibilities regarding the relation between the obtained income and investments. A novelty is the *performance centres* which ensure the improvement of the entire performance management system. Basically, the aim is to ensure, through the implementation of the performance centre, an increased performance through a rational use of resources and an increased quality of products and services, productivity of work and a continuous improvement of labour conditions within the company (Petrescu, 2003, p. 75). In another vision, a performance centre is the centre that may change a result of peoples' labour into an exceptional, top one, with genuine competitive chances of success and on the market. A source of inspiration for such a structure are the performance indicators through which the organisation may come on the market and the business processes through which these indicators can be put into practice (Bogdan, 2005, p. 44).

The activity of such a centre defines the limitations within which the duties and responsibility of a manager are being exercised. We believe that the managerial accounting system will better achieve the objectives within a company where profit, management and performance centres are implemented. Each of its functions – forecast, organisation, coordination, training, control-auditing – is manifested at the level of each centre in a more efficient manner because, *it is much easier to make forecasts, set objectives, organize, coordinate, monitor* a smaller department as compared to an entire organisation. *Responsibilities will be more clearly defined, information more easily obtained*, charging the posts will be made at the level of the centre, not by the company.

In our opinion, we believe that a key advantage in the general management is measuring performances, *the accounting information being analysed both at the level of the centre and at the general level*. At the level of the centre, the manager of the

centre will be responsible for the collection of data, their structure and transmission to the general financial-accounting department of the company. The financial system has several options for performance quantification (Dumitrana & Caraiani, 2004, pp. 221-222), depending on the objectives.

Table 2. Performance measurement of management, profit and performance centres

Objectives	Quantitative and qualitative criteria for measuring performance
<i>Costs</i>	The size of individual costs; cost deviations; price deviations; unit cost; cost rates; cost per employees; the quality of production; analysis of costs at 1.000 lei turnover on the income, based on grouping them into fixed variables, per employee; materials etc.
<i>Incomes</i>	Turnover, turnover analysis in relation to the production capacity and demand, on customers, sale markets, products etc., turnover deviations from forecasted numbers; commercial profitability rate, etc.
<i>Profit</i>	Indicators used for expense and revenue centres; profit diagnosis analysis (structural, factorial analysis, profit analysis on turnover, etc.); liquidity etc.
<i>Investments</i>	Indicators that quantify the effects of investments; indicators that quantify investment and operational efforts; indicators characterizing the time to make their investments and operation; indicators characterizing the economic efficiency of investments (Bogdan, 2004, pp. 60-68).

This information will be analysed separately, in accordance with the objectives set for each centre and also in general, in accordance with the objectives and strategy of the company.

Another important advantage for the management aims the *control*. Whether we are talking about the preventive financial control, the managerial control or other type of financial control, we believe that the management will be more efficient if the control is made at the centre, irregularities being more easily noticed and solved.

Moreover, a special impact of the implementation of management, profit and performance centres within the company is the *delegation of responsibility*. Therefore, accounting professionals working at the level of the centre will have better grounded knowledge regarding the activity of the centre, no longer being involved in all the activities of the centre. Responsibilities are very well known and the concerns to achieve the objectives will be more obvious.

4. CONCLUSIONS

Consequently, the current accounting system underlying the accounting activity, used by the organisations in our country, regardless of the field of activity they perform, was designed on two interrelated levels: the financial accounting and the managerial accounting, both having as support a series of methods and techniques of the market economy. The compulsoriness of the dualism may be attributed even to the fact that the organisation can no longer rely only on the information from the financial

statements, but it has to know how to organise its activities based on some informed decisions and this requires detailed knowledge. We do not exclude, however, that legislative provisions could also address a better control from the state on the company, but we still want to believe that this reason was forgotten.

Often regarded as “*the belated child of the Romanian accounting*” (Feleaga, 2002), managerial accounting provides confidential information to internal users for the future evaluation, control and management of the business. As compared to the financial accounting that can no longer lead the “international war of business” on a constantly changing Romanian market, managerial accounting has created new information channels that would solve and/or compensate the limitations of the former (Sucală, 2004, p. 820).

The problem of costs is that they are an extremely complex variable of the company’s management, because of their importance in the management of each business. All managers need accurate and timely information to carry out pricing, planning, operation activities and to take other type of decisions. Managerial accounting is considered as an indispensable system in the accounting activity of the organisation for decision making. Regardless of where they are, managers administrate their field of responsibility, start actions that will lead to effects only by means of resources consumption. But, in order for the effects to be favourable to the organisation, managerial accounting demonstrates its usefulness in establishing what is profitable, in terms of costs as decisive factors for determining prices, this system being implemented through the managerial accounting, as part of the accounting activity performed within the organisation.

Given the confidentiality of the information supplied by the managerial accounting and implicitly of those related to costs, we believe that there is no impediment for the managers of the organisations to make sure they get real and accurate information. Moreover, it is recommended that the activities involved in the managerial accounting broaden their horizon by determining hidden costs. Therefore, we may say that managers should know all costs, because this reflects the entire activity of the organisation, outlining why they were obtained or not, the desired profit. Cost management represents the management and control of activities, improvement of economic processes, eliminating losses, identifying expense generators, planning development operations and strategies, the management of invested capital recovery and profit management.

Many managers consider that the organisation of managerial accounting is an obligation and not a necessity, probably not knowing that, through its organisation, they get more involved in the internal management of the company and provide useful information for the general management. Through a study made on a sample of 110 companies in Sibiu, it was aimed to capture the managers’ attitude regarding the organisation of managerial accounting, the obtained information being shown in table 1.

		Frequency	Percentage	Valid percentage
Valid	110			
	obligation prescribed by law	43	39,1	39,1
	helps support the company's general management	67	60,9	60,9
	Total	110	100,0	100,0

It can be noticed that 60,9% of the managers in the sample companies consider that the organisation of managerial accounting helps, through its specific functions, support the general management of the company and 39,1% of the managers in the sample companies believe that the organisation of managerial accounting is only an obligation of the company derived from legal provisions.

The high percentage of those who are aware of the importance of managerial accounting organisation, its functions, leads us to conclude that the hypothesis formulated prior to the research (*Managerial accounting helps support the general management*) is confirmed.

For further details, we tried to know *the managers' attitude regarding the organisation of managerial accounting, depending on the company's category*. The information obtained is shown in table 2.

Table 2. Organisation of managerial accounting – grouping by company's category

Organisation of accounting	Category				Total %
	micro-enterprise	small company	medium-sized company	large company	
obligation prescribed by law	10	24	7	2	43
%	58,8%	46,2%	24,1%	16,7%	39,1%
helps support the general management	7	28	22	10	67
%	41,2%	53,8%	75,9%	83,3%	60,9%
Total	17	52	29	12	110
%	100,0%	100,0%	100,0%	100,0%	100,0%

The analysis of this association leads to the conclusion that, as the company's size increases, the percentage of managers who regard the organisation of managerial accounting as a contribution to support the general management also increases (microenterprises – 41,2%, small companies – 53,8%, medium-sized companies – 75,9%, large companies – 83,3%).

Also for further details, we tried to know *the attitude towards the organisation of managerial accounting depending on the company's field of activity*. The information is shown in table 3.

Table 3. Organisation of managerial accounting-grouping by field of activity

Organisation of accounting	Field of activity	Total
----------------------------	-------------------	-------

	trade	industry	services	%
obligation prescribed by law	28	8	7	43
%	62,2%	21,6%	25,0%	39,1%
helps support the general management	17	29	21	67
%	37,8%	78,4%	75,0%	60,9%
Total	45	37	28	110
%	100,0%	100,0%	100,0%	100,0%

It appears that most companies in trade (62,2%) consider the organisation of managerial accounting as a legal obligation, while most companies in industry and services (78,4% - industry, 75,0% - services) are aware of the importance of managerial accounting as support of the general management.

REFERENCES:

- [1]. **Bogdan, I.** (2005) *Managementul pe centre de gestiune, de profit și de performanță*, Vol. III „Binomul sărăcie-bogăție și integrarea României în Uniunea Europeană”, Ed. Universității „Lucian Blaga” din Sibiu, Sibiu, p. 44
- [2]. **Bogdan, I.** (2004) *Managementul eficienței investițiilor*, Ed. Economică, București, pp. 60-68
- [3]. **Briciu, S. in Bogdan, A.A.** (2011) *Costurile în fundamentarea deciziilor manageriale*, Contabilitatea, expertiza și auditul afacerilor, 9, p. 40
- [4]. **Cerņușca, L.** (2004) *Organizarea și conducerea contabilității de gestiune în spiritul noilor reglementări contabile*, Contabilitatea, expertiza și auditul afacerilor, 9, p. 55
- [5]. **Ciuhureanu, A.T.; Popa, D.** (2009) *Aspects Regarding the Management Profit and Performance Centre's Implementation Inside the Companies*, *Economica*, 2, pp. 32-37
- [6]. **Dumbravă, P.** (2003) *Contabilitatea de gestiune între cadrul legislativ și realitate*, Contabilitatea mileniului III, Ed. Sincron, Cluj-Napoca, pp. 253-254
- [7]. **Dumbravă, P.** (2004) *Abordări teoretice și practice privind contabilitatea de gestiune*, Congresul profesiei contabile din România. Armonizare sau Convergență în Standardele Internaționale de Contabilitate?, Ed. CECCAR, București, pp. 207-208
- [8]. **Dumitrana, M.; Caraiani, C.** (2004) *Măsurarea performanței, atribut al contabilității manageriale*, Congresul profesiei contabile din România. Armonizare sau Convergență în Standardele Internaționale de Contabilitate?, Ed. CECCAR, București, pp. 221-222
- [9]. **Feleagă, N.; Ionașcu, I.** (1998) *Tratat de contabilitate financiară*, vol. 1, Ed. Economică, București
- [10]. **Feleagă, N.** (2002), prefață *Contabilitatea managerială*, Diaconu P., Ed. Economică, București
- [11]. **Neamțu, I.H.; Teiușan, S.C.** (2012) *Normarea și normalizarea contabilității de gestiune la nivelul întreprinderii*, [Online], Available at: <http://www.oeconomica.uab.ro/upload/lucrari/820061/20.pdf>, [Accesed 5 January 2012]
- [12]. **Needles, E.B. jr.; Anderson, R.H.; Caldwell, C.J.** (2000) *Principiile de bază ale contabilității*, Ed. Arc, Chișinău, pp. 856-858
- [13]. **Oprea, C.** (2002) *Contabilitatea de gestiune*, Editor Tribuna Economică, București, p. 15
- [14]. **Petrescu, I.** (2003) *Managementul pe baza centrelor de performanță*, Ed. Expert, București, pp. 74-75
- [15]. **Rusu, C.; Voicu, M.** (2001) *Managementul pe baza centrelor de responsabilitate*, Ed. Economică, București, p.15

- [16]. **Sucală, L.** (2004) *Contabilitatea de gestiune – între reglementare și necesitate, în condițiile procesului de convergență contabilă în România*, Congresul profesiei contabile din România. Armonizare sau Convergență în Standardele Internaționale de Contabilitate, Ed. CECCAR, București, pp. 820-823
- [17]. **Tabără, N.** (1995) *Obiectivele și conceptele contabilității de gestiune*, Revista generală de contabilitate și expertiză”, 11, p. 43
- [18]. *Ordinul ministrului finanțelor publice nr. 1826 din 22 decembrie 2003 pentru aprobarea Precizărilor privind unele măsuri referitoare la organizarea și conducerea contabilității de gestiune*, publicat în M.Of. nr. 23/12.01.2004

INVOLVEMENT OF MANAGERIAL ACCOUNTING IN ENSURING THE COMPANY'S COMPETITIVENESS ON THE MARKET

ALINA-TEODORA CIUHUREANU *

ABSTRACT: *The problem of costs is that they are an extremely complex variable of the company's management, because of its importance in the management of each business. All managers need accurate and timely information to carry out pricing, planning, operation activities and to take other type of decisions. Managerial accounting is considered as an indispensable system in the accounting activity of the organisation for decision making. Regardless of where they are, managers administrate their field of responsibility, start actions that will lead to effects only by means of resources consumption. But, in order for the effects to be favourable to the organisation, managerial accounting demonstrates its usefulness in establishing what is profitable, in terms of costs as decisive factors for determining prices, this system being implemented through the managerial accounting, as part of the accounting activity performed within the organisation.*

KEY WORDS: *managerial accounting; cost; price; management; expenses; method.*

JEL CLASSIFICATION: *M41; M10.*

1. KNOWLEDGE AND COST ANALYSIS IN DETERMINING THE PRICE POLICY

Ensuring the company's competitiveness on the market is mainly based on the quality of products and services offered and on their price. Therefore, when the company will determine the optimal price-quality ratio, managing to attract customers but also to gain their loyalty, it may consider that one of the market competitiveness conditions is achieved.

Once the company has manufactured a product, it has to decide how it will determine the price. Unfortunately, there are no easy ways to give the answer. It may

* Assoc. Prof., Ph.D., Romanian-German University of Sibiu, Romania,
alinaciuhureanu@yahoo.com

be kind of dangerous to decide upon the price because the stakes are high. If the company decides on a high price, consequences on the volume of sales may be negative; if the price is too low, possible profits will be sacrificed (Ciuhureanu & Bălan, 2009, pp 584-589).

The price is the key to a company's profitability, both for the short and the long term (Doyle, 1998, p. 227). The construction of the designed cost, the price of offer, identifying and dealing with the deviations of actual costs from the default level is the ABC in economics, in the company's general management and particularly in the managerial accounting. There is no generally valid rule or system that, if applied correctly, would invariably lead to the "fair" price. Price decisions are mostly quantitative and arithmetic, but there is always a subjective element in managers' judgement and in traders' and consumers' reaction to a price decision.

Costs provide the starting point for decisions regarding pricing (Parkinson, 1995, p. 48). Several other problems should be overlapped, including the characteristics of the products or services that are to be put on the market, finding the markets and choosing the promotion methods and the proper distribution channels.

The accounting specialist, together with the marketing manager, the chief of product or the general manager can not fix the price of a product independently of the general objectives of the company. Most often, the company tries, through the price policy, multiple objectives, on which we would not insist, these ones being presented more detailed in the specialty literature (Charpentier et. al., 2000, pp. 417-418; Dumitru, 2004, p. 206):

- *Survival*. In a highly competitive market, the company's existence is being threatened, hence a low prices policy to maintain the activity, but with a low and often insufficient profitability;
- *Maximizing profit*, which must be defended either from the position of a technological monopoly, or for the innovative products for which the competition is not yet pressing (ensuring recovery of investments);
- *Maximizing turnover*, more than the benefit, objective sought when costs are not well known and are thus difficult to be distributed;
- *Maximizing growth* involves the exploitation of volume in order to benefit from scale economies. It is the optics of penetration policies;
- *Differentiation*. It requires the immediate valuing of innovations, positioning on the "quality" axis, by practicing high prices;
- *Exploiting image* refers to the defence of an exclusive image through a systematically higher price policy.

Objectives represent a framework. In terms if the decision, this can not intervene but after analysing the variables that are directly influencing the price: *costs*, *demand*, *competition*, elements related to image or policy (laws against discrimination of customers through price, maintaining a brand image etc.) (Albu & Albu, 2009, p. 47). In the specialised literature (Nicolescu, 1998, pp. 497-506), presenting the pricing procedure involves the following stages: Cost analysis on each component; Market analysis, aspects related to price levels and margins, the situation of demand and offer, competition being relevant; Determination of price limits, depending on the product's

competitiveness and the prices used by the competition; Determining price objectives; Calculating the price structure; Price quotations and quotations for sale.

Economic theory and practice have, however, prefigured some *efficient ways* to approach the price issue (Andronic, 2000, pp. 123-126):

a. „*Mark-up-Pricing*” of fixing the price is meant to maximize the long-term profit. It consists of applying a profit margin to the average cost that would ensure reasonable remuneration of the allocated capital, covering the risks of the activity;

b. „*Target rate of Return Pricing*” method is used by the dominant companies, able to impose their own price by calculating the margin depending on the desired performance of the invested capitals. The capital's performance (r) can be determined based on the ratio between the obtained profit (P) and the allocated capital (K). By dividing the total obtained profit from the previous ration to the total cost (C), the profit margin rate is obtained (m). The price (p) will be determined based on the:

$$p = \frac{C}{q} \times (1 + m) \quad (1)$$

where: q = quantity of products obtained.

c. „*Direct costing*” method requires the acquisition of the price by adding a margin on the variable cost to the average variable cost, which ensures the recovery of fixed costs and a profit;

d. „*Target-cost*” method is characterized by the fact that exogenous factors (market price) contributes to the calculation of the product's cost. The target-cost method is also associated to the managerial “Just in Time” method of production and it usually incorporates the effects of learning in time;

e. *Maximization of sales method under the constraint of a minimum profit* is a reasonable compromise between the interests of the management and the economic usefulness of the shareholders. The method consists of maximizing the total income from sales so that the profit is higher or equal to the minimum satisfactory level of the profit.

The practical analysis of cost analysis should be by excellence a major component of the company's management that would provide the achievement of competitive costs, so that the pricing decision competes in obtaining a profit that would lead to the possibility of the company's future development.

Cost analysis is a fundamental step in the foundation of an optimal price policy that would achieve the company's objectives. Among the most important *cost analysis options* available to the management of the financial activity, we mention tracking the deviations, the value analysis, the break-even, ABC method etc. In terms of *tracking deviations*, we believe that several factorial analysis methods could be used, upon which the strengths and weaknesses of the company could be determined regarding the costs and their impact on the prices. Among the most efficient methods we mention (Petrescu et al., 2003, pp. 312-317):

a. *Total cost analysis in conjunction with the company's incomes* has the role of outlining their evolution, the factors influencing them, as well as identifying the

reserves that can be valued for reducing them. Therefore, the following instrument is used: *efficiency rate of total costs* (R_{ct}), calculated according to the formula:

$$R_{ct} = \frac{\sum_{i=1}^n chi}{\sum_{i=1}^n vi} \cdot 1000 \quad (2)$$

where: chi = costs on each category of products; vi = income on each category of products.

b. *Cost analysis at 1000 de lei turnover* serves to measure the volume and evolution of the commercial activity of the economic entity. The analysis model of the instrument *costs at 1000 lei turnover* (C^{1000}) is the following:

$$C^{1000} = \frac{\sum_{i=1}^n qi \times ci}{\sum_{i=1}^n qi \times pi} \times 1000 \quad (3)$$

where: qi = quantity sold of each product (physical volume); ci = cost per unit; pi = selling price per unit without VAT

c. *Cost analysis of materials*. For the cost analysis of materials at 1000 lei turnover (Cm^{1000}) the following formula is used:

$$Cm^{1000} = \frac{\sum_{i=1}^n qi \times cmi}{\sum_{i=1}^n qi \times pi} \quad (4)$$

where: qi = quantity sold of each product (physical volume); cmi = cost of materials per product unit; pi = selling price per unit without VAT

d. *Analysis of labour costs*. The analysis of the general situation of labour costs (costs with the actual salaries of the employees and the social expenses associated to them and supported by the company for its employees) tries to know the evolution and tendency of this type of expenses, by using indicators such as: their percentage in the total costs and the labour costs at 1000 lei turnover (Cs^{1000}).

$$Cs^{1000} = \frac{Fs}{CA} \quad (5)$$

where: Fs = salaries fund; CA = turnover.

We further propose a series of *solutions* that the management should consider to improve the performances of the company:

a. if the company has significant excesses in financial expenses, it is considered as a main and immediate necessity the capitalization of the company through new capital contributions from the shareholders. The company's capitalization will have favourable short-term influences, materialised into the reduction of loans and implicitly of expenses with bank interest rates;

b. reducing as much as possible the imports of raw materials, materials and other assets needed for production in the total of purchased goods, with direct consequence on reducing financial expenses from differences in the rate of exchange;

c. collection in time of customer-claims, which will contribute to the payment on time of liabilities to third parties, with direct consequence on reducing costs with penalties and increases for delay;

d. increasing the level of integration of the company, by increasing the costs of living labour in the total expenses, with direct consequence on increasing the surplus of value resulting from the productive activity.

ABC method is based on a new way of the company's thinking, focusing on indirect costs and not on the total cost (Brăescu & Jinga, Online, p. 36). A number of issues related to the volume of acquisitions are frequently present in the organisation's activity, the potential payment, the establishment of stocks of different levels and values, etc. These require a differentiated approach from managers, depending on their features, ways of manifestation and influence on the general management.

ABC method concept starts with the idea that products are not the ones that consume resources, but the activities of the company do. Therefore, it is preferable to trim the organisation on activities rather than on functions and products.

ABC method involves identifying the main operational activities, classifying all costs on activities, reducing or eliminating invaluable activities and distributing costs by using as basis the activity that generates them. This approach meets the requirements of a systematic vision of the company and of an overall approach of productivity, closer to reality. We notice that the concept of activity represents the foundation of the method, the allocation of costs being more relevant because the relationships between resources, activities and products are emphasized. The basic assumption of this method is: *products consume activities and activities consume resources* (Epuran et al., 1999, p. 390). The need for cost-value couple, the increase of indirect costs, the development of information systems, are only some of the reasons that should contribute to the implementation of this method. The most important *mutations* in managerial accounting due to the use of ABC method may be considered the following (Albu, 2002, p. 34): the futility of the distinction between main-auxiliary, productive-non-productive centres, retaining an overall image on the organisation; due to the activity inducers, great part of the fixed costs become variable on the short-term, depending of several parameters; the impact of the sub-activity must be rethought; cost

objects are various, the accounting activity turning into a huge multi-criteria data base subject to simulations.

By the diversity of the calculation instruments, the integration in various management systems, the method provides multiple analysis possibilities; it supplies a reliable basis for the sale pricing policies, allows the introduction of target-cost and the management of the entire life cycle of the product, favours the calculation of several types of costs according on needs, ensuring good visibility on the production processes and the company's profitability.

Value analysis method is an investigation method of products aimed at increasing the usefulness of the product, while reducing the cost, the purpose being to ensure customer satisfaction (Niculescu, 1997, p. 188). In other words, through value analysis, the management of the financial activity may make the link between the costs and functions of the products and services. The information can be extremely useful for the general management in terms of reducing costs for certain unsolicited functions by the customers, improving the functions solicited more often, even if this involves increased costs, etc., all of these eventually leading to more efficient products/services and reduction of costs. For the company to obtain maximum income and thus maximum of value, its resources must be oriented towards the production/marketing of those goods and services that efficiently ensure customer requirements and needs. If resources are wasted or used inefficiently, costs will increase significantly, without a reflection of recovery and of course profitability will decrease (Avram, Online, 2002, p. 41). The stages of applying the value method are the following: identifying the functions of the product; measuring the cost of each function; determining the functions that should be maintained, improved, excluded, created; establishing the minimum cost so that each function is ensured under optimal conditions; allocating resources on functions in order of importance; the analysis of costs-functions relation (Niculescu, 1997, p. 188; Bogdan, 2004, p. 319).

Therefore, value analysis involves the identification and individualization of the product's functions, in order to understand the cost formation mechanisms and to detect the possibilities to differentiate those functions from similar ones carried out within competitive organisations. Differentiation to the advantage of your own company means its ability to fulfil strategic activities at costs lower than the competition (Nicolescu, 2002, p. 312). A better integration of all functions may lead to cost reduction.

2. INDICATORS USED IN THE ANALYSIS OF PRODUCTION ACTIVITY

Based on the physical production obtained, the company may establish the extent to which available resources were used and the customer satisfaction in terms of ability to honour contracts. Also, consistency between supply and demand can be ensured. Therefore, we can talk about a number of available indicators used in the analysis of production activity, indicators that can be used by those involved in managerial accounting.

Calculating the average range coefficient (Ks) is used to characterise the degree achievement of overall manufacturing programme of the enterprise, in case of a

heterogeneous production (Vâlceanu et al., 2004, p. 90). The ways to determine the average range coefficient are the following (Işfănescu et al., 1999, p. 77):

$$K_s = \frac{\sum_{i=1}^n qi_{\min} \times pi_o}{\sum_{i=1}^n qi_o \times pi_o} \quad (1)$$

$$K_s = \frac{\sum_{i=1}^n gi'_o \times Ii_o}{100^2} + \frac{\sum_{i=1}^n gi''_o}{100} \quad (2)$$

$$K_s = 1 - \frac{\sum_{i=1}^n (\Delta qi \times pi)}{\sum_{i=1}^n qi_o \times pi_o} \quad (3)$$

where:

$\sum_{i=1}^n qi_{\min} \times pi_o$ = recalculated value of production within the provisions,

determined by comparing the value achieved for each item with the value in the programme and taking into account the minimum level of the two (according to the indeterminacy offsets);

g' = weight of sets for which provisions were not made;

g'' = share of sets for which the programme was achieved, respectively exceeded;

Iq = index of achieving provisions for each set;

$\sum_{i=1}^n (\Delta qi \times pi)$ = sum of negative deviations per range.

Analysing the situations that may arise, we can highlight the following:

a. $K_s = 1$, when:

- production programme was achieved for all sets at 100%;
- production programme was achieved and exceeded for all sets, regardless of the proportion of achievement.

b. $K_s < 1$, when:

- production programme was not achieved, both inclusive and per sets, regardless of the proportion of non-achievement;

- production programme was achieved and exceed inclusive, but for at least one set the level provided was not made.

The evolution of average range coefficient reflects the proportion of carrying out the programme but it does not provide a conclusive image of the number of sets that the programme was conducted at. In order to correct this situation, it is recommended to determine the nomenclature coefficient (K_n), according to the relation:

$$K_n = 1 - \frac{n}{N} \quad (4)$$

where:

n = number of sets for which the programme was not achieved;

N = total number of sets in the programme.

Because the production programme is achieved differently for each range, some changes occur in its structure, a structure reflected by the shares of each set in the company's production nomenclature in the total volume. Being expressed by the share of each range in the total production, the structure is influenced by the evaluation methods. To outline the structure's change, it is thus requested that, besides the value evaluation method, the other evaluation methods be used – when possible. Choosing one or another is not random, but depending on the pursued purpose. Failure to comply with such a principle leads to erroneous conclusions with serious implications on the decisions that are adopted (Işfănescu et al., 1999, p. 81).

In order to characterise the structure of production, the share of each range in the total production is calculated. By comparing the shares in each range, it can be noticed whether or not the initial structure of the production programme was observed. What managers are actually interested in is the intensity of this phenomenon from one period to another, the causes that led to it, so that in relation to them, the economic effects causing the changes in the structure of production can be appreciated. From this point of view, the production structure can be characterised by the average structure (K_{st}), determined according to the relations (Mărgulescu et al., 1994, p. 96):

$$K_{st} = 1 - \frac{\sum_{i=1}^n |\Delta g_i|}{100} \quad (5) \quad \text{or} \quad K_{st} = 100 - \sum_{i=1}^n |\Delta g_i| \quad (6)$$

where: Δg = change of each set's share.

This model explains the change intensity of the production structure.

$$K_{st} = \frac{Q_p}{Q_r} \quad (7)$$

where:

Qp = value of production undertaken for the production provided;

Qr = value of actual recalculated output.

Making an analysis related to the average range coefficient and the structure coefficient, the following situations can be distinguished (Vâlceanu et al., 2004, pp. 96-98; Spătaru, 2004, p. 110):

- a. $K_s = 1$ and $K_{st} < 1$: shows that the production programme was achieved for all sets, but in different proportions;
- b. $K_s < 1$ and $K_{st} = 1$: is a theoretical solution showing that the programme was not achieved for none of the sets, but in the same proportion;
- c. $K_s = 1$ and $K_{st} = 1$: theoretical solution showing that the programme was achieved and exceeded for all sets, in equal proportions
- d. $K_s < 1$ and $K_{st} < 1$: shows that the production programme was not achieved for one or several sets.

Within the operational analysis of the production programme, in order to characterise the production's rhythmicity, several methods can be used, among which the most commonly used are:

- a. production indices per time subdivisions. If they present significant variations as compared to the average index for the whole period, then there is the non-r rhythmicity situation;
- b. production's share per time subdivisions;
- c. synthetic coefficients of rhythmicity calculated as it follows (Spătaru, 2004, pp. 114-115; Vâlceanu et al., 2004, p. 1999):

$$K_r = \frac{100 - \Delta g}{100} \quad (8)$$

where: Δg = amount of the deviation of time subdivision share, established based on the relation: $g_1 - g_0$

$$K_r = 1 - \frac{\Delta q}{Q_0} \quad (9)$$

where:

Δq = amount of negative deviations per time subdivisions;

Q_0 = programmed output value.

$$K_r = 1 - \frac{1}{2\bar{x}} \sqrt{\sum_{i=1}^n (x_i - \bar{x})^2} \quad (10)$$

where:

\bar{x} = average production per time subdivisions;

x_i = production per time subdivisions.

3. COST-VOLUME-PROFIT ANALYSIS – MODERN INSTRUMENT OF FORECAST, ANALYSIS AND CONTROL

Cost-volume-profit analysis is an instrument used in forecasting, and also for control and it represents the analysis of cost evolution method, which emphasizes the relationships between cost, production volume and profit (Mărăcine, 1998, pp. 249-257). The method includes a number of techniques and procedures to solve the problems, based on understanding the characteristics of evolution models of the company's costs. Cost-volume-profit analysis studies the evolution of incomes, costs, total profits, as changes occur in the activity of the organisation causing the change of sale prices and/or of particular types of costs (Heiuş, 2011, p. 37). The techniques show the relationships between incomes, the structure of sales, costs, volume of production and profits and they include the break-even analysis and profit planning procedures. The general management may use the information to make short-term plans, evaluate performance and analyse decision alternative (Needles jr. et al., 2000, p. 910). Calculations and analyses based on cost-volume-profit relationship are an important instrument for the company's managers in view of improving the result of the activity. This is made by determining the influences they have on profit, changing the factors that stood at the basis of its establishment: the price of sale, the volume of production and bargain, variable costs, fixed costs and the structure of production and bargain sale (Oprea & Cârstea, 2002, pp. 384-410). The analysis of this correlation can be made by using the following *indicators*:

a. *The point of balance*, also known as the critical point, the dead spot or the break-even, is the point where incomes from sales are able to cover all variable costs of sales and fixed costs for the reporting period. They show the level from which any increase in the volume of production made and sold brings profit, same as any reduction of sales generates losses, certainly by observing the correlation between costs, prices and the type of production;

b. *The point of optimum activity* is the point where both the production and costs are within regular limits, enabling to get the scheduled outcome;

c. *The safety margin* shows how much the sales can drop to reach the critical point. It is calculated as the difference between the total volume of sales and the volume of sales at the level of the point of balance, evaluated at price of sale, namely between the total turnover and the turnover at the level of the point of balance;

d. *Dynamic security index* is the instrument through which the percentage to reduce the turnover is determined in order for the organisation to reach the critical point. It is calculated as the ratio between the total turnover, minus the turnover of the point of balance and the total turnover;

e. *Coverage factor* represents the percentage between the turnover needed to cover costs and to get profit. It is very important to calculate this indicator for taking current decisions regarding sale, because it shows the percentage from the volume of sales needed to cover the fixed costs and to make profit. The higher this indicator's value is, the bigger the profit will be;

f. Absorption index represents the percentage from the turnover needed to cover the fixed costs. The lower this indicator's value is, the easier it is for the organisation to reach the point of balance;

g. Volatility coefficient or the operational leverage is the percentage of the obtained result variation for a percentage variation of the turnover, thus representing the elasticity of the result in relation to the turnover. It may outline the influence on the result of the organisation's position to the point of balance, proving the dependence of the economic risk on the fluctuation of the turnover and its position to the critical point; the farthest the turnover is from the critical point, the less risky the activity of the organisation is. Therefore, the operational leverage considers the economic risk, namely the organisation's inability to adapt on time and with the minimum of efforts to the fluctuations of the economic and social environment conditions (Epuran et al., 1999, p. 358).

For control purposes, cost-volume-profit analysis is a method used to measure the company's performances by comparing real costs to the estimated costs. The result is a performance relation, based on which managers may perform the control of operations. Moreover, the cost-volume-profit analysis may be applied to quantify the effects of the various action alternatives: the change of fixed and variable costs, the increase or reduction of sales, the increase or reduction of selling price, the introduction or withdrawal of a line of production and taking special orders, analysing the production structure etc. (Needles jr. et al., 2000, p. 912).

REFERENCES:

- [1]. **Albu, N.** (2002) *O contabilitate de gestiune "mai" ABC*, "Contabilitatea, expertiza și auditul afacerilor", 10, p. 34
- [2]. **Albu, N.; Albu, C.** (2009) *Relația cost-preț în diferite contexte organizaționale. Implicații asupra utilității informației de tip cost*, "Contabilitatea, expertiza și auditul afacerilor", 5, p. 47
- [3]. **Andronic, B.C.** (2000) *Performanța firmei*, Editura Polirom, Iași, pp. 123-126
- [4]. **Brăescu, M.; Jinga, G.** *Măsurarea și evaluarea performanței întreprinderii prin metoda ABC*, [Online], Available at: <http://www.biblioteca.ase.ro/eresurse/reviste/2/Masurarea%20si%20avaluarea%20performantei%20intreprinderii%20prin%20metoda%20ABC.doc>, [Accesed 20 January 2005], p. 36
- [5]. **Avram, Gh.A.** (2002) *Sisteme informaționale*, Editura Aisteda, București, [Online], Available at: <http://217.156.122.85/SistemeInformationale/Capitolul%201.pdf>, [Accesed 20 February 2005], p. 41
- [6]. **Bogdan, I.** (2004) *Management financiar*, Editura Universitară, București, p. 319
- [7]. **Ciuhureanu, A.T.; Bălan, G.** (2009) *Study Regarding the Knowledge and Use of Costs Analysis to the Setting-up of Prices Policy in Firms*, Proceedings of the World Congress on Engineering, Vol I, London, U.K. Publisher Newswood Limited, published in Journal: Lecture Notes in Engineering and Computer Science, pp 584-589
- [8]. **Charpentier, P. et al.** (2000) *Organizarea și gestiunea întreprinderii*, Editura Economică, București, pp. 417-418
- [9]. **Doyle, P.** (1998) *Marketing, Management and Strategy*, Second Edition, Prentice Hall Europe, p. 227
- [10]. **Dumitru, I.** (2004) *Marketing strategic. O abordare în perspectiva globalizării*, Editura Uranus, București, p. 206

-
- [11]. **Epuran, M.; Băbăiță, V.; Grosu, C.** (1999) *Contabilitate și control de gestiune*, Editura Economică, București, p. 358, p. 390
- [12]. **Heiuș, M.** (2011) *Analiza cost-volum-profit. Sistemul de indicatori și decizii*, Contabilitatea, expertiza și auditul afacerilor, 7, p. 37
- [13]. **Ișfănescu A. et al.** (1999) *Analiza economico-financiară*, Editura Economică, București, p.77, p. 81
- [14]. **Needles, E.B. jr.; Anderson, R.H.; Caldwell, C.J.** (2000) *Principiile de bază ale contabilității*, Editura Arc, Chișinău, p. 910, p. 912
- [15]. **Mărăcine, V.** (1998) *Decizii manageriale. Îmbunătățirea performanțelor manageriale ale firmei*, Editura Economică, București, pp. 249-257
- [16]. **Mărgulescu D. et al.** (1994) *Analiza economico-financiară a întreprinderii*, Editura Tribuna Economică, București, p. 96
- [17]. **Niculescu, M.** (1997) *Diagnostic global strategic*, Editura Economică, București, p. 188
- [18]. **Nicolescu, O.** (1998) *Strategii manageriale de firmă*, Editura Economică, București, pp. 497-506
- [19]. **Oprea, C.; Cârstea, Gh.** (2002) *Contabilitatea de gestiune și calculația costurilor*, Editura Genicod, București, pp. 384 – 410
- [20]. **Nicolescu, O. et al.** (2002) *Sisteme, metode și tehnici manageriale ale organizației*, Editura Economică, București, p. 312
- [21]. **Parkinson, A. et al.** (1995) *Management financiar. Vol. 3 „Calcularea costurilor”*, CODECS, p. 48
- [22]. **Petrescu, I. et al.** (2003) *Managementul pe baza centrelor de performanță*, Editura Expert, București, pp. 312-317
- [23]. **Spătaru, L.** (2004) *Analiza economico-financiară, instrument al managementului întreprinderilor*, Editura Economică, București, p. 110, pp. 114-115
- [24]. **Vâlceanu, Gh. et al.** (2004) *Analiză economico-financiară*, Editura Economică, București, p. 90, p. 99, pp. 96-98
- [25]. **Curtea de Conturi a României, Secția de Control Financiar Ulterior**, *Sinteza raportului de audit “Performanța financiară a agenților economici - pierderi în economie”*, no. 2112/DDS/13.12.2003, [Online], Available at <http://www.rcc.ro/rccdiac/rapct.htm>, [Accesed 12 December 2004]

ANALYSIS OF PENSION REFORMS IN EU MEMBER STATES

ELENA LUCIA CROITORU *

ABSTRACT: *The demographic situation in the European Union is changing. Demographic trends have a significant impact on social policies in each state and in particular on social security pensions. By 2050, the number of young active population will decrease dramatically. Meanwhile, the older population will triple. And so, the pension expenditure will increase and regarding this many countries reform they pension systems. Pension systems in the European Union are very different, due to the fact, that there is a tradition regarding the way that pensions are granted and the various phases of the reform process.*

KEY WORDS: *reform; pension system; expenditure; age limit pension; occupational pension.*

JEL CALSSIFICATION: *H55; J11.*

1. THE MAIN CHARACTERISTICS OF PENSION SYSTEMS IN THE EU

Pension systems in the European Union are very different, due to the fact, that there is a tradition regarding the way that pensions are granted and the various phases of the reform process.

In the EU are found several types of pension schemes. They can be classified (Barr & Diamond, 2006) in different ways, taking into account two aspects, namely, how they are organized and the relationship between contributions and benefits. Thus, we can arrange pension systems: fully funded systems, the PAYG system, defined contribution systems (DC), defined benefit systems (DB) and notional defined contribution systems (NDC).

a) Fully funded systems and PAYG systems

Fully funded schemes are based on savings, contributions are invested in financial assets. Full financing, is thus a method of accumulating financial assets which

* *Assist. Prof., Ph.D. Candidate, Romanian-American University, Bucharest, Romania,*
lucia.croitoru@profesor.rau.ro

are exchanged for goods at a later date. Even if, fully funded schemes may take usually several forms, mainly, they have sufficient reserves to pay all outstanding debts. If there isn't a redistribution across generations, a generation is constrained by past savings and thus a representative of such a system receives, no more than has contributed. Moreover, there is no direct distribution between individuals when an individual retires, will receive contributions, together with dividends and interest on which the system kept them for himself. This accumulation will finance through annuity or other forms, the individual consumption after retirement.

PAYG systems are usually state administered. They are based on the fact that the state may, but need not, accumulate assets in anticipation of future pensions, but may tax the working population to pay the pensions of existing and future generations of retirees. The vast majority of state pension systems are PAYG, but these systems can be administered by private corporations also. Only a state PAYG system is dependent on the presence of future tax base, because PAYG system administrated by corporations is depending on the presence of their future earnings to pay pensions. The most majority of states have considered this as unsatisfactory because of the risk of default.

From an economic perspective, the PAYG system can be viewed in several ways. From the point of view of the tax payer that contributes individually his claim for a pension is based on a promise coming from the state: if he now pays contributions will receive a pension in the future. Terms of this promises are quite precise, governed by a set of country-specific laws. On the other hand, from a common view, the state charge for a group of individuals and transfers income to another group. The state administrate the PAYG system from a macroeconomic perspective, different than other forms of income transfers. However, it should be noted that, determinants like who pays, who benefits and form of stimulation can be very different from other income transfer systems.

A major feature of the PAYG system is that relaxes the constraint that the benefits received by every generation has to be compensated by their contributions. Samuelson (1954) showed that in a PAYG system is possible for each generation to have more than contributed, provided that the growth rate of total real income to be higher than the indefinitely interest rate. This is possible when there is technological progress and / or when there is a permanent increase in population and an excessive accumulation of capital (Aaron, 1966). Because, this, empirical, is not relevant on long term, the role of PAYG system is to redistribute both the benefits and risks between generations.

b) The relationship between contributions and benefits.

The defined contribution system (DC) known as funded through individual contributions, assumes that each individual in an account paying a fixed part of its income. These contributions are used to purchase assets that are accumulated in the account to obtain a yield. At the time of retirement, the assets account finances post-retirement consumption through annuity or other methods. In a pure form of this system, that one that does not involve a redistribution of individual accumulation, consumption pensioners, given life expectancy and interest rate is determined by the size of the pension accumulated throughout life, maintaining the individual character of

each budget constraint over life. Even if the annuity protects the individual from the risk associated with longevity, a pure defined-contribution scheme, assumes that it faces some risks associated with varying rates of return on assets, the risks of future earnings and future price of annuities. One way to reduce these risks represents a minimum guaranteed pension.

Defined benefit systems (DB), assume that an individual's pension is not based on accumulation, but on his salary and possibly the number of years worked. A feature of this system is how wages are introduced in formula for calculating benefits. In a final scheme, the individual pension is based on his last year income or the income from recent years. Alternatively, the pension can be established on real wages or relative one of a person over a long period, or even during the entire career. In any case, the monthly pension of a person can be, in fact, indexed wages until retirement. The individual contribution is generally a share of his salary, and so contribution is conceptually dependent variable that ensures financial balance of the system.

Defined benefit system can be administered by the state or by employers. When the system is state administered and funded by the contributors, the risk of negative results is supported by current taxpayers, instead, where there is a taxpayer subsidy, the risk is borne by taxpayers. In practice, governments change the share of benefits and contributions, when there isn't a balance between revenue and expenditure, changes that can be automated (indexed) or may be a result of legislative changes. In a situation where the system is administered by employers, the risk of the multiple rates of return of assets is borne by the employer, and, if the company uses surpluses to cover certain periods / increases pensions or changes the formula in relation to expectations, risk falls on a combination of current employees (through the effect of the profit of the company), the shareholders and taxpayers, and former or future employees.

Pure notional defined contribution systems (NDC), are conceptual in a way similar to pure defined contribution schemes because the risk is common, but otherwise different in the sense that they are not fully funded and can be wholly the PAYG type.

As we have shown above, there are several types of pension schemes. In EU Member States, common is that the public sector is involved in pension systems and so we obtain public pension systems, but the importance of the provisions on occupational and private pensions varies from one country to another. Also a common feature, is the statutory earnings-related to age limit.

Public pension system provides most often a guaranteed minimum pension for those who do not fit in the scheme or for those whose retirement income is small. Thus, in Denmark and the Netherlands, the public pension system provides, in the first instance, a fixed pension, which may be supplemented through earnings from private occupational pension schemes. In the UK, complementary to this form, pension may be supplemented from public earnings-related state second pension, and in Ireland, the pension can be supplemented through earnings-related pensions for public service employees.

On the other hand, a number of Member States: Sweden, Bulgaria, Estonia, Latvia, Lithuania, Hungary, Poland and Slovakia have modified some pension

schemes, passing a part of the public pension system in the "care" of private pension system. Usually, this decision is statutory for each individual, the insurance contract ending between the individual and the pension fund, but participation in a funded system is subject to participation in the public pension system and is mandatory for new entrants to the labor market work, except Swedish, which is mandatory for all employees and voluntary for older employees, except Lithuania, where is voluntary for all age groups.

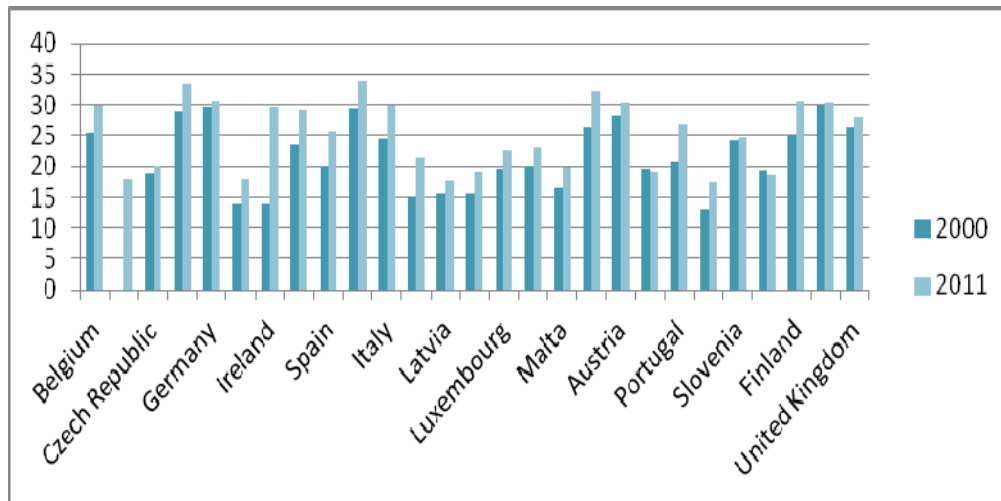
Not only the type of system varies from country to country, but the types of benefits provided by them also. Thus, most pension systems besides providing pension for old-age, provides disability pensions, survivors or early retirement. However, some countries have specific programs for some of these benefits.

2. ANALYSIS OF PENSION EXPENDITURES IN THE EU MEMBER STATES

Pension systems are very different in the Member States, due to shape that benefits have and because of the stage of the reform. Regarding the legal retirement age, compared with average exit age from the labor market, something that leads to increased pension expenditure in most countries, average exit age from the labor market is higher than retirement (legal). In many cases, this is due to the existence of early retirement schemes and / or other government programs that financially support the elderly, people who choose to retire early. On the other hand, in countries like Finland, Sweden, the retirement age is flexible, but built with incentives to determine the person remain active on the labor market.

Pension expenditure in EU Member States varied in the period 2000-2011 (the latest year for which data are available). For most countries (25) there were increases in these expenses as a percentage of GDP, the most notable increase (Figure 1.) were observed in Ireland (about 15.8 percentage points), Cyprus (6.80 pp), Portugal (6.11 pp), countries that have experienced population increases in recent years. A number of states have maintained constant the amount of expenditure, while Slovakia and Poland have negative trends. As a percentage of GDP, the highest level of pension expenditure recorded in France and Denmark (33.77% and 33.26%), followed by the Netherlands (32.05%), Germany, Finland and Sweden, with a approximately equal proportion of 30 %. In contrast, the lowest level recorded in newcomers states: Bulgaria, Romania, Estonia with 18%. In many countries, pension spending grew faster than GDP, but in others (UK, Czech Republic, Slovenia) the growth was slower.

Future projections show that trend growth of these expenditures will keep in the most majority of member states (Table 1.). Increases will not be spectacular, except for Greece, whose spending will double horizon of 2060, reaching a value of 24.1% of GDP, compared to 11.6% in 2010, Cyprus (the difference will be of 10.8 percentage points), Luxembourg (expenses as a percentage of GDP will rise from 8.6% in 2010 to 23.9% in 2060). There are, however, countries where the trend is downward: Denmark, Estonia, Italy, Poland, Sweden. It should be noted, however, that these reductions are significantly lower than net increases in other states. The horizon of 2060, Greece and Luxembourg, will have to allocate more than 20% of GDP to cover pensions, while Estonia and Latvia only 5%.



Note: for Bulgaria no data available in 2000

Source: own processing based on data from Eurostat

Figure 1. EU member states pension expenditure, as a percentage of GDP, the years 2000, 2011

3. PENSION EXPENDITURE PROJECTIONS IN THE EU MEMBER STATES

A number of states have implemented reforms in the pension system, transferring part of the public to a private compulsory. Currently, the private system is not well developed, but its importance will increase in the future. Precisely in this sense, further, we will consider costs both in terms of projections for the public and the private perspective.

3.1. Public system

At EU level, the projections show an increase of 2.3 pp pension on expenditure in GDP between 2010-2060. At the member state level, there are large variations (Table 1.) regarding the expenses (Poland registered a drop of 2.8 percentage points, while Luxembourg an increase of 15.3 percentage points). Expected increase is due to the increase of pensions for old age, and those anticipated. In turn, the age limit is expected to grow more than the invalidity or survivors, due to population aging. Thus, in Luxembourg, increasing costs for age limits pensions as a percentage of GDP is more than 10 percentage points, while in five other countries it will be between 5 and 10 pp. In the case of Estonia, Poland, Italy and Denmark percentage will decrease below baseline in 2010, but for the most majority of states modification will be around 5% or below. Regarding expenditures related to other pensions (disability and survivor's pension) in most member states projections show that will decrease, possibly due to issue legislation that limit these types of pensions and a much healthier population.

Table 1. Pension expenditure projections in the EU, per types of expenditure as a percentage of GDP

Country	Pension expenditure - total				Age limit pension expenditure			Other pension expenditure (disability, survivors)		
	2010	2030	2060	2010/2060	2010	2060	2010/2060	2010	2060	2010/2060
Belgium	10.3	13.9	14.7	4.4	9.5	14	4.5	0.8	0.7	-0.1
Bulgaria	9.1	8.6	11.3	2.2	7.3	10	2.7	1.8	1.3	-0.5
Czech Republic	7.1	7.1	11	3.9	6.5	10.5	4	0.6	0.6	0
Denmark	9.4	10.6	9.2	-0.2	7.4	6.7	-0.7	2	2.5	0.5
Germany	10.2	11.5	12.8	2.6	10.2	12.8	2.6	x	x	x
Estonia	6.4	5.6	4.9	-1.5	5.5	4.3	-1.2	0.9	0.6	-0.3
Ireland	4.1	5.4	8.6	4.5	2.7	7.2	4.5	1.4	1.4	0
Greece	11.6	17.1	24.1	12.5	8.8	17.7	8.9	2.9	6.4	3.5
Spain	8.9	10.8	15.1	6.2	6	12.1	6.1	2.9	3	0.1
France	13.5	14.2	14	0.5	13.5	14	0.5	x	x	x
Italy	14	14.8	13.6	-0.4	13.5	13.3	-0.2	0.5	0.3	-0.2
Cyprus	6.9	10.8	17.7	10.8	5.3	14.2	8.9	1.6	3.5	1.9
Latvia	5.1	5.9	5.1	0	4.7	4.8	0.1	0.4	0.3	-0.1
Lithuania	6.5	8.2	11.4	4.9	5.4	10.3	4.9	1.1	1	-0.1
Luxembourg	8.6	14.2	23.9	15.3	5.8	20.1	14.3	2.8	3.9	1.1
Hungary	11.3	11	13.8	2.5	9.5	12.7	3.2	1.8	1.1	-0.7
Malta	8.3	9.3	13.4	5.1	5.3	11.1	5.8	3	3.3	0.3
Netherlands	6.5	9.3	10.5	4	4.5	9	4.5	2	1.6	-0.4
Austria	12.7	13.8	13.6	0.9	9.6	11.1	1.5	3.1	2.7	-0.4
Poland	10.8	9.4	8.8	-2	9.3	7.9	-1.4	1.5	0.9	-0.6
Portugal	11.9	12.6	13.4	1.5	9.6	10.8	1.2	2.3	2.7	0.4
Romania	8.4	10.4	15.8	7.4	6.9	14.2	7.3	1.5	1.6	0.1
Slovenia	10.1	13.3	18.6	8.5	7.3	15	7.7	2.8	3.6	0.8
Slovakia	6.6	7.3	10.2	3.6	4	6.2	2.2	2.6	4.1	1.5
Finland	10.7	13.9	13.4	2.7	8.2	12	3.8	2.5	1.4	-1.1
Sweden	9.6	9.5	9.4	-0.2	7.2	8.2	1	2.5	1.2	-1.3
United Kingdom	6.7	7.6	9.3	2.6	6.1	9.1	3	x	x	x

Note: x – no data available

Source: Ageing Report: Economic and budgetary projections for the Eu-27 member states (2008-2060), European Commission, Brussels, 2009, ec.europa.eu

In conclusion, the concerns of Member States aim:

- decrease in generosity of the public pension system in order to make these programs more sustainable financial, given the demographic trends;
- increasing the legal retirement age;
- restrictions in access the forms that allow early retirement pension and strengthen incentives targeting life, which would lead to a smaller increase in the retirement age limit for early retirement.

3.2. Private system

In light of fiscal pressures due to demographic trends, many countries have encouraged the adoption of occupational and private pension schemes, so that the role of these schemes has increased. However, the role of privately administered pensions is quite limited in present, if we talk in terms of income that is provided, this income is mainly provided by public authorities. But as can be seen from table 2, private pension income will increase.

Currently, most of the occupational pension schemes are defined benefit schemes. However, many of these schemes have been transformed into defined contribution schemes, as also were the private systems from the start. Increasing the role of defined contribution schemes had and will have important implications for asset values depending on the rate of return.

Overall, net contributions to private pension schemes and the occupational has increased in recent years, but most of the funds are to be considered far from mature. In other words, at this moment, there are few states with a number of people retired or will retire soon and that they can base on income from these funds.

Regarding the expenditure projections for the occupational pension (Table 2.), only 6 countries (Denmark, Ireland, Spain, Portugal and the Netherlands) have been developed such projections, the other states saying they don't have such schemes. Among them may be noted that in Portugal, Spain, Sweden and Ireland this expenditure level is very low, below 2.5% Of GDP, while in Denmark and the Netherlands, the level is over 5%. In the Netherlands, the occupational pension expenditure will increase from 5% of GDP in 2010 to 12.1% in 2060, growth of 7.1 pp, while in Denmark, Spain, Sweden and Ireland, growth will be lower, 3.2 pp , 0.3 pp, 0.7 pp and 1.3 pp respectively. There is a negative projection, which is found in Portugal where the occupational pension expenditure as a percentage of GDP will decrease from 0.6% in 2010 to 0.5% in 2060.

A number of states have implemented mandatory private pension schemes (Bulgaria, Germany, Estonia, Lithuania, Latvia, Hungary, Poland, Slovakia, Sweden and Romania), while in Denmark, Belgium, Greece, Spain, Netherlands, Portugal, Czech Republic and Malta do not have such systems. For some of these countries, private pension spending will begin to appear in 2020, except Sweden who began to pay pension since 2010 and Lithuania which will begin in 2015.

Table 2. Occupational and private pension as a percentage of GDP

Country	Occupational		Private pension expenditure			
	2010	2060	2010	2015	2020	2060
Belgium						
Bulgaria					0	1.7
Czech Republic						
Denmark	5.7	8.9				
Germany						
Estonia					0.1	1.8
Ireland	1.4	2.7				
Greece						
Spain	0.4	0.7				
France						
Italy						
Cyprus						
Latvia					0.1	4.9
Lithuania				0.1	0.3	2
Luxembourg						
Hungary					0.1	2.2
Malta						
Netherlands	5	12.1				
Austria						
Poland					0.1	1.9
Portugal	0.6	0.5				
Romania					0	1.9
Slovenia						
Slovakia					0.1	2.2
Finland						
Sweden	2.6	3.3	0.1	0.2	0.3	1.4
United Kingdom						

Source: *Ageing Report: Economic and bugetary projections for the Eu-27 member states (2008-2060)*, European Commission, Brussels, 2009, ec.europa.eu

In the horizon of 2060, the highest level of spending as a percentage of GDP will be recorded in Latvia (4.9%). Even though at the present time, funds are not highly developed, they expected an increase in pension expenditure as a percentage of 0.5% in 2020 to an average of 2% in 2060 (except Latvia), meaning an increase of 3 times level. Percentage of expenditure mandatory private pension system in the horizon of 2060 will range from 1.4% of GDP in Sweden to 4.8% in Latvia.

4. CONCLUSIONS

Demographic changes without precedent in recent years, will have a major impact on the welfare states in the European Union because growth rates are likely to remain low in the coming years and the number of taxpayers is shrinking while the population is aging. As a result, public finances are unsustainable and tend to compromise the social security and pension systems in general. Consequently, most countries have reformed their pension systems in order to reduce pension expenditure and ensure pension systems financially sustainable.

Demographic change in recent years is an important challenge for pension systems in the Member States of the European Union, even for the most developed one. Thus, increasing the number of older people, while increasing longevity inevitably lead to an increase in pension expenditure, showing thus, ensuring the financial sustainability of pension systems.

Demographic trends among other factors support the financial difficulties facing public pension systems in most EU states. Due to these difficulties, many European countries (Bulgaria, Romania, Estonia, Latvia, Hungary, Poland, Slovakia and Sweden) have reformed their public pension systems. So they either have redirected some of the contributions from public schemes to privately administrated or proposed supplementary pension schemes. At this point, these schemes are still in accumulation phase but the importance of their implementation will see in the coming decades, especially in the context of the age pyramid roll and globalization, the latter one by component labor migration that puts the problem due to the portability of pensions, measures for coordination at EU level of private pension funds.

More and more countries have reformed their pension systems adopting a multipillar system that can face pension expenditure which is increasingly higher. The trends observed from researching on a European level, require certain measures aimed at: increasing the retirement age, increasing full season subscription, equalize retirement ages for men and women.

REFERENCES:

- [1]. **Aaron, H.J.** (1966) *The Social Insurance Paradox*, Canadian Journal of Economics and Political Science, 32(3), 371-4; reprinted in Barr, N. (ed.) (2001) *Economic Theory and the Welfare State*, Edward Elgar Library in Critical Writings in Economics, Vol. II, pp. 79-82
- [2]. **Barr, N.; Diamond, P.** (2009) *Reforming pensions: Principles, analytical errors and policy directions*, International Social Security Review, 62(2), pp. 5-29
- [3]. **Barr, N.; Diamond, P.** (2006) *The economics of pensions*, Oxford Review of Economic Policy, 22(1), pp. 15-39
- [4]. **Heijdra, B.J.; Romp, W.E.** (2008) *Retirement, pensions and ageing*, Journal of Public Economics, Elsevier, vol. 93(3-4)
- [5]. **Holzmann, R.; Guven, U.** (2009) *Adequacy of retirement income after pension reforms in Central, Eastern, and Southern Europe: eight country studies*, Banca Internațională pentru Reconstrucție și Dezvoltare and Banca Mondială

- [6]. **Holzmann, R.** (1994) *Funded and private pensions for Eastern European countries in transition*, Conference: “Pension system feature and options for reform”, Rio de Janeiro, Brazil
- [7]. **European Commission** (2011) *Ageing Report- Underlying assumption and projection methodologies*, Brussels, [Online], www.ec.europa.eu
- [8]. **European Commission**, (2010) *Brussels Green Paper – towards adequate, sustainable and safe European pension system*, [Online], www.ec.europa.eu
- [9]. **European Commission**, (2009) *Ageing Report: Economic and budgetary projections for the EU-27 member states (2008-2060)*, Brussels, [Online], www.ec.europa.eu
- [10]. www.ec.europa.eu

CUSTOMERS CATEGORIES AND TYPES OF BANKING SERVICES

DANIELA SIMONA DIMITRIU *

ABSTRACT: *For a bank it is advantageous to have different types of clients because, as will receive deposits and provide loans for both business and individuals. The difference between the interest charged by banks and they are paid gross banking profit, following recovery, by the bank, business development potential offered by customers, resulting in advantages for both bank and customer. Customer benefits can be considered: the safety of deposits held at banks; interest received for them; that the money held in bank accounts can be returned at any time upon request; transfers of money to them, instead of wearing them large sums of cash.*

KEY WORDS: *customer; bank; categories; type; banking account.*

JEL CLASSIFICATION: *G29; G21.*

1. INTRODUCTION

In 1950 occurred the so-called "customer orientation", which meant focusing on requirements. Main concern was directed to identify customer needs and desires, such as companies come to meet them at the highest level of satisfaction of their needs. This change of perspective, belongs to the famous economist Philip Kotler, considered the father of modern marketing, which says that the new marketing must be "human activity directed towards meeting the needs and wants through exchange process in relation to market" (Kotler, 1986, pp. 4-5).

The concept argues that the key achievement by an organization, its objectives, is to determine the needs and desires clients, targeted and expected satisfaction in providing a better and more quickly than the competition.

The year 1950 is when introducing this concept in banking, with the tertiary sector development - sector of the Service. The marketing has come to learn many things about the client.

* Lecturer, Ph.D., "Dimitrie Cantemir" Christian University, Romania, nenciu75@yahoo.com

Client - a possible definition Customers are those who turn to bank services, but first you need to be known more closely. A customer is a person or entity receiving or benefiting from the bank, and who uses a company or banking institution to change currency. The customer is one who has a bank account.

"Customers are bank depositors, who entrust their money, banking facilities, for storage and fruiting, for which they receive interest and applicants or those who need temporary, some additional money for paying interest or commission" (Pîrvu, 2004, p. 31).

There is no established definition of "client", but can be but few details about customers to draft a definition of customer, in terms of banks, as is the bi-univocal relationship, client-bank relationship.

"At the most general relationship as defined in dictionaries, is nothing but a link, a connection, a relationship between things, facts, ideas, processes, features, people, institutions, entities, whatever they may be.

Extrapolating the definition of the bank plan, typically client-bank relationship is a more special relationship than meets the eye, precisely because it is very sensitive. "In this dualism, almost inseparable, the customer can be defined by the following features: (Ionescu & Dimitriu, 2008, passim)

- Is a person or legal entity that has a business relationship with the bank;
- Turn to one of the units a bank to ask for operations;
- Use one, some or all services offered by banks.

The relationship between customer and bank defined by law. This refers to the duty of the bank to take care of the customer and the banks responsibility to ensure that the system protects the technology used, the bank itself and its customers.

In essence, the relationship between bank and client is that relationship estab debtor and creditor. Customer may be creditor and debtor bank. Reverse this situation is recorded for the customer borrows money from the bank. Bank is not just a keeper of money, since it could use the funds for the purpose of business, but assumes the obligation to repay, on request, amount of deposits. Business potential offered by bank customers there for a viable business, banks need customers.

Different types and categories customers have different requirements, in accordance with their business or personal needs, offering great potential for development banking. Requirements and customer needs may change after a period of time, according to the new conditions existing in the economy and society.

The customer needs and offer advanced services, banks will keep their customers and will be able to offer new services. In a market economy is a long established fact that specialized banking products are more easily developed and used by existing customers than new ones. It is, shoulder important to identify different types of customers and their specific requirements. Companies will have different needs depending on the nature and volume of business. A small company, for example, may need a short term loan to cover the needs for services and manufacturing. Great investors may want to borrow money for investment so as to expand and diversify its business.

Needs of individuals who open their personal accounts may differ, depending on income level and lifestyle. Currently, this type of customers have a small share in

Romania, but in perspective, the number of those who open their personal accounts should increase considerably.

"The market economy is a modern monetary economy (a money). Most trade is done by means money, money. All economic transactions are influenced in one way or another, money. Monetary Economics organic blends real economy, affecting a positive or negative, depending on the nature of prices and monetary measures". (Heyne, 1991, p. 8.) "Thus, customers choose based on their needs and will choose a particular bank, depending on the services and benefits. This criterion takes you a while, the banking industry developed according to demand". (Ionescu, 2009, Cap. I) Pressure from customers with different needs, the existence of services and by other financial institutions, will lead to changes and improvements in the banking system. While, due to the fact that banks are beginning to improve strategies, will be introduced new banking products and services in accordance with international banking practice.

2. CATEGORIES OF CUSTOMERS

Category of customers expressed groups of individuals with similar properties that are identified with those who do business with a bank. They are diverse and differ with different interests and needs. For a banker is particularly important: [7]

- To recognize categories of customers that come in direct contact;
- To identify the transactions necessary for each category;
- Know the law, existing for different types of customers.

Customers can be divided mainly in legally, into two categories:

- Legal and
- Individuals.

Legal entities may be, in turn, grouped by type of ownership, legal form of organization and type of economic activity (business). For example, in Romania, most accounts are held by legal persons.

2.1. Corporate customer

Method of establishment of companies is regulated by law. "In terms of corporate bank accounts should be noted that each bank based on the law on banking has developed its own regulations (rules) to open and operate such accounts. These regulations are constantly improving to meet the demands of market economy development. Laws and regulations are published in our country in the Official Gazette. At the same time, it is important to know the internal regulations of banks". (Ionescu, 2009, Cap. I)

It is also important for banks to know whether a person is a client company, the right of legally constituted, before doing business with him, each type of company is subject to certain regulations.

In Romania, there are several forms of organization of companies, defined by the Law no.31/1990.

Features companies as clients of the bank [7]

Are established in some specific forms that determine both the organization and their activity;

- Have obtained, by law, the status of legal person;
- In case of termination payments are subject to bankruptcy.

In their capacity as bank customers, these companies must meet requirements set by the bank, on the opening and operation of their bank accounts. Thus, companies who open bank accounts are asked a series of documents showing their form of legal organization, company name, type of work, the company's capital, specimen signatures for persons to operate the account etc..

Types of companies that operate in Romania Legal persons may carry out business in a variety of forms, according to Law. 31/1990. (Monitorul Oficial, 1990, nr. 126-127) The law defines various types of companies that can be formed.

These companies will be in the following forms: (Monitorul Oficial, 1990, nr. 126-127)

- SNC;
- Limited partnerships;
- Company limited by shares;
- Joint stock companies;
- LLC - Limited liability company.

Each of these must be established by law, each category of companies, in part, having to meet certain requirements. So there:

a) SNC

The law defines this type of company as the company whose social obligations are guaranteed by its social heritage and unlimited joint and several liability of all partners.

Features of this type of company are:

- Minimum number of associates is 2 - to be able to conclude the company;
- Capital can be as small and consists of members contribution (cash and / or kind), divided into shares, which generally are not transferable (except in cases where the contract of association, agreed that can be assigned);
- Liability of members for social obligations, shall be joint and unlimited;
- All associations were considered as traders and usually they have given another mandate to manage, one for the other company;
- Each pair can be declared bankrupt as a result of errors of them, as a consequence of the solidarity clause of the associates;
- Their association gives them the opportunity to trade in partnership.

Name of such companies must have at least one name and the words associated CNS opening bank account on the company name. The signature list are designated as persons to operate the account.

b) limited partnerships

The law defines this type of company as the company whose social obligations are guaranteed by social heritage and unlimited joint and several liability of general partners, limited partners liable only up to their intake

When setting up this type of society prevailing mutual trust between partners. The main feature of this type of company is that it has two categories of partners: general partners and limited partners.

Comanditates

- Have the sole right to participate in company management;
- Unlimited and severally liable for company obligations;
- Their name is included in the name of the company;
- Is the active element of society;
- Have the quality merchants. partners are

Comanditars

- Contribute equity, their liability limited to its level;
- Not a trader, they can not intervene in trade of the company to third parties and banks;
- Not allowed to participate in corporate governance only in special cases, by proxy, in this case responding, jointly and unlimited fortune, like the partnership;
- Their names not be included in the company name;
- Have the right to exercise acts of surveillance, to know the balance sheet, profit and loss account, commercial records etc.

It is not necessary that all partners are present name Bacar account and checks issued by a company.

Obligations of members:

- Obligations are backed social heritage;
- Comanditates respond unlimited joint and several, for the debts of the company, their present and future assets;
- Partners are liable only up to their capital contribution. Thus, creditors may recover their debts not only of assets (properties) company, if they remain unpaid after all properties have been exhausted, they may, in legal terms, to take possession of personal property belonging to one order.

c) companies limited by shares

The law defines this type of society as society whose capital is divided into shares and social obligations are guaranteed with social patrimony and unlimited joint and several liability of general partners, limited partners are required only to pay actions.

“Not everyone wants to start a business have unlimited liability for datoririle made. Such people will be attracted to form a company limited by shares”. (Ionescu, 2009, Cap. I) The decisive element of such a company is capital, not individual members. Capital is divided into shares of equal value. This form of society has common features with limited partnerships and with the stock.

Associations are controlled and limited partners, indicating that in this case, partners are liable for the debts and obligations to society only within the subscribed capital in shares.

Capital is represented by shares. The contribution may be in cash and / or nature, but evaluated and taking the action.

Obligations, liabilities company limited by shares are secured by:

- Assets of the company;

- Joint and several unlimited liability limited partnership;
- Partners are required only within the subscribed capital in shares.

d) joint stock company

The law defines this type of society as society whose social obligations are guaranteed with social patrimony, shareholders are obliged only to pay their actions.

These companies are companies whose capital is divided into equal shares and marketable securities (including stock exchanges). This form of society is the typical company, it allows the accumulation of capital for development of large companies - industrial, commercial, banking. Capital contribution of officials may be in cash or kind, but was evaluated and taking the action.

Training requirements of joint stock companies are more stringent than the formation of other types of companies, established by law as a set of requirements for setting up and functioning.

Management companies stock is made by the Board of Directors and General Meeting of Shareholders.

e) Limited Liability Company – LLC

The law defines this type of company as the company whose social obligations are guaranteed by social heritage, associations are required only to pay shares. In this case, the company's capital is divided into shares which, under contract societies and as set forth in the statute, not negotiable on the stock exchanges. The members of this type of society are responsible for social liabilities only to the amounts deposited as shares and the assets of the company.

f) individual comerciants (Monitorul Oficial, 1990, nr. 126-127)

Although the dominant role they have companies in the market economy, individual traders continue to show presence and be part of bank customers. From this point of view can be distinguished:

f.1) free tradesmen and professionals

They operate under an operating authorizations issued by local city and pay a flat tax on income, the financial department of belonging. They can open bank account as an individual, being bound by law I have a bank account "the company" as a legal entity.

f.2) family associations

Works under Decree no. 94/1990, (Monitorul Oficial, 1990, nr. 20) where opening a bank account is made in the same manner as any body.

Opening bank accounts for the activity of its specific economic any agent should have opened a bank account through which to conduct operations of receipts and payments. In this respect, the company must provide the bank the following documents:

- Request to open an account - if accounts currency, currency;
- Articles of association / society operating status;
- Final court decision;
- Registration with Directorate General of Finance and State Financial Control;
- Operating license / certificate of registration in the Trade Register;
- Excerpt from the minutes of the General Assembly of Shareholders approving the nominal signature of persons authorized to right;

- Sheet specimen signatures of persons authorized to order the operations account with the bank and company stamp;
- Banking and stamp tax code;
- Evidence of operating space. With the opening of accounts, bank cards issued company checks to bearer and / or limit the amount necessary for payment efecuarea current operations.

2.2. Individual clients

“A customer - an individual can be defined and described as a person holding a bank account for personal use. Such customers must comply with existing regulations and bankers must ensure that they do not open and use bank accounts for illegal purposes”. (Ionescu, 2009, Cap. I)

Individual customers still have a low share in overall banking. In Romania there are types of accounts specifically for this category of customers. For individuals, opening a bank account requires only:

- Request for account opening
- Presentation of an identity - identity, Romanian individuals or passport for foreign individuals.

Only individuals can open accounts in their names, with the possibility of account holders and empower others for signature in mind. In other countries, joint accounts - open two names - are common, for example, family, husband and wife can open an account with both names.

In Chapter individuals, the only consideration that banks should consider it is old people who want to change an account. It is envisaged that the very young may not fully know the consequences of making certain transactions with banks and therefore, such persons are protected to not be manipulated to benefit from them.

Also, it would be unwise for banks to engage in complex loan agreements with people too young. Even if the law is not explicit in this regard, banks may have their own regulations regarding the minimum age of clients. In Romania, as in many other countries, starting from the age of 18 years, individuals have full legal capacity and as such, can exercise their rights and assume obligations related to provision of legal relations which they conclude.

Conditions for maintaining Clients who have been admitted by the bank, following the fulfillment of criteria and enter into normal relations and current affairs will be followed always, the purpose of determining to what extent they maintain, want or reduce their performance original. Thus, during the course of business and various links with the bank, where customers can see the following possibilities: [7]

1. Their customers maintain or increase their overall quality were tested by the acceptance criteria. These customers are recommended to be very good, with high performance in these conditions, the bank and its territorial units will continue to actively address.

2. Customers change their performance in that record low profitability, assets are in a situation not too good - too much - to equity and long-term sources, it uses

fewer banking products and services, customers will be accepted indicators still passive and will be carefully monitored and supported to improve the overall situation is.

3. Customers no longer meet the criteria for which have been accepted, not a profitable place, liquidity and are below the permissible level of debt, work and their products are received in the market and generally have a situation determined which promises to be improved in future. This category of customers will be transferred to competition, so that, through a suitable attitude, not harm normal relations recommended in general, but must be firm, the bank will not promote new business with companies in this category.

2.3. Types of customers with whom the bank is working frequently [7]

- The driver of change - money provides the means to change reality in order to meet their own values and high standards;
- Caring - money is the means by which to show care and concern for others, leading to dependence and customer awareness, that is important for the bank;
- Competitor - money provides the means for overcoming self affirmation and competitors observed;
- Creative artist - money supply prompting the medium of creative and artistic aspirations of satisfying emotional needs,
- Innovator - money provides the means to explore new ideas and of finding new and better ways to do certain things;
- Bureaucracy - money is the means of ensuring economic security, social and psychological;
- Hedonistic - money provides the means of achieving personal goals and enjoy life;
- Creator of empires - money provides the means of modeling the environment, controlling the destiny of others and establishing a dynasty;
- Peace - money is the means to preserve the status quo, keeping people happy, accept that everything is subordinated to achieve what is best in the best of all possible worlds.

REFERENCES:

- [1]. Heyne, P. (1991) *Modul economic de gândire*, Editura Didactică și Pedagogică, București, p. 8
- [2]. Ionescu, I.G.; Dimitriu, D.S. (2008) *Relația client - bancă, parte a strategiei de marketing pentru dezvoltarea pieței financiar-bancare și creșterea profiturilor*, [comunicare științifică], Universitatea Creștină Dimitrie Cantemir, Constanța, passim
- [3]. Ionescu, I.G. (2009) *Impactul activității financiar-bancare asupra mediului de afaceri în condițiile globalizării*, [Teză de doctorat], Universitatea din Craiova, Cap. I.
- [4]. Kotler, P. (1986) *Principles of Marketing*, Third Edition, Prentice Hall Inc., Englewood Cliffs, New Jersey, pp. 4-5
- [5]. Pîrvu, G. (2004) *Macroeconomie*, Editura Universitaria, Craiova, p. 31
- [6]. *Monitorul Oficial* (1990) Partea I, nr. 126-127
- [7]. www.referatele.com/economice/online2/clientii-unei-banci-si-serviciile-oferite-de, [Accessed may 2009]

SOME CONSEQUENCES OF THE ECONOMIC CRISIS IN ROMANIA

ALINA FLEȘER, RADU CĂTĂLIN CRIVEANU*

ABSTRACT: *The international financial crisis has led to a number of effects on the Romanian economy. Although there had not been reported any direct consequences on the banking system, indirect effects on the economy were felt in full. In this context, the present paper, aims at highlighting numerous macroeconomic effects of the crisis with important economic and social load.*

KEY WORDS: *economic crisis; unemployment rate; employment; GDP; economic development; investment.*

JEL CLASSIFICATIONS: *J21; J61; O11.*

1. ECONOMIC CRISIS IMPACT ON SMES

The global economic crisis, which started in 2008, was felt in Romania as well, as we can talk about a major international crisis with many negative effects on the economies of the world. In this context, we consider that highlighting the impact of the economic domestic and international downturn on SME activity in Romania is of great importance.

Thus, according to the White Paper on SME's, considering the development of activity in this sector during October 2008- March 2012, we may observe that 35,4% of the companies, have reduced activity; 50,57% of the units operate at the same parameters and 14,02% of the companies have led an upward trend, in the sense that they have increased their activity (White Paper of SME's 2012). In this context, we can see that the economic downturn has affected a large part of the Romanian companies, and only a small percentage managed to consolidate and develop their business.

If we consider the regional affiliation of SME's it can be noticed that entities in the South-West region recorded a higher percentage among the companies which had a

* Lecturer, Ph.D., University of Petroșani, Romania, alina_flesher@yahoo.com
Lecturer, Ph.D., University of Craiova, Romania, raducriv@yahoo.com

downturn trend, driven by the economic crisis (56,74%). The Central region, has the largest share of SMEs business, which has maintained activity at the same level (50,88%) and recorded the lowest percentage of firms in recession (35,67%); if we consider firms which developed during October 2008- March 2011, companies in the South-East region have a lower percentage (7,61%), while the companies in the North-East region, recorded a higher percentage.(22,67%). (White Paper of SME's 2011)

Table 1. Dynamics of SMEs investigated during October 2008 - March 2011, according to the regions they belong to (%)

No. crt.	Dynamics of firms in the period October 2008 - March 2011	SMEs grouped by regions							
		North East	South East	South	South West	West	North West	Centre	Bucureşti - Ilfov
1.	SMEs which have reduced activity	42,25	48,73	47,08	56,74	47,06	37,79	35,67	39,20
2.	SMEs operating in the same parameters	38,73	43,65	43,30	32,58	42,65	39,53	50,88	48,74
3.	SMEs that have increased activity	19,01	7,61	9,62	10,67	10,29	22,67	13,45	12,06

Source: White Paper on SMEs 2011

If we analyse the domain of activity (table 2) we may observe that, because of the economic crisis, construction companies were the most affected companies, with the highest percentage of reduced activity (59,72). This phenomenon is based on the low power of purchasing of the population and also on the tightened credit conditions.

These factors have led to the reduction of the activity of trade firms as well. SMEs in the transport sector, recorded a higher percentage among firms that maintained their workload (51,18%); industrial units have the highest percentage of SME's that have increased their activity (19,34%); while tourism entities stand for a lower number of operators who have reduced their activity (35,29%).

Table 2. Dynamics of SMEs according to industries in the period 2008-2011 (%)

Nr. crt.	Dynamics of SMEs in the period October 2008 - March 2011	SMEs by industry					
		Industry	Constructions	Trade	Transport	Tourism	Services
1.	SMEs which have reduced activity	41,04	59,72	47,13	39,37	35,29	41,34
2.	SMEs operating in the same parameters	39,62	31,94	42,89	51,18	48,04	40,94
3.	SMEs that have increased activity	19,34	8,33	9,98	9,45	16,67	17,72

Source: White Paper on SMEs 2011

Overall, it can be concluded, that a considerable part of Romanian SMEs have faced serious problems, due to the economic downturn. As in other countries, in the world and in the EU community, these companies did not manage to cope with the economic crisis, which is explained by the fact that SMEs are generally more vulnerable to contextual turbulence than the larger firms are.

2. THE INFLUENCE OF THE ECONOMIC CRISIS ON LABOUR MARKET IN ROMANIA

In recent years, the labour market in Romania has been heavily influenced by various economic, political and social factors. After a period of economic growth and increasing living standards, the manifestation of economic and financial global crisis affected labour market in Romania and highlighted the imbalances and vulnerability of the Romanian economy as a whole, as the Romanian economy could not keep away from the harmful influences of the recession.

On the Romanian labour market, the economic crisis emerged by a significant increase in unemployment and a strong reduction in employment (Figure 1). The most affected sector was that of constructions, but also the automotive and consumption-related sectors suffered a lot. According to numerous studies, unemployment has mostly affected male population as a consequence of the reduction of the activity in the fields already mentioned, where there were mostly men employed.

Basically as the following chart shows, the evolution of unemployment in Romania is characterized by two distinct periods:

- 2000-2007 when there can be seen a continuous reduction in unemployment (from 10.5% in 2000 to 4,1% in 2007) due to the positive development of the economy in that period;
- 2007-2011 the labour market equilibrium is disturbed by the economic crisis which has affected our country as well. Consequently, the unemployment rate started to increase each year gradually.

An analysis of the distribution of unemployed people based on age group, shows that the most productive population has been affected by the crisis, which includes persons between 30-49, which is 52% of the population. In this context, the idea of going abroad for work, is becoming more attractive to Romanian people and many of them choose to work in a foreign country. The jobs offered on the internal market are insufficient and cannot meet the demand; salaries are also much lower than in previous years, thus, going to foreign countries, where salaries remain satisfactory and enough to maintain a decent standard of living seems to be an adequate solution.

In this context, the economic crisis transforms emigration from Romania in a lifetime horizon. Not only those who have relatives abroad want to emigrate but also people belonging to other categories, in any age, any ethnic or professional ancestry. Thus, emigration is not determined only by the level of the income but also by the distrust in institutions and policy makers. (Marga, 2011)

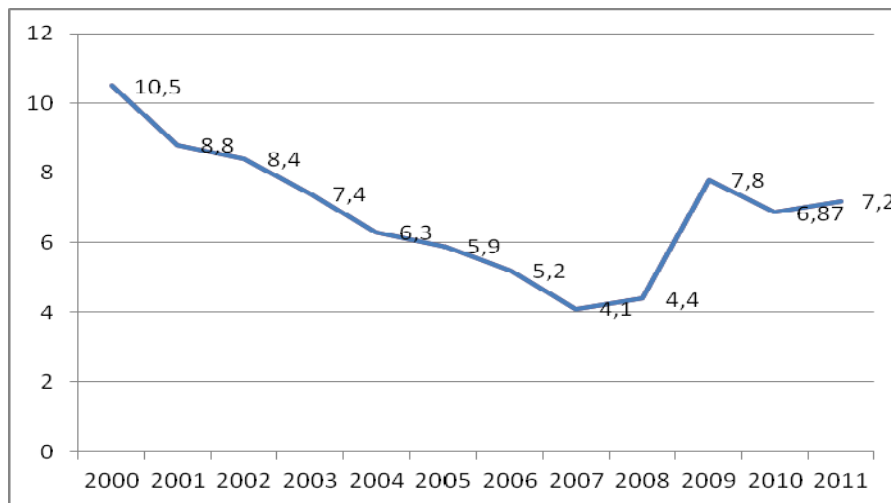


Figure 1. The evolution of unemployment rate

Source: data processing www.insse.ro

According to the data published by Eures, in 2011 a number of 17.318 persons were in search of work abroad, and so they turned to Eures adviser to find a job in various European countries (National Agency for Labour Employment, 2011). A new element is that for the first time in five years of Eures Romania, the number of job seekers in European countries with secondary and post-secondary educational level was higher than that of the persons with primary, secondary and professional. In general, their applications were targeted mainly for skilled and unskilled jobs in agriculture, construction, manufacturing, hospitality food and so on, but there were also demands for highly skilled jobs (engineer, doctors, teachers, and so on).

According to Eures, in terms of distribution of people by region, it appears that in 2011, most requests were recorded in the South- West (4968 persons) South (2969 persons) and North-East regions (2765 persons) – which are also the poorest regions in the country. The phenomenon is explained by the fact that the highest percentage of SME's reduction, has been precisely in these regions. The fewest requests were recorded in Bucharest Ilfov (1.119 persons) and Central (933 persons) (National Agency for Labor Employment, 2011), due to the higher degree of economic development of SME's which maintained or even improved activity. Among the countries which were predominantly favoured by Romanians are: Spain, Denmark, Austria, and Italy.

According to the data provided by the National Employment Agency by Eures, it is noted, that the largest share of migrant people is represented by women (87,76%) who generally go for activities which do not require a certain skill (domestic service, agriculture, home care for elderly people) and who would not have a chance to get employed, if we consider the current labour market in Romania.

In terms of age group comprising persons who want to find a job abroad, there is a significant share of people between 26-35 and 36-45 (Figure 2). This can be

explained by the fact, that the first group of people has a greater mobility and perhaps they are in a foreign country for the first time, in order to build a career abroad. I assume that the motivation for the second category of people, is given by the restructuring of the activity that occurred in many areas and sectors, and without a proper program of retraining, labour market integration opportunities in Romania are limited.

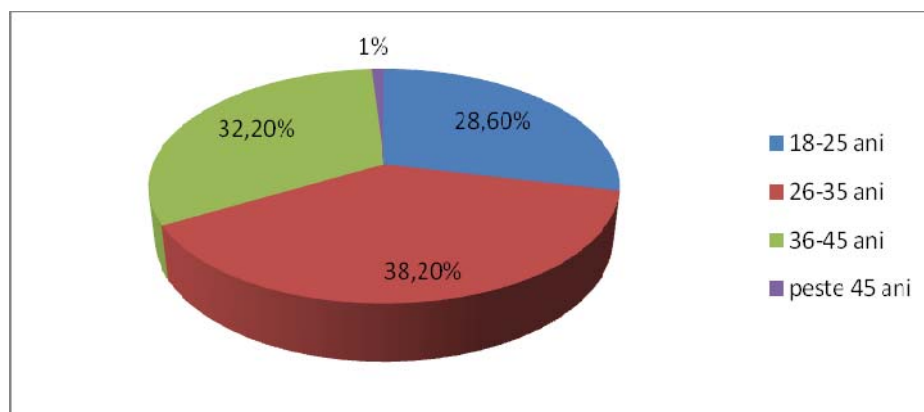


Figure 2. Age distribution for migrant persons

Source: National Agency for Labour Employment

In conclusion, I consider that, most Romanians choose to go abroad to improve their income and to achieve a higher standard of living, especially since in recent years, under the auspices of economic crisis, poverty rate has reached alarming proportions in our country. According to a study carried out by the Romanian Institute for Evaluation and Strategy in March 2012, most Romanians tend to consider themselves as poor when they are asked to position themselves on a scale from 1-10, where 1 means "poor" and 10 means "rich" the obtained media being 4.73. Moreover, an overwhelming proportion of respondents say that the majority of the population in Romania is regarded as poor- 90%. Also, more than three quarters of respondents consider that inequality between people in Romania is high or very high. Also, within the same study, respondents were asked to rate the importance of issues whose resolution is pursued through the Millennium Development Goals. The most important aspects in view of respondents are: poverty (61%), lack of school education (48%), environmental pollution (36%), discrimination against girls and women (28%) and dirt and infectious diseases (24%). (Romanian Institute for Evaluation and Strategy, 2012)

3. THE REFLECTION OF ECONOMIC CRISIS IN ROMANIA'S GDP

The analysis of GDP / capita in the developing regions of Romania for the period 2007-2009 shows that there is a growing trend for 2007 and 2008, followed by a decrease for the period shown below. The increase is resumed since 2010. However, the GDP for all regions are below those recorded in 2008. In terms of GDP growth the

Bucharest-Ilfov region emerges, followed by the West region, at the opposite side hovering North - East and South – West regions. For 2011 there is a faster growth tendency for the North-East and South-East regions, while other regions, as the values predicted are regarded as being relatively steady compared to the previous year. (Figure 3).

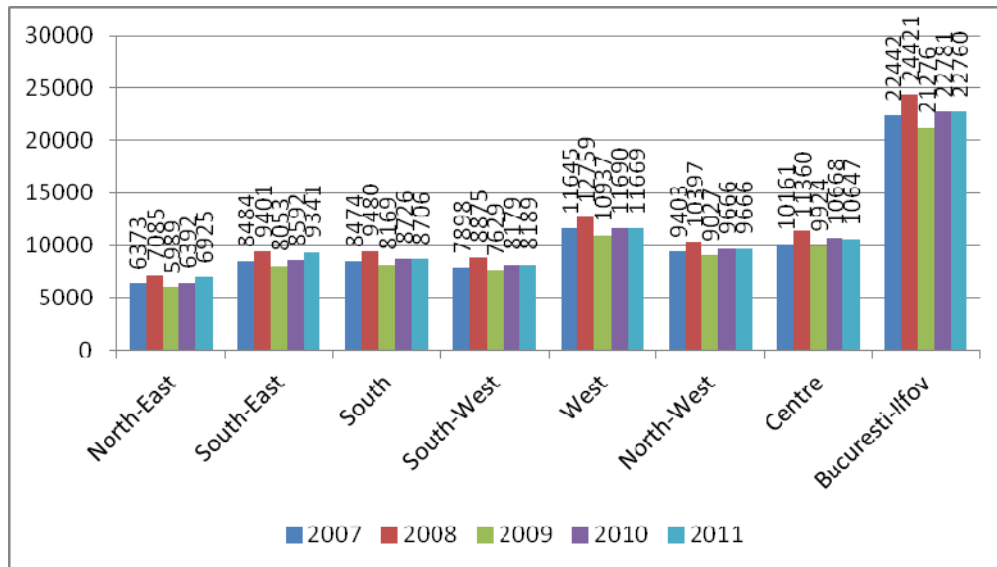


Figure 3. Evolution of GDP / capita by regions in 2007-2011 (EUR)

Source: calculations based on the data taken from www.cnp.ro and www.insse.ro

At the regional level there is a close relationship, inverse proportional between the GDP/capita and unemployment. For 2007 and 2008 there was a decrease in the unemployment rate, which continues the trend of the pre-accession period. The year 2009 represents a turning point in the economic crisis with a significant impact on both GDP and unemployment rate.

The highest values of unemployment rates are recorded in the South West, followed by the Central region, South Muntenia and North-East regions (Figure 4). These levels are coupled with the lowest GDP growth rates since 2007. Thus, the North – East region recorded the lowest level of GDP / capita in 2007 (6373 EUR) and even lower in 2009 (5989 EUR) and in 2011 remained in this position, at approx. 6925 EUR. Although recorded higher levels of GDP / capita compared to the North - East: in 2007 (7898 EUR), (7629 EUR) in 2009 and (8189 EUR) in 2011, the South – West region recorded the highest levels of unemployment throughout the period.

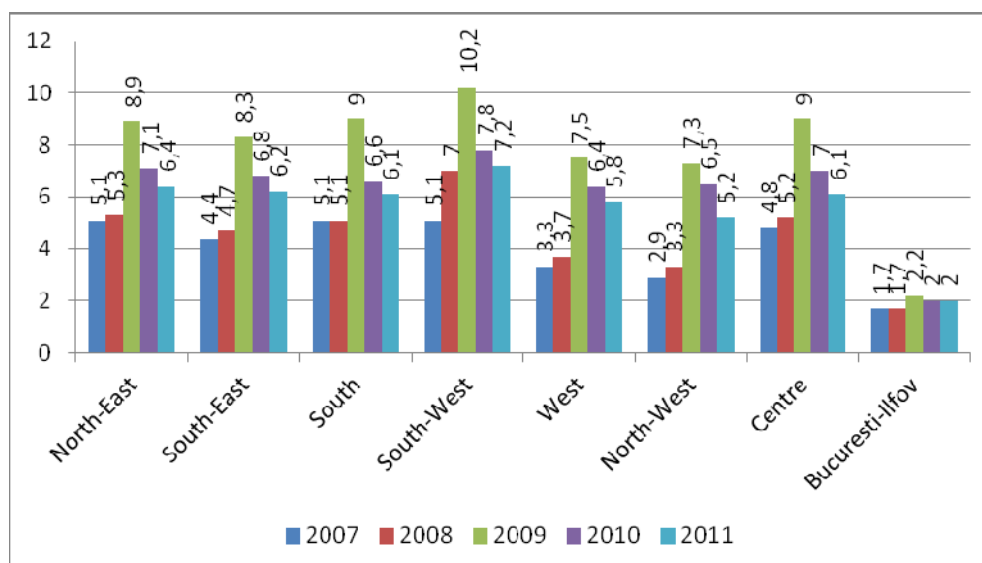


Figure 4. The evolution of regional unemployment rates in 2007-2011

Source: calculations based on the data taken from www.cnp.ro and www.insse.ro

CONCLUSIONS

The undertaken analysis has outlined a number of conclusions:

- The economic crisis has affected the private sector, meaning that a significant percentage of small and medium enterprises have reduced their activity;
- An immediate consequence of this situation was job loss of a large part of the population and, as a consequence, a rise in the unemployment rate;
- A large part of those who remained unemployed have chosen to migrate to other countries with the hope of obtaining a satisfactory income;
- Reduction in the productive private sector activity immediately reflected in the GDP which has experienced a downward trend;
- Overall, the economic crisis led to negative changes in the socio-economic situation of our country in the given period and therefore to a lower standard of living and quality of life for most people.

REFERENCES:

- [1]. **Marga, A.** (2011) *Emigration and Immigration*, [Online], Available at <http://ziua-dec-j-realitatea.net/eveniment/emigrare-si-imigrare--59222.html> [Accessed 2 November 2012]
- [2]. **National Council of SME's of Romania** (2012) *White Paper of SME's 2012*, [Online], Available at: http://www.immromania.ro/stiri_fisiere/carta-alba-a-imm-urilor-din-romania-2012-6062.pdf [Accessed 4 November 2012]
- [3]. **National Council of SME's of Romania** (2011) *White Paper of SME's 2011*

- [4]. **National Agency for Labour Employment** (2011) *Activity Report 2011*, [Online], Available at: <http://www.anofm.ro/files/Raport%20de%20activitate%20al%20ANOFM%20pentru%20anul%202011.pdf>, [Accessed 14 November 2012]
- [5]. **Romanian Institute for Evaluation and Strategy** (2012) *Rich and Poor. Perceptions and attitudes of the Romanian population on poverty and social inclusion*, March 2012, [Online], Available at: http://citynews.ro/_Files/NewsAttachments/2012/04/10/0000222736/3296_0000222736.pdf, [Accessed 14 November 2012]
- [6]. www.bnr.ro, [Accessed 07 October 2012]
- [7]. www.cnp.ro, [Accessed 07 October 2012]

THE QUANTIFIABLE COMPONENT OF QUALITY MANAGEMENT IN ENERGETIC INDUSTRY

CLAUDIA ISAC *

ABSTRACT: *The present paper intends to highlight aspects of the quality management characteristic to the energetic industry and particularly its distribution. The items listed are just a part of a more extensive research in this area and it focuses mainly on quantifiable items such as general and guaranteed performance indicators which prove that quality can be quantified and is not an unquantifiable component. The quality indicators presented demonstrate that the energetic system, including the quality management system can be included in the European trends and the alignment to these trends is compulsory considering the characteristics of the continuous product flow and of the non-stock items within this system.*

KEY WORDS: *quality management system; performance indicators; level of quality; the indicators of quality of electric energy; electric network.*

JEL CLASSIFICATION: *M 11; Q40.*

1. INTRODUCTION

The evolution of the concept of quality has been closely linked to industrial development, this being more prevalent in the last 20-30 years, when, the quality management systems may be considered 'modern weapons' and effective for the company management in the fight against competition.

Through quality management the managerial team seeks to meet expectations by offering products that comply with certain standards at competitive prices and by delivering them in effective terms. Inadequate quality of industrial production adversely affect the efficiency of the economic activity because it generates high costs with troubleshooting, it has the effect of losing of customers, orders, and even minimize the prestige of the company.

* *Assoc. Prof., Ph.D, University of Petroșani, Romania, isacclaudia@gmail.com*

The definition of total quality management (T.Q.M) can be synthesized via the following definitions given by many researchers in recent years (Zaire, 1991; Oakland, 1989; Pfan, 1989; Pugna, 2002; Soare & Colceru, 1995):

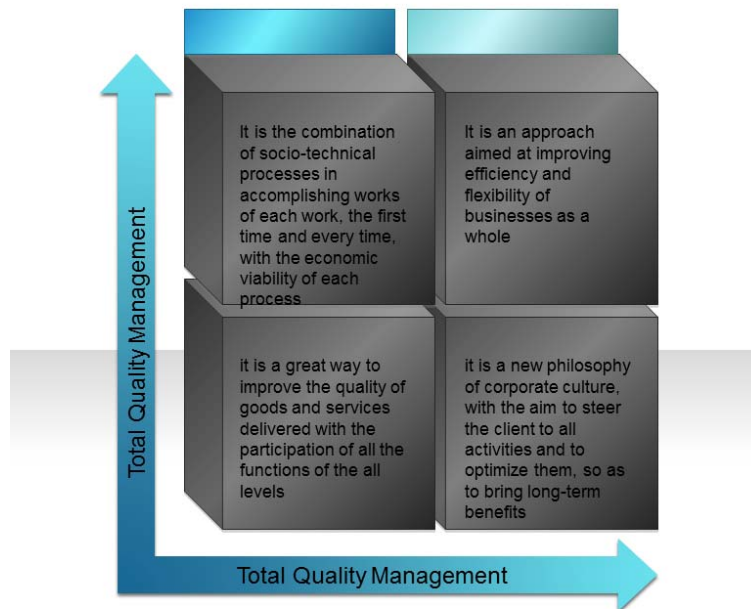


Figure 1. Definition of Total Quality Management

Total quality management is the concept of continuous improvement of products, processes and management at all stages and phases of existence and actions through the participation of all factors at all levels and in all functions of the organization within an organizational and improved operational system, characterized by clear relationships based on persuasion aimed at improving the quality, reliability and cost through innovation and by increasing efficiency and the effectiveness of business aimed at complying with the customer's requirements and exceeding his expectations (Popescu, 1998).

2. THE IMPORTANCE OF TOTAL QUALITY MANAGEMENT

The importance of quality has resulted in the emergence of total quality management as an all-embracing concept which provides a broad framework for action, leading to a process of continuous improvement by extending the requirements for quality of the products and processes and of the relationships, attitudes and beliefs, towards a new industrial culture, a culture of integration and quality. The main elements of quality models refer to:

- stakeholders. The results obtained during the economic processes are addressed not only to clients, even if they remain the most important category, but also to employees and to society. The total participation of employees is

considered to be an essential factor, and among the various causes of the success of these broad participatory activities, the importance of leadership exercised by top managers cannot be ignored.

- the factors and the results converted into a continuous process of learning and innovation, where knowing its own employees and the coordination of their activity is a key element;
- “management excellence”, i.e. defining the 'targets', represents the development of an optimal approach in order to determine quality policies and strategies. A systematization of quality strategies – strategies for adapting the quality of products and processes to the requirements of market segments, strategies of differentiation by quality of the offers of competitors, strategies for diversification through quality and strategies for continuous improvement of quality – enables to highlight the various opportunities the company has in order to implement a system of quality management.

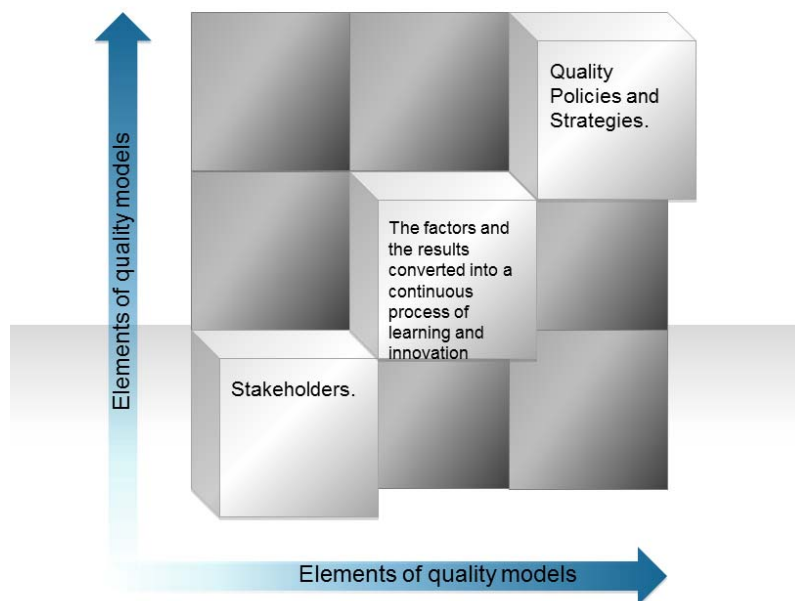


Figure 2. Elements of Quality Models

The energetic industry is a sensitive and complex area in the world economy, through its specific characteristic, given by the non-availability of finished product storage, by wide territorial spreading and last but not least by its importance for the development of the society. The restructuring of this industry and the introduction of competitive mechanisms in the production and supply of electric energy aims at increasing the level of satisfaction among consumers, which is obtained by two

coordinates, and increasing the quality of the service offered by lowering prices. Since the first coordinate is more difficult to quantify by consumers, and the quality of service can be proved after signing the contract, there is a risk that the reduction in price triggers a reduction in the quality of the service provided. For these reasons, in addition to supply licenses of electricity and heat and the components of a regulatory framework, in Romania, the National Authority for Regulations in the field of Energy has developed 'Performance standards for the supply of electricity at regulated rates' that includes quantitative indicators and qualitative levels for each activity included in the services related to electricity.

3. THE METHODOLOGY FOR THE CALCULATION OF INDICATORS OF PERFORMANCE

Performance standards intend to make providers ensure a minimum level of quality of the service supplied– thus establishing the guaranteed performance indicators - and ensure objective assessment of the performance of each supplier as well as making comparisons between them on the basis of general performance indicators. The most important *guaranteed performance indicators* for the supply of electricity consider the following aspects:

- according to the supply license, the supplier is obliged to meet any connection requirements of potential consumers, to ensure the measurement of the quantity of electricity sold to the consumer, to set up a system for recording, investigating and settling complaints etc.;
- granting price reductions for the electricity supplied with voltage deviations from standard limits;
- compensations for damages caused by the interruption of electricity supply;
- the commercial quality of the delivery service;
- supply continuity;
- the technical quality of electricity;
- setting up information desks or offices to serve consumers.

General performance indicators are designed to create an image of the quality of the service provided by each supplier, and the values specified by standards constitute a minimum limit of the quality of the service. These indicators refer to:

- the connection of consumers is reflected through two annual performance indicators:
- the number of requests of consumers to connection to the mains differs according to voltage levels and types of consumers;
- the number of requests for which the length of time for registering the connection request is less than 15, 30 or 60 days.

The measurement and management of electricity refers to the obligation of the supplier to measure the electricity sold in accordance with the type of rate selected by the consumer, to ensure the management of voltage measuring units and the installation, verification, maintenance, repair and the replacement of measurement units and low voltage electric meters;

- the measurement, billing and collecting the price of electricity supplied can be assessed by the following annual performance indicators: the number of complaints regarding invoicing by consumers, the number of complaints resolved within 10 working days, the number of complaints which proved to be justified, and the number of consumers disconnected/re-connected for non-payment of invoices;
- accidental interruption of electricity requires that the supplier ensures the arrival of the service teams within an hour in major cities, and within three hours in the rest of the towns and within 24 hours in rural areas.

The council for regulations in member countries of the European Union (CEER) has drawn up a report on the performance indicators of the delivery service, which fall into three categories: trade indicators, indicators for continuity in supply, voltage quality indicators. By imposing these standards CEER follows the convergence of the provisions within these standards so that the single market for electricity can be homogeneous in terms of the quality of the service provided.

In the energy sector there are various approaches of the term of energy quality. In the broad sense, the notion of energy quality can be interpreted as the quality of electricity supply service which has three aspects: the reliability of supply, the quality of energy supplied and a proper information circuit.

Although theoretically, specialized textbooks in the field of energy uses the term energy quality since the 1980s, a systemic approach of this notion was given a great importance in the last decade, both from managerial considerations due to the use of modern management methods in order to improve the quality of production and from technical point of view related to the existence of receivers sensitive to the changes in the quality of energy supply, the rapid expansion of digital telecommunications, computers and computer networks and last but not least the demonopolization of the energetic industry, which leads to competition among companies within the chain of production, transport and distribution of electricity, one of the competitive factors being its quality.

The emergence of quality systems and the total quality concept has changed the nature of the relationship with their providers, currently requiring an appropriate system of quality and even surveillance and a systemic assessment of subcontractors. That is why in the case of energy production plants, especially thermal power stations, the problem of quality of primary energetic resources is especially important due to its influence on reducing specific consumption, the heat loss, dust emissions directly proportional to the percentage of the fuel ash etc.

In terms of coal, its quality is given by the calorific value, by the ash content and moisture and in the case of pit coal it is given by the quality of the dressing/preparation process.

In order to improve the quality of coal, one should make changes in various ways both in the case of the producer and in the case of thermal power plants. Thus, if the producer, in addition to improving the technological process meant to exclude the interstices of sterile and any water infiltrations, seeks to avoid the contents of xilite, and if the beneficiary, the thermal power station, respectively makes a selective coal reception by correct sampling and by using a performing laboratory equipment, the

ignition of the stored coal¹ can be avoided, coal would be dried before grinding and during grinding the diameter of coal particles can be as small as possible.

Improving the quality of electricity is an obligation of the supplier, for which it must make an analysis of the indicators of the quality of electric power. The indicators of quality of electric energy defined by the specialized literature in the country can be found in the directive of the European Community Council no. 89/336/EC concerning in particular the primary indicators that depend on the electricity provider:

- the frequency deviation (Δf) – represents the difference between the real and the nominal value of frequency:

$$\Delta f = f_{nom} - f_r \quad (1)$$

where:

f_{nom} – is the standardized nominal frequency of 50 Hz;

f_r – is the frequency of the network at any given time [Hz].

- voltage deviation (ΔU) – is calculated as the difference between the real and the nominal value of the voltage:

$$\Delta U = U_r - U_{nom} \quad (2)$$

where:

U_{nom} - is the nominal value of voltage [kV];

U_r – is the real value of voltage [kV].

- the amplitude of voltage variation is the difference between the amplitude or the real value of the voltage up to and after a single variation of voltage. Single variation of the voltage is the variation of the real or maximum value of the voltage between two adjacent levels of actual or maximum values or between the extreme value and the level that is maintained for a certain amount of time;
- the voltage gap and the duration of the gap which means a slump or a short magnitude of the actual value of the voltage in a range between two consecutive contrary voltage shocks;
- the electric shock is a sudden and isolated change of voltage, generally linked to a disruption of current as, for example, during the development of an electric discharge;
- the voltage impulse, i.e. the sudden voltage variation, on a timescale of a few microseconds to tens of milliseconds, followed by restoring the initial voltage.

¹ In order to avoid auto-ignition of the coal that is being stocked it is necessary to obey by some regulations regarding the breakage, the manipulation and the stocking of coal so that the temperature of the aggregation/stock should be less than 45°C and the density of the entire stock should be between 1,05 and 1,15 t/m³.

In addition to these indicators, specialists use various *coefficients* for voltage fluctuations, non-symmetric coefficients of line voltage and circuit voltage, as well as of some auxiliary parameters regarding electrical power, such as the frequency of voltage variation, the time interval between two consecutive variations of voltage, the depth of the voltage gap or the duration of the voltage pulse.

The characteristic of the consumption within the electric network makes the assessment of the quality of electricity be carried out at large periods of time, usually one week, and checking the classification within the acceptable limits of the quality indicators has a probability of 95%.

Currently in Romania, not all equipment for the evaluation of quality indicators provide information in accordance with international standards, which is why there is the need of purchasing monitoring equipment for online tracking of voltage levels and disturbances, which re easy to use and to integrate into a centralized system as well as their reduced cost is reason enough for their implementation.

The use of equipment for tracking quality indicators of electricity and the processing of information on the basis of statistical algorithms in accordance with international standards enables the assessment of the level of disturbances determined by some consumers and affecting the quality of the electricity supplied to other consumers. Deviations from these indicators can affect the level of production, reducing the life of the equipment used and this may lead to rejections in the technological process.

The importance of the information obtained from the use of such equipment is greater if the quality of electricity from distribution networks may represent one of the important criteria in the selection of the supplier.

Damages caused by permanent deviations from the quality indicators of the electricity supplied to industrial consumers can be calculated as follows (Albert et al., 2001):

$$D = C_r - C_n \cdot p \cdot c_d + D_c + D_r \quad (3)$$

where:

D – is the amount of damage;

C_r - refers to production costs in terms of deviations from quality indicators;

C_n - represents production costs at quality indicators equal to the contracted ones;

C_N - means production costs at quality indicators equal to the contracted ones;

P – is the level of production in case of disturbances in the quality of indicators as opposed to contracted values;

C_d - is the life of equipment in conditions of deviations of quality indicators from the contracted values;

D_c – represents the damage caused by the reduction in product quality due to deviations from the agreed quality indicators and failure in delivering contracts;

D_r – refers to the damages caused by rejections in the production process.

Therefore, the reduction of the voltage at the input results in increased wear and tear on engines followed by a shorter life cycle, increased energy consumption, increased production costs.

4. CONCLUSIONS

The role of the Quality Management System is mainly to increase the level of performance for services of distribution and supply of electricity and for related services, a level which can be achieved through the continuous improvement of quality indicators. The benefits of approving the Quality Management System for this company are the following: increase our customers ' satisfaction - consumers of electricity; strengthening the partnership with suppliers of services and/or products; recognition of a powerful and competitive management; improving the image of the company in its relations with domestic partners as well as with external ones.

REFERENCES:

- [1]. **Albert, H.; Rășcanu, V.; Galovanov, N.** (2011) *Monitoring the Quality of Electricity at Consumers*, Energetica, nr. 11
- [2]. **Barrie, G.D.** (2003) *Managing Quality*, Lavoisier
- [3]. **Oakland, I.S.** (1989) *Total Quality Management Heinemann Professional*, UK
- [4]. **Pfan, L.D.** (1989) *TQM Gives Companies a Way to Enhance Position in Global Market Place*, Industrial Engineering
- [5]. **Popescu, D.** (1998) *TQM, a Concept of Continuous Improvement*, Revista Română de Informatică și Automatică, nr. 1,
- [6]. **Pugna, C.** (2002) *Conceptul evolutiv al managementului calității*, Tribuna Calității, nr. 11-12
- [7]. **Soare, I.; Colceru, Al.** (1995) *Organizarea și conducerea sistemelor calității la nivel de întreprindere*, Ed. Tribuna Economică, București
- [8]. **Zaire, M.; Simintiras, A.C.** (1991) *The Sales Link in the Customer – supplier Chain Productivity*
- [9]. <http://www.biblioteca-digitala.ase.ro/biblioteca/carte2.asp?id=78&idb>, [Accessed 12 october 2012]

THE MANNER FINANCING INFLUENCES THE PERFORMANCE OF EUROPEAN UNION HEALTH SYSTEMS – A CASE STUDY: ROMANIA

MARIANA MAN, BOGDAN RĂVAȘ*

ABSTRACT: *Within the European Union, Romania detains the last place as regards the share of health allocated incomes within the Gross Domestic Product (GDP). Romania which allocates a small percent of its GDP faces a chronic financing deficit that has as a result a low performance of the system and requires the searching of solutions capable to increase the incomes to be used for health purposes.*

Irrespective of the adopted financing system, we consider that providing the funds required by the health field has been and still is an issue of governmental policies.

KEY WORDS: *financing sources; incomes; expenditures; foundation; allocation; use.*

JEL CLASIFICATION: *I 15; M 41; H 75.*

1. FINANCING SOURCES OF HEALTH CARE IN ROMANIA

The mechanism of financing health represents the instrument of implementing sanitary policy with a view of meeting the demands for medical assistance of the population. The term 'financing' covers the following aspects: gathering incomes in order to pay health services, allocating funds to the providers of medical services (redistribution of money), and payment of medical services.

According to the Law of Health Social Insurances no. 145 dated July 24th, 1997, published by Monitorul Oficial no. 178 dated July 13th, 1997, insured persons contribute with a part of their gross incomes to the foundation of the health fund. The persons who are unemployed should declare their taxable incomes with a view to settle their health social insurance contribution. At the same time, the employer also contributes with a certain amount to the foundation of the fund. Initially, the contribution share represented 7 % in case of the employee and 7 % in case of the

* *Prof., Ph.D., University of Petroșani, Romania, man_mariana2011@yahoo.com
Lecturer, Ph.D., University of Petroșani, Romania, ravasbogdan@yahoo.com*

employer. Subsequently, the 7% share representing the contribution to health social insurances due by insured persons and stipulated by the Law of Health Social Insurances no. 145/1997 decreased to 6.5%. (Order no. 147/31.10.2002 published in Monitorul oficial no. 821 dated 31.11. 2002)

There are a lot of categories of financing health services: social insurance originating in compulsory contributions; public financing (centralized or governmental) originating in taxes and fees (the State budget); private insurance (optional, owing to individual payment of insurance fees); direct payment of services by the patients; co-payment.

Funds of health social insurances

The funds of health social insurances are the main source of health financing in Romania and represent over 90% of the public health expenditures. The foundation of the funds is done owing to the contributions of natural (employees, retirees, other natural persons) and juridical persons and are used in order to pay medicines and given medical services and to cover the administration and functioning expenditures, etc.

The Law of Health Social Insurances no. 145/24.07.1997 published by M. O. no. 178/31.07. 1997, stipulates that natural and juridical persons should pay monthly money contributions; it also settles the exceptions to the law given by the law makers. Let's notice that in case of retirees, unemployed persons, and those who work according to a labor convention, the contribution for the health social insurances is retained at the moment they receive their incomes.

The foundation of the National Unique Fund of Health Social Insurances according to Order no. 150 dated 31.10. 2002 which regards the organizing and functioning of the system of health social insurances is done through: contributions of natural and juridical persons; subsidies from the State budget; interests, donations, sponsorships, and other incomes, as the law stipulates.

Contributions are collected by the Insurances Bureaus in the unique account opened for the National Health Insurances Bureau (CNAS).

Natural persons (insured persons) are obliged to pay a money contribution for health insurances which represents a 6.5% share that applies upon: salary incomes that are taxable – monthly payment; incomes originated in activities deployed by persons who exert liberal professions or who are authorized according to the law to carry out independent activities – trimester payment; agriculture and fruit tree culture incomes established according to the incomes standards for the natural persons who are not employers and do not range into letter b) – trimester payment; unemployment aids and support allocations – monthly payment; incomes originated in ceding the use of goods, in dividends and interests and in other incomes that are taxable in case they do not belong to the category of incomes stipulated by letters a)-d) – yearly payment.

The employers to whom the insured persons deploy their activity are obliged to calculate and give to the insurances bureau a 7% contribution reported to their salary fund and due in order to provide the health of their employees; they are obliged to announce the insurances bureau about all their incomes changes that may occur.

The foreign citizens who contract facultative insurances contribute to the fund with a sum that is calculated by applying the 13.5% to the value of the country's two basic minimum gross salaries for a service package settled by the standard contract.

In case of the persons who benefit from insurances without paying the contribution (those who are under term military service; those who are in medical leave, in medical leave for pregnancy and post-pregnancy or in medical leave in order to take care of the ill child until he/she reaches 7 year old; those who are deprived of liberty or are in preventive arrest; those who benefit from unemployment aids or, according to the case, from support allocation), the sums afferent to the contributions for the health social insurances are paid by the State budget, the budget of the State social insurances, and the budget of unemployment insurances as the law stipulates.

The funds that were not used at the end of the year are reported during the next year and have the same destination. With a view of balancing the deficit budgets of the health insurances offices, each insurance office pays a 7% share of its monthly incomes in the account of CNAS.

In exceptional circumstances and when objectively motivated, in order to cover the deficit of the fund budget after the reserve fund has been spent, the incomes of the fund budget are supplemented with sums that are allocated from the State budget.

State budget financing

State budget further covers the following expenditures: current expenditures of sanitary units (organized as integral or partial public institutions); investment expenditures that regard the building of medical and sanitary units as well as certain endowments in highly performing medical equipments; diagnose activity, patients' curative and recovery activity; recovery of labor capacity; expenditures of the national medical institutions.

At the same time, under special circumstances, the State budget may allocate subsidies in order to supplement the funds of the National Health Insurances Bureau and of the funds of District Health Insurances Bureau.

Special health fund

Special health fund is founded separately from the State budget and originates in certain taxes perceived upon health damaging activities deployed by juridical persons which get incomes from advertising tobacco products, cigarettes, and alcoholic beverages (a 10% share of such incomes); also, juridical persons which get incomes from selling tobacco products, cigarettes, and alcoholic beverages contribute a 1% share of such incomes. At the same time, this fund also includes a series of incomes originated in the activity of sanitary units (a share of the incomes of pay policlinics, fees for medical examinations, etc.). The resources of this health special fund are put together with the resources of the State budget for the units totally financed out of budget resources.

Population's health expenditures

Population's health expenditures are those payments for medical services or medicines other than those that belong to the field of health social insurances; at the same time, population may contract facultative, private insurances.

To the same category of population's health expenditures also belongs "co-payment". It was introduced according to Law 220, dated November 28th, 2011, and represents the "payment of the money contribution of the insured person according to

the obligation stipulated by the law in order to benefit from the medical services belonging to the package of basic services of the national health social insurances.”

Co-payment’s introduction in 2011 is going to bring changes both at the level of the public sanitary system and at the level of the private one. The arguments that support and motivate such an act are the following ones: the potential increase of health incomes, discouragement of unnecessary health services demand, and consequently, the unmotivated use of some limited resources, efficiency in providing services owing to assuming responsibility for the patients’ interests and needs, improvement of equity through distributing the incomes gathered from those who have the necessary means towards those who do not possess financial resources in order to support the payment of sanitary services. Co-payments incomes may cover a part of the functioning costs of current programs according to which simple curative services are given. The counter-arguments which should be considered when employing co-payment regard: the covering of an extremely small part of the functioning costs of the public sanitary system, the boomerang effect that may determine a stagnant or even a descendant trend of collected incomes.

Private health insurances

Private health insurances represent another means of improving financing.

The advantages of the private health system are given by the wider access to specialized doctors and high class equipments as well as by the time spared owing to the decreased period of wait as compared with public medical services which are always agglomerated. The introduction of private health insurances has determined the increase of the efficiency of employing public funds due to the competition system and the decrease of certain important expenditures made by the public system such as the investments in the private sanitary environment.

The negative financial consequences of a precarious health represent an important risk which should be a major priority of a private insurances program (system). Under such circumstances, the practice of private health insurances should notice moral haphazard and adverse selection.

As regards the direct payment of health services by the population, one may infer that the individuals’ financial vulnerability is accordingly increased. Its consequence is the decrease of the access of small incomes population to health services, and, on a long term, the burdening of the public system due to the increase of the expenditures of secondary and tertiary services.

2. STRUCTURE AND DYNAMICS OF HEALTH FINANCING INCOMES

The structure analysis of health financing incomes correlated with population’s size and structure may determine another debate (Table no.1). The analysis of the structure shows the high share of health insurances contributions within health incomes ranging between 90.26% in 2008 and 93, 92% in 2009, and 76.21% in 2010. The sums received from the State budget and other administrations are under 10%, except in 2010.

Table 1. Structure of health financing incomes (%)

	2007	2008	2009	2010
TOTAL INCOMES, out of which:	100	100	100	100
I. INSURANCES CONTRIBUTIONS:	93.46	90.26	93.92	76.21
1. Employers' contributions	46.80	44.50	46.72	37.79
2. Insured persons' contributions	46.66	45.76	47.20	38.42
3. Non-fiscal incomes	0.46	0.46	0.10	0.05
VARIOUS INCOMES	0.02	0.00	0.01	0.02
IV. SUBSIDIES	6.08	9.28	5.97	23.74
SUBSIDIES FROM STATE BUDGET	1.54	2.08	2.28	20.96
SUBSIDIES FROM OTHER ADMINISTRATIONS, out of which:	4.55	7.19	3.70	2.78
Health insurances contributions for the persons who benefit from social aids	0.11	0.11	0.09	0.10
Sums allocated out of the Ministry's of Public Health own incomes	4.39	7.07	3.59	2.67

Source: Yearly reports of CNAS

A few questions are raised: *Are such circumstances normal? Did the Romanian State intervene with health subsidies in 2010 in order to cover the financing needs? To what extent is this structure of incomes going to determine the under financing of the sanitary field?*

In order to be able to answer such questions we are going to start from the premise that health services are provided for "all Romanian citizens residing in the country as well as for the foreign citizens and no - country individuals who have demanded and obtained the prolonging of the temporary residence right or who reside in Romania and give the evidence of paying their contribution to the fund; to them one should add the categories of persons who benefit from insurance without paying the contribution" (Law 95/2006 art. 211). According to the same law, the insured person pays a monthly money contribution for health insurances, except those insured persons that benefit from insurance without paying the contribution (as a percent share that is applied upon the incomes).

The natural and juridical persons for whom the insured persons work are obliged to calculate and pay to the fund a contribution whose percent is settled by the law upon the salary fund and due in order to provide the health of the unit's employees. The contributions shares both for insured persons and for employers are settled by the State budget. The contribution due by the persons for whom the payment of the contributions is done out of other sources is going to be paid to the fund as follows: by the State budget; by the budget of State social insurances in case of retirees; by the budget of unemployment insurances, in case of unemployed persons.

When considering the stipulations of the same law, one may observe that most beneficiaries of medical services should contribute, directly or indirectly, to the fund of health insurances. While all employed persons pay these contributions, in case of the other categories of persons for which the State budget and other budgets should contribute to the Unique National Health Insurances Fund, the paid sums are much under the required level.

In 2009, employed population represented 43.12 % and provided 93.92% of the incomes of the fund due to the contributions paid by the insured persons and their employers. Retired persons represented only 26.54% while the incomes from the State budget, either the direct ones or through the Health Ministry, represented only 5.87%. Considering that the State's consolidated budget should have paid the sum afferent to the contributions of retired persons, one may infer that a diminishing of health funds occurs. The under - financing of health is the result of certain circumstances that perpetuated during a long period of time (between 2005 and 2009).

In 2010, the share of the contribution of employed persons decreased to 76.21%, while the contributions paid from the State budget and other administrations increased (23.74%). While retired persons represented 25.68% of the population, unemployed persons 3.33% and the beneficiaries of social aids 1.23% (categories for which the fund should have received sums), the 23.74 percent of incomes is not sufficient. But the sums received as subsidies do not cover only the health insurances contributions that should be paid to the fund by the categories of persons stipulated by the law; they should also cover certain sums which are meant for the health programs directly financed by the Health Ministry.

In order to provide the funds required with a view of supplying proper health services, the increase of the sums the fund consists in is imperative. A means of increasing such sums may be the growth of the contribution share for health insurances. Such a fact would determine an increase of the fiscal burden which is going to influence economic activity; and although on a short term incomes would increase, on a long term they might diminish. The second manner of increasing health incomes is "co-payment", namely the additional payment made by the consumer of medical services; yet, this supporting method of financing sanitary system should not be seen as a miracle element as it only represents a small percent of the cost of medical services which is not covered by the basic insurance.

The most important source of founding the incomes required by the sanitary system is the Unique National Health Insurance Fund administered by the National Health Insurances Bureau. The income sources of the Unique National Health Insurance Fund are the following ones: contributions of natural persons (insured persons) and of juridical persons (employers); subsidies from the State budget and from other administrations; interests, donations, sponsorships, incomes from the exploitation of the patrimony of CNAS and of insurances bureaus as well as other incomes, according to the law.

The foundation of the incomes of health fund depends on three main factors: the number of contributors, the share of contribution, and the degree of funds collecting.

The analysis of Table no. 2 shows an increase of the incomes, from one year to another, except in 2009. Due to the fact that beginning with 2009, as a result of the economic crisis, the number of direct contributors (employees and employers) has decreased, a diminishing of the contribution of health social insurances can be noticed. The decrease of the number of contributors adds to the diminishing of the contribution share from 6% to 5.5%, namely 5.2%, a fact that undoubtedly determined the decrease of the incomes collected by the fund.

Table 2. Dynamics of health financing incomes according to categories of resources (%)

Indices	2008/2007	2009/2008	2010/2009
TOTAL INCOMES, out of which:	120.64	92.67	118.02
I. INSURANCES CONTRIBUTIONS:	116.51	96.43	95.76
1. Employers contributions	114.70	97.30	95.46
2. Employees contributions	118.33	95.59	96.06
3. non-fiscal incomes	121.71	20.32	50.52
VOLUNTEER TRANSFERS, Other than subsidies	130.81	47.49	263.94
IV. SUBSIDIES	183.97	59.68	468.98
SUBSIDIES FROM THE STATE BUDGET	163.54	101.26	1086.32
Subsidies received from FNUAS' budget	220.11	118.52	1482.71
SUBSIDIES FROM OTHER ADMINISTRATIONS	190.88	47.63	88.82
Health insurances contributions for the persons who benefit from social aids	117.35	80.08	132.60
Sums allocated out of the Public Health Ministry's own funds	194.06	47.08	87.75

Source: Yearly reports of CNAS

One may notice an important increase of the State budget subsidies in 2010 as compared with 2009; a fact suggesting that in order to provide the stability of the system of Health Insurances State's intervening was required.

3. STRUCTURE AND DYNAMICS OF HEALTH EXPENDITURES

As to the structure of health expenditures (Table 3.), one may notice the tremendous share (about 95%) of health expenses, namely of medical services, medicines and medical devices providing. No significant changes occur from year to year.

The largest share within health expenditures is detained by the Medical services in hospital type sanitary units (between 45.21% in 2008 and 48.76% in 2006). Such a fact is quite normal due to the diversity and complexity of the insured services. Worldwide, the share of hospital services expenditures ranges between 40 – 60%, Romania being included within this margin.

The next shares are detained by pharmaceutical products expenditures, specific sanitary stuff, and medical devices (28 - 31%) and by ambulatory medical services (shares ranging between 10.4% and 15.75%).

If one takes into account the fact that the providing of population health includes three components – prevention, treatment, and recovery – it means that most funds are spent in order to treat; prevention and recovery are neglected.

Accordingly, in 2008, when the “Program of evaluating population's health” was ended, one could see an increase of the share of ambulatory medical assistance expenditures (family doctors and polyclinics) together with a decrease of the share of hospital expenditures. Such facts show that a lot of persons who were aware of the

existence of certain illnesses went to their family doctor or to the specialist in order to cure these illnesses.

Table 3. Structure of health expenditures during the period 2006-2010 (%)

Index	2006	2007	2008	2009	2010
Total expenditures	100	100	100	100	100
I. Health expenditures	95.26	95.56	95.40	93.96	94.07
a) Medical stuff and services:	93.62	93.44	93.94	92.64	91.99
<i>Pharmaceutical products, specific sanitary stuff, and medical devices out of which:</i>	31.57	31.19	29.43	28.02	29.04
Medicines with or without personal contribution	19.73	20.34	18.60	14.28	16.94
Medicines and materials for high risk chronic diseases employed by curative national programs	7.67	7.11	7.65	9.89	8.28
Hem dialysis and peritoneal dialysis medical services	3.67	3.09	2.51	3.22	3.33
Medical devices and equipments	0.51	0.65	0.67	0.62	0.50
<i>Ambulatory medical services:</i>	10.40	12.78	15.5	12.39	10.49
Primary medical assistance	4.54	5.81	8.76	7.24	6.29
Medical assistance for clinical and para - clinical specializations	4.77	5.87	5.97	4.23	3.45
Other categories of medical assistance	1.09	1.10	1.02	0.92	0.76
<i>Emergency services</i>	2.84	2.87	3.34	4.05	3.73
<i>Medical services in hospital type sanitary units:</i>	48.76	46.53	45.21	47.93	48.51
General hospitals	48.18	46.09	44.79	47.51	48.13
Other hospital type units (recovery)	0.57	0.44	0.42	0.43	0.37
<i>Medical care at home</i>	0.04	0.08	0.12	0.12	0.16
b) Fund administration expenditures:	1.64	2.12	1.50	1.24	1.39
Medical service given in a state member of the European Union	0.00	0.00	0.09	0.12	0.06
II. Insurances and Social Assistance Expenditures	4.74	4.44	4.60	6.04	5.93

Source: CNAS's reports during 2007-2010

As to the share of recovery expenditures, they represent an amount under 1%. Consequently, recovery is the responsibility of the patient (insured persons), financially speaking, as the health fund insignificantly contributes. We consider that such circumstances are not normal due to the fact that health providing also includes this component having significant long term effects on population's health.

Public health expenditures are meant for the maintaining and functioning of sanitary institutions (hospitals, dispensaries, polyclinics, etc.) as well as for financing certain illnesses preventing programs, accident avoiding programs, and sanitary education. The report of health expenditures in Romania, according to the National Health Insurances Bureau (CNAS) is displayed by Table 4.

Health care financial resources are used both in order to make investments in this field (building of sanitary units, their endowment with modern medical equipments, devices, and instruments, adequate transport means) and especially in order to provide current maintaining and normal functioning of the hospitals,

dispensaries (salaries and other rights of the employees, sanitary stuff, medicines, food for patients, repairs, etc.).

Table 4. Health expenditures during the period 2006 – 2010 (thousand lei)

Index	2006	2007	2008	2009	2010
Total expenditures, out of which:	10170503.1	12859102.8	16636256	15274758	17507384
I. Health expenditures, out of which:	9688279.0	12288469.3	15870567	14351730	16469661
a) Medical stuff and services:	9521157.5	12015375.5	15628563	14150624	16104663
<i>Pharmaceutical products, specific sanitary stuff, and medical devices out of which:</i>					
Pharmaceutical products, specific sanitary stuff, and medical devices out of which:	3210979.5	4010708.9	4896301	4279614	5084210
Medicines with or without personal contribution	2006519.9	2616142.9	3094919	2181869	2965416
Medicines and materials for high risk chronic diseases employed by curative national programs	779774.1	913745.4	1272527	1511241	1448987
Hem dialysis and peritoneal dialysis medical services	373077.1	397164.8	417979	491286	582725
Medical devices and equipments	51608.4	83655.8	110876	95218	87083
<i>Ambulatory medical services:</i>	1057925.8	1642870.6	2620102	1892435	1836807
Primary medical assistance	462035.7	746726.2	1456956	1105264	1100946
Medical assistance for clinical and para-clinical specializations	484689.9	754262.2	993847	646689	603477
Other categories of medical assistance	111200.3	141882.2	169299	140482	132384
<i>Pre-hospital emergency services and sanitary transport</i>	289062.6	368620.6	556083	618756	653718
<i>Medical services in hospital type sanitary units:</i>	4958674.7	5982948.1	7522036	7321761	8491999
General hospitals	4900573.9	5926597.4	7452125	7256536	8427017
Other hospital type units	58100.8	56350.7	69912	65226	64982
<i>Medical care at home</i>	4514.9	10172.3	19279	19080	28144
b) Fund administration expenditures, out of which :	167121.5	273093.8	249972	189692	242854
Medical service given in a state member of the European Union	200.0	54.9	14761	18977	9785
II. Insurances and Social Assistance Expenditures	482224.1	570633.6	765690	923028	1037723

Source: CNAS's reports during 2007-2010

The amounts allocated for the various categories of expenditures and their evolution depend on sanitary policy and on the evolution of the prices of medicines and medical services. The dynamic analysis of health expenditures shows that they have an ascendant tendency from year to year, except in 2009 when a 8.18% decrease was registered.

The evolution tendency of sanitary field expenditures is the result of the evolution of the expenditures made by hospital type sanitary units (hospitals) and by the expenditures with pharmaceutical products, specific sanitary stuff, and medical devices.

Significant deviations from the average tendency are displayed by *Ambulatory medical services* which during the period 2006-2008 increased over the average level (155.29% as compared with 126.44% in 2007, namely 159.48% as compared with

129.37% in 2008); afterwards, during the period 2008-2010 their decreasing tendency was higher than the average (72.23% as compared with 91.82% in 2009, namely 97.06% as compared with 114.62% in 2010). These significant differences are explained owing to the fact that during the 2nd semester of 2007 and the 1st semester of 2008 the “Program of evaluating population’s health” was carried on; the program determined the supplementing of the funds allocated for ambulatory medical assistance. Another possible explanation of these differences is given by the changes of the State’s sanitary policy concerning the discouraging of giving hospital medical care when this could be done in ambulatory.

Table 5. Dynamics of health expenditures during the period 2006-2010 (%)

Index	2007/2006	2008/2007	2009/2008	2010/2009
Total expenditures, out of which:	126.44	129.37	91.82	114.62
I. Health expenditures	126.84	129.15	90.43	114.76
a) Medical stuff and services:	126.20	130.07	90.54	113.81
<i>Pharmaceutical products, specific sanitary stuff, and medical devices out of which:</i>	124.91	122.08	87.41	118.80
<i>Ambulatory medical services:</i>	155.29	159.48	72.23	97.06
<i>Pre-hospital emergency services and sanitary transport</i>	127.52	150.86	111.27	105.65
<i>Medical services in hospital type sanitary units</i>	120.66	125.72	97.34	115.98
b) Fund administration expenditures	163.41	91.53	75.89	128.03
Medical service given in a state member of the European Union	27.45	26887.07	128.56	51.56
II. Insurances and Social Assistance Expenditures	118.33	134.18	120.55	112.43

Source: CNAS's reports during 2007-2010

Another case displaying major differences is that of the pre-hospital emergency services and of sanitary transport; the circumstances can be explained owing to the fact that in case patients faced malfunctioning of ambulatory medical services, they resorted to emergency medical services.

A peculiar case is the one of the “Medical services given in a state member of the European Union” which witnessed a spectacular increase in 2008 as compared with 2007 (268.87 times). Such an increase is due to the fact that Romania as an EU member has started to discount medical services given abroad to insured persons (E112 form). In 2008 the number of those who benefitted from such services increased.

4. CONCLUSION

A general conclusion of the research is that, irrespective of the financing system adopted and of the development level of the country, sanitary policies in the field of health try to settle a fundamental issue: the balance between the financial resources allocated to health and the continually increasing expenditures of the sanitary field.

As the research shows, the performance of the system of health care depends on the level of the incomes allocated to the system is perfectly valid due to the fact that the countries which allocate a higher percent of their GDP, through their sanitary policy, have acquired a performing system shown by the decrease of the following indices: “life hope at birth” or “rate of child mortality”.

Romania which allocates a small percent of its GDP confronts with a chronic deficit of financing that determines a decreased performance of the system and the search of solutions capable to increase the incomes meant for health.

One of the variants is given by the “private health insurances” in case we consider the fact that Romania is placed under the level of the other countries as regards the share of the private insurances funds in the total amounts allocated for health (18% as compared with 21% in France, 22% in Germany, 26% in Poland). If one notices the decreased level of the population’s incomes then private insurances are only a palliative of the growth of health financing resources.

A second variant of increasing the incomes meant for health is given by “co-payment”, namely the additional payment made by the consumer of medical services; yet, this type of financing sanitary system should not be seen as a salutary element as it only represents a small percent of the cost of medical services which is not covered by the basic insurance.

The 2011 introduction of co-payment is going to bring changes both at the level of the public sanitary system and at the level of the private one. The arguments that support and motivate the co-payment are the following ones: potential increase of the incomes to be used by the health system, discouraging unnecessary demands of health services and, accordingly, the unmotivated use of limited resources, efficiency of services supply through assumed responsibility for the patients’ interests and needs, improvement of equity through distributing the incomes obtained from those who possess the means towards those who do not possess financial resources in order to support their demand for health services. Co-payments incomes may cover a part of the functioning costs of current programs according to which simple curing services are given. The counter-arguments that should be noticed when employing co-payment regard the covering of a very small part of the functioning costs of the public sanitary system, the boomerang effect according to which collected incomes might not grow – on the contrary, they might diminish. In fact, co-payment represents a masked self financing scheme of the health system and an increase of fiscality.

REFERENCES:

- [1]. Arrow, K. (2004) *Uncertainty and the welfare economics of medical care*, Bulletin of the World Health Organization 2004:82(2), <http://www.who.int/bulletin/volumes/82/2/PHCBP.pdf>
- [2]. Barro, R.J.; Sala-I-Martin, X. (2003) *Economic Growth*, Mc.Graw-Hill, New York
- [3]. Călin, O.; Man, M.; Nedelcu, M. (2008) *Contabilitate Managerială*, Didactica și Pedagogică Publishing House, Bucharest
- [4]. Cucui, I.; Man, M. (2004) *Costurile și controlul de gestiune*, Economică Publishing House, Bucharest

-
- [5]. **Grossman, M.** (1972) *The Demand For Health: A Theoretical And Empirical Investigation*, National Bureau of Economic Research, New York
- [6]. **Husain, M.J.** (2009) *Contribution of health to economic development: A survey and overview*, Economics - The Open Access, Open Assessment E-Journal, Discussion Paper nr. 40
- [7]. **López-Casasnovas, G.; Rivera, B.; Currais, L.** (2005) *Health and economic growth – Findings and policy implications*, MIT Press, London, England
- [8]. **Măcriș, M.** (2009) *Contabilitatea Instituțiilor Publice*, Universitas Publishing House, Petroșani
- [9]. **Măcriș, M.** (2011) *Bazele Economiei*, Universitas Publishing House, Petroșani,
- [10]. **Mincă, D.G.; Marcu, M.G.** (2004) *Sănătate publică și management sanitar*, Carol Davila University Publishing House, Bucharest
- [11]. **Sandier, S.; Paris, V.; Polton, D.** (2004) *Health Care Systems in Transition*, WHO, Copenhagen, Vol. 6, No. 2
- [12]. **Schultz, T.W.** (1993) *The economics of being poor*, Blackwell, London
- [13]. **Tănăsescu, P.** (2001) *Managementul financiar al activității sanitare*, Tribuna Economică Publishing House
- [14]. **Tulchinsky, T.; Varavikova, E.** (2003) *Noua sănătate publică*, Ulysse Publishing House, Chișinău
- [15]. **Vlădescu, C.** (2004) *Sănătate publică și management sanitar*, Cartea Universitară Publishing House, București,
- [16]. **Vulcu, L.** (2002) *Tratat de sănătate publică*, Constant Publishing House, Sibiu
- [17]. **Young, D.W.** (2003) *Management accounting in health care organizations*, Ed. Yossey-Bass, San Francisco
- [18]. *Le Financement Des Systèmes De Sante- Le chemin vers une couverture universelle*, Organisation mondiale de la Santé, ISBN 978-92-4-068481-2 (version électronique)
- [19]. *Legea nr 145/1997, Legea Asigurărilor Sociale de Sănătate*, Monitorul Oficial al României, nr 178/ 31 iulie 1997
- [20]. *Legea nr 95/2006 privind reforma în domeniul sănătății*, Monitorul oficial, nr 372/ 28 aprilie 2006
- [21]. *Legea nr 220/2011 pentru modificarea și completarea legii nr. 95/2006 privind reforma în domeniul sănătății*, Monitorul oficial, nr 851/ 30 noiembrie 2011
- [22]. *Raportul Casei Naționale de sănătate 2006-2010* www.cnas.ro/pdf/Prezentare_Raport_2006v1.ppt
- [23]. *Raport privind dezvoltarea umană*, 2011, PNUD
- [24]. *The NHS Constitution, the NHS belongs to all*, England, 2010
- [25]. <http://www.who.int/research/en/>

THE COST OF POPULATION AGING ON THE PUBLIC PENSION SYSTEM IN ROMANIA

DANIEL NICOLAE MILITARU *

ABSTRACT: *This paper analyses the interrelationships between population aging and the public pension system in Romania and the economic impact of population aging on public finances. The pension reform is the only solution for the pension systems to deal with the challenges of demographic change. The paper analyses the main challenges of the pension systems at the European level: population ageing, the reduction of the active population, the consequences of the economic and financial crisis, the trends in the labour market, in order to deliver viable solutions to social decision makers for creating a suitable and sustainable pension system that should allow citizens to maintain a certain standard of living after retirement. Also, due to the structural changes that have occurred, mainly the transition to funded pension systems that involve for individuals to take more risks, we will analyse if this gradual transition to the private pension systems is the key to the sustainability of pension systems in Europe.*

KEY WORDS: *public pension system; population aging pension reform; demographic crisis.*

JEL CLASSIFICATION: *H55; H75.*

1. INTRODUCTION

Considering the ample debate at EU level about the impact of population aging on pension systems in Europe, this paper focuses its attention on the demographic trends with major impact on pension systems, namely, on population aging, low fertility rates, mortality and the increase in longevity. The analysis is made both at global and national levels and it is based on data supplied by the National Institute of Statistics, Eurostat and the World Bank.

* *Ph.D. Student , University of Craiova, Romania, militarunicolaedaniel@yahoo.com*

The methodology used in this paper consists of analyzing data correlation in order to assess the impact of aging on public pension system in Romania and to offer solutions for ensuring long-term sustainability of the pension system.

Starting from the premise that pension systems are designed to ensure the financial security of people reached retirement age, this paper assesses and analyses in detail the main lines of action to reform the public pension system. Although this aging process was envisaged long ago, Romania has failed to reform the public pension system in order to cope with the demographic trends recorded worldwide and especially in the European Union.

If the Romanian government will not respond with appropriate long term reforms of the registered pension system inefficiencies in the social security budget the fiscal situation will further aggravate and country's growth prospects will slow down by more creating a pressure on public finances.

Considering that social policies are expected to remain unchanged, population aging can slow down GDP growth per capita by increasing public support for seniors through grant pensions and other social benefits.

Social policy priorities, the content and the effects of these actions must be consistent with the national circumstances and must have as main target reducing the imbalances in the public pension system and the necessity to ensure its sustainability.

2. THE ANALYSIS

The public pension system in our country is a redistributive one and it is affected by the low level of labor employment and therefore by the low level of contributions to the social insurance budget.

From an economic point of view aging population recorded a number of costs at both microeconomic and macroeconomic and makes economists to be more interested in quantifying the costs of aging on public finances.

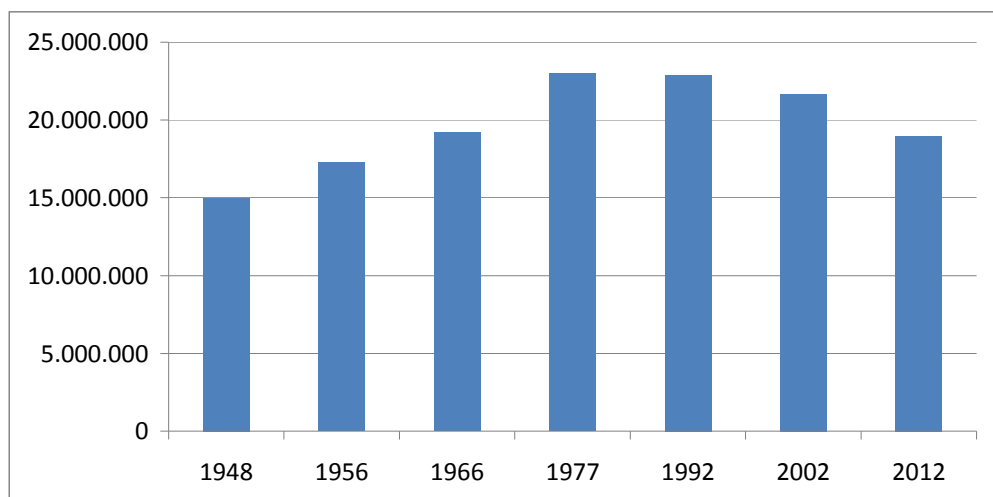
Considering the fact that pensions are the main source of income for the elderly, the redistribution principle, on which the public pension system is based, finds itself in the position of not being able to fulfill the inter generational promise, namely that young people who work pay for current retirees.

Retirement at a more advanced age can be a viable solution to this inter generation problem and may increase future levels of replacement rates. Otherwise we can consider the raise of the retirement age is a necessity.

Population aging correlated to increased longevity will have negative economic consequences on public finances and will reduce growth potential at the same time. However correlated with the current economic and financial crisis, it prevents pension systems to fulfill intergenerational promises.

Starting from the idea that current retirees are entitled to a decent living, the reform, that our pension system must go through, focuses on changing Romanians' mentality, enhancing their economic education in the spirit of saving for themselves and for their future to the sole purpose of being able to make a decent living after reaching retirement age.

Romania's stable population reached 19,043,767 people in 2012 according to the latest data provided by the National Institute of Statistics, reaching the lowest recorded level in our country in the last 40 years.



Source: Data provided by the National Institute of Statistics

Figure 1. Stable population in Romania during 1948-2012

Romania's active population is at present of 9,759,000 persons, of which 9,019,000 are people employed in the workforce and the remaining 740,000 are unemployed, which means that we have a dependency ratio of inactive persons per 1000 % of 1368 active people. In the first quarter of 2012 the active population aged 15-64 years recorded an employment rate of 58.0%.

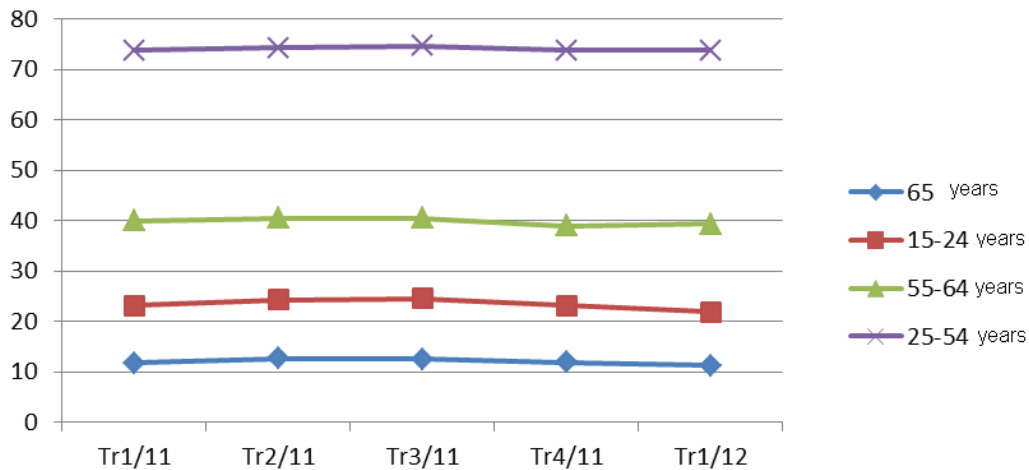
In Romania there are 7.087 million of households where 18.878 million people are established, meaning a rate of 99.1% of the population. Thus, each household shelters 2.66 people (266 people from 100 households). The remaining 165,000 were registered in collective living spaces or are homeless people.

In contrast, the lowest share of households in urban areas, are at Giurgiu county (28.4%), Dambovița (30.7%) and Teleorman (32.1%). Average household size is smaller in urban areas (2.53 persons / household) than in rural areas (2.83 persons / household) (journal. ro.).

These demographic changes will have a devastating impact on public finances in the next period if the current social protection policies are not reformed so as to reflect these demographic changes. The share of pension expenditure in GDP may exceed 16% in 2060, which places Romania among the countries with the highest spending on pensions in GDP in the European Union.

The impact of aging on public pension system has the effect of increasing state public pension expenditure to 16% by 2060. The decline in economic growth, the serious lack of vital financial resources in the national budget, the weak financial

stability, population aging and low employment intensifies the urgent need to adjust retirement practices and security pension rights.



Source: Data provided by the National Institute of Statistics

Figure 2. The evolution of employment rate (population aged over 15)

Romania's population continues to grow along with increasing life expectancy, Romania's population will reach 16 millions with a dependency ratio of those assets that support will fall to 20.8 million people in 2020 to 18.1 million in 2050 and 16,9 million in 2060, Romania is the fourth country in the European Union dramatic population declines (-21%) after Bulgaria (-28.2%), Letonia (-25.9%) and Lituania (-24, 3%).

Table. 1 Fertility rates in Romania during 1980 -2060

Year	Fertility rate
1980	2,44
1990	1,84
2000	1,39
2006	1,31
2008	1,32
2010	1,33
2020	1,37
2030	1,41
2040	1,44
2050	1,48
2060	1,52

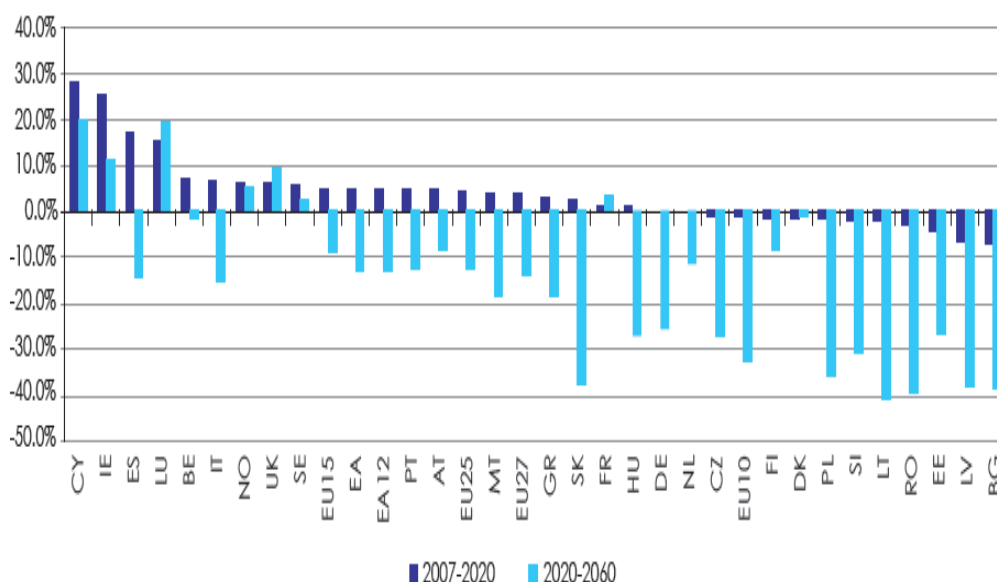
Source: Data provided by the Eurostat and Europop 2008

We must consider two directions that need to be analysed in order to solve the problem of aging, meaning the decreasing fertility rates and the increasing in longevity. The decreasing fertility rate is the main factor of aging resulting in a small number of births and an increasing number of elderly.

Beginning with the objective of pension systems which is to provide some financial security for older people, governments need to better manage these demographic trends in order to achieve this goal because they can cause loss of equity and efficiency in the system.

Population aging has a strong negative effect on economic growth according to the GDP forecast models made by Malmberg and Lindh who demonstrated that aging has a negative correlation with GDP growth per capita (Malmberg & Lindh, 2004).

This means that in countries where the aging process is very advanced, there will automatically be recorded higher costs with the pensions for the elderly, by diminishing the available resources at the same time with reducing the main factor of economic growth, labor productivity.



Source: http://ec.europa.eu/economy_finance/publications/publication13782_en.pdf

Figure 3. Percentage change of persons aged 15 to 64 years

The aging structure of the population in our society can influence consumption and the savings by the fact that people over the age of 60 record minus savings as they use everything they have to fill the gap in their lower pensions. The more generous the pension systems is, by providing a greater benefit compared to the contributions paid, the more attractive it will be to young people encouraging them to work until retirement age, while the elderly can afford to accumulate wealth (Mirescu, 2011).

3. CONCLUSIONS

The goal of pensions policy is to build a financially sustainable system because only in this way it can be achieved, meaning by providing adequate income to pensioners, ensuring them a decent living and economic independence.

In order to succeed, there must be a balance between the activities carried out during working age and the inactive retirement years, and also a balance regarding the participation in private pension systems.

Among the measures placed on the public agenda of the European social actors we can include:

- Encouraging people who want to stay active and reached retirement age by extending their professional active life;
- Providing certain tax facilities to employers who maintain in employment persons who have reached retirement age;
- The implementation of the necessary measures in order to ensure that citizens have access to a higher lifelong education and training;
- Through the social policy reforms there must be reduced or eliminate the possibility of public pension systems' taxpayers to take advantage of unjustified early retirement schemes or any other way of early leaving the employment pool;
- All measures of social policy reform must have as starting point the adjustment of pension age to citizens' life expectancy;
- The state has to promote the development of additional saving systems through which citizens can get a pension supplement to the public pension.

The main direction of the reforms implemented in our country, the changing of the retirement age by increasing it, has reduced for the moment the impact generated by population aging on its own pension system, but in Europe, it is expected to continue the increase in spending also generated by the demographic phenomenon, with up to 5 percent of GDP.

The dynamics of capital accumulation and the sustainability of the pension system depends largely on the openness of the economy. The European economies are not isolated from each other nor of the world.

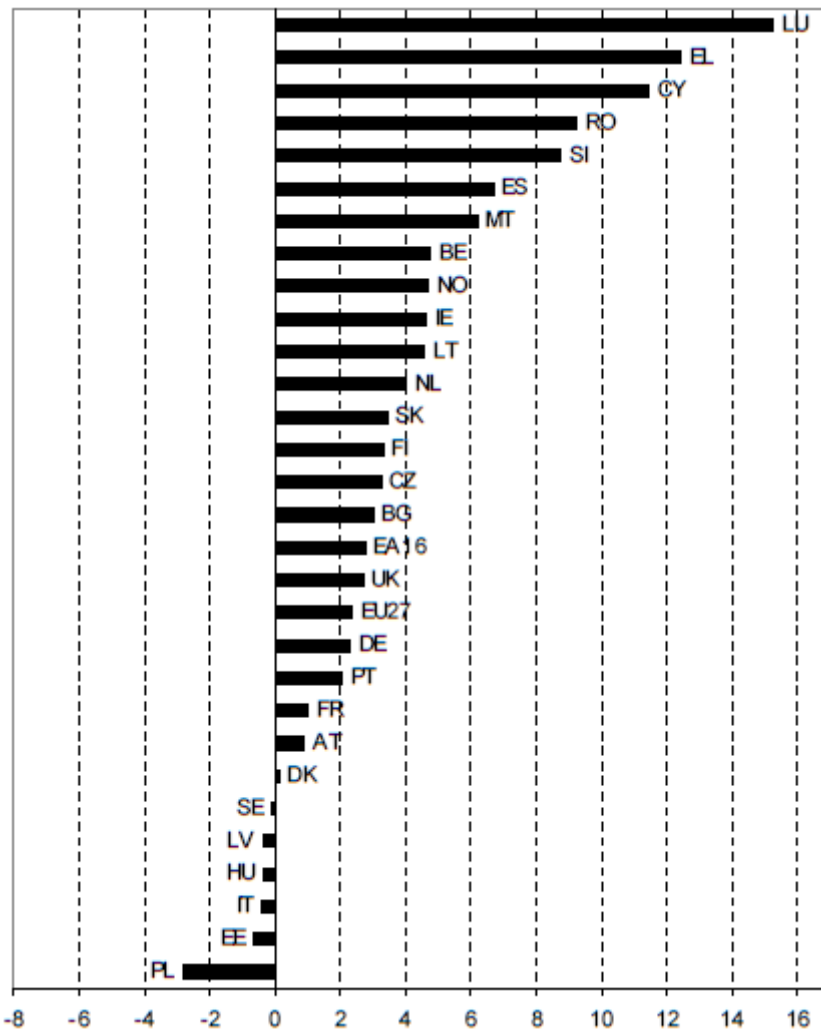
Therefore, even slight differences in their pension schemes, coupled with a severe aging population will inevitably increase the financial flows between these countries and will bring modifications regarding the accumulation of the fixed capital.

Thus the nature of the financial environment will play a crucial role for the European economies in the process of adapting to these phenomena and implementing their reforms. So, an increased regulation of the financial markets is also a necessity.

I believe that to deal with this situation we should consider the changes in the consumption habits for all ages and to give more importance to cover the essential costs for a decent life. It seems that population decline is a greater danger to the world economy than the current recession.

So, it is necessary to develop and implement regulatory strategies to support pensions on long-term.

I think that in this context we need to give a special importance to the supervision and coordination of pension policies across Europe.



Source: http://ec.europa.eu/economy_finance/publications/publication13782_en.pdf

Figure 4. Expenditures for pensions payment in GDP (%)

In addition to these measures, older workers should be given other opportunities in the labor market:

- The access to specialized services of placement on labor market for older people;
- The state has to create and offer social benefits and tax systems that should facilitate the employment of older workforce;
- Combating age discrimination;
- Ensuring income security in old age;

- Promoting an active life in society by helping the elderly to participate to society development;
- As a result of demographic changes and the costs generated by them, there is necessary a further reform of the pension system by raising the retirement age, by giving up the possibility of early retirement, by providing tax and social facilities to employers who keep and hire older people, through the development of labor market insertion programs for this category of people and by promoting the concepts of active life and active aging through programs of lifelong learning and retraining leading to a late withdrawal from work.

ACKNOWLEDGMENT:

”This work was partially supported by the strategic grant POSDRU/CPP107/DMI1.5/S/78421, Project ID 78421 (2010), co-financed by the European Social Fund – Investing in People, within the Sectoral Operational Programme Human resources Development 2007 - 2013”

REFERENCES:

- [1]. **Mirescu, D.D.** (2011) *Decision making on pension system reform in Romania*, Bucharest
- [2]. *Green Paper Towards systems adequate, sustainable and safe*, Bruxelles, 2010
- [3]. *White Paper agenda for adequate, safe and viable*, Bruxelles, 2012
- [4]. www.insse.ro
- [5]. www.ec.europa.eu/eurostat
- [6]. www.pensiileprivate.ro
- [7]. www.zf.ro
- [8]. www.money.ro
- [9]. www.jurnalul.ro

REGIONAL DEVELOPMENT vs. INNOVATION – THE MAIN ENGINE OF ECONOMIC GROWTH

ELENA MĂDĂLINA OPRITĂSCU *

ABSTRACT: *Regional development and innovation are vital processes for social and economic growth of Europe. In the current period, deeply affected by the financial and economic crisis with major demographic changes, intense global competition, many budgetary restrictions, the competitiveness in Europe as well as its capacity to create new jobs, briefly, our life standard depends on its ability of innovation in products, services and commercial and social processes. This is the reason why innovation has been placed at the heart of Europe Strategy 2020. Furthermore, health, energy supply, major climate changes, environment with its limited resources, and the population aging are major social challenges that are approached by innovation. Starting from all these aspects, we are facing now the following questions: on what shall be based the next competitiveness in Europe? How will we generate a new growth and how will we re-launch Europe's economy?*

KEY WORDS: *economic growth; regional development; innovation; research and development.*

JEL CLASSIFICATION: *G01; R11.*

1. INTRODUCTION

The European Union represents one of the most prosperous economic areas of the world, but the differences between the Member States are striking. In other words, not all the Europeans have the same advantages and successful opportunities to face the challenges of globalization phenomenon. Everything depends on the area where they live, if there are in a prosperous region or a poorer one, in a dynamic or in a declining one, in the city or at the country, in the periphery of the Union or in one of his main centres. In order to increase productivity, the European Union needs more innovation and more investment in education, training and lifelong learning. The access to new jobs, business competitiveness and investment in new technologies for electronics economy is the responsibility of economic agents and national and regional

* *Ph.D. Candidate, University of Craiova, Romania, opritescumadalina@yahoo.com*

authorities. In this regard, the Member States implement a European regional policy since a single region of ten reached the Europe 2020 target of investing 3% of GDP in research and development.

In order to achieve the objective of sustainable development, the economy of the European Union must become dynamic, based on knowledge and growth oriented. Europe must also react more quickly to market conditions and changing preferences of consumers and it has to become more inventive. Society and economy as a whole must also become favourable to innovation.

2. THE REGIONAL DEVELOPMENT CONCEPT

One of the most important and most complex policies of the European Union is the regional development policy. This acts on some significant fields for regional development like economic growth and SME sector, transports, agriculture, urban development, protection of environment, employment and training, education etc.

The regional development concept is derived from economic development and it is focused on territorial, regional or local aspects of this development. The regional development requires the use of resources, primarily the local ones, but also those attracted from the national and international environment to increase territory competitiveness. The main instrument of regional policies is given by the volume of financial resources that can be deployed to sustain regional development programs. The financial sources initially come from local taxes, respectively transfers from central budget. But sustaining de regional development only through this type of resources means entering a vicious circle of regional imbalances, whereas the areas with an intense economic activity will be able to collect more resources compared to less developed areas and therefore, they will experience a more sustainable development. This means that the chance of less developed areas will depend on the opportunities to attract investors by giving them various facilities. In addition, the transfers from the central budget are essential to create favourable conditions of social and economic developments in less developed areas. Besides financial resources derived from local taxes or from transfers from central budget, the regional policy has as additional financial sources, the community contribution made by Member States, namely its main funds: the Cohesion Fund and the Structural Fund.

The traditional objective of regional development policies is to reduce traditional disparities, achieving a relative balance between the levels of economic and social development of different areas of the national territory.

Most of the countries, including those economically developed, face regional problems and therefore they apply regional development policies. This happens because some parts of the national territories have been neglected or they have known a certain delay in their general development, as in the case of southern Italy or western Ireland. On the other hand, other regions are experiencing a strong economic growth due to the tendency of focusing some leading economic activities in certain areas of the country. When these disparities have reached a level considered unacceptable, the public authorities have sought to neutralize causes and effects by different means. The adopted policies have mainly aimed for measures for regions in difficulty. For the

implementation of these policies it is firstly necessary to identify regions confronted with problems and adopting a series of measures in public spending, infrastructure, enhancement of lands, urbanization and economic development in general.

In order to reduce regional disparities, for better area utilization, distribution of activities, environment protection and improvement of life quality, the main objectives of regional strategies are the following:

- the development of slightly lagging regions and growth control in regions that have been developing very fast which means reducing territorial imbalances;
- creating jobs, improving the standard of living and quality of life;
- the environment protection as well as managing human resources and their conservation;
- the balanced development of urban and rural centres and rational use of territory, in other words the large industrial complexes must be located so as to protect farmland and forestry.

A sustainable regional development requires an efficient use of funds, not to mention a greater ability of regions to change and innovate.

3. THE CONCEPT OF INNOVATION

The capacity of regional economies to change and innovate represents the essential element leading to sustainable economic growth. As such, we need to do more to create an environment that encourages innovation, research and development (R&D). Innovation supports smart, sustainable and inclusive growth and constitutes the core of Europe 2020 Strategy, agreed by Member States in the European Council in June 2010. The Initiative „An Union of innovation” is one of the seven flagship initiatives announced in Europe 2020 Strategy, and aims to improve conditions and access to finance for research and development, so that innovative ideas can be turned into products and services that create growth and jobs.

The European Union should fight to create a true „Innovation Union” until 2020 by creating a strategic policy of research and innovation that is oriented towards businesses and favourable to integration. This strategy should target major societal challenges (health and population aging, energy supply, major climate changes, environment and its limited resources), creation of new jobs and economic competitiveness. Furthermore, the Union must prioritize European innovation partnerships, investments in education, making Europe a place where the innovation and realization of ideas enjoy more rewarding.

The Cohesion Policy is the largest source of funding at EU level that aims research, technological development and innovation. There was a significant increase in the overall support for enterprises (as grants for modernization and expansion of capital base) between past and current programming periods (Figure 1). This increase, based on innovative measures includes research grants for private sector, and research institutions, investment in formal education and vocational training to provide workers with qualifications and skills, business support services, technology transfer, venture capital and loans etc.

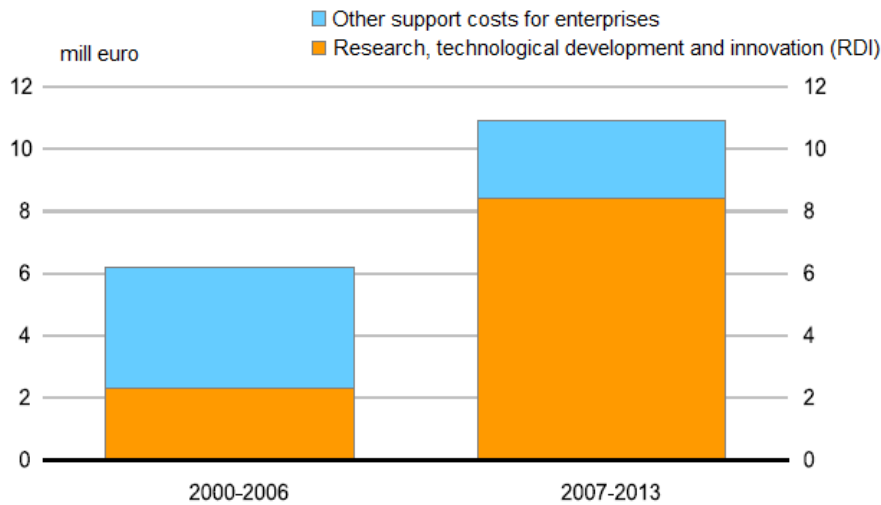


Figure 1. Annual expenses for enterprise and innovation, the period

Source: Spending plan EU 25

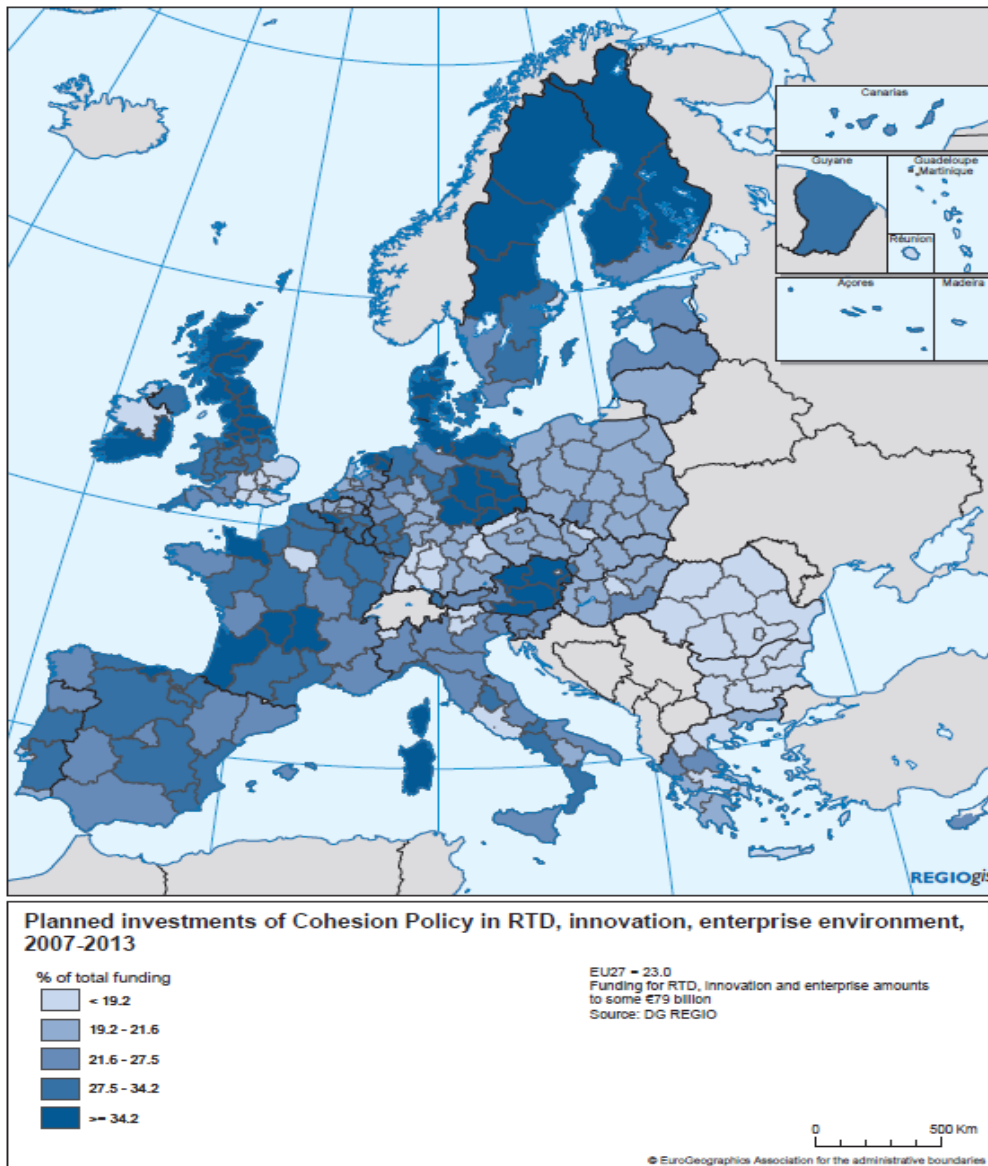
In the period 2007-2013, the instruments of cohesion policy have set out about 86, 4 billion euro (almost 25% of the total budget) for R&D and innovation, as follows:

- 50,5 billion euro will be allocated strictly to *R&D and innovation* for infrastructure related to research and technological development and competency, for investment in firms directly linked to research, assistance provided particularly to SME to stimulate research and technological development, etc.;
- 8,3 billion euros will be allocated to *entrepreneurship* for advanced support services for enterprises, to support independent activities and start-up enterprises, etc.;
- 13,2 billion euros will be allocated to *information technology and innovative communication*, to stimulate demand for ICT services and applications addressed to citizens (health and administrative online services, on-line learning and electronic integration, etc.), for services and applications for SMEs (e-commerce, education and training, network creating), etc. ;
- 14, 5 billion euros will be allocated to *human capital* to develop strategies and permanent learning systems in enterprises, trainings and services for employees, promoting entrepreneurship and change, etc.

There are big disparities between member states and EU in innovation and R&D, disparities much more persistent at a global level. Europe must quickly react to market conditions and changing preferences of consumers and it must become more inventive. Society and economy as a whole must also become favourable to innovation.

The performances in R&D and innovation vary widely within the EU. The discrepancy between the targets of 3% of GDP expenses related to R&D varies a lot from a region to another: only 27 regions of EU, approximately one of ten have reached the target (see map 1). The agglomeration effects make the resources of R&D to focus in some leader-regions (for example, in Braunschweig, Germany, where the

expenditures with R&D represents almost 7% of GDP) and very low in others (for example, in Severentsentralen, Bulgaria, where these represent less than 1 %.)



Map 1. Cohesion Policy Investment in terms of expenses for Research, Development and Innovation in EU

Source: Communication from the Commission to the European Parliament, Council, European Economic and Social Committee and Committee of the Regions, Contribution of the Regional Policy to smart growth in Europe 2020, European Commission, Brussels, 6.10.2010

Europa must invest in the development of better ideas. This is mainly the role of private sector. However, Europe is investing approximately 15 billion EUR per year less than the United States in venture capital, and concerning research and development in enterprises, in order to reach the objective of 3% of GDP dedicated to research and development we need investments 100 billion EUR higher each year. Also, there are little investments in the knowledge base, spending each year 0,8% of GDP less than in the United States and 1,5% less than Japan for research and development – with big differences related to research and development in enterprises and venture financing – while education systems need reforms. In the private sector, research and development are increasingly outsourced to emerging economies, while the best researchers and innovators go by thousands in countries where conditions are more favourable. Countries like China or South Korea are catching up and go from being imitators to leaders in innovation. Unlike the EU, these countries follow a strategic approach to create an environment open to innovation. Their development creates huge commercial opportunities and new possibilities of cooperation, but they exert a considerable pressure on our enterprises. Meanwhile, the United States and Japan continue to position themselves ahead of EU in the field of innovation performance. The European Union must face challenges and exploit its huge potential in science and innovation.

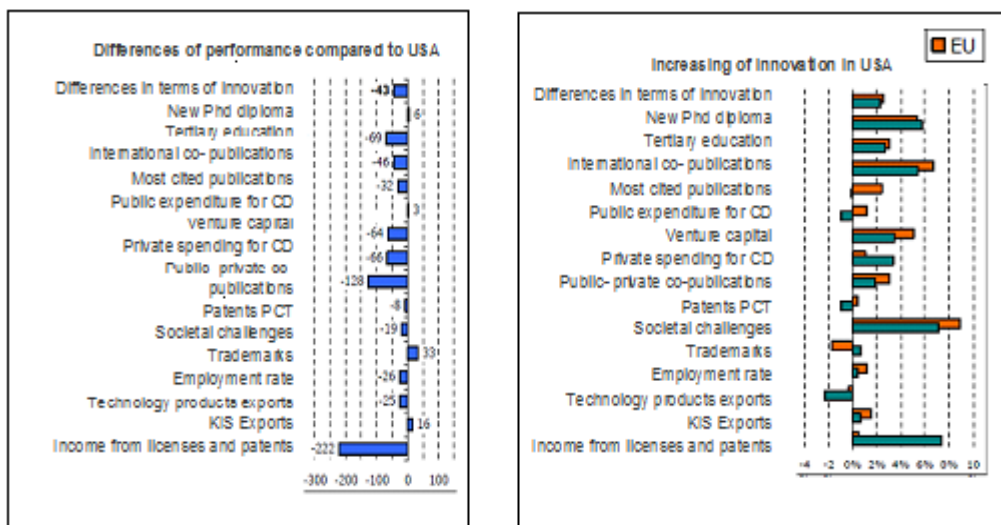


Figure 2. Compare between EU and USA

Source: Communication from the Commission to the European Parliament, Council, European Economic and Social Committee and Committee of the Regions, Emblematic initiative of Europe 2020 Strategy, An Innovation Union, Brussels, 6.10.2010

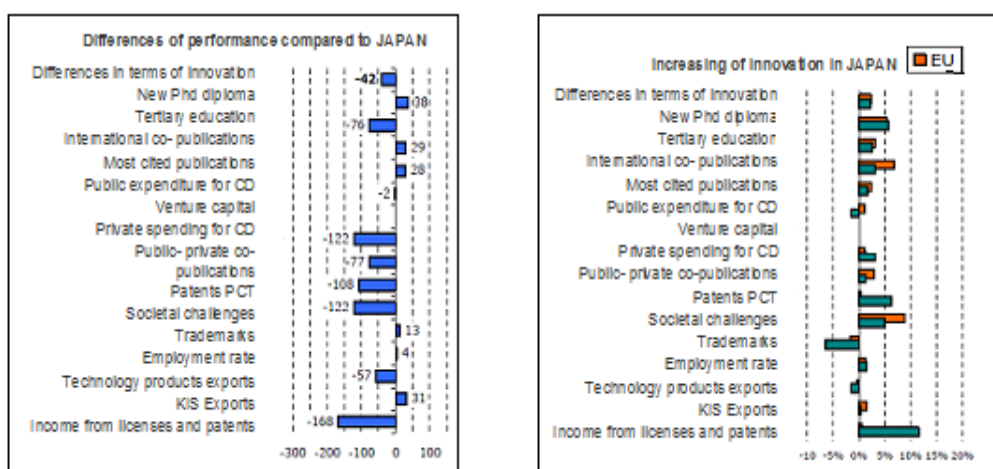


Figure 3. Compare between EU and JAPAN

Source: Communication from the Commission to the European Parliament, Council, European Economic and Social Committee and Committee of the Regions, Emblematic initiative of Europe 2020 Strategy, An Innovation Union, Brussels, 6.10.2010

At national level, The National Plan for Research, Development and Innovation 2007- 2013 represents the main instrument through which The National Authority for Scientific Research (ANCS) implements the National Strategy for Research, Development and Innovation (RDI). **The general objective** of innovation programme is to increase innovation capacity, technological development and uptake of research results to improve national economy competitiveness and life quality.

The specific objectives are to strengthen the innovation capacity of enterprises and consolidation of their contribution to create new products and markets, stimulate the partnership between economic agents and research entities, the development of the capacity of technological transfer in universities, creation and development of innovation infrastructures, infrastructure and quality management, etc.

Despite unfavourable economic conditions, the Member States and the regions committed themselves to support smart growth. To achieve the goal of spending 3% of EU GDP for research and development (RD) until 2020, according to recent estimates, we could create 3,7 million jobs and annual GDP could increase with almost 800 billion EUR until 2025. Although EU market is the biggest in the world, it is still fragmented and insufficiently open to innovation.

4. CONCLUSION

Innovation is important for all regions, both for the most advanced, in order to keep their position, and for those less advanced in order to catch up the advanced. (Wintjes & Hollanders) The European Commission encourages Member States and regions, as well as enterprises, universities and research centres to optimize their

investment opportunities. To achieve the objective of smart growth for Europe 2020, we have to mobilize the entire potential of innovation of EU regions.

The times in which economic growth was going away by itself and in which the regional policy had only to steer this growth are outdated today. The economic policy is responsible to promote economic growth throughout the country by encouraging competitiveness and ability of regions to develop through themselves. It is considered that we should be given a broader sense to the concept of regional disparity, a disparity which in actual sense is limited to production, incomes and unemployment. In the current period new types of imbalances appear, especially in terms of environment quality, endowment with infrastructure elements, education possibilities, capital possibilities, access to competition and others. All these elements relate to upstream disparities which affect the context in which the enterprises and local authorities operate. Based on these aspects, a region's economic growth requires a sustainable regional development, an efficient use of public funds, an increased capacity of regions to change and innovate and maybe an increased influence on private investments.

REFERENCES:

- [1]. **Wintjes, R.; Hollanders, H.**, *The regional impact of technological change in 2020*
- [2]. *Communication from the Commission to the European Parliament, Council, European Economic and Social Committee and Committee of the Regions*, Emblematic initiative of Europe 2020 Strategy, An Innovation Union, Brussels, 6.10.2010
- [3]. *Communication from the Commission to the European Parliament, Council, European Economic and Social Committee and Committee of the Regions*, Contribution of the Regional Policy to smart growth in Europe 2020, European Commission, Brussels, 6.10.2010
- [4]. <http://europa.eu>, Luxembourg: Publications Office of the European Union, 2010

ADVANTAGES OBTAINED BY THE SMALL COMPANIES BY APPEALING TO MANAGERIAL AND FINANCIAL CONSULTANCY IN A COMPETITIVE ENVIRONMENT ON THE TOURISM SERVICES MARKET

**MONICA PĂTRUȚESCU, DALIA SIMION, CLAUDIU ȘERBAN,
SABIN ARMĂȘELU ***

ABSTRACT: *The tourism is a field which offers multiple opportunities in deploying an activity, by the small companies. The problems arise as activities related to the creation, management and development of the business become more and more complex. Their solving is possible if the entrepreneur understands the need to benefit from assistance from outside the company, consultancy in management and financial-accounting consultancy capable to defend the interests of his customer and to ensure the support needed for a successful business.*

KEY-WORDS: *consultancy; entrepreneur; business background; managerial competences; informational system; economic indicators; scorecard.*

JEL CLASSIFICATION: *M41; G30.*

1. INTRODUCTION

The contemporary economy knows a changing in the developing rhythm of small and medium companies (I.M.M.), which successfully compete in many fields of activity. The favourable technological, economic, social and psychological conditions

* *Lecturer, Ph.D., University of Craiova, Romania*
Assoc. Prof., Ph.D., University of Craiova, Romania
Assist. Prof., Ph.D., University of Craiova, Romania
Assist. Prof., Ph.D. Candidate, University of Craiova, Romania

are remarkable, the I.M.M phenomenon being supported by laws and political decisions.

In the context of economic globalization, in Romania are tremulously crystallized the opportune development directions for the small companies which activate in the field of the tourism services. This also because of the fact that the national strategy for sustainable economic-social development on a medium term regards the tourism as a priority sector, capable to contribute to the economic redressing of the country.

With the purpose to optimally capitalize the touristic resources and to protect them and the environment, as a priority condition, it was ensured a juridical and administrative framework regarding the organization and the deployment of the activity of tourism in Romania (O.G. 58/1998, H.G. 107/1996, H.G. 77/1996, H.G. 1269/1996) and were defined the criteria regarding the certification of the touristic regions. (Cîrciumaru et. al., 2009)

Despite the opportunities of the moment, in the Romanian business background, the small companies have a relatively fragile structure, with a low stability, being confronted with general problems regarding the access to credits, adequate technical and managerial assistance, juridical aspects regarding the qualified human resource, problems which also affect the large companies.

If we refer to the problems specific for the small companies from the tourism field, we can identify (Patruțescu, 2008):

- ⇒ Limited resources and reserves, which create vulnerability to the variation of the business rhythm;
- ⇒ Limited capacity to contract loans, especially in the developing phase of the business;
- ⇒ The company existence and evolution depends on the entrepreneur – manager, on the competence and the events from his personal plan;
- ⇒ The economy to the functioning costs leads to syncopes in the interpretation of insufficient data by the management;
- ⇒ The strategy and functioning problems in respect to the business background are managed by the manager of the company who often doesn't have the competences needed;
- ⇒ The personnel training in the tourism domain is averted by the financial difficulties and has, as an effect, the increase in the personnel fluctuation, the decrease of the competence at the level of the company;
- ⇒ Often, the managers of small companies aren't capable to advantageously interpret the regulations, actions and facilities granted by the governmental bodies;
- ⇒ The absence of an initial business plan, doubled with exaggerated investments in fixed funds;
- ⇒ The precarious financial control, the organization of an inadequate accounting evidence and the misunderstanding of the information provided by the accountancy.

On the other side, the small companies with the tourism activity in Romania are managed by the managers – entrepreneurs (investors) whose personal features decisively influence the evolution of the business, mostly in a negative way. The

explanation is exclusively related to the “quality” of manager of these entrepreneurs, to which we can identify:

- the over-estimating tendency of management knowledge, sustained or not by a training in this domain;
- the low level of education;
- the great resistance to change, inflexibility and subjectivism in the decisional process;
- the use of the personal opinion as being the best;
- the reduced documentation regarding the evolution of the business and orientation towards the past, not towards the future;
- the non-acceptance of suggestions from other qualified persons;
- the opinion according to which technical skills are more important than the managerial skills;
- the opinion according to which “the school of life” is more important than the university studies;
- the appreciation of the publicity or the personnel motivation as an expense, not as an investment.

Nowadays, the performances obtained by the small companies from the domain of tourism depend, in a fundamental way, by the capacity to dominate the environmental turbulences and to evolve by adapting to them, taking profit from any opportunity created on the internal or external plan.

2. MANAGEMENT CONSULTANCY OFFERED TO THE SMALL TOURISM COMPANIES

The need for a rapid adaptation on the touristic market gives a sense to the appeal at the assistance from outside the company, in order to start, manage and develop a business. Thus, the financial-accounting and managerial consultancy is as useful as the juridical services, if is recognized a deficit in the understanding of some problems felt as pressing or as restrictions in managing a business.

In the opinion of the specialist Milan Kubr “the consultant shall have the possibility to form his own opinion in respect to any situation, to say the truth and to openly and objectively recommend what the beneficiary organization shall make, without hesitating to the taught that this attitude could negatively influence his own interests”.

To offer consultancy to the small companies with an activity in tourism, both in respect to the management and to the financial-accounting field, doesn't mean to take the management of the business, the consultant providing recommendations to the decisions makers within the organization-client. In order to ensure the pertinence of these recommendations, the consultant shall be prepared with a global vision on the company, on the its business background, to have communicational skills, thus transmitting and being well understood by the managers with whom he enters in contact.

The role of a consultant in management or of a financial-accounting consultant is that to offer practical solutions, manageable to the complex problems and to help to their implementation when he is required to do so.

The presentation way of the solutions proposes shall be clear, easily to understand and to apply, considering the training level of the entrepreneur, his possibility to understand an economic language.

Considering the fact that the entrepreneurs of the companies with activity in tourism, who appeal to consultancy, are those who recognize their limits in the management of a business, is supposed to be a long time partnership between them and the consultants in management or the financial-accounting consultants. But, shall be mentioned the fact that, mainly, the use of a consultant is justified only if the benefits are bigger than the expenses.

2.1. Solving management problems by appealing to consultancy

Based on the nature or level of problems and situations faced by small companies in the domain of the tourism, can analyse several directions in which the managerial assistance offers solutions.

The first step in consulting assignment is the identification of the type of problem faced by the beneficiary:

A. the need to correct a situation that has deteriorated (correction issue)

After a diagnosis analysis, the consultant identifies the points that have reported difficulties, systematically taking each segment of activity. For example, investments may be reconsidered in correlation with the possibilities of providing tourism services, with the number of tourists and the average duration of their visits, depending on the potential of the area. Regarding human resources, a "job description" for establishing the qualifications, the skills and the experience of staff, gives a clearer picture of the tasks to be accomplished in various activities within the company. Note that in small companies is necessary that the job description be flexible so that the entrepreneur have more freedom in allocating tasks to employees, who are, usually, in a small number.

Motivating the staff is another aspect to be analysed for the consultant in management. Correction solutions are to be examined and proposed regarding both the ways of motivating (monetary stimulus, assessing performances through rewards, taking into account the views of employees, flexible working program) as well as the considerations for using the motivation (attracting potential employees, improving the results of current employees or maintain them in the company)

B. creating a new situation (creation issue)

Managerial consultancy offers alternatives, new solutions, depending on the stage in which the company requires this. Thus, in the physical implementation phase of the tourism companies, financing methods (franchising) might be proposed, and in the business development phase, the realization of related activities (creating recreational or leisure facilities, access to natural areas of touristic interest) .

From another perspective, oriented towards the internal environment of the business, the consultant analyses the directing style of the entrepreneur-manager and

propose new solutions in approaching the relationships with employees, their interaction within the company.

Leadership expresses a person's ability to influence others, formally or informally, in order to achieve certain objectives. It is very important that, at the level of the tourism companies, the managers lead employees to strive in order to obtain the results that bring them both professional and personal satisfaction.

The consultant may find that autocratic leadership, in which managers make most of the decisions alone, may be replaced by a more advantageous style for all the parties involved. In this way, are being reconsidered the leadership styles that are best received and understood by staff:

- participative leadership, in which employees participate in setting goals, strategies and tasks;

- permissive leadership, where employees act with great freedom, provided that their professional training and managerial skills enable them to solve problems.

C. improving an existing situation (evolution issue)

Here, the consultant's role is that of forecasting the possibilities of extending the activity and the appropriate directions, on the basis of the economic-financial indicators and of the business environment. The realization of financing projects with European funds envisages the increment of the tourist welcoming (touristic chalets, camping houses, bungalows), the development of the information system and touristic promotion (information centres, promotional materials, touristic signs posting).

Human resources represent for small companies a decisive factor in achieving the performance, especially when it refers to the touristic activity, as well as to any other domain of the services.

The consultancy, in an evolution issue, has the mission of preparing, from a professional point of view, the employees, within the frame of a continuous professional development, both for the executive functions and the managerial ones.

In the progress of the training there must be taken into account the following aspects:

- the need for training, the field and the capacity of every employee, differentially established, in persons;
- stable training plan, which includes specific ways of conducting training, assigning additional tasks and monitoring their execution, the schedule and the graphic of the performance of this training;
- systematic consultation of employees in order to establish the extent to which their training needs are met, the absorption grade of new knowledge, their practical usefulness perceived by the employees.

A decisive role in the success of the management consultancy mission plays the analysis of the informational system within the company. Given that the entrepreneur-manager is the beneficiary-user of all the information regarding the activity in progress, the importance of the informational system "can be considered both in terms of design and analysis, as well as in terms of exploitation". (Ispas & Simion, 2009)

The making of an informational system dedicated to a performed management assumes the compliance with the following ideas:

- is subordinated to the company's director requirements, both the realization and the functioning of the system;
- is correlated to the organizational structure and to the decisional system;
- the goal is to achieve a maximum of primary information (not only quantitative) with a significant character.

The design and the operation of an informational system is based on the transfer of information containing characteristics of financing, strategy, interaction with the external environment, business results, and communicates them in an appropriate form to the managers. The interpretation and the systematization of these information are provided by the financial – accounting consultancy, able to ensure for a small company in the domain of tourism the decisional support for the entrepreneur.

Having as a work basis the information in the financial accounting, a consultant in this domain presents reports tailored to the pursued objectives. The modality of initial data processing and interpretation, the analysis form and the complexity of the content of the final reports is different depending on the management of the level for which it is intended, operational or strategic. A schematic overview is as follows:

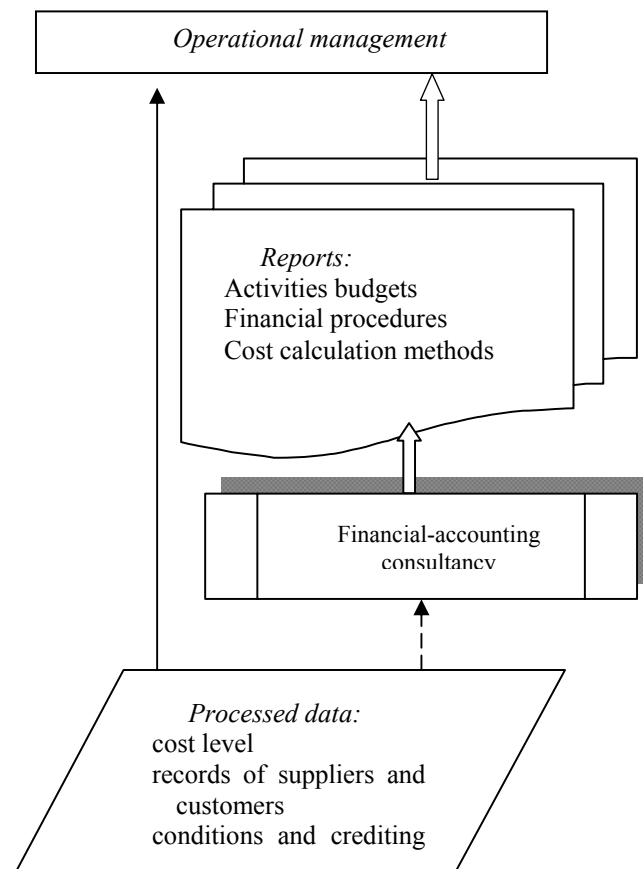
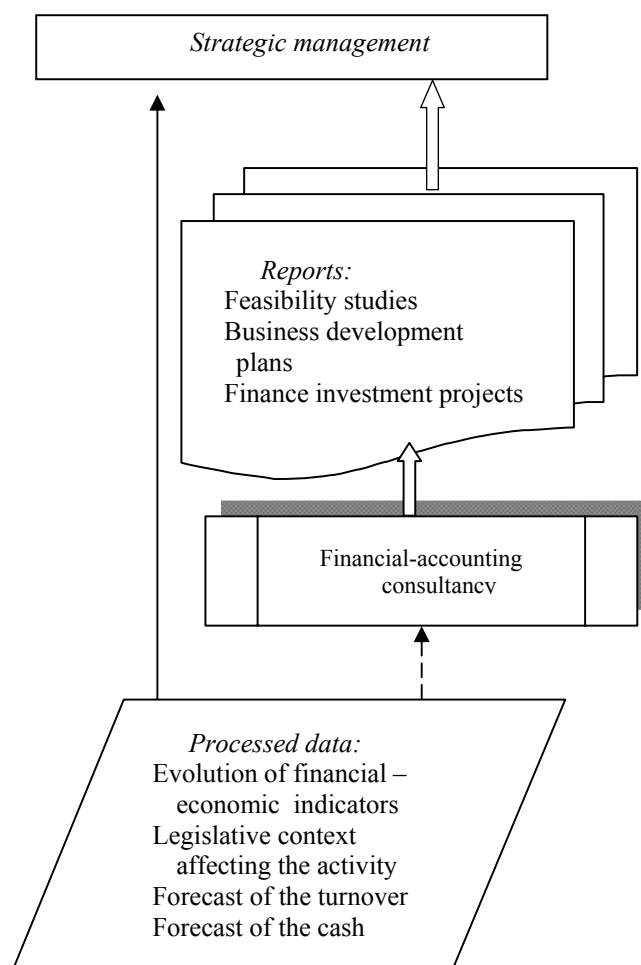


Figure 1. Consultancy at the level of operational management

The tendency of small touristic companies to focus on costs, incomes and results obtained in short periods of time is to be remembered, the role of the consultancy reports being to offer an overview, with projections in perspective, explaining the causes and the effects reflected in the results. The financial – accounting consultant has the mission of making the connection in the interpretation of various indicators, from operational and strategic level, focusing on non-financial aspects (changes in the labour market, staff training, strategies for reaching a market segment) but which indirectly influence the progress of the activity in a given time segment.

**Figure 2. Consultancy at the level of strategic management**

2.2. Financial - accounting consultancy offered to the small tourism companies

The realizing of consultancy reports which include budgets on activities, financing procedures, development plans, also responds to a constant preoccupation of the entrepreneurs of tourism companies, that of the cost-price report.

Pricing policy must be established prior to any business strategy, having the necessary flexibility to price changes on the market, but not deflecting too much from the baseline.

The market of the offer conditions the establishing of a touristic service price. The prices of the other competitors, the objective position regarding the services and their quality, their reaction capacity, are elements determining the price limits that may be practiced.

On the other hand, the market of the demand offers an evaluation of the level of the acceptable price for clients. In this context, the proposed solutions by the financial-accounting consultant shall be oriented as follows:

a) the politics of facing the competition, that takes into account the concurrent companies and, consequently, the practicing of lower prices for the touristic services is envisaged, when the market penetration and obtaining a position on market as good as possible are necessary. A price higher than the market price average is practised for conquering the best market segment, but it must be supported by a superior quality of the services.

b) the cost - oriented policy, in which the touristic services prices have a limit (the one of costs) under which it is not allowed to descend, especially for long periods of time.

To be remarked is the fact that the managers of small companies have the tendency of establish the price of the services lower than the competitors, willing to attract tourists. The consultant should make warnings regarding two issues that may occur:

- the volume of the sales is lower at the dimension of such company, and the costs higher, in comparison with the medium or large competitors on the market;
- subsequent increasing of prices, after the attraction of tourists, shall have a negative impact on the satisfaction of consumers.

Annual financial statements allows the analysis and the interpretation of the financial stability, of the economic indicators regarding the profitability and the possibilities of investments' self-financing, especially due to the fact that small companies manifest their interest in the area of business development.

The performances of the company may be analysed by means of a financial consultancy report based on the data from the "Profit and loss account", the dimension of the activities and of the financial flows being outlined in this synthesis document.

So, if the patrimonial balance cannot be explained in terms of the causes that generated the business performances, the profit and loss account defines, by means of structures of revenues, expenses, resulting from a given period, the sizes of the success.

The relationship which considers the total incomes and expenses of a period, from which the overall result is calculated, is:

$$\text{Result of the financial year} = \text{Incomes} - \text{Expenses}$$

The financial analysis included in the consultancy reports emphasizes the composition and the structural changes of the result of an exercise, regarding both the

kinds of activities, as well as the types of products and touristic services offered by a profile company.

The activities may be grouped into the three categories found as well in the cancelled annual financial situations, respectively:

- the exploitation activity (basic);
- the financial activity;
- the extraordinary activity.

Within each activity, expenses are assigned to the incomes of each product and service, and also, the obtained results are delimited on centres of responsibility.

The revenues are considered to increase economic benefits during a financial year, which is reflected in the emphasis of own capital. In the tourism activity, incomes may be found in the form of the assets development (from cash and receivables increase to investment in the accommodation, improving tourist services) or in the form of debt reduction.

Expenses are seen as reductions of economic benefits during the financial year, from which results the reduction of own capitals that arise in the form of consumption of economic resources or increasing debts.

Therefore, it can be considered that the measure of the efficient use of the capital, the result, reflects an increase in assets (profit), according to the relation:

$$\text{Result of the financial year} = CP_N - CP_{N-1}$$

where:

CP_N = own capitals in the financial year N

CP_{N-1} = own capitals in the financial year N-1

The efficient use of the invested capital is closely related to a responsible management, that sets its pertinent objectives through budgets and products (meaning here touristic activities also). Essential for an entrepreneur-manager or for the manager of a small company is to set, together with the financial-accounting consultant the following budgets:

⇒ the budget of the sales, in which the turnover is provisioned, in direct relation with the capacity of offering the touristic products requested by the beneficiaries, with the touristic market segment that may be occupied, and with the expected movements of the competitors;

⇒ the budget of the expenses, in which are provisioned:

- the variable expenses, which include the material consumptions, staff salaries directly related to tourism activities, collaborations, commissions, publicity, advertising, taxes related to the volume of activities, repairs to fixed assets, (accommodation and other goods used in providing tourism services);

- fixed expenses, in which are included reductions, general utilities, salary and administrative expenses, of security and conservation the assets not used (on certain periods);

- expenses for investments, as a separate chapter, connected to the possibility of obtaining some predictable benefits from the touristic activity or identifying new financial sources. These are justified by the necessity of radical

changes, essential improvements regarding the product or the touristic service offered, from which is expected to achieve substantial benefits in the future.

⇒ the budgets of the profit centres, in which are pre-calculated the profit from the touristic activity, starting from a strategic indicator of the flexibility of the exploitation, very important in the consultancy reports, *the breakeven point*.

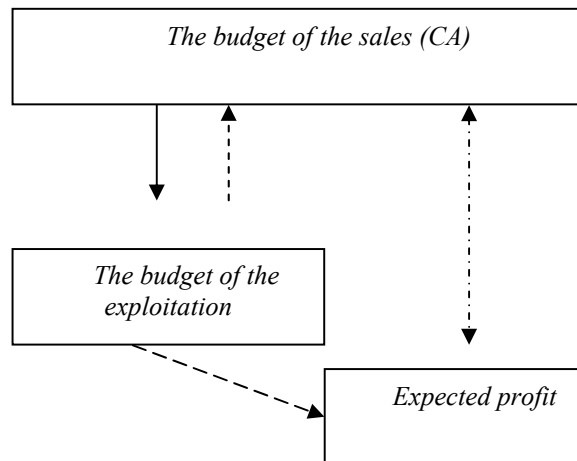


Figure 3. Relationship of conditioning in the budget construction

The financial analysis refers to the breakeven point, being essential for the entrepreneur to know the point where the turnover covers all expenses of the company. Proper allocation of the variable and fixed costs is a starting point in determining the limits that can interfere for their reduction.

Considering that the breakeven point is the point in which the turnover (CA) covers the exploitation (Ch.ex), and the result of the activity is null, the denomination of critical turnover is also justified (CA_{cr}) with the following modality of calculation:

$$CA_{cr} = Ch.ex$$

or

$$CA_{cr} = Ch.var + Ch.fix.$$

If we also consider the relationship of calculating the rate of variable costs (R_{var}), with reference to the previous period turnover, considered as the reference (CA_{ref}), the calculation is:

$$R_{var} = Ch.var / Ca_{ref}.$$

A way to express critical turnover depending on the elements described above may be deduced, of the form:

$$CA_{cr} = \frac{Ch.fix}{1 - R_{var}}$$

The exploitation flexibility (F) may as well be expressed according to the critical and reference, as bellow:

$$F = \frac{CA_{cr}}{CA_{ref}}$$

The analysis leads to the conclusion that the values close to 1, corresponding to a maximum flexibility offers a touristic company the possibility to support easily the variations of the exterior environment (market, inflation, exchange rate). It is obvious that to the increased flexibility contributes a critical turnover as minimized as possible.

The financial – accounting consultancy may contribute to a performed management in the measure in which it demonstrates to the beneficiary the opportunity of centring the decisional process on the concept of flexibility. This presupposes the simultaneous action of three directions:

- ✓ reducing the fixed expenses;
- ✓ reducing the variable expenses;
- ✓ increasing the turnover.

For a small tourism company a fair assessment of critical turnover and the development of specific programs are required:

a) programs of reducing the fixed expenses, since falling in the strategic plan that includes future investments, development of touristic activities, and are justified from a financial – accounting point of view;

b) programs of reducing the variable expenses, due to a reorganization of the staff activities, of the analysis accommodation capacity use, of the offered services efficiency;

c) programs of increasing the turnover that envisages the marketing activity of the company, the analysis of the practised costs and prices, correlated with the possibility of increasing the quality of the touristic products offered.

In the financial - accounting consultancy reports are also presented the "intermediate management balances" relevant to the modality of development of every activity within the company. As noted, the analysis of income and expenses flow allows the determination of monetary accumulation margins, profit margins designed to fund the business growth in the future.

The economic indicators which are useful in creating a correct imaging of the activity developed by a tourism company must be included in a presentation as the one on the next page:

As main intermediate management balances outlining the financial management performances at every step of accumulation, there are retained:

1. *the added value*
2. *the gross operating surplus*
3. *the result of the exploitation*
4. *the actual result*
5. *the net profit.*

The consultancy reports accumulate relevant information that are necessary in order to realize the "Scorecard" indispensable tool for the overview of the whole

activity management. At the strategic level, a correct Scorecard presentation should include the three sections corresponding to the three environments in which business is conducted.

<i>Expenses</i>	<i>Incomes</i>
The cost of sold products Material expenses Services expenses	Sales of products Sales of services +
	<i>Value added</i>
Staff expenses Taxes and charges	Subsidies for exploitation
	<i>Gross operating surplus</i>
Other exploitation expenses Value adjustments regarding the assets	Other incomes coming from exploitation
	<i>Exploitation result</i>
Financial expenses	Financial incomes
	<i>Actual result</i>
Extraordinary expenses Income tax	Extraordinary incomes
	<i>Financial year result (net profit/loss)</i>

Table 1.

<i>Business environments</i>	<i>Types of information</i>
General external environment	<ul style="list-style-type: none"> ✓ inflation rate ✓ unemployment rate ✓ exchange rate lei/euro ✓ monthly rate of the credits interests ✓ changes in utility prices ✓ changes in taxes and charges ✓ development funds available from E.U.

Specific external environment	<ul style="list-style-type: none"> ✓ competition and its market share ✓ profitability rate as average in the domain of tourism ✓ the turnover obtained by the main competitors ✓ geographical areas of interest for the customers ✓ new services emerging on tourism market ✓ government facilities designed for travel companies
Internal environment	<ul style="list-style-type: none"> ✓ overall profitability rate ✓ rate of the exploitation result ✓ share of salary expenses in value added ✓ relationship between receivables and payables ✓ work productivity ✓ dynamics of touristic services sales ✓ duration of debts recovery ✓ duration of payments to suppliers ✓ investment amortization period

3. CONCLUSIONS

A summary of the tourism company activity is realized by synthetizing the coefficients and the operational indicators, of in tabular form, on chapters of interest, as follows:

- statistics regarding the activities (occupation degree, attendance index, median duration of the touristic service use);
- financial aspects (medium price per service, total turnover, on periods or departments);
- debtors tracing and management of expenses (rate of debts recovery, collection terms, expenses on performed services, staff expenses rate);
- staff performance (expenses per hour for every employee on departments, turnover for every hour of effective work, hourly productivity)
- performance related to the market (available market share, effective market share, performance index of activity)

This presentation allows choosing solutions that will be implemented by the consultant in collaboration with the beneficiary, in order to be placed in an "area" where the value added of the rendered tourism services be maximized, and the obstacles be minimized.

REFERENCES:

- [1]. **Asero, V.; Patti, S.** (2009) *Asymmetric information, tourist satisfaction and quality in tourism*, The Annals of the University of Petroșani, Economics, vol. X, Part III
- [2]. **Cîrciumaru, D.; Siminică, M.; Berceanu, D.** (2009) *A Study Regarding the Value Added of the SMEs from the District of Dolj, Romania*, European Research Studies Journal, Volume XII, Issue (4)
- [3]. **Iacob, C.; Simionescu (Bușe), S.** (2010) *Necessity And Reality Between Information Transparency In Performance SMEs To Track*, The Annals of the University of Petroșani, Economics, vol. XI, Part IV

- [4]. **Ispas, R.; Simion, D.** (2010) *The financial management of the small and medium sized companies in Romania*, Annals of University of Craiova, Series Economics
- [5]. **Lala-Popa, I.; Miculeac, M.E.** (2009) *Economic analysis - financial. Theoretical and case studies*, Ed.Mirton, Timișoara
- [6]. **Mazilu, M.** (2007) *Le tourisme roumain dans le contexte du tourisme europeen*, Universitaria Publishing House, Craiova
- [7]. **Miculeac, M.E.** (2007) *The analysis of the financial equilibrium indicators on the basis of financial and functional balance – is it necessary or not?*, „Nicolae Bălcescu“ Land Forces Academy, The 12th International Conference - The Knowledge Based Organization, Sibiu, 11th -14th June
- [8]. **Patruțescu, M.** (2006) *Inventory information system*, Editura Universitaria, Craiova
- [9]. **Patruțescu, M.** (2008) *The role of financial and managerial consultancy in maintaining profitable business on the market*, Review of Management and Economic Engineering, vol 7/ no. 4, pp. 129-134
- [10]. **Rojanschi, V.; Duduman, S.; Grigore, F.** (2007) *Integrated management systems for economic agents*, Editura Tribuna Economica, Bucuresti
- [11]. **Simion, D.; Pătruțescu, M.; Ispas, R.** (2010) *Correlation between an Entreprise's Financial Performance and its Politics of Social Responsibility*, Annals of Tibiscus University of Timisoara, Series Economics, Vol XVI, pp. 451-456
- [12]. **Stancioiu, A.F.; Pargaru, I.; Teodorescu, N.; Stanciu, M.; Mazilu, M.** (2009) *Swot Analysis-Marketing Tool for Regional Developement of Tourism*, Metalurgia International, vol. XIV, no. 8, pp.29-33

THE INVESTMENT PROCESS AND ITS FINANCING

MUGUREL GABRIEL SORIN POP *

ABSTRACT: *The ultimate aim of this study is to outline the main coordinates of the investment process as well as the process of funding it. In researching the issue, the author of this study started from the idea that the investment in a company has a complex, unitary and dynamic nature. This process includes the assembly of all decisions, actions and measures adopted and implemented (in the sense of achievement) in the propose of carrying out the investment projects and their funding arrangements. The author states that research should start from the economic approach, the financial approach and the accounting approach of the investment concept. In economic terms, the investment entails sacrificing current resources in the hope of obtaining in the future, results that will be displaying in time and which will have to be at a higher level than the initial expenditure. In financial terms, the concept of investment(placement) includes permanent capital advanced over a long period of time as well as future operating costs, all these directed at increasing the company's profits and rate of return. In accounting terms, it refers to the concept of tangible, intangible and financial assets, during the time frames traced in the financial statements of the company. The investment process involves several steps and phases. During these phases different resources are advanced and spent so that, at the end of the process, one will be able to identify the exact amount of used in-house facilities and the ones attracted by the economic operator.*

KEYWORDS: *investment; investment process; steps and phases; credit and financing resources.*

JEL CLASSIFICATION: *G 31*

1. INTRODUCTION

This study started from the idea stating that the current crisis is actually a collection of various failures, which through their interdependence clearly illustrate the degree of economic and financial globalization in our society today. We find in recent research (Totir & Dragotă, 2011, pp. 136-139), explanations of how these failures express themselves. It is estimated that during the current period there are three engines

* Lecturer, Ph.D., The Faculty of Economic Studies Cluj-Napoca, „Dimitrie Cantemir” Christian Univestity Bucharest, mugurel.pop@cantemircluj.ro

of global growth gathering way world widely, "engines" that are also manifesting in our country's economy. They are: investment accompanied by relocation, credit and consumption.

Investments in tangible, intangible and financial assets, having the ability of generating income / profit, determine companies to move along as much money as possible in the present (including money borrowed from banks) for new investments, in anticipation of future profits. Present demand for capital investment depends on the size and intensity of expectations (anticipations) for future income, expectations rapidly changing, that is, with a high degree of resilience. Current practice shows that expectations regarding future profits are super optimist, being under the influence of the growing gap between demand and supply of resources, which leads to increased prices in investment asset (especially financial investments). Asset prices vulnerability is exacerbated by the financial intermediation of banks and other financial institutions through loans, derivatives, subprime, which threaten the financial stability.

Credit has become, during the current time frame, a substitute of the company's own resource revenues. The phenomenon is explained by the effect produced by relocation, in the economy of developed countries, on the increasing asymmetry in the distribution of income (profits). (Lynch, 2008)

Consumption, the third engine of economic growth, was fully stimulated by the expression of the resource abundance, made available to economic actors and to the population by credit institutions. Consumption financing (and its stimulation by loans) did not only happen at an individual or firm level, but it has even become a state policy. However, as other authors notice (Totir & Dragotă, 2011, p. 139) this phenomenon was felt equally by states that ran into debt in order to sustain their consumption tendency as well as by those who financed the deficit resulted from this approach with their own trade surpluses, being dependent on the trade markets represented by the consuming states.

Studying the specialized literature and analyzing the financial practice of our companies, we find a strong interaction between the three development engines mentioned above.

Even in the field of investment financing, which is the issue we will develop in this study, there is a general trend of companies increasing their debt burden especially in times of prosperity, which increases their vulnerability to debt deflation. This phenomenon occurs due to the tolerance manifested by creditors during the economic boom to the increased indebtedness of economic actors.

2. THE CONCEPT OF INVESTMENT AND INVESTMENT PROCESS

The concept of investment defines a complex and controversial economic and financial category while in practice it represents an operation of changing and increasing the initial patrimony. The investment is in fact "(...) the purchase of an asset in the hope of making a profit" (Stiglitz & Walsh, 2005, p. 329).

The concept of investment has evolved in time, as a result of the socio-economic practice development as well as of the ideatical mutations occurring at a conceptual level. In the process of its evolution, the specialized literature (Vasilescu et

al., 2000, p. 162) has consecrated a very broad spectrum of definition. Definitions assigned to investments fall into two main categories: *traditional* or *narrow*, linking the concept of investment to the acquisition of new assets, called capital investment, and *modern* or *large*, which expands the coverage of investment, including the financial investment.

Irrespective of the large or restricted meaning given to the approach of the investment concept, there are certain universal coordinates accepted as being defining, namely:

- any investment involves transposition cash in expenses, whether the effort means achieving concrete, tangible assets or financial investments (shares, bonds and securities);
- any investment implies a certain effort, which results in discounting material and social values, usually having a multiplier effect, as an increase in profits and achievement of a higher future rate of return, hoped for but uncertain;
- any investment involves temporary but certain decommissioning, of a certain amount of current resources (material, financial, human) whose cost is intended to be replaced by future net effects.

The essence of investment can be emphasized through a process of *capital savings* allocation in productive activities, in order to increase the value of the initially created assets. Such investments are, par excellence, aimed at achieving higher incomes, at developing activities and thus at economic growth.

The diversity of the ways to define investments is explained by the fact that there are different angled perceptions of the concept. In this respect, the economic and financial theory is generous in granting freedom of interpretation for the concept of investment. (Todea, 2006, p. 15). In the economic theory there are many difficulties in the use of terms with similar meanings that stand out, and often, in the absence of standardized names things get mixed up. The same term can have different meanings, depending on the author who is using it and the text in which it appears.

From this point of view, the terms *capital* and *investment* offer us telling examples, texts abound in the interchangeable use of the terms "capital" and "investment", or of the investment process and production of capital goods, or even of the process of long and medium-term financing and the investment itself. On the other hand, the same inconsistency characterizes everyday language like the business one, in which spending a sum of money is often assimilated to investing some money.

In a general sense (Bințița, 2005, p. 9), investing means sacrificing cash for the fulfilment of more or less remote hopes. It is a bet on the future, that involves numerous risks, but it is a necessary bet. Investing usually means purchasing specific goods, paying an actual cost for the achievement of future earnings. This means changing a certainty (waiving certain immediate satisfaction) for a series of future revenue expectations, allocated in time. Thus, the investment covers a subject that invests, an amount that is invested, the cost of a present relinquishment in favour of a future hope. Investment designates the act of investing as well as the object of this act.

As P. Masse assesses, by investment one designates "all acts of converting financial resources in real goods and the results of these actions" (Masse., 1959, p. 12). In this view the notion of investment is delimited by the following elements:

- *subject*, which is the person (individual or entity) that invests;
- *object*, namely the construction, equipments, machinery for which the investment is initiated and developed;
- *cost*, namely the financial effort, present expenses for achieving that objective;
- *effects*, incarnated in material, value and social results, to be obtained in the future, a more or less certain hope.

The idea that emerges is the fact that investment is considered as being "a present expenditure carried out in order to obtain future effects under uncertainty and risk" (Cistelean, 2002, p. 15).

Since at a company's level investment causes patrimonial changes (increases in immobilized assets and debt liabilities) all actions concerning the concept of investment will be linked to the company's patrimony.

We can speak of an accounting meaning of the investment concept. In this respect, investment "means a treasury allocation currently available for purchasing a fixed asset, that will determine future financial flows of revenues and operating expenses" (Eglen et al., 1988, p. 300). The accounting meaning tells us that investment is assimilated to the term immobilization, fixed assets and it represents any movable or immovable property acquired or created by the company, tangible or intangible, designed to sustainably remain in the same format in the company. The U.S. economist C. Ayers also expresses himself in the same direction, considering that "investment is the act of adding capital (...), of creating real assets, tangible, such as: machinery, factories and inventory that can be used to produce other goods and services" (Ayers, 1962, p. 36).

Understood from an economic point of view, investment is "(...) the renunciation to immediate and secure satisfaction in the hope for higher future results" (Todea, 2006, p. 13). The Italian economists M. Bandini, I. Guerrieri and T. Sediani express themselves similarly in their study *Principi di Economia*, defining investment as "(...) the economic process through which savings are transformed into capital goods" (Bandini et al., 1989, p. 42).

Understanding this coverage of the economic meaning of investment, we can structure the investment costs as follows:

- research and development expenditures;
- expenses for the purchase of patents and licenses;
- expenses for the company to purchase production goods in order to increase the productive capacity;
- expenses for employee training and development etc.

In the specialized literature (Margerin & Ausset, 1990, p. 15; Todea, 2006, p. 13; Bințișan, 2005, p. 10) we also come across the financial significance of the investment concept. In this regard, investment is a set of expenses, made for the purpose of acquiring real or financial assets that have a certain probability of generating higher earnings in the future. Such an approach broadens the concept of investment, in the sense that it refers not only to the cost of creating physical and financial assets but also to other expenses that contribute to the smooth functioning of the business such as those related to the acquisition of financial assets and to their management. The financial significance of the investment concept implies that

changing a present and certain amount of money in the hope of a prospective but higher future income is only possible if a process of accumulation and saving takes place before that. This phenomenon was observed and argued by J.M. Keynes (Keynes, 1970, p. 98), about 65 years ago.

Regardless the nature of the investment, the allocated funding resources, any investor seeks to achieve the following:

- modernization of the technical and material basis in the condition of full or partial restructuring of the production activity;
- reducing production costs and especially material expenses. The big challenge is to select an investment that ensures reduction of the production costs and a concurrent increase in the quality level of products and their degree of complexity;
- promoting the scientific and technical progress by implementing, as soon as possible, in production, the results emanated from the scientific research;
- proper management of available resources, while raising the level of resource exploitation (financial, material, human etc.);
- streamlining the overall activity of the company, in parallel to the direct and indirect effects of the investment implementation.

From the above, we conclude that any investment is a complex expense of resources (from previously accumulated funds) directed towards a clearly defined end. The nature of expenditures can be analyzed in generally economic terms, in financial and accounting terms. Just like the content of the investment expenditures, their economic effect is complex as well, namely: material, value and social. The three manifestations of the effect, mentioned above, necessarily take the financial form of profit and rate of return (their expected increase).

If the tridimensional understanding of the investment concept (economic, accounting and financial) is almost unanimously accepted in the specialized literature (Brezeanu, 2009, pp. 35-36; Onofrei, 2004, p. 144; Todea, 2006, p. 13; Bințițaș, 2005, p. 31), meaning which we also support, we ascertain a great diversity of opinions expressed by economists regarding the classification of investment. The existence of different classifications highlights the complexity of the investment concept and the diverse approaching angles used by different authors.

Starting from the complex content of the investment concept, observing its different approaches in the specialized literature and tracking its direct practice at a company's level, we express our opinion that (theoretically and practically) it is appropriate to approach investment according to the view of the *investment process* concept.

Specifying that the notion of *investment process* was introduced in our economic theory in the '80s, and ascertaining that this notion was adopted in relatively recent times by other authors (Bințițaș, 2005, p. 12), we believe that it is most practical to use it in our language when we describe a company's investment activity.

The fact that the investment activity manifests itself as a rigorous process, that underlies the entire economic growth process, is supported by the fact that the activity runs in an organized manner and is aimed at a specific purpose, being a process of qualitative transformation of material, financial and human resources by creating new

active capabilities in all sectors of the economy through modernization, development and renewal of fixed assets.

Investment is a process that is carried out in time, and usually involves a large number of firms producing inputs for the assets resulted from this process. Therefore, the investment process involves a complex network of payments that must be financed. Payments must be made, although investment projects only bring revenues to the investor after having been put into service. As stated by H.P. Minsky (Minsky, 2011, p. 430) the value of an investment project depends on the prices assigned to the resulted assets, which in turn depend on the future investment policy of the companies consuming these goods as well as the future situation of this business's market. Given the general idea that evolves from our previous efforts, namely that money spent now will bring increased (prospective) future benefits we agree with H.P. Minsky's statement that investment in our economy is "(...) money now for money tomorrow transaction "(Minsky, 2011, p. 430).

The investment process is a chain of steps, actions and operations as well as factors involved in the investment activity. The progress of the investment process depends on the subject of investment. No investor can invest capital in a particular target, without having enough information about the unexpected that can show up in the future, while exploiting the concerned target. In this respect, before proceeding to the investment decision, the investor carries on, through specialized bodies, a leading research and forecasting, which will allow him to find out all the information about the possibilities given by the future exploitation of the investment target.

In general, the specialized literature reports the investment process in the achieving of durable production goods, considering the investing act as being the transfer of capital in order to ensure revenue and profit for the investor and the investment is "the acquisition of shares, bonds, mutual funds, property and so on, in the hope of obtaining income or capital gain, or both, in the future "(Zait, 1996, p. 12).

Conceptually, the process reflects the progress, development or evolution of a phenomenon or event, the successive transformation of an object or sequence of operations or events which create a paper etc. The term is used in physics and chemistry, in law and literature, biology and economics. As stated "(...) the economic process reflects the progress of economic phenomena in time and space, the successive quantitative and qualitative transformations intervening in their status" (Cistelean, 2002, p. 19).

According to the thesis of N. Georgescu-Roegen, "(...) because time is running in one direction, that is towards the future, this reflects the entropic evolution of processes, entropy being the measure of disorder in a system, in relation to the intended purpose"(Georgescu-Roegen, 1996, p. 210).

There are some interesting observations that the author makes about the model of analytical representation of a process by means of flows and funds, worth mentioning:

- any process can be decomposed in relation to the boundary fixed by the analyst between the new demarcated processes;

- efficient use of the elements of a process's fund is possible, especially if the processes are organized in elementary operations in the company's economic mechanisms;
- an element of the fund enters and exits the process without having to change their efficiency;
- elements within the flow enter the process in a well-established structure (recipe) according to the purpose, the boundaries and the length of the process and exit the process in a structure that expresses their own becoming during the process, due to the action of the process's elements on the inputs;
- dividing production factors in flow or content elements is relative, depending on the scope or purpose of the process, their duration and their role in the process;
- economic processes are considered products, exactly like goods;
- an economic process is not circular but unidirectional and entropic, it does not create or consume material or energy but it just transforms low entropy into high entropy;
- in comparison to the entropic process in the environment, characterized by automatism, the economic process depends on human activity, it is a selective entropic process. Just as the author plastically expresses himself, "(...) his true product does not consist in a physical flow of waste, but in the enjoyment of living" (Georgescu-Roegen, 1996, p. 220).

Obviously N. Georgescu-Roegen's emphasis on the economic process and its conceptual aspects, concerning the analytical representation model, exceed the approach area of the investment activity issue. But, we ask ourselves, can't the investment activity be seen in this context as a process? We believe the answer is yes, given the following:

- the investment activity is conducted in an organized manner, according to a programme which is preordained by the technical and economic documentation, aiming at the achievement of a specific goal outlined in the decision making process of the firm's investment policy;
- the investment activity has strict boundaries and shapes. They are identified at an organizational, technological, financial and informational level. In organizational terms, the boundaries operate regardless of the actual fulfilment of the investment project (direct labour or by contractor). The execution technologies are varied, but they are also adapted to the pursued goal - the achievement of the investment's objective at the location previously specified. The creation and allocation techniques for investment funds have a special procedure. Finally, on an informational level, boundaries consist in separate organization of the information acquisition and processing flows (bookkeeping), as well as the exploitation of information in the synthetic accounting system;
- the investment process sequence of stages involve various execution timeframes, running its course as subject to the time factor.

Moreover, some laws emphasize that investment activity is a large and complex transformation process in the quality of material, financial and employment

resources, by creating new capabilities and objectives in all sectors of the economy through modernization, development, reconstruction and renewal of the fixed assets. So the legal framework itself requires a systemic, procedural approach in the investment activity. (Law no.78/2009 – with regard to stimulating investment)

Although there are many different opinions in the economic theory on the concepts of investment and investment process, the common characteristic of all kinds of investment is the fact that they are all expenses.

3. THE FINANCING OF THE INVESTMENT PROCESS

Financing is a complex concept which, at a microeconomic level, involves procurement, allocation and spending of monetary resources according to the objectives and specific options of each company, which imprints the concept with quite different connotations induced especially by the precise nature of the utilized resources.

Regarded from a more general point of view, the financing concept manifests itself in the economy as a funding mechanism and it is accomplished by the mechanisms of monetary resources procurement and allocation, followed by the incorporation and distribution of monetary fund's to companies. As it stands out in some specialized studies (Lynch, 2002, p. 357; Fîrțescu, 2005, p. 347), we distinguish the mechanism of self-financing, the capital markets financing mechanism and the monetary or credit market financing mechanism, as being typical financing methods. These mechanisms are also linked to the involved financial institutions (Philip et al., 2003, pp. 16-17) which organize and carry out the funding relationship.

The implementation of the financing policy at the company's level takes into consideration both its modernization and development side which is achieved through investments as well as the needs of the current operating cycle involving short-term operations. The two manifestation directions of the activity can channel, by themselves, the company's options regarding the financing resources.

As we ascertained during this research, the investment activity is the greatest long-term resource "consumer". With the company having several financing options, other researchers also pointed out (Dobrotă, 2009, p. 35), the problem of choosing those options best suited for its needs. The selection of possibilities is done taking into consideration the conditions that limit the sources of procurement. Covering of the long-term resource deficit can be achieved by resorting to the banking system, the capital market, leasing companies or budgetary subsidies. Since these resources are part of the permanent capital, being included in the company's financial mechanism for a long time, it requires a relevant substantiation of the financing decision.

The making of the investment process involves two interlinked components namely:

- *a financial component* - embodied in the constitution and use of monetary funds necessary for the running of this process, and
- *a physical component* - which consists of a set of technical and technological activities, aimed at the physical achieving of the investment objective.

Referring to the financial component we point out that the internal sources of investment financing are the investing company's *own funds*, *long and medium term bank loans* and *budget allocations*.

Own funds are supplied from the net profit intended for investment, depreciation intended for the same purpose, amounts from the sale of fixed assets or other materials from dismantling. The *net profit*, resulted after having deduced taxes from the gross profit, shall be allocated for development (investment) as well as other destinations such as: dividends, bonuses, etc. Using *depreciation* as a financing resource for investments must take into account the ultimate goal of depreciation (which is replacement of used fixed assets), but entrepreneurs do not only accumulate annual depreciation in order to use it when the fully amortized fixed asset is being decommissioned, but they use it whenever investment opportunities arise. Amounts from the *sale of decommissioned fixed assets* are used as a resource of investment financing, even if their share is relatively small.

Loans or bank loans are used to finance the resource where their funds are not sufficient must be strictly based resource use such as investment risk and cost of this resource is much higher. To make use of loans, investing company must know very well what are the prospects for repayment, including interest on, or to estimate as accurately as possible, we will obtain profits.

Loans or bank credits are finance resources used when their own funds are not sufficient, the using of such a resource having to be strictly underlain, because the investment risk and cost of this resource is much higher. In order to use loans, the investing company must understand very well what the prospects for repayment, are including the interest, and to estimate as accurately as possible, the profits it will obtain.

Allocations from the state's budget - are designed to achieve the investment objectives of national interest strategic sectors, where private initiative is whether limited or of no interest to private investors.

Currently, allocations from the state budget to finance investments are scaled according to the size of the necessary resources and the importance of developing industries or areas of economic and social activity.

When internal sources cannot provide the necessary funds for investments, one relies on external sources which essentially represent a capital import and can be found in the following forms:

- external credits or loans;
- direct capital investment.

Credits or foreign loans manifest themselves as follows:

- *government loans* - based on an agreement between the governments of two countries, one that requires the credit and the other awarding it, also establishing a guarantee ceiling for the loan;
- *foreign bank loans* - are provided by banks in different countries, they must have a material guarantee, a feasibility study rigorously prepared to ensure that the lending bank can recover their credit and the interest rates associated with them;
- *loans* - are granted by international financial institutions like the International Monetary Fund, the International Bank for Reconstruction and Development,

European Bank for Reconstruction and Development, European Investment Bank, and others.

The direct capital investments are direct participation (in cash or in kind) of foreign investors in the real economy of our country.

4. CONCLUSIONS

Starting from the complex content of the investment concept, observing its different approaches in the specialized literature and the immediate practice in the companies in our country, we have expressed the view that (in the theoretical, methodological and practical matter) it is appropriate to address investment in view of the *investment process* concept.

The same findings lead us to suggest that the development of the investment process as well as the role of investment in the company's economic mechanism is subject to various factors. Among these factors we point out:

- the social need reflected in an increased demand for products and services;
- the value of monetary resources saved by the company, in order to be reinvested;
- the company's self-financing ability;
- cost of credit (especially the long term);
- the profitability of the company;
- domestic and international economic environment, etc.

Investment has a crucial role in ensuring the modernization of the economic activity, as a necessary condition for adapting technical and economic systems, manifestations that increased with country's accession (in 2007) into the European Union. The intensification of the economic activity's modernization is a condition of our country's participation in international trade in competitiveness conditions. Investment provides high labour employment, jobs equipped with advanced equipment, improved technological processes, extension and generalization of the governing principles of the company's economic and productive activity.

We ascertain the simultaneous action of investment on both the demand and the supply of goods. They manifest a follows:

- an investment project once implemented in the production of goods and services (for example the purchase of equipment) directly results in the increase and diversification of the offer;
- as the additional supply of goods and services is absorbed by the market, the profits of the investing company will also increase;
- by the drag effect this will lead to increased employment opportunities;
- increasing number of employees (in companies and hence the national economy), leading to a general increase in wages which determines an increase in effective demand for goods and services;
- finally the increase of profits in the investing companies and increase in available money, creates the conditions for intensifying the process of savings, that can lead towards the development of new investment projects.

Consequently, the action of investments on growth and diversification of the economy as a whole is very intense. Both the intensity and scale of the effects that it entails can be highlighted by the following symptoms:

- investing firms increase their production capacity, they gain additional income and therefore may increase their patrimony;
- investment (whether productive or socio-cultural) will generate additional requests in related economic sectors (either upstream or downstream), leading to increased revenues for all companies involved in the process and for their staff.

The role of investment manifests itself on a social level as well, both by the leverage which affect employment as well as by labour implications in improving the quality of life.

As it is usually assessed, the plenary manifestation of the role of investment policy takes effect in the following directions:

- the source of investors' gains;
- shape and intensity of competition's manifestation;
- ways of assimilating the technological advancement.

The investment process in its complexity (both in content and in details of concrete progress) produces effect at least in the following areas:

- the size of future results;
- achieving company's financial stability;
- emphasis towards saving resources;
- measures for reducing the effect of the economical and financial risk.

We pointed out opinions according to which, in the current stage, considering that the transition to the market economy has been completed, the role of investment may have the following priorities:

- the contribution to the economic growth by expanding and improving the material base of our country's society and economy in terms of market mechanisms;
- promoting technical progress in the overall structure of the national economy;
- supporting the training and employment that are adapted to the socio-economic dynamic;
- environment protection;
- promoting socio-cultural projects according to the proportion requirements - possibilities;
- strengthening national defence;
- promoting projects that facilitate amplification of external economic relations.

We appreciate that to achieve these objectives, the general manager must establish general long-term behaviour referring to:

- *company growth* - by increasing the capacity to produce utility;
- *consumption realization*- by modernizing production equipment;
- *production conversion*- by desinvesting in a sector and investing in another sector.

If managers transmit these general objectives to their contributors in the company, they put an emphasis on the fact that the ideas on investment must, necessarily, coincide with its strategic dimensions which should prefigure the existence and development of the company in the cluster of competitive relations of the market economy.

REFERENCES:

- [1]. Ayers, C. (1962) *The theory of Economic Progress*, 2nd ed. Schocken Books, New York
- [2.] Bandini, M.; Guerrieri, I.; Sediani, T. (1989) *Principi di Economia*, Bologna
- [3]. Bințișan, P. (2005) *Strategii și politici de investiții*, Editura Casa Cărții de Știință, Cluj-Napoca
- [4]. Brezeanu, P. (2009) *Finanțe corporative*, vol. II, Editura C.H. Beck, București
- [5]. Cistelean, L. (2002) *Economia, eficiența și finanțarea investițiilor*, Editura Economică, București
- [6]. Dobrotă, G. (2009) *Decizia de finanțare pe termen lung la nivelul firmelor*, Analele Universității “Constantin Brâncuși”, Seria Economie, nr. 1, Târgu-Jiu, pp. 35-48
- [7]. Eglem, J.Y.; Mikol, A.; Stolowy, H. (1988) *Les mécanismes financiers de l'entreprise*, Montchretien, Paris
- [8]. Filip, Gh. (coord.) (2003) *Adaptarea mecanismelor financiar-bancare la cerințele integrării României în Uniunea Europeană*, Editura Sedcom-Libris, Iași
- [9]. Firțescu, B. (2005) *Sisteme moderne de finanțare a economiei și funcționalitatea acestora*, Analele Științifice ale Universității „Al.I.Cuza”, Seria Economice, pp. 347-351
- [10]. Georgescu-Roegen, N. (1996) *Legea entropiei și procesul economic*, Editura Expert, Bucharest
- [11]. Keynes, J.M. (1970) *Teoria generală a folosirii mâinii de lucru, a dobânzii și a banilor*, Editura Științifică, București
- [12]. Lynch, R. (2002) *Strategia corporativă*, Editura ARC, București
- [13]. Margerin, E.; Ausset, G. (1990) *Investissement et financement*, Collection Pedagogique Multimedia, Université Grenoble II
- [14]. Masse, P. (1959) *Le choix des investissements*, Dunod, Paris
- [15]. Minsky, H.P. (2011) *Cum stabilizăm o economie instabilă*, (traducere), Editura Publica, București
- [16]. Onofrei, M. (2004) *Finanțele întreprinderii*, Editura Economică, București
- [17]. Stiglitz, J.; Walsh, C. (2005) *Economie*, Editura Economică, București
- [18]. Todea, A. (2006) *Investiții*, Editura Casa Cărții de Știință, Cluj-Napoca
- [19]. Totir, F.C.; Dragotă, I.M. (2011) *Criza economică și financiară actuală, paradigme, cauze, efecte și soluții adoptate*, Economie teoretică și aplicată, vol. XVIII, nr. 1, pp. 131-153
- [20]. Vasilescu, I.; Românu, I.; Cicea, C. (2000) *Investiții*, Editura Economică, București
- [21]. Zaiț, D. (1996) *Fundamentele economice ale investițiilor*, Editura Sanvialy, Iași
- [22]. *** *Legea nr.78/2009 – privind stimularea investițiilor*, Monitorul Oficial nr. 230 din 08 aprilie 2009

GLOBALIZATION AND INTEGRATION INTO THE ECONOMIC AND MONETARY UNION-CHALLENGES FOR BANKS OPERATING IN ROMANIA

CORALIA EMILIA POPA *

ABSTRACT: *This paper aims to present recent evolution, but also the consequences of globalization of the banking sector, considering different approaches of this phenomenon. Over time, the banking field has undergone important changes in both the applicable law of this area, and through the technologies used in satisfying the customers' needs. The development of international markets has led to new opportunities and challenges for banks that transformed the domestic financial market into an arena where only the best survive and grow. On these grounds and in strict relation to positive and negative effects of globalization, we can speak of a constant evolution of its most important subsystems - the financial subsystems of the global economy. In this paper special importance is given to the banking field, the article presenting arguments through which this complex phenomenon called globalization may have important consequences on financial supervision and regulation.*

KEYWORDS: *globalization; banking system; Economic and Monetary Union.*

JEL CLASSIFICATION: *F62; F33; E22.*

1. INTRODUCTION

Worldwide, the barriers raised in the way of integration in the banking industry have been significantly reduced in the last decades. Among the factors that contribute to this freedom we mention: the lifting of regulatory restrictions on cross-border banking, technological progresses that allow better management of cross-border financial institutions, as well as increases in non-financial activities that create demands for international banking services. Despite these low barriers, the integration of banking industry in most developed countries is far below the level expected by many observers.

* *Ph.D. Candidate, University of Craiova, Romania, coraliaemiliapopa@yahoo.com*

One of the major objectives of European Union is to create a single market for financial-banking services and products. As the financial-banking system is defining for the allocation of resources in economy, a single market would be able to improve the efficiency of investments. An important aspect of the transition to a single market is the Economic and Monetary Union (EMU).

The role of EMU in an increasingly globalized world is rather a challenge from several points of view, among which is included the approach of a new element of international integration, namely "regionalization". The globalization phenomenon has become obvious. Its objectives go beyond the economic sphere, sometimes being politically motivated. The economic integration increases economic growth and through competitiveness, a representative feature of globalization, it will lead to high quality of services and products offered.

EU Member States, including Romania, are under simultaneous integration of two processes. Like all developing economies, they are integrated in the international economy as part of the general process of globalization. Globalization generally creates economic structures that limit the possibilities of Member States to take financial and economic decisions, without exerting a significant influence on partner countries. Globalization can be called one of the most controversial and analyzed phenomena of contemporary economic and social environment.

The academician Constantin Ionete, analyzing this concept, believed that it was not the result of studies, neither of politicians, nor of any of theorists, but it has emerged as a natural process, as a complex of specific mechanisms of modern society. "The phenomenon has progressed through economic performance and functional relationships of cooperation between economic agents with international openness. The economic environment favorable to strengthen global socio-economic processes ensures the free market, with its own potential for expansion." (Ionete, 2002, p. 4) The pedants of The International Monetary Fund see globalization as a "rapid process of integration of world economies through trade, capital flows, networks, technology transfer and cultural exchanges". (International Monetary Fund, 1997, p. 43)

Romanian practitioners and famous thinkers believe that "the essence of the phenomenon can be summarized through the following specific elements: information technologies which put us faster and more frequently in relation to each other; compression of time and space through new technologies, interconnection and interdependency growth; integration of financial and trade markets, internationalization of production by multinational companies, the emergence of problems which require global solutions: the spread of behaviors implies the rationality of a homo oeconomicus that knows no boundaries and local emotions - the emergence of a homo globalus, the development of transnational identities etc." (Daianu & Vrânceanu, 2002, p. 27)

In economic literature there are many definitions of the concept of globalization, but not even one of them is fully accepted. Professor Joseph Stiglitz considers globalization as it follows: "the phenomenon of globalization consists of the stronger integration of the countries and their populations, due to significantly reduced costs of transport and communication and by eliminating artificial boundaries on goods, capital and people movement between countries".

Practically globalization is a global network that brings together communities from the planet, forming "one world". There are voices that militate against the concept, considering that globalization is a "modern colonialism" which generates unemployment, leading to the lower living standards. The opponents of globalization are aware of the real opportunities offered by the phenomenon, but they consider that the degree of exploitation of these opportunities varies from country to country and depends heavily on the speed with which these opportunities can be capitalized.

The constant emphasis of the interdependence between individuals and countries is the component which highlights globalization, also being a result of the trade expansion, involving goods, services and capital, but also the transfer of ideas and know-how. Thus, the globalization of banking can be seen as a result of the multiple changes that appeared in various production processes, movement of goods and services worldwide.

2. THE EFFECTS OF GLOBALIZATION IN ROMANIA - CHALLENGES FOR THE BANKING SYSTEM

Like any activity, the activity of banking systems was focused on maximizing the profit, under the conditions of a more severe competition. Thus, for the dispersion of risk, some specific activities of a bank were outsourced, being taken over by non-banking financial institutions. Moreover, strong banks from the European Union countries took advantage of the huge differences in the structure of wages and taxes from other neighboring countries, relocating on their territory certain activities or banking units. The events of the last years, increasing competition have led to the orientation of banks towards a policy of mergers and acquisitions.

In Europe, the mergers have materialized, among others we mention the purchase of Sanpaolo Bank by Intesa Bank, or the most important merger, with direct implications on the Romanian banking system, is the one between UniCredit and HVB.

The consequences in Romanian market were represented by the unification between HVB Bank Romania, "Ion Tiriac" Commercial Bank and UniCredit Romania. It should be noted that, although bank mergers and acquisitions have as primary purpose costs reducing, dispersion of banking risks and a more efficient use of resources, they can also generate dominant positions on the market. The largest banks that resulted from mergers may impose their own policies, even using anticompetitive means.

In Romania, the evolution of the financial system was determined by the changes in the global economy, changes imposed by globalization. The banking system in Romania offered products somehow standardized, products that could not satisfy in an absolute manner the requirements and expectations of the market. Thus, from this need to cover the whole range of customer needs, banks started to focus on expanding the market share of traditional products and towards their diversification.

The accession of Romania to the European Union allowed the penetration of foreign capital, with a significant weight in the current structure of the Romanian banking system. 2011 and the first half of 2012 haven't brought major changes regarding the structure of the Romanian banking system.

Significant changes have occurred in terms of market share, the group of banks with Greek capital was outrun by the group of banks with Romanian capital, ranking second, after the group of banks with Austrian capital.

Table 1. Structural indicators of the Romanian banking system

	end of period							
	2005	2006	2007	2008	2009	2010	2011	2012 S1
Number of credit institutions	40	39	42	43	42	42	41	41
Number of banks with majority private capital	38	37	40	41	40	40	39	39
Number of banks with majority foreign capital,	30	33	36	37	35	35	34	34
of which:	6	7	10	10	10	9	8	8
– foreign bank branches								
Assets of banks with majority private capital/Total assets (%)	94	94,5	94,7	94,6	92,5	92,4	91,6	90,7
Assets of banks with foreign capital/Total assets (%)	62,2	88,6	88	88,2	85,3	85,0	83	81,2
Assets of top five banks/ Total assets (%)	58,8	60,3	56,3	54,3	52,4	52,7	54,6	55,2
Herfindahl-Hirschmann index (points)	1,124	1,171	1,046	926	857	871	879	866

Source: NBR

In terms of the shareholders, the changes during 2011 and the first half of 2012 were not significant in the structure of Romanian banking sector. The number of credit institutions, compared to 2010, declined following the transfer of the Anglo-Romanian Bank branch to BCR, in the third trimester of 2011.

In 2011, the degree of financial intermediation calculated in nominal terms recorded a slightly downward trend, due to the reduction of the weight of foreign assets and of some categories of domestic assets, other than loans and securities. The degree of financial intermediation expressed in real terms and calculated by the volume of private sector credit reported to GDP (Gross Domestic Product) shows a slight increase compared to December 2010.

The Romanian banking system is currently represented by 40 active banks: 4 with majority domestic private capital, 26 with majority foreign private capital, 8 branches of foreign banks, to which we add a credit cooperative organization and 2 banks with majority or integral capital of state. A total of 18 credit institutions in the EU, during 2011, have notified to BNR their intention to directly provide financial services in Romania, based on the European passport.

In terms of assets, the market share of banks with majority foreign capital continued its downward trend from 2011, reaching 81.2 percent at the end of the first half of 2012. The reduction in market share was mainly due to the sales of fixed and bad assets in the context of restructuring balance sheet. The largest market share, as in previous years, is owned by the banks with major Austrian capital, holding 38% at 30.06.2012. The group of banks with major Greek capital has reduced its market share

from 16.3% to 12.9%, being surpassed by the group of banks with major Romanian capital, whose weight in aggregate assets increased to 18.3%.

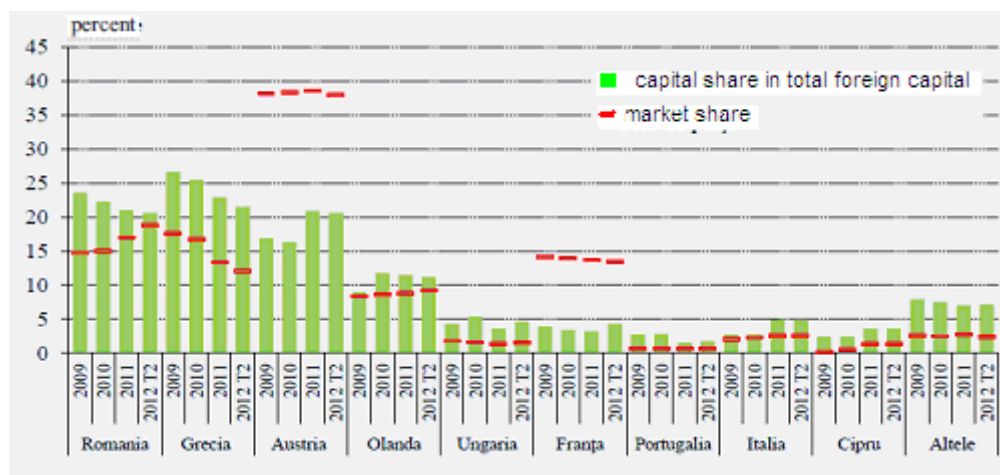


Figure 1. The weight of social capital of credit institutions in their total capital and market share by country of origin

Source: NBR

The increase of the social capital of the banking sector, by 42% in June 2011 - June 2012 was provided exclusively by the private sector, both through additional capital and through the adjustment of existing capital levels with inflation, as a result of the application of new accountant standards for reporting IFRS. However the Greek capital remains majoritary (21.5%) in the Romanian banking system, but continues the downward trend began in 2010 (Figure 1).

Regarding the weight of Austrian capital in the aggregate capital, it recorded a significant increase compared to 2010 (4.3%) reaching at the end of June 2012 the level of 20.6%, the cause being represented by the capital additions made by the Austrian banks.

Regarding the Romanian banking system in terms of the degree of connectivity to the European banking system, we can say that there is a close connection between them (Figure 2). The Romanian banking system is owned mostly by the foreign capital (34 credit institutions with major foreign capital held over 81.2% of the assets of banking system in June 2012).

The period 2009-2011 is represented by a tendency of reducing costs with the territorial branch and the number of employees, a tendency also shown in the first half of 2012, but with more intense speed. The number of units was reduced with 130 in 2011 and with 352 in the first 6 months of 2012. Regarding the number of employees in the banking system, this one decreased with 980 in 2011 and, by 3700 in the first half of 2012 (Figure 3).

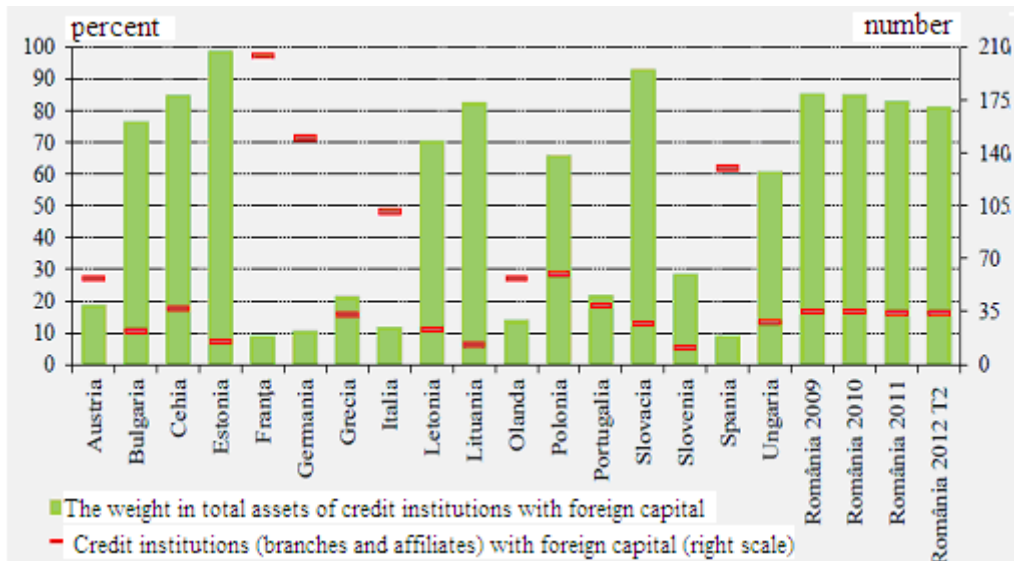


Figure 2. Market share and the number of credit institutions with foreign capital (international comparison)

Source: ECB – EU Banking Structures, NBR

The banking system of Romania continues to be below the European average in terms of number of credit institutions per 100 000 inhabitants and, respectively, the number of territorial units (Figure 4).

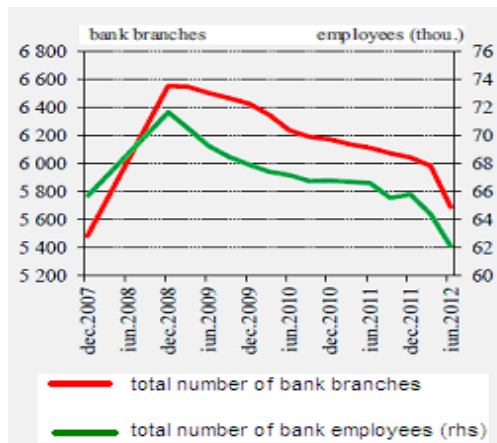


Figure 3. The number of bank branches and bank employees (percent)

Source: NBR

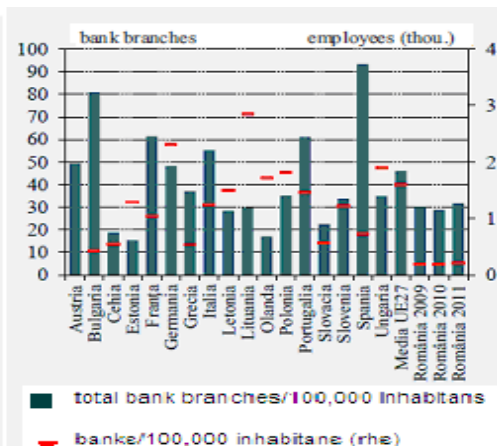


Figure 4. The number of banks and bank branches per 100,000 inhabitants (international comparisons)

Source: NBR, ECB-Statistical Data Warehouse

The degree of financial intermediation in nominal terms has recorded a slight downward trend (to 67.9% in December 2011) in the case when the nominal rate of growth of the gross asset was outrun by the one recorded by the nominal GDP. The degree of intermediation was calculated as a percentage of bank assets in GDP (at gross value).

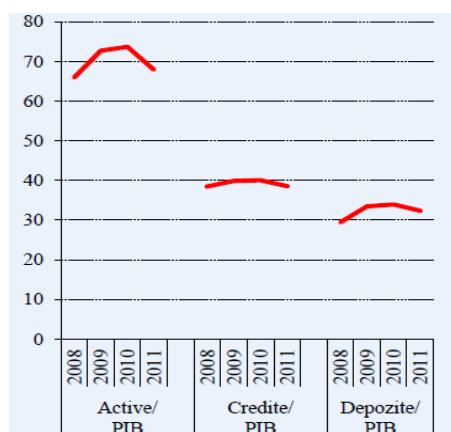


Figure 5. The degree of financial intermediation in Romania

Source: NBR

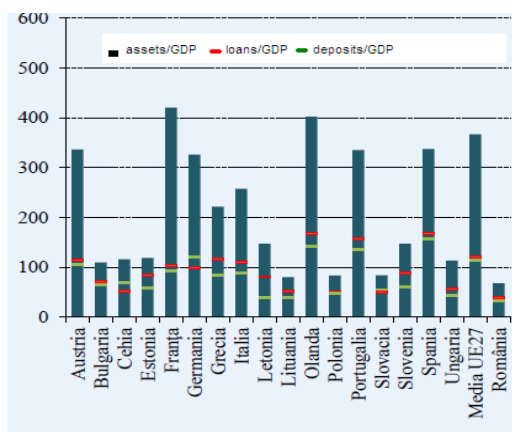


Figure 6. The degree of financial intermediation (international comparison)

Source: NBR, ECB-Statistical Data Warehouse

The degree of financial intermediation calculated by referring to GDP of credits given to the private sector shows an upward trend compared to December 2010 (approximately 0.8%), that in case when the other two presented indicators reflect a decreasing trend (-3.6 % for assets or -0.16% for deposits). Therefore, we can say that the degree of financial intermediation in Romania for the year 2011 is a lot below the EU27 average (Figure 6.)

In terms of the degree of concentration of the Romanian banking system, reflected by the weight of assets held by the top five banks in aggregate assets, we can speak of a slight increase to the value of 55.2% (Figure 7) trend observed since 2010. This upward trend was also seen in credits, where the top 5 banks in the system (by size of assets) owned 53.1% of the Romanian banking system loans. Thus, both economic agents and the population begin to orient themselves to credit institutions with a positive image.

Herfindahl-Hirschman index (HH) reveals a lower degree of concentration in assets compared to deposits (983 points). HH values, calculated from the assets, at end of first semester of 2012, attest a moderate level of concentration. Also, in this case the Romanian banking system is below the EU27 average (Figure 8).

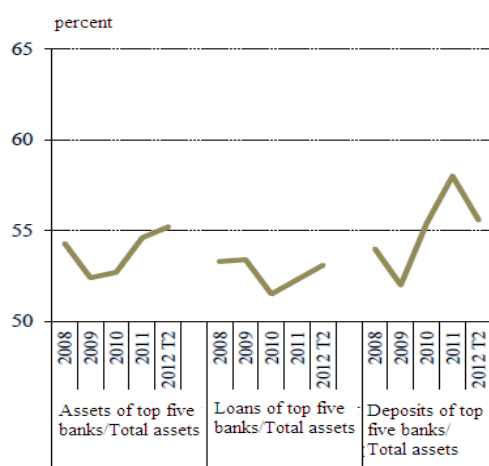
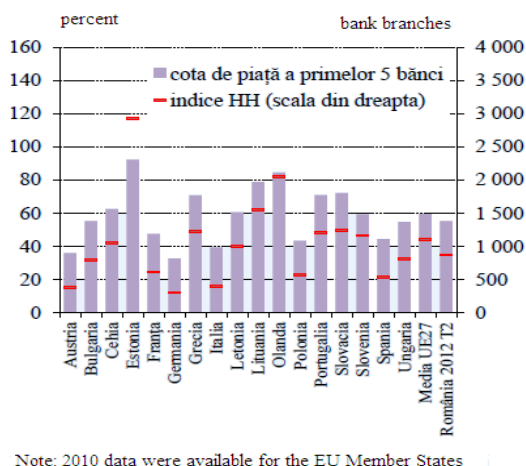


Figure 7. The degree of concentration of the Romanian banking system

Source: NBR



Note: 2010 data were available for the EU Member States

Figure 8. The degree of concentration of the System (international comparison)

Source: NBR, ECB –Statistical Data Warehouse

3. CONCLUSIONS

In the current economic climate, globalization is a phenomenon that cannot be avoided. It can lead either to an economic growth, if it is properly understood and applied, or to regression, if the participating institutions cannot cope with permanent and rapid developments. We foresee for the near future new measures of financial stability, measures with applicability also in the field of credit institutions.

The banking system has been and will remain a volatile environment favorable for risk and innovation. Only those banks that will know how to take advantages of the opportunities that will arise, in terms of keeping an acceptable level of risk, will survive and will develop practically absorbing other weaker institutions or poorly managed.

REFERENCES:

- [1]. Ionete, C. (2002) *Monetary policies in globalization perspective*, in "Finances - future challenges", Universitaria Publishing House, Craiova, p. 4
- [2]. Dăianu, D.; Vrânceanu, D. (2002) *Romania and the European Union. Inflation, balance of payments, economic growth*, Polirom Publishing House, p. 27
- [3]. The International Monetary Fund, *World Economic Outlook*, May 1997, p. 43
- [4]. <http://www.bnr.ro/PublicationDocuments.aspx?icid=6711>, Report on Financial Stability - 2012

OPPORTUNITIES FOR HUMAN RESOURCES DEVELOPMENT BY PROFESSIONAL INTEGRATION / REINTEGRATION

LAVINIA ELISABETA POPP *

ABSTRACT: *The present paper presents some opportunities for the development of human resources by means of professional insertion / reinsertion. It is about an intervention project, more precisely the establishment of a Centre for Career Counselling and Professional Requalification (CORP) within the University "Eftimie Murgu" of Reșița. The objective was the promotion of an inclusive society able to facilitate the access and integration on the labour market of the young unemployed. By its activities, the project forwards an inclusive model of social inclusion of the professionally inactive young people through individualised programmes of qualification - requalification, support and professional counselling. By its results the project contributed to the stimulation of the participation of young unemployed persons to the social, economic and educational life, the consideration of the importance of the role played by education and professional training among the youth.*

KEY WORDS: *human resources development; professional integration; intervention project; opportunities; research.*

JEL CLASIFICATION: *I21; I23; I25; J60.*

1. INTRODUCERE

Important changes are taking place on the labour market (regarding the labour status, structural and occupational modifications) in the countries in transition to market economy, which exhibit certain particularities generated by the structure of economy, economic performances and potential, training degree and opportunities for labour force improvement. The transition of Romanian economy includes also the organisation of an appropriate labour market, an extremely complex and difficult process, as the labour market is the most imperfect of all, which imposes adequate measures in the economic policy to ensure its normal functioning (Cojocaru, 2003, p. 604). Labour market is a heterogeneous ensemble, made of labour markets

* Lecturer., Ph.D., University „Eftimie Murgu” of Reșița, Romania, lavinia_popp@yahoo.com

individualised down to each trade or specialisation, which operate distinctly and may influence each other by professional re-qualifications (Pert, 2002, p. 33).

2. PROFESSIONAL IMPROVEMENT – ESSENTIAL FACTOR OF THE PROFESSIONAL INTEGRATION PHENOMENON

Taking into account that professional training, qualification, requalification and improvement are essential factors for the phenomenon of professional integration - reintegration and of the reduction of the vulnerability to unemployment, the institutions with attributions in the field of the social protection of the unemployed should intervene for: supporting and maintaining the competencies affected by their long-term unemployment, qualification of active persons without professional competencies, re-qualification of active persons in accordance with the needs of the economic agents or their desire, their adapting to the labour market requirements (Maniac, 1998, p. 104).

An important contribution to the reaching of these objectives is brought by practising certain forms of improvement such as: *poly-qualification*, which results in getting a qualification adjacent or complementary to the basic specialisation, whereas the labour force may be used more efficiently, both from the individual viewpoint and from the perspective of the performances of the group they belong to; *re-qualification*, which consists in modifying or acquiring new professional skills and competencies, with subjective causes (individual's re-evaluation of his professional option, failure to adapt or integrate in the acquired profession) and objective causes, such as modernisation of manufacture, of its organisation forces under the impact of technologisation, automation, accented moral wear and tear of certain professions leading to their disappearance and replacement with new ones, amplification of competition among work teams, individuals, unemployment); professional recycling, focussed on the maintaining of professional competencies at the performance standards imposed by the continuous technical and scientific progress. By making appeal to these forms of professional improvement, the employed individuals will succeed in maintaining their present social status, in heightening their social and professional prestige and in manifesting a flexible and creative behaviour, in line with the increasingly higher requirements imposed by the scientific process and permanent restructuring of the economic and social system. Both economic agents and labour force suppliers are interested in solving the problems related to professional training, qualification, re-qualification and improvement in order to meet employers' requirements. But in fact it is rare that demand is in accordance with supply when it comes to labour force. Specialised studies have highlighted the fact that the relation between education and labour force is at the origin of the correction operations or dys-functionalities in the labour demand – supply relations, combined with the dynamics of professions and the behaviour or preferences of demand and supply, as well as social-economic crises. The system of “given qualifications” (acquired through the training system) is also a regulator of the labour market, beside the system of “professional reconversion depending on the market requirements”. The latter attempts to solve dysfunctions and to increase thus the opportunities of the labour force offers, with

qualifications that are precarious or non-conform with the market requirements, when it comes to finding a job (Cojocaru, 2000, pp. 142-146).

Professional reconversion should take place on the basis of a local market study, aiming at: comparing the qualifications of employees with those of the unemployed, comparing the qualifications existing on the market with the requirements of economic agents at a given moment and the qualifications of the persons at present as well as their availability to have these qualifications (three to five years prognosis); identifying the capacities of local economic agents to organise courses of (re)qualification, improvement of practical training at the place of work; researching curricula and syllabi of education institutions in the area (schools, high schools, vocational schools, post-graduate schools, colleges and universities) and comparing them to the necessary labour force, by domains, economic branches and trades; presenting lists of qualifications in demand at a certain point, latent qualifications – which are not used in the labour market, usually during crisis period, either by those who possess them, or by those who are in search for them and do not know where to find them; outdated qualifications – “worn out” qualifications as a result of new technologies (they can be revived at a certain moment – such as farming and husbandry services).

The process of professional reconversion is largely influenced by the complex problems of the jobs offerors: preference for the complete or particular thing, observance of labour legislation by the employers; salary levels and labour conditions (night shifts, long hours, work in shifts, social assistance in the company, bonuses for difficult and dangerous conditions, manufacture and labour hygiene, promotion, relations with supervisors and subordinates, life cost for the individuals and their family); the flexibility of the labour force supply (desire to participate in qualification and requalification courses, possibilities of travelling to other areas where there are jobs available for trades and professions conform to the training); the social issues of the unemployed (living standard of families where a member is unemployed, loss of motivation to work or to search for a job, loss of confidence and self-respect and respect for the others, loss of friends, social assistance of the unemployed); attitude towards self-employment and entrepreneurship (availability to work as an independent authorised self-employed person, creation of jobs for the unemployed); level of labour force emigration (to other countries, by social-professional categories, ages, genders or nationalities); tendency of excluding from the labour market certain categories of persons from a certain area (youth, women, national minorities, former convicts, persons aged over 50).

The professional qualification, requalification and improvement of the unemployed is organised by the Divisions for Labour and Social Security and takes place in: own centres for qualification, requalification and improvement; different organisations such as autonomous enterprises under state’s supervision, companies, SMEs and lucrative associations; public and private educational institutions; and natural persons authorised to perform independent activities according to the law, on the basis of conventions (Cojocaru, 2000, pp. 146-148).

The qualification and re-qualification of the unemployed can be done in trades, specialisations, positions and activities corresponding to the labour force demands. The

training curricula and syllabi are elaborated by the Division for Labour and Social Security and the units where the training is offered, in accordance with the legal stipulations. The duration is set differentially: up to maximum 6 months, in relation with the complexity of the trade, profession or activity, and when the persons who are to get qualified have already practical knowledge and skills in the respective trade, the duration can be cut into half compared to the full duration of a requalification course for the same profile.

The qualification or re-qualification courses can be attended by the persons who are apt to work in the respective trade, profession or activity, who have the adequate studies and were selected and professionally oriented; the persons who did not graduate from the compulsory education, but possess minimum general knowledge for some simpler trades or activities which do not require theoretical training. The persons with diminished working capacity or with deficiencies are admitted to these courses only with the recommendation of the commission of medical examination and recovery of labour capacity.

For the jobs in economics and administration where the competition is harsh and the demand for qualification and re-qualification courses is higher, the Divisions for Labour and Social Security, together with the interested units, can establish other conditions of professional orientation and selection, including the subjecting of candidates to psychological and skills testing.

The persons who receive unemployment allowance admitted to qualification or re-qualification courses are obliged to conclude with the Division of Labour and Social Security a commitment, established by the Ministry of Labour, Family and Equality of Opportunities, and the latter concludes conventions with the units where the graduates will be assigned, by which the units pledge themselves to employ them after graduation (the persons who do not receive unemployment allowance do not sign such a commitment). Qualification and re-qualification comprise: theoretical training, which is offered according to the case at the office of the centres or at different units, the training programme being organised according to the conditions, one or two days a week, continuous or in 2-3 cycles. The practical training is usually made in the unit where the persons will be employed or in other units established by the courses organisers or at the qualification and requalification centres (in these situations it can be only practical training). The graduation from the qualification and re-qualification courses is done through an examination, consisting in a theoretical test taken before the examination board constituted at the Division for Labour and Social Security, and a practical test.

The expenditure for the activity of qualification and requalification of the persons who receive unemployment allowance are borne by the Division for Labour and Social Security from the unemployment fund and comprise, according to the law (beside the payment of the unemployment allowance): the course participation fee for each person which is set by the units where the training takes place, comprising the totality of the expenses necessary for the activity of qualification and requalification (personnel expenses, materials, upkeep and operation); expenditure for editing printed materials, published in the press, broadcast on the radio, on TV, as well as the organisation by the Ministry of Labour, Family and Equality of Opportunities and its

territorial organisms of some actions of information of the unemployed and the economic agents about the demand and supply of jobs, the opportunities of qualification and requalification in view of the reintegration of the unemployed. The revenues resulted from the works effected by the trainees during the training period, from which one retains the amounts that are paid to them, will be transferred to the unemployment fund.

The persons who, according to the law, are not entitled to receive unemployment allowance, as well as other persons who desire to get qualified or requalified, with priority those who wish to carry on free initiative activities, may be admitted with the payment of schooling expenditure, whereas the persons who, according to the law, are not entitled to the employment allowance or the persons for whom the unemployment allowance has ceased and do not earn any other incomes (or their monthly incomes are under 50% of the minimum salary in the economy), who desire to attend a qualification or requalification course do not have to pay schooling fees; the Divisions for Labour and Social Security have the task to organise, within the limits of the available funds, qualification or requalification courses of the unemployed who desire to carry on free initiative activities (Government Decision H.G. no. 288/20.04/1991 regarding the qualification and requalification of the unemployed, Romania's Official Gazette, no. 104/15.05/1991).

The organisation of a qualification or requalification course is done in the following conditions: that there are demands from units or interested persons; that there are no qualified persons in the records of the Labour Office for the trade or profession for which the course is organised; that there are well-endowed training facilities, well prepared teachers and trainers, didactic materials and practice locations.

The guidance and control of the manner of organising and teaching qualification and requalification courses is done by the Ministry of Labour, Family and Social Security through inspectors for the monitoring of the activity regarding the establishment and payment of the unemployment allowance; the specialised inspectors of the Division for Labour and Social Security, experts, teachers and foremen-instructors of the Centre for the Qualification and Requalification of the Unemployed.

The persons admitted to the courses of qualification and requalification of the unemployed have to meet the following requirements: to be graduates of the general compulsory education, to be apt for the respective need or to have the recommendation of the commission of medical evaluation and recovery of labour capacity, to meet other requirements related to professional selection and orientation, including passing certain skills tests, if for a certain trades such conditions are set.

The persons who receive unemployment allowance should conclude a commitment pledging them selves to get employed in the units where they will be assigned. The activity of theoretic training and practical training is carried on based on curricula and syllabi specific for each trade, drawn up by the Centre for the Qualification and Requalification or by the Labour Force Office and the units where the course is given. The theoretic training is established to be around 33% of the total training hours, whereas the practical training represents 67% of the total. The verification of knowledge and skills acquired by the trainees is done during the entire process of theoretic instruction and practical training. The final graduation examination

can be taken by all the trainees who passed the subjects of the curriculum, and this final exam consists in a practical test and written and oral theoretic tests. The list of graduates from the qualification or requalification courses, by trades, is filed with the Office of Labour Force – the placement office – which assigns them to their working places (Methodological norms regarding the organisation of qualification or requalification of the unemployed – annex to the norms approved by the Order of the Minister of Labour and Social Security no. 149/1991).

3. THE DEVELOPMENT OF HUMAN RESOURCES BY PROFESSIONAL TRAINING. INTERVENTION PROJECT

Professional training represents the learning process, helping to the orientation of the development strategy of human resources, which can shape the future and can be integrated into the national and regional programme of economic and social development. At the integration into the practical equation of this strategy we consider it necessary to combine the efforts of specialists belonging both to sociology and to economy, who will have to become partners in an efficient dialogue.

Toffler H. in 1995 affirmed that the investment in man and professional training prove to be, under the condition specific to world economy on the threshold of the 3rd millennium “... a source of power of the highest quality, which gains in importance with each nano-second...” (p. 467). Professional training represents the process of learning, aimed at orienting the strategy that can mould the future.

Andrioni F. forwarded the idea that in the present context, because of the increasingly high complexity of the labour market, it is necessary for each individual to make realistic decisions as regards his or her training and professional career, especially when one takes into consideration “the dynamics of economic and social changes generating diverse professional challenges, but also employment opportunities on the labour market” (2011, p. 30)

It is essential that the strategy of human resources development gets integrated into the national and regional programme of economic and social reform and observes certain stages: identification of the guidelines allowing the alignment of professional training to the requirements to the economic-social development; analysing the situation existing in the Caraş-Severin county in order to identify the problems affecting the operation of the local labour market; the partnership and dialogue among specialists, able to contribute to the grounding of the strategic scene of human resources development, analysing the exiting theories and practices in order to find the most efficient possibilities of correlating labour supply and demand.

By shaping the strategy of human resources development one strengthens the social and economic dimension of reform in our country’s labour market. It is important to shift the attention in the field of human resources from the national to the regional level. The professional training should be done with focus both on a short-time perspective, which should meet the immediate requirements of employment and other processes of training, improvement or reconversion, as well as on a medium and long-term perspective which will succeed in combing results in a national or regional policy of human resources development on the labour market.

The territorial area comprised in the project is the town of Reșița, mono-industrial town where technical qualifications are predominant and the offer of professional training is poorly covered.

The objectives and activities of the financing frame *Development of Human Resources, Active Employment Measures* are in accordance with the EU Guidelines of the Employment Strategy, with those of the National Strategy for Employment 2004-2010 and with the strategic and action directions for lifelong professional training 2005-2010. One has taken into account the elimination of structural unemployment problems in Romania, the key issues to approach being related to the high unemployment rate among the youth (persons aged between 15 and 25), the long-time unemployed, the persons in search of a job living in the rural areas and the persons employed in agriculture with low incomes.

Approaching this problem by the intense use of active measures, focused on professional training, will increase mobility, flexibility and adaptability of the persons on the labour market, generating thus a higher unemployment rate.

The University "Eftimie Murgu" of Reșița implemented, in the period 2008-2010, a project in the Active Measure for Employment activity field, which should correspond to the goals and priorities set on the national and regional level in the domain of employment and promotion of lifelong professional training. The project aimed at establishing a Centre for Career Counselling and Professional Requalification (CORP) within the University "Eftimie Murgu" of Reșița.

General objective: promoting an inclusive society meant to facilitate access and insertion on the labour market of the young employed.

The project contributes to the reaching of the objective regarding the increase of the employment rate among the youth by facilitating access to education and employment. By its activities, the project proposed an inclusive model of social insertion of the young people who are professionally inactive by individualised programmes of qualification - requalification, support and career counselling; awareness and direct information campaigns of decision-makers on the labour market, and indirectly of society, all scientifically grounded through a local survey. These endeavours were supported by a partnership among local authorities, local centres of economic-social research, employment institutions and NGOs specialised in the youth issues. The project aimed at counselling the young unemployed persons in search of a job.

Four qualification courses were organised, all authorised by the CNFPA, i.e.: web page designer, social worker, specialist in computer-aided design and guesthouse manager.

A database was elaborated with the persons who demanded counselling and a survey was conducted on the unemployed counselling and skills, in order to identify new trades for which the university could get future authorisations. The survey, represented by the analysis of the application of professional interests tests, the scope of the professional success, is a transfer of weight from skills and abilities to professional interests and motivations.

The University "Eftimie Murgu" of Reșița considered it necessary to adapt its educational offer to the requirements of the regional and local labour market, and the

reasons that contributed to the selection of these qualifications were the following:

- *For social workers*; in Caraş-Severin there was a very limited offer of authorised suppliers who organised qualification courses in Reşita, Anina, Oraviţa. Unfortunately, most persons who attended these courses went to work abroad, and in the county we could notice a deficit of such specialists.

- *For touristic guesthouse manager*; in our county at UEMR we offer a specific specialisation, Economy of Commerce, Tourism and Services, training both qualified personnel and also graduates who wish to become specialists. There are numerous locations (mountain tourism - Semenic, Little Mountain, Crivaia, Gărna; Rural tourism - Bolvaşnita, Caraşului Gorges, Nerei Gorges, Sasca Montană) which started touristic projects, but being at their start do not have specialists. The demand for such qualifications is increasing, guesthouses cannot operate without a manager.

- *for web pages designer*; tourism means also IT (software), foreign languages, large-scale modern management and marketing. All these can be acquired by youth, which have the capacity to learn and have the ambition to build a career.

- *for specialist in the field of computer-aided design*; almost every job supposes, in the present perspective, the use of computer and the Internet.

Within the Sector Operational Programme Development of Human Resources 2007-2013, in the chapter *Analysis of the present situation of the development of human resources*, it was mentioned that the high unemployment rate among the youth represents a major negative effect determined by the poor correlation of qualifications supplied by education and initial professional training with the labour market. This rate remained high for almost all the levels of education / training. A young person's chances to be integrated on the labour market increase along with his or her level of qualification, the situation being different in the case of older population. This fact can be explained by the low connection between education and labour market. The poor degree of correlation between school and labour market explains why the young graduates, compared to the older population, need a relatively longer period to get inserted to the labour market and adapt to the requirements of the place of work, irrespective of their level of education / training. The lowest degree of correlation is mostly specific to the intermediate levels of qualification. The young unemployed were mostly men, who did not succeed in getting employed, and were registered as unemployed immediately after school graduation. In Romania young people have been and still are very exposed to the unemployment risk, the unemployment rate among them being 2-3 times higher compared to the EU average.

Following the evaluation of the results of the survey conducted locally, we found that in Caraş-Severin county there were not enough social workers with secondary training, because they were trained through qualification courses and came from among women aged over 45, who had been laid off from other positions. Even among the persons qualified through lifelong learning courses, many of them preferred to work abroad. Following this analysis, we find that the young unemployed aged between 15 and 25 have the following educational needs: correlating their qualifications with the labour market, and conceiving courses adequate for the economic activities that can be developed locally, for instance guesthouse manager, social worker; organising free courses, as the young unemployed cannot afford to pay

for another qualification; creating a centre for career counselling and professional orientation, because, beside family and friends, young people are thus helped by specialists to make a career decision using scientific methods and techniques, more efficient than the empirical methods. If the young people desire to make efficient decisions as regards their educational and professional trajectory, then the process started with the awareness and evaluation of their own person..

The beneficiaries of the intervention project were the families of the persons who found a job; the state or local budgets, which were lifted the burden of paying employment allowances or social allowances according to Law; employers.

As pointed out, the general objective was represented by the active and preventive employment measures destined to the unemployed, focused on the young unemployed, long-term unemployed, and persons in search of a job from the rural milieu, as well as persons working in agriculture who earn low incomes.

Among the results of the project we can list: the creation of the Centre for Career Counselling and Professional Requalification; at least 56 persons acquired a new qualification following the participation in the courses of web design, social worker, specialist in the field of computer-aided design and guesthouse manager; counselling a number of 120 young unemployed persons, the survey *The unemployed - identity and professional training*.

The Centre for Career Counselling and Professional Requalification provided the young unemployed special opportunities related to career counselling. At present there are career counsellors in some high schools, but the young people who graduated from high school 8-10 years ago, or those who attended a vocational school, did not have the possibility, at that time, to know their specific skills, their thinking style, their domains of interest, their personality traits. This is why many young people graduate from a school and get a qualification in a trade they will never practice.

The partner in this project was AJOFM Caraş-Severin, the County Employment Agency, which provided the database used for the selection of the persons who attended the courses, and attempted to identify the potential employers for the persons qualified in the project.

The project sustainability was assured by means of tertiary activities, by the authorisation of the CNFPA in other fields too: social mediation, care-taker of senior citizens at their domicile, personal assistant of the persons with serious handicaps, etc.

The project had multiplying effects, as at its completion at the University "Eftimie Murgu" of Reşita one created a Centre for Career Counselling and Professional Requalification, equipped with a modern IT laboratory. By continuing the activities one ensured the increase of the number of trainees and hence the multiplication of the project results. Another activity in the project was on-line counselling, which meant the creation of a portal for on-line counselling called e-Counselling with the following options: courses offer; career planning, educational environment, lifelong learning; on-line assistance; career management; classic counselling, labour market; partner placement enterprises; CV elaboration. On-line career counselling is a rapid method to find details when needed, in the profess of personal development. Although it is different as operation modality compared to classic counselling, its advantages are obvious, i.e. participation in the programme is

not conditioned by a certain location; the counselled person is in direct and permanent contact with the specialists; one may continue the personality evaluation through a programme of classical pre-counselling, it is less expensive. At the end of the counselling stages the beneficiary will receive a personalised report of career evaluation containing the analysis of the results of the personality inventory, the strengths and “weaknesses” which have to be fortified through diverse programmes of personal development.

4. CONCLUSIONS

By its theoretic and methodological content the study aims at underlining the importance of profession and career, of reconstructing professional identity in creating a balance between individual and society, strengthening the correlations between the labour force demand and supply and the specificity of professional training. We attempted to put this plea into practice by the intervention project - “Creation of the Centre for Career Counselling and Professional Requalification” - CORP within the University “Eftimie Murgu” of Reșița.

Grace to its results, the project contributed to the stimulation of the participation of the young unemployed in the social, economic and educational life, the consideration of the importance of the role played by education and professional training among the youth, the elimination of stereotypes, prejudices and certain managers’ practices towards the young generation’s lack of experience.

Career counselling contributes to the moulding of the future, to the shaping of the young person’s own destiny, by information, education, self-training, self-orientation, and this person becomes thus able to make rational, justified and motivating professional and career choices.

REFERENCES:

- [1]. **Andrioni, F.** (coord.) (2011) *Informarea, consilierea și orientarea profesională a persoanelor afectate de virusul imunodeficienței umane. Ghid de bune practici*, Editura Corvin, Deva
- [2]. **Cojocaru, M.** (2003), *Asistența și protecția socială la nivelul pieței muncii în România, în Tratat de Asistență Socială*, (coord. Neamțu, G.), Editura Polirom, Iași
- [3]. **Toffler, H.** (1995), *Puterea în mișcare. Cunoașterea, bogăția și violența în pragul secolului XXI*, Editura Antet, București
- [4]. **Maniac, E.** (1998), *Șomajul*, Editura Călăuza, Deva, p. 104
- [5]. **Perț, S. et al.** (2002) *Ocuparea și șomajul în România*, Centrul de informare și documentare economică, București
- [6]. *Government Decision H.G. no.288/20.04/1991 regarding the qualification and requalification of the unemployed*, Romania’s Official Gazette, no. 104/15.05/1991
- [7]. *Methodological norms regarding the organisation of qualification or requalification of the unemployed* – annex to the norms approved by the Order of the Minister of Labour and Social Security no. 149/1991
- [8]. *Law no. 76 of 16 January 2002 regarding the system of unemployment insurance fund and stimulation of employment*, published in Romania’s Official Gazette no. 103 of 6.02. 2002

PROMOTION OF ACTIVE MEASURES AND EMPLOYMENT STIMULATION

LAVINIA ELISABETA POPP *

ABSTRACT: *Researches in the field of the labour market has allowed the identification of certain specific mechanisms for employment promotion; at present, on the Romanian labour market we find passive policies, concretised in financial aids paid to the unemployed, along with active policies, constituting the most efficient social protection activity addressed to the unemployed (they aim at counterbalancing the inefficiencies determined by the granting of financial allowances, help population to find a job by actions of information, professional training and contributing to the encouragement of the labour force mobility). The paper refers to some theoretical considerations related to the influence factors of employment stimulation, as well as to the unemployment – correlated adequate measures synapse. The applied research comprises the analysis of statistic documents; the method used is the case study, i.e. the activity of employment stimulation carried on by the County Agency for Employment Caraș-Severin, in the period 2004-2012. The conclusions highlight the impact of the activity of the institutions involved in the system of social protection and security within the labour market.*

KEY WORDS: *active employment measures; unemployment; poverty; labour market institutions; social protection and security.*

JEL CLASIFICATION: *I24; J15; J21; J71.*

1. INTRODUCERE

A specific group of Romania's active population requiring the intervention of the social work services is represented by the unemployed. Unemployment represents, in the context of the transition to market economy, with the deep restrictions it implies, a true psychological and cultural shock for the people accustomed, in the past, to have an easily-found job and kept even more easily (Zamfir & Vlăsceanu, 1993).

In the context of a common European policy, acknowledging the importance of the role of social services as key actors in the population's partnership for welfare, in

* Lecturer., Ph.D., University „Eftimie Murgu” of Reșița, Romania, lavinia_popp@yahoo.com

the promotion of the equality of opportunities and social inclusion of all the citizens of the EU member states, Romania, both in the pre-joining period, and after having joined the European Union, has developed the segment of social services (Andrioni, 2011, p. 22) assuming its mission to respond also to the transformations and challenges of the labour market by promoting active and stimulating actions for employment boosting.

The restructuring of the Romanian social-economic system in accordance with the requirements of market economy has triggered deep and essential changes to the labour market, among which the occurrence of unemployment as mass phenomenon. Unemployment, unwanted social phenomenon, has determined, among certain social-professional categories, the drop of material earnings (sometimes even serious poverty) and complete alteration of social statuses and roles. Negative phenomenon of the social-economic space affecting part of the active population, main factor of economic instability and consequently of social conflicts, unemployment is not uncontrollable, and it is not a one-way process, it can be reduced if one acts competently by promoting some adequate correlated measures (Codin, 1990).

2. PROMOTION OF ACTIVE MEASURES AND EMPLOYMENT STIMULATION

The labour market has undergone powerful changes in time, modifications that have created the need for a new institution. A modern flexible institution, able to respond to these challenges. In order to achieve social protection in the Romanian labour market one created, through Law no.145/9 July 1998, The National Agency for Employment and Professional Training (ANOFPT), institution that has changed its name into the National Agency for Employment.

The National Agency for Employment (ANOFM), together with the 42 county agencies and over 180 local agencies, is addressed to the unemployed and economic agencies, and its main objective is represented by the increase of the employment rate and implicitly by the decrease of the unemployment rate.

Among the essential objectives of the National Agency for Employment we may list: institutionalisation of social dialogue in the field of employment and professional training; application of strategies in the field of employment and professional training; application of the measures of social protection for the unemployed. The main services offered by ANOFM are the following: professional information and counselling; business consulting for the unemployed and students; pre-firing services; completion of salary incomes, labour mediation; advantageous loans; courses of qualification and requalification; stimulation of the labour force's mobility (ANOFM).

3. EMPLOYMENT STIMULATION

The measures for the stimulation of employment are addressed both to the persons in search of a job and to employers and are realised through specialised services, supplied by the employment agencies or other services providers belonging to the public or private sector. The increase of employment opportunities for the persons

in search of a job is mainly done by: information and professional counselling, labour mediation; professional training, consulting and assistance for initiating an independent activity or of starting a business; completing the employees' salary incomes; stimulation of labour force mobility.

3.1. Professional training of the persons in search of a job

The persons in search of a job can participate in professional training programmes meant to offer them the growth and diversification of their professional competencies with the purpose of ensuring mobility and reintegration to the labour market. The professional training programmes provide, according to the law, initiation, qualification, requalification, improvement and specialisation of the persons in search of a job. The professional training of the persons in search of a job is done taking into account the current and prospective requirements of the labour market and in accordance with the individual options and aptitudes of the respective persons. The forms taken by professional training of the persons in search of a job are: courses, practice and specialisation stages, as well as other legal forms.

The access to the professional training programmes is done as a result of the activity of professional information and counselling or mediation. The professional training programmes for the persons in search of a job are organised distinctly by levels of training and specialisations, and by categories and groups of persons.

3.2. Completion of employees' salary incomes

The persons entitled to receive the unemployment allowance according to the law who get employed for a normal working schedule, according to the legal stipulations in vigour, are entitled to receive, from the moment of the new employment until the end of the period of unemployment allowance, a monthly non-taxable amount from the budget of the unemployment insurance fund, representing 30% of the total unemployment allowance, established or recalculated according to the law.

3.3. Stimulation of the labour force mobility

The persons who, in the period when they benefit from the unemployment indemnity, get employed in a locality situated at more than 50 kms from the locality of their stable domicile, benefit, according to the law, from a non-taxable settlement bonus, paid from the budget of the unemployment insurance fund, equal to two minimum gross wages in vigour on the respective date. The persons who, in the period when they receive the unemployment allowance, get employed in another locality and consequently change their domicile, receive a settlement bonus, granted from the budget of unemployment insurance fund, equal to 7 minimum gross salaries in vigour on the settlement date. The cease of the labour or job relations at the initiative or for the employee's fault, within less than 12 months from the employment date, triggers the obligation to return the entire amount granted as bonus provided in art. 74, 75.

The employers' stimulation to employ the unemployed is done through: subsidies for the jobs; granting of advantageous loans in view of creating new jobs; granting other facilities.

The jobs subsidies are allotted from the budget of unemployment insurance fund and from other sources according to the legal provisions, for covering the expenditure for the labour force incurred within the deployment of certain programmes aiming at the temporary employment of the labour force from among the unemployed, for the execution of works and activities of interest for the local communities. The sources stimulated in par. (1) can mainly subsidise the following categories of services:

- public services of infrastructure recovery and upkeep, of ecologisation and construction of husbandry works, organised by the local public authorities, by private companies or NGOs, with the approval of the local public administration;
- social services comprising activities of home care for the children, for the sick, for the senior citizens and the handicapped, organised by the local public authorities, NGOs and other organisms under the law.

Loans granted in advantageous conditions. For the creation of new jobs by the incorporation and development of SMEs, cooperatist units, family associations, as well as independent activities carried on by the authorised self-employed persons employers may receive advantageous loans from the budget of the unemployment insurance fund.

Facilities granted to employers. The employers who hire unemployed person, and keep them employed for at least 6 months from the employment date, benefit from the reduction of the amount representing the 5% contribution due to the budget of the unemployment insurance fund.

3.4. The labour mediation

This is the activity meant to connect employers with the persons in search of a job, in view of establishing labour or job relations. The employment agencies have the obligation to identify the vacant jobs at the employers and to advertise them among the persons in search of a job.

The mediation services for the persons in search of a job is granted free of charge by the employment agencies and they consist in:

- information regarding the vacant jobs and the conditions of occupying them by publication, displaying, organisation of job fairs;
- the electronic mediation with the purpose of the automatic connection of jobs demand and supply by means of IT techniques;
- the pre-selection of candidates corresponding to the requirements of the job offered in accordance with their training, aptitudes, experience (Costin, Tufan & Garcea, 1996).

In view of implementing the measures for the employment stimulation, the agencies for employment have the obligation to draw up, for each person in search of a job, the individual mediation plan. The elaboration procedure, the content and monitoring of the individual mediation plan will be established by the order of the ANOFM Chairman.

Mediation in the sphere of labour and unemployment. The mediation centre

Society has the duty to intervene in the labour market, to offer a material and moral support to the human subjects in difficult times, to assist them in their efforts for the job search, identification, filling and preservation. For this purpose, in Romania, one created the adequate legislative and institutional frame and has allotted the human, material and informational resources for the development of a new domain of activity, known under the name of “labour mediation”.

Labour mediation is a compound of activities by which one attempts to correlate demand and supply on the labour market, with the final goal of employing the available persons, and of occupying the vacant jobs. The encounter between the labour demand and supply must take place under conditions able to satisfy both parties and lead to a sustainable professional relation. In the mediation activity, irrespective of the country or institution where they take place, there are three main actors that interact: the provider of labour force; the provider of jobs; the mediator.

The mediation centre offers the jobs applicant complete information related to: vacant jobs and conditions to fulfil for occupying them, services provided by the mediation department, statistics about the labour market, the employment programmes started locally offering a perspective of job offers; opportunities of qualification / professional training and conditions of participation in the courses. With the help of on an interview the mediator can evaluate the level of training and the level of the job applicant’s aspirations and is able to orient the job applicant towards:

- the economic agent who advertises a vacant job, when he considers the applicant meets the requirements for filling this position and wishes to carry on that activity;
- the centre for professional guidance / counselling, when the applicant does not have a clear image about his professional opportunities, the career he intends to develop or the needs to enhance his professional training;
- The Club of the Unemployed, when the applicant needs guidance in elaborating a CV, in drawing up a job application, in the preparation for an interview with the prospective employer;
- The frame of psychological investigation, when the person seems to have special problems or when the job requirements impose the candidate’s psychological testing.

The mediation centre should contact the maximum number of job suppliers (economic agents from the state or private sector, from the production or services sphere, all the public, governmental or non-governmental institutions that can employ personnel immediate or prospective) in view of:

- identifying the jobs that are currently vacant or will become vacant in the near future;
- collecting information about the ensemble of the economic agent’s activities;
- providing information related to the available labour force registered in the records of the mediation department;
- informing about the candidates’ opportunities of professional training for the vacant jobs (Costin, 1996).

3.5. The professional information and counselling

This constitute a set of services granted free of charge to the persons in search of a job, with the following goals: to supply information regarding the labour market and evolution of occupations, personality evaluation and self-evaluation in view of career guidance; development of the abilities and self-confidence of the persons in search of job, meant to enable them to make the right decisions about their own career; training in job search techniques. Professional information and counselling is done in specialised centres, organised within the agencies for the employment, as well as in other accredited centres and services providers belonging to the public or private sector, which conclude contracts with the employment agencies in legal conditions. The information about the labour market, the establishment of the professional track, the evaluation and self-evaluation is made by individual or group counselling offered, at request to the persons in search of a job – clubs organised by the employment agencies. The professional counselling and training in job search techniques and the presentation at the job interviews is done within the centres by career orientation counsellors.

Information about the labour market. The Centre for Information and Documentation (C.I.D) is an institutional frame organised as a public service, whose goal is the growth of the employment rate locally, by offering pertinent information about the labour market to target groups, and especially their orientation in accordance with their own aspirations and desires. As they are non-profit associations of local interest, focused on the processing and organisation of information related to the labour market, in order to offer them to the public, in an accessible form, C.I.D. contribute to:

- attenuating imbalances manifested, at a certain moment, on the labour market;
- observance of democracy and fundamental human rights, which also implies the free access to wide-interest information (such as that related to the labour market);
- ensuring the equality of the access of all categories of applicants, attempting at the same time to offer concrete and relevant answers to their questions (the information provided should be objective, free from any ideological or other types of influence);
- raising the awareness of the role of information in general, and of information regarding the labour market in particular;
- defining the notion of “public information” and of regulations of the access to this information.

For the success of the C.I.D.’s activities, it is extremely important to strengthen its relations with the economic agents, with the public institutions in the region, with the authorities and the local mass media. The initiative to create and support such a centre can belong to certain governmental institutions, local communities, NGOs, economic agents, programmes of international assistance for Romania. C.I.D. operates with the following types of information: related to the local and general economic-social frame, regarding professional orientation, vacant jobs and information with bibliographic or documentary character (Pitaru & Baciu, 1997).

The services provided by the C.I.D. are free of charge or cost very little, they must be rapid, updated, easy to retrieve, presented in an accessible form to the beneficiaries; the information, in order to be useful, should fulfil a series of conditions,

such as: to be accurate, complete, opportune, accessible, consistent, relevant and concise. C.I.D. systematically collaborates with: the Centres of Labour Mediation; the Centres for Career Counselling, the Club of the Unemployed, the units of professional training in the region (schools, colleges, universities, lifelong learning centres for the qualification, requalification and professional improvement of adults, belonging either to the Ministry of Education, or to the Ministry of Labour and Social Security or other ministries, public institutions, state or private companies); the Consulting Centres; the Business Incubators, the Chambers of Commerce and Industry; the institutions of research on the labour force who elaborate studies, analyses, statistics, prognoses; governmental bodies, local authorities (Prefectures, Mayor's Offices, local councils); the professional associations, trade unions, employers' associations; the Centres of European or international importance.

4. DESIGN OF THE CASE STUDY RESEARCH. THE ACTIVITY OF THE COUNTY AGENCY FOR EMPLOYMENT CARAŞ-SEVERIN

Methodology used: analysis of documents (studies, researches, articles, analyses), statistic analysis (databases, statistic documents), descriptive analysis.

AJOFM Caraş-Severin co-ordinates the activity of three local employment agencies which in their turn have workpoints in different localities of the county. The Local Agency for Employment Reşiţa (Workpoint Bocşa; Workpoint Resita – Govândari); The Local Agency for Employment Caransebeş (Workpoint Oţelu Roşu; Workpoint Băile Herculane; Workpoint Bozovici); The Local Agency for Employment Oraviţa (Workpoint Anina; Workpoint Moldova Nouă); Centre for Professional Training Reşiţa. AJOFM Caraş-Severin has developed various employment programmes since 2005: the programme for the employment of the socially marginalised persons; plans of professional training; *The employment programmes - 2005-2011 - of the County Agency for Employment Caraş-Severin*. AJOFM Caraş-Severin assists the interested persons to find a job in the European Union through the Public Service of Employment in the Economic European Area, EURES, and the position of the SEE states related to the access to the Romanian labour force on the European labour market is well defined. The EURES portal allows direct access in the 25 EU languages, to the set of labour offers published by Europe's 31 Public Employment Services.

The offers of vacant job presented on the EURES portal are mainly directly imported from the national databases of vacant jobs, generally written in the national language of the source country. Other details, as well as the type of contract, required experience and education level, are translated in all EU languages, and each employer may decide what language to use for advertising their vacancies. When the job offers are accompanied by a blue flag, this means the respective employer looks for personnel from European countries other than his own. Each vacant job offers information about the application procedure and contact person. The contact person may be either the EURES counsellor processing the application or, in other cases, the employer's representative directly. The standard EUROPASS European CV allows the presentation of qualifications, skills and competencies in a logical order: personal information,

description of professional experience, description of studies and training courses and a detailed inventory of personal aptitudes and competencies.

In 2007, as a result of the establishment of EURES in Caraş-Severin, a number of 451 persons have received the following types of services; counselling, information about the vacant jobs available in the SEE and Switzerland; data about the living and work condition in the EU; counselling and guidance for finding a job abroad; the applicants were assisted in filling in their CVs; the correspondence was kept both with the EURES counsellor in other counties, and with the EURES manager; the evidence of the job applications in SEE and Switzerland was transmitted monthly; the upload on the EURES portal of the job offers from Malta.

Since January 2007, when Romania joined the EU, it has been applying the provisions of the EEC Regulations no. 1408/71 and no.574/72 in the field of co-ordination of social security systems. AJOFM Caraş-Severin is an institution competent in the application of the aforementioned regulations for the unemployment allowances based on Order no 57 of 11 February 2008, for the approval of the instructions for the application of the provisions of the EEC Regulation no. 1.408 of 14 June 1971 regarding the application of the social security regimes to the employed, independent workers and the members of their families who travel within the Community, and of the EEC Regulation no. 574 of 21 March 1972, which sets the modalities of applying the EEC Regulation no.1.408 of 14 June 1971 related to the application of social security regimes to the employees, independent workers and members of their families who travel within the Community in the field of the unemployment allowances, issued by the Ministry of Labour, Family and Equality of Opportunities, the National Agency for the Employment and published in Romania's Official Gazette no .136 of 21 February 2008.

4.1. Increase of the employment opportunities for the persons in search of a job

AJOFM Caraş-Severin implemented the action "The Caravan of Employment", initiated by the National Employment Agency ANOFM, which intervenes by specific actions of information regarding the labour market, counselling and employment directly in the middle of the community. The purpose is to draw closer together the employment services and the beneficiaries or potential beneficiaries, through a pro-active approach, an open attitude and a better evaluation of the employment situation in the rural area. The target groups were the unemployed persons from the Caraş-Severin rural zones and the persons belonging to the Roma ethnic group.

4.2. The results of the implementation of the Employment Programme and of the active measures on the Caraş-Severin labour market

The employment programmes for the period 2004-2012 were elaborated on the basis of the proposals of local employment agencies, based on the analysis of the economic and social situation recorded in the territory.

Furthermore, one also took into consideration the results obtained in the past years as a result of the application of the employment plans and programmes, as well as the legislative changes in the domain, together with the coming into force of the modifications to Law no. 76/2002 and of the entire package of normative acts in the support of their application, as well as of Law no. 116/2002 regarding the elimination of social marginalisation, which underlay the definition of the main quantitative indicators. The increase of the employment opportunities for the persons in search of a job is done mainly by: professional information and counselling, labour mediation, professional training, consulting and assistance for the initiation of an independent activity or for the start of a business, completion of employees' salary incomes, stimulation of the labour force mobility.

Professional information and counselling

AJOFM Caraş-Severin stimulates the Employment Programme through: free services of professional information and counselling offered to the persons in search of job, attempting, if possible, their placement in the vacant positions; supplying information related to the labour market and evolution of occupations; personality evaluation and self-evaluation in view of professional and career guidance; development of ability and self-confidence of persons in search of a job, training in job-searching methods and techniques.

The number of the persons employed as a result of the counselling services, as shown in table no.1, has dropped, from 865 persons in 2005, down to 532 in 2007, and even lower, to 279 persons in 2009; in the first two months of 2010 only 5 persons found a job. AJOFM Caraş-Severin organised annually auctions for the suppliers of information and professional counselling services who carried on these activities in localities where the Agency does not have specialised personnel. Grace to the information and counselling services, the number of the persons employed increased, in 2012, compared to the previous years 2004-2011, as a number 742 persons were employed in the period January – April.

Table 1. Situation of the persons employed as a result of providing the information and consoling services

2004	2005	2006	2007	2008	2009	2010	2011	2012
-	865	903	532	657	275	383	208	742

Source: AJOFM Caraş-Severin

Granting allowances for the unemployed who get a job before the expiration of the unemployment period, attempting thus to prevent long-term unemployment among youth up to 25 years of age, and of the other categories of unemployed persons, subjected to the risk of staying unemployed more than 6 or 12 months, respectively. The number of the persons who benefited from this facility was of 1786 in the peak year 2004, dropped by 183 in 2007, compared to 2005, being represented by 261 persons in 2009. Moreover, in the 2008-2012 period, we remark a decreased of the number of persons employed grace to support allowances, compared to the years 2004-2007.

Table 2. The situation of the persons employed grace to support allowances

2004	2005	2006	2007	2008	2009	2010	2011	04. 2012
1786	622	590	439	278	261	277	208	45

Source: AJOFM Caraş-Severin

Labour mediation

Labour mediation is the activity connecting the employers with the persons in search of a job in view of establishing labour or job relations. The agencies for employment have the obligation to identify the vacant jobs at various employers and to make them known to the persons in search of a job. The tasks set by the Employment Programmes for the period 2004–2012 in Caraş-Severin were established together with the ANOFM. For reaching the set goals, the measures taken for the implementation of the Employment Programme consisted in: granting free mediation services for the vacant or new jobs through an activity of providing information related to the available jobs and connecting the persons in search of a job with the respective employers; elaborating, for each person, an individual mediation plan, increasing the preoccupation for selection actions in accordance with the jobs requirements, organising job fairs.

The number of persons employed grace to the mediation services was relatively constant in the period 2005–2007, being almost equal to the number of persons employed by mediation in 2004. In 2008 we found a drop in the number of persons employed as a result of job mediation; an important part in providing mediation services is played by the Jobs Fairs.

The County Agency for Employment Caraş-Severin organised, starting with 2002, the General Jobs Fair, which is organised nationally on the same date in September each year. In the period 2005 – 2009 the Jobs Fair for the Roma ethnics was organised the same day in Reşita, Caransebes and Oraviţa. Another 2 fairs were organised between 2005 and 2011, i.e. the jobs fair for the graduates and the jobs fair for the youth leaving the child protection system. If the labour market launches a stringent demand, other special job fairs are organised.

Table 3. Situation of the persons employed through mediation

2004	2005	2006	2007	2008	2009	2010	2011	04. 2012
6095	6599	6143	6147	5476	3623	3335	2142	975

Source: AJOFM Caraş-Severin

Professional training

The persons in search of a job can participate in the professional training programmes meant to ensure the increase and diversification of their professional competencies enabling their mobility and reinsertion to the labour market. The professional training programmes provide, according to the law, initiation, qualification, requalification, professional enhancement and specialisation of the persons in search of a job. The access to the professional training programmes is made following the activity of information and professional counselling or mediation. The

programmes of professional training of the persons in search of a job are organised distinctly by levels of training and specialisations, as well as by categories and groups of persons. A.J.O.F.M. Caraş-Severin through the Centre for Professional Training organised professional training courses with the observance of the stipulations of Government Decision OG no. 129/2000 approved by Law no. 375/2002 and the Methodological Norms no. 353/5202 ale M.M.S.S.F and M.E.C.T, being authorised in 12 professions or trades. The qualification courses are free for the unemployed persons receiving unemployment allowance, and are offered for a fee to those who wish to attend professional training courses. The schooling fees were established based on the procedures of Government Decision H.G. 377/2002 and include the expenditure incurred by the qualification activity. In 2008, 325 persons were employed after they attended professional training courses: 154 in 2009 and 6 in the first two months of 2010.

Consulting and assistance for starting an independent activity or for initiating a business

The consulting and assistance services for starting an independent activity or for initiating a business are granted at the request of the person in search of a job, under the form of legal , marketing and financial services, efficient management methods and techniques as well as other consulting services. AJOFM Caraş-Severin stimulates the free providing of counselling and assistance services for starting an independent activity or for initiating a business, for the increase of the employment rate by the funding of one's own business. Although the number of persons who asked for and received these services, as shown in table no.4, was rather high, i.e. 216 persons in 2005, it exhibited a non-uniform variation in the following years, dropping to 70 persons in 2009; at the opposite pole we find the number of persons who succeeded in incorporating their own firm, which was very low, only 20 persons in 2005, with a non-uniform variation in 2006 and 2007 and remaining at the minimum number of 1 person for two years in a row (2008, 2009).

Table 4. The situation of the persons who benefited from the counselling services, and of the persons employed after counselling services

2004	2005	2006	2007	2008	2009	2010	2011	04.2012
-	216	159	250	80	70	73	228	-
-	20	2	6	1	1	-	-	-

Source: AJOFM Caraş-Severin

Completion of employees' salary incomes

The persons who receive unemployment allowance in the period stipulated by law and who get employed according to the law, for a normal working schedule, are entitled to receive, from the moment of employment until the end of the period of employment allowance, a monthly non-taxable amount, granted from the budget of the unemployment insurance fund in a percentage of 30 % of the unemployment allowance received in the months previous to the employment.

Stimulation of the labour force mobility

The persons who, in the period of unemployment allowance, get a job, according to the law, in a location situated more than 50 kms away from the stable domicile, are entitled to receive a non-taxable settlement bonus, paid from the budget of the unemployment insurance fund, equal to two minimum gross salaries in vigour on the respective date. The persons who, in the period of unemployment allowance, are employed, according to the law, in another locality and change their domicile accordingly, receive a settlement bonus from the budget of the unemployment insurance fund, equal to seven minimum gross salaries in vigour on the settlement date.

The stimulation of labour force mobility by AJOFM Caraş-Severin was done by bonuses awarded to the unemployed persons who desire to change their domicile or work place at more than 50 kms away from their domicile. The number of these bonuses has decreased year after year (table 5), and at the end of 2007 only half of the number of bonuses granted in 2004 was recorded, with insignificant variation in 2008 and 2009.

Table 5. Persons employed through the labour force mobility

2004	2005	2006	2007	2008	2009	2010	2011	04.2012
211	188	163	106	111	100	98	76	36

Source: AJOFM Caraş-Severin

5. CONCLUSIONS

During these past few years, the situation of the unemployed persons has considerably degraded: the conditions for employment allowance were restricted, the selectivity of the labour market hardened, poverty amplified, the opportunities for getting a job were reduced. The individuals who lost their job belong to diverse social layers, and for each there are special rights and obligations, as regards incomes and especially the job search. We analysed the impact of the activity of the institutions involved in the system of social protection in the labour market, by enhancing the awareness related to: the legislative frame regulating the operation of the system, the organisation administrative frame and of the institutional system; the system of the unemployed persons' registration, services for the benefit of the unemployed, condition of access to indemnities; scope of the system; level and duration of the allowances granted; sources for the system's financing; manner of distributing resources for the programmes of protection for the unemployed, efficiency of the social protection measures intended for the unemployed.

The measures for the stimulation of employment are addressed both to the persons in search of a job, and to employers and are done through specialised services, supplied by the agencies for unemployment or other providers of services in the public or private sector. The providers of specialised services for the stimulation of employment may perform, based on contracts concluded with the employment agencies, services funded from the budget of the unemployment insurance fund only if they are accredited, and the accreditation is awarded by the National Agency for Employment.

REFERENCES:

- [1]. **Andrioni, F.** (2011) *General overview on evolution of social services from Romania and Hunedoara county in the socio-economical context of post communist transition period (2000-2009)*, Annals of the University of Petroșani, Economics, 11(2), pp. 15-24
- [2]. **Codin, M.** (1990) *Șomajul în Europa – dimensiuni și soluții*, Calitatea Vieții, nr.1, Institutul de Cercetare a Calității Vieții, București, p. 146
- [3]. **Costin, A.E.; Tufan, M.; Garcea, G.** (1996) *Centrul de mediere a muncii*, FIMAN, București
- [4]. **Cojocaru, M.; Popp L.; Rădoi, M.** (2008), *Politica ocupării forței de muncă*, Editura Fundației Academice Axis, Iași
- [5]. **Pitariu, H.; Baci, C.** (1997) *Centrul de Informare și Documentare pentru piața muncii*, FIMAN, București
- [6]. **Zamfir, C.; Vlăsceanu, L.** (coord) (1993) *Dicționar de sociologie*, Editura Babel, București
- [7]. *Law no. 1/1991 regarding the social protection of the unemployed and their professional reinsertion* (republished in Romania's Official Gazette no. 199 of 14 August 1992)
- [8]. *Law no. 145-09.07.1998, Romania's Official Gazette no. 261/13.07.1998*; EEC Regulations no.1408/71 and no.574/72
- [9]. *Law no. 76 of 16 January 2002 regarding the system of unemployment insurance fund and stimulation of employment*, published in Romania's Official Gazette no.103 of 6.02.2002
- [10]. *Romania's Official Gazette no. 136 of 21 February 2008*
- [11]. *Statistic analysis conducted by the County Agency for Employment Caraș-Severin*, <http://www.ajofmcs.ro>, <http://eures.europa.eu>

SOCIAL INSTITUTIONS

ROBERT PRODANCIUC *

ABSTRACT: *The paper approaches the concepts that are specific to the study of institutions from a systemic and actional perspective. When defining the institutions we have to start from the social actions system. The social actions also ensure the criterion for the institutions typology. Then the components of the institution are being analyzed. The roles of the institutional structures were treated next. The general characteristics of the institutional systems were presented afterwards. The transition from the theoretical aspects to the pragmatic ones is done through the presentation of the leadership. The efficiency of the social institutions 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*

Each of us interacts with the others all our lives within institutions and organizations. It is a known fact that we are generally born in maternities, learn in different types of schools, earn our living working in companies, we are active members or just subscription payers of unions and parties, we get married in churches and town halls and get treated in clinics and hospitals. Because of this reason everybody has a minimum knowledge of them. These facts are part of the common knowledge.

The transition from common knowledge to scientific knowledge is based on operating with exact knowledge. At the scientific knowledge level we talk about the concepts of „institution” and „organization”. Thus, Ion Tudosescu (1976, pp. 11-29; 1978, pp. 9-34) in two separate studies that continue and complete each other, combining the perspective of a modern systemic methodology with a praxiological view of the social phenomena shows that the social system, as a system of relations is actually a system of social actions. Continuing the analysis of the social structures, the author mentioned above shows that there are two types of social relations: *actional social relations* and *conditional social relations*. The conditional social relations are

* *Assist. Prof., Ph.D. Candidate, University of Petroșani, Romania,*
robertprodanciuc@yahoo.co.uk

conditions which are necessary for the foundation of actional social relations. *The general social actions system* is made up of their synthesis. The actional social relations are made up of actions that transform nature, actions that transform society and actions that transform the individual. The latter actions are instructive-educative, medical and health protecting. All the actions mentioned so far are *direct social actions* because they produce efficiency directly. There are also *indirect social actions* that potentiate the efficiency of the first ones. Among the latter we can exemplify transports, communications, services, actions to change and perfect social relations, actions to elaborate and perfect norms and decisional and managing actions (see Figure 1). Out of the conditional social relations category we can mention economical relations, ideological relations and institutional relations. These conditional social relations make up the situational frame that condition the way that the actional relations work. Farther more, the situational frame is also subordinating *the means of the action*. Among these means there are material, logic/scientific and ideological/conceptual resources. Closely connected to the later ones are the *norms of the action*. Initially they are gained by experience and tradition; afterwards, they can be elaborated and perfected according to the actual and dynamic situational context that the social action is in. Also, *the motivational grounds of the action* are established in regard to this situational set. The motivational grounds of the social action are a combination of psychic motivation (affective and rational), teleological motivation (interests and goals) and axiological motivation (appreciation and validation).

All these actional components are valuable only in connection to the elementary terms represented by *the object of the action* and *the subject or agent of the action*. The object of the action is represented by the existential areas that the actional agent refers to. The actional agent is represented by communities, groups and individuals that are involved in the actional process. In order to obtain the desired efficiency of the social action, it has to be taken into account that a special importance must be given to its phases. Thus, going from intent to act has to pass through *command*, which is made up of *decision* and *managing*. In this way *the execution* is launched and it finalizes with a *product*. The author shows that the management attributes and implicitly the responsibility for the decisions made are entrusted (or self assumed) by a leading group, a political party or a special social category. Both the liability and the social responsibility of this managing group increase qualitatively as well as quantitatively together with being promoted to a higher hierarchical step of the respective social system. These social actions are intertwining with all the other types of social actions of the respective social system.

The same author – Ion Tudosescu, in the second study that we considered, starts from the observation that the efficiency of contemporary societies is determined by organizational improvement of all the working mechanisms, at all the structural levels of the social system. The social action is causally, structurally, functionally and dynamically determined by the hierarchical level of the social system at which it takes place. Under the conditions of labour division and the need for cooperation of the social agents, within the social action there is a need for defining and observing some norms and rules encoded by the action. These norms and rules are both coercive and incentive reported to the needs, aspirations, and interests of the organizational

members. They also regulate the statuses and roles of the individuals within the organization. Also, the relations between the individuals, the relations of the individuals with the organization and the relations of the organization with its environment are also regulated. The need for norms and rules is required by the fact that the relations between the individuals are and must be actional cooperation relations. Competition is not enough because the relations between individuals are animated by complex interests and needs. Through their action, the organizational structures ensure their relative autonomy and contribute to the consolidation or the collapse of a certain social system.

The relations between members of organizational structures are:

1. *formal relations* are relatively stabile, determined by cohesion, goals and duration of the structure and are coded in norm systems that have the necessary means to implement them and in this way they are controllable;
2. *informal relations* are relatively instable relations, made up at random, eventually for momentary goals, without being coded in norms, they are implemented as group opinions and are uncontrollable.

The existence of these types of relations are between members of organizations are determined by the existence of specific groups. These groups intertwine and act differently. In order to get the actions of these groups to converge their divergent orientation must be avoided; it could lead to the collapse of the organization from the inside.

In order to ensure the internal cohesion of the organizational structure and to maximize its efficiency, the norms are elaborated rigorously and systemically grouped based on logical and operational criteria like:

1. *mutual coherence and consistence*, meaning to form a unitary norm system;
2. *hierarchical structuring* meaning that it must comprise of principles, fundamental norms, secondary norms, provisions, indications and recommendations;
3. *precision and inexpensiveness* that is obtained by stating directly and clearly the content and the applicability;
4. *elasticity and simplicity* it represents the necessary and useful minimum in order to ensure conformity but also the freedom of initiative as well as the improvement through new requirements;
5. *the distribution of competences* to elaborate and adopt norms, as well as controlling their application, on hierarchical levels as well as inside the same level on different compartments.

The norm system, being elaborated in such a manner, is governing the organizational relations beyond the individual adhesion of the actional agents. Through the force of the norms, the organizational structures gain an existential statute.

The organizational system of a society, considering the conditions of social dynamics, is made up of two fundamental levels that of social institutions and that of social organizations. These two fundamental levels contain structures made at other levels, from the lowest up to the highest, like state and international structures – EU, NATO and UN.

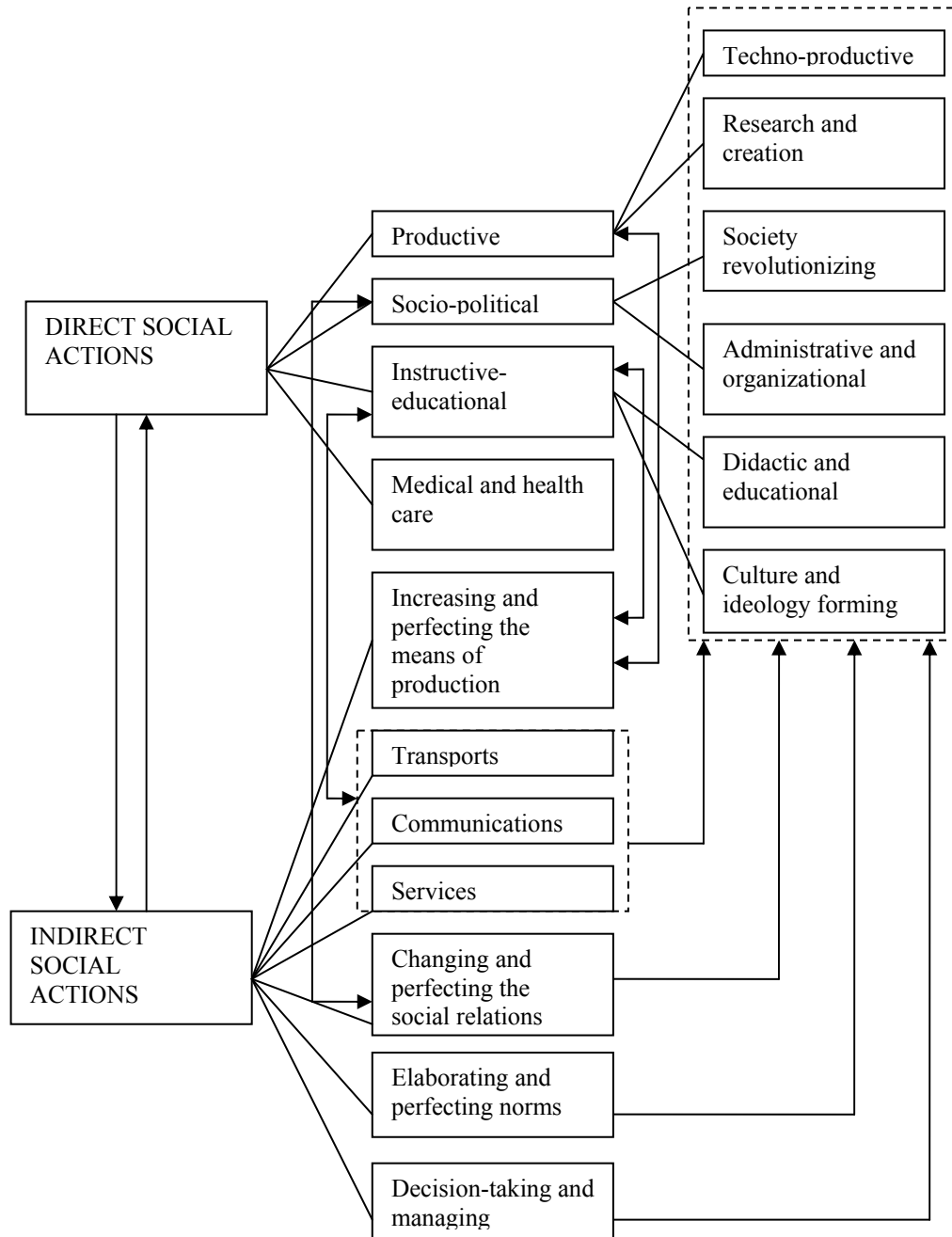


Figure 1. The Social Actions System (Tudosescu, 1976, p. 27)

Ion Tudosescu considers social institutions to be organizational structures with formal character (their work is based on norm systems establishes on tradition or

elaborated deliberately), that the groups or the human communities make concisely but out of necessity, to serve as means of gaining superior degrees of efficiency in their relations as well as in the goods, material and spiritual values production activities (Tudosescu, 1978, p. 15).

As it is easy to see from the above definition, the cause for implementing institutions is necessity of superior efficiency in the groups' and communities' relations and activities. The institutions are made up of the members of the group or of the collectivity, the collective chose or enforced by a decision, professionalized specialists and personnel of the administrative and technical department. Once the institutions are established, they become relatively autonomous in their activity. Their members enrol in these institutions as a result of their offer of existential insurance, so as they can afford covering for the living necessities and professional, social and family achievement. The members of the institution compulsory adhere to the activity of the institution, regardless of whether they understand its significance and the social role.

Ion Tudosescu, as we have seen already, uses as a criterion to separate the different types of social institution the variety of social actions carried on by them. Thus the social institutions can be: political, administrative, juridical, educational, medical, religious and others. It is more than obvious that all these types of institutions are structured systemically and hierarchically.

Ioan Mihăilescu (2003, pp. 174-194) starts by distinguishing the three concrete concepts of: *social structure*, *social organization* and *social institution*. The first concept the social structure refers to the composition of the social system and is defined as being a set of relations including a variety of elements (social positions, groups, social classes, social institutions) possessing qualities of totality, transformation and self adjustment (Mihăilescu, 2003, p. 174). The second concept, the social organization refers to the functioning of the social system and it is defined as a system of roles and social institutions, behaviour patterns, means of action and social control that ensures the satisfaction of the needs of a certain community, coordinates the actions of its members, regulates the relations among them and ensures the stability and the cohesion of the colectivity (Mihăilescu, 2003, p. 174). The organization is the subject of the organization theory. The author considers that the main elements of the social organization are the social roles and statuses, the behaviour patterns, the means of action and the social control. The third concept, the social institutions are defined as behavioural systems and relations that regulate the life and the activity of the individuals. And then he adds that the institution is a structured and functional set of norms and values that differentiate it from the social organization.

Synthesizing the references of the literature he considers that by social institution we can understand a system of social relations that is organized based on common values and where there are used certain procedures in order to satisfy particular fundamental social needs of a social collectivity. The author explains how the institutionalization of social needs is achieved. The relations and the practice of several behaviors for a long period of time establish them as being **standardized behaviors**. Then they are encoded into laws, thing that is equivalent to the institutionalization of social relations. Thus, behaviours become expected, shaped,

predictable and accepted in a given social system. As a result, the statuses and the roles are also institutionalized. This doesn't mean that all the roles corresponding to some statuses are identical. The individual differences, especially those related to the personality, lead to the personalization of roles. The personalization of the role influences the institutional role form elevating it to compromising it.

Ioan Mihăilescu considers that the institutions can be defined and characterized by there elements. Among the elements that the author considered are: objective, functions, means, symbols, code of conduct, value and norm systems that are specific. These elements are important because they ensure efficiency. As a measure of efficient operation of an institution the degree of achievement of its goal and its objectives must be taken into consideration. The efficiency of an institution is also dependent on the way it is organized, on its relations with its social environment and on the implementation of several conditions like:

1. the clear definition of its goal and objectives in relation to the needs to be covered;
2. rational organization of activities on compartments and roles;
3. the depersonalization of institutional roles that would give the primacy to objectives achievement;
4. social acceptance of the means and procedures used, as they have to be in accordance with the recognized values;
5. social recognition of the utility of the institution through its acceptance by the social actors;
6. the relations between institutions and institutional autonomy must influence each other in keeping with the functional autonomy.

The diversity of institutions requires that we establish a typology. The author uses two criteria for the realization of the typology of the social institutions. The first criterion is firmness of the regulations. So we have:

- formal institutions, where the goal, the objectives, the procedures, the organization and the roles are established and regulated precisely;
- informal institutions, where the activities and the roles are vaguely regulated allowing for their personalization.

It can be argued that this typology has a logical problem. If the norms are the constituting elements of the social institution through which they are defined and characterised, they must be regulated in such a way that standardised behaviour patterns must be ensured. As a result, the vague regulation of the activities and roles contradicts the norms. The second typology criterion is the nature of the activities. At this criterion the differences compared to Tudosescu are minimal, only the explanation is a bit different. The following types are considered:

- economical institutions, that comprise the institutions that activate into the production, the circulation and the selling of goods, services and work organizing;
- political and juridical institutions, that activate into the conquering, maintaining and exercising the power;

- cultural and educative institutions, that activate for the maintaining of the cultural tradition and the development of the cultural creation, as well as for the socialization of the individuals;
- religious institutions, that organize the activities of the cults and the relations of the believers with the clergy.

Mircea Agabrian (2003, p. 227) considers that the social institution represents a stabile and persistent bunch of values, statuses, roles, groups and organizations that work together to meet societies' basic demands in a particular area of social life. In this definition, as we can see, the criterion that separates the distinctive type of social institutions is the need that they meet. As a result there will be political and economical institutions, family and education, the medical system etc. We must also point out the fact that in this definition the institution is made up of groups and organizations.

Norman Goodman (undated, pp. 71-74) refers to institutions in identical terms. For him, the social institutions are characterized by a relatively stabile bunch of values, norms, statuses, role prescriptions, social groups and organizations that are connected to a certain area of human activity. Further on the author links the institution to the specific needs. Goodman assumes from the functionalist theories the social institutions typology and it includes economy, education, family, politics and religion. In this paper the author only considers two characteristics of the institutions. It is about tendencies, the tendency to resist to changes and the tendency to be interdependent.

Richard Jenkins defines the institutions as being behaviour patterns in a certain context that consolidated over time and as being the way in which things are done. Their knowledge and recognition is due to the fact that they represent norms practiced in a certain social situation. The author underlines the fact that the institutions are part of the social construction of reality, being imagined but not imaginary. Because of their existence the institutions generate important consequences and are constraining. As such they are products and components of human actions. The precursors of institutions are habits and routine. During institutionalization routine the way in which things are done is reached. As a result of turning these practices into mandatory patterns, deviation from them attracts penalties and so the social control is expressed as the way things must to be done.

In a complex and uncertain world, institutions arrange social life, offer predictability and allow the actors to use a lower level of attention than a complex social world would require. They are transmitted from generation to generation through language. The author's conclusion is that the institutions are sources and places for identification. The institutional identification of individuals, just like the status, means both rights and duties, namely what I can expect from others and what others expect of me.

The thing that must be noted from these explanations is the universality of behaviour institutionalization. The thing that isn't shown is that any behaviour is first of all what is done and this is the support for how it is done.

Carmen Bulzan (2008, pp. 136-141) entitles a subchapter Institutions and organizations, but doesn't approach the social institution, preferring to deal only with the social organization. We could believe that the author might consider them to be synonymous.

REFERENCES:

- [1]. **Agabrian, M.** (2003) *Sociologie generală*, Institutul European, Iași
- [2]. **Bulzan, C.** (2008) *Sociologie. Știință și disciplină de învățământ*, Editura All Educațional, București
- [3]. **Goodman, N.** (undated) *Introducere în sociologie*, Editura Lider, București
- [4]. **Jenkins, R.** (2000) *Identitatea socială*, Editura Univers, București
- [5]. **Mihăilescu, I.** (2003) *Sociologie generală: concepte fundamentale și studii de caz*, Editura Polirom, Iași
- [6]. **Tudosescu, I.** (1976) *Sistemul și tipologia acțiunilor sociale*, in Tudosescu, I.; Popa, C.; Florea, M. (coord.) *Acțiune, decizie, responsabilitate: studii de praxiologie*, Editura Academiei, București
- [7]. **Tudosescu, I.** (1978) *Structura organizațională a societății*, în Tudosescu, I.; Florea, M.; Popa, C. (coord.) *Structurile organizaționale și eficiența acțiunii*, Editura Academiei, București

THE VOTERS' PRIORITIES FOR THE 2012-2016 MANDATE OF THE LOCAL GOVERNMENT IN A JIU VALLEY COMMUNITY

ROBERT PRODANCIUC, VASILE CIOCODEICĂ *

ABSTRACT: *The present paper is part of a larger pre-election research report. For conducting the research we used a methodology tested four years ago during another pre-election research. We decided to use the same methodology because of the good results that it produced the last time we used it and also due to the low costs it implies. As expected, the results obtained were confirmed by the actual elections. Besides trying to figure out who will be the winner of the local elections, we also investigated some other problems. The results that we obtained were interesting. The current paper contains some of those results.*

KEYWORDS: *election; community; sample; distribution; need.*

JEL CLASSIFICATION: *D72*

The sample size required by the present research was of 130 respondents from a total population of about 4000 people, meaning approximately 3.25% of the total population. In the studied sample, people from all over the city, from all neighbourhoods and all the streets were included, according to their ratio of the total population of the city.

Due to the lack of accuracy of the voter lists, in addition to the main sample of 130 people, another back-up sample of the same size as the main one was considered. Of the cases reported by field operators regarding the lists errors we have to note that there were many people who went abroad - for work, people who have changed their residence (abroad or to a different city in the country), thus the real addresses do not match those from the list, plus the fact that some are deceased and let's not forget the people who were serving sentences of imprisonment.

* *Assist. Prof., Ph.D. Candidate, University of Petrosani, Romania,*
robertprodanciuc@yahoo.co.uk

Assoc. Prof., Ph.D., University of Petroșani, Romania, vasileciocodeica@gmail.com

However, of the 130 addresses from the main sample, 20 addresses were not valid – meaning that about 15.5% of the respondents could not be contacted. These deficiencies were partially overcome by the use of the back-up sample, because of the 20 addresses needed to reach the proposed sample size; we were able to find only 16 people (from the back-up sample – knowing that 20% of the 20 people required could not be contacted). Thus, we were able to question 126 respondents.

The questionnaire was designed to cover both sexes in age groups of over 18 years old. We also took into account the education level of the respondents and the marital status of the people included in the sample. Among other general issues we were also interested in the voting intentions.

Next, we will present the structure of the sample of questioned subjects by the independent variables taken into consideration. The most important are the fundamental demographic variables: gender and age. In Figure 1 it can be noticed that the structure of the studied population is within normal limits, with a female population of 51% and a male population of 49%. Usually in mono-industrial areas, where heavy industry or mining are dominant, the gender ratio tends to reverse in favour of the male population.

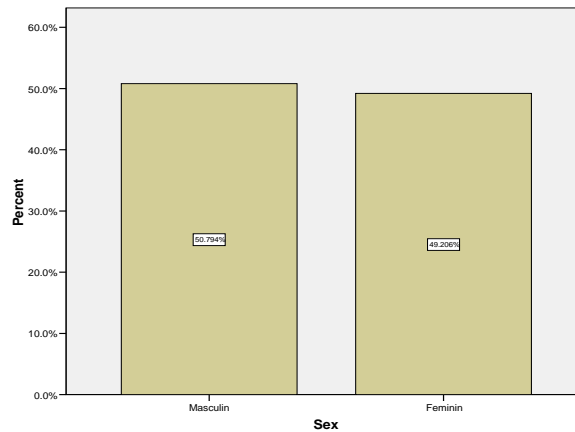


Figure 1. The Gender Distribution of the Sample

In Figure 2 it can be seen that the studied population is in an unstable balance regarding that, for now, the active age part of the population is predominant, but, in the future, if the same trend is kept, the studied population will be confronted with an acute aging process – the now active people will be pensioners and the lower age group will be the active people.

In Figure 3 we represented the age-sex pyramid. It exemplifies the severity of the problem and the future evolution possibilities of the population. As the name suggests, its shape should be like a pyramid.

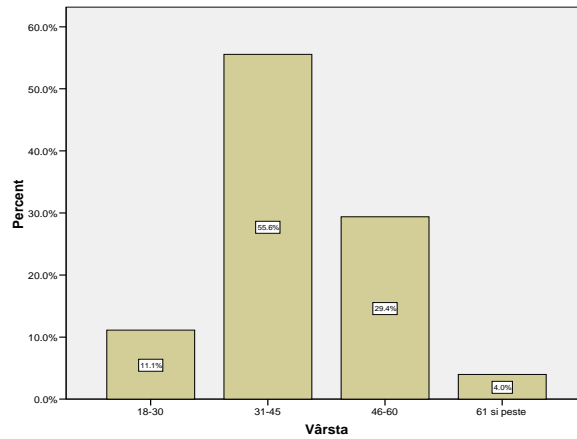


Figure 2. The Age Distribution of the Sample

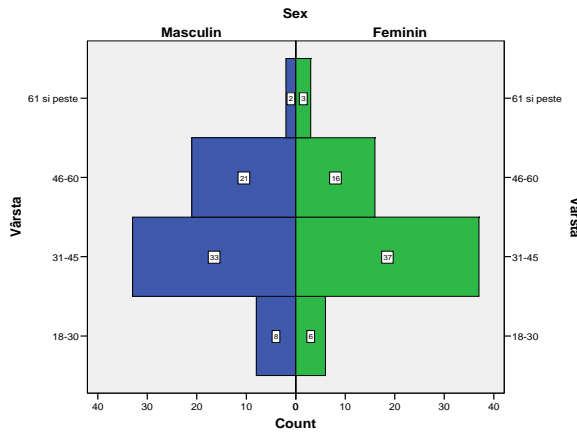


Figure 3. The Population Pyramid of the Sample

The education level of the respondents is presented next in Figure 4. It can be noticed that most of the respondents graduated high school (at rate of almost 37%), closely followed by those who graduated 10 classes (at rate of almost 30%). This indicates a population with a relatively low level of general knowledge (only 7% have a higher education) and a political culture according to the level of general knowledge.

Regarding the number of children, the distribution of the respondents can be seen in Figure 5. Given the shape of the age pyramid, the distribution that can be seen is relatively normal. People with one child as well as those with two children each make up 34.9% of the sample. This fact, coupled with the fact that the next position is taken by those without children, strengthens the hypothesis that the studied population is declining because it doesn't even ensure the simple reproduction of the population. In time this will lead, to the aging of the population. The negative effects will be felt by both the economic production that will continue to decline due to lack of workforce and also by the consumption that will increase due to the increased number of retired

people, which are dependent on pensions and aid from the state as well as from the local community.

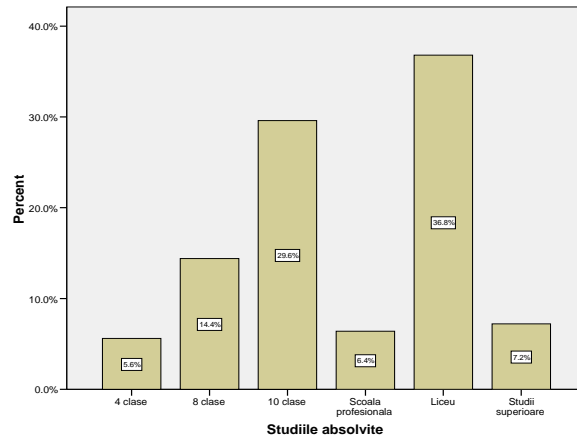


Figure 4. The Education Level Distribution of the Sample

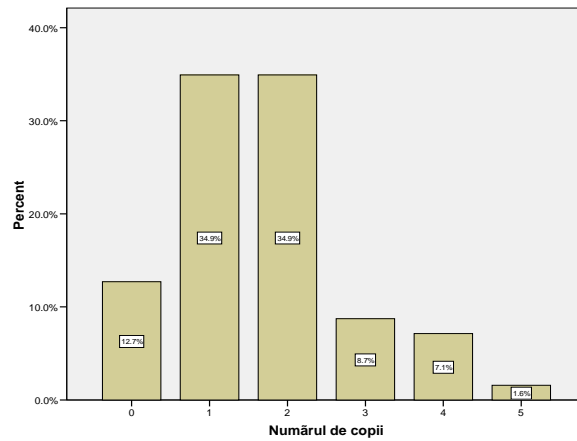


Figure 5. The Number of Children Distribution of the Sample

The distribution of the marital status of the sampled population, as it can be seen, is represented in Figure 6. In terms of marital status we can consider it to be a normal population. The largest category is made up of married people with a proportion of 77.8%. The proportion of divorced and widowed people is relatively low (4% and 3.2%). Given that the sample included only people of over 18 years of age, the number of single individuals is relatively high, with a proportion of 14.3%, which can be attributed to a certain state of poverty. Regarding concubinage, there was only one person that recognized this state - which we consider to be very little.

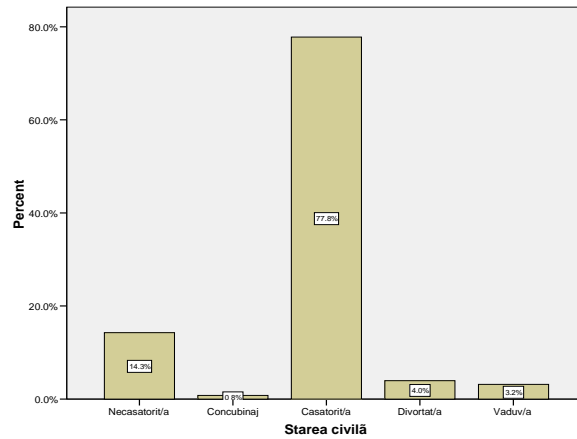


Figure 6. The Marital Status Distribution of the Sample

For a clearer explanation of the situation we correlated the distribution of the number of children with the marital status distribution, correlation shown in Table 1.

Table 1. The Marital Status and the Number of Children Correlation

		Starea civilă * Numărul de copii Crosstabulation								
		Numărul de copii								
		0	1	2	3	4	5	Total		
Starea civilă	Necasatorit/a	Count	10	2	2	1	2	1	18	
		% within Starea civilă	55.6%	11.1%	11.1%	5.6%	11.1%	5.6%	100.0%	
		% within Numărul de copii	62.5%	4.5%	4.5%	9.1%	22.2%	50.0%	14.3%	
		% of Total	7.9%	1.6%	1.6%	.8%	1.6%	.8%	14.3%	
		Concubinaj	Count	1	0	0	0	0	0	1
		% within Starea civilă	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%	
		% within Numărul de copii	6.3%	.0%	.0%	.0%	.0%	.0%	.8%	
		% of Total	.8%	.0%	.0%	.0%	.0%	.0%	.8%	
		Casatorit/a	Count	4	40	39	7	7	1	98
		% within Starea civilă	4.1%	40.8%	39.8%	7.1%	7.1%	1.0%	100.0%	
		% within Numărul de copii	25.0%	90.9%	88.6%	63.6%	77.8%	50.0%	77.8%	
		% of Total	3.2%	31.7%	31.0%	5.6%	5.6%	.8%	77.8%	
	Divortat/a	Count	1	1	3	0	0	0	5	
	% within Starea civilă	20.0%	20.0%	60.0%	.0%	.0%	.0%	100.0%		
	% within Numărul de copii	6.3%	2.3%	6.8%	.0%	.0%	.0%	4.0%		
	% of Total	.8%	.8%	2.4%	.0%	.0%	.0%	4.0%		
	Vaduv/a	Count	0	1	0	3	0	0	4	
	% within Starea civilă	.0%	25.0%	.0%	75.0%	.0%	.0%	100.0%		
	% within Numărul de copii	.0%	2.3%	.0%	27.3%	.0%	.0%	3.2%		
	% of Total	.0%	.8%	.0%	2.4%	.0%	.0%	3.2%		
Total	Count	16	44	44	11	9	2	126		
	% within Starea civilă	12.7%	34.9%	34.9%	8.7%	7.1%	1.6%	100.0%		
	% within Numărul de copii	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
	% of Total	12.7%	34.9%	34.9%	8.7%	7.1%	1.6%	100.0%		

Table 2. The Correlation Coefficient of the Marital Status and the Number of Children Correlation

		Symmetric Measures			
		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Interval by Interval	Pearson's R	.194	.119	2.203	.029 ^c
Ordinal by Ordinal	Spearman Correlation	.243	.111	2.787	.006 ^c
N of Valid Cases		126			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Also, to further clarify this issue, we performed the calculation of the correlation coefficient. In Table 2, as it can be seen, the correlation coefficient is positive, which means that the number of children is even greater as the person was married at least once, whether or not the marriage ended. On the other hand, it can be noticed that this coefficient is very small. This fact is due to the category of unmarried people, as it can be seen in Table No. 1, who has the highest proportion in the “0 children” category (55.6%), which leaves almost half of them with 1, 2, 3, 4 and even 5 children. This can be explained by a certain promiscuity given by the state of poverty, but also by a lack of sincerity, in terms of responses regarding the marital status and especially in the concubinage category.

Data on income perception is shown in Figure 7. As expected, we can see that almost 31% of respondents believe that their income is either low or very low. The category of people who believe that they have a very good income has no representatives. This can be interpreted by the fact that with an increased income, expenses increase as well, although we have sincere doubts about the second option. We can also notice the category of people that even though they are not satisfied with their income; they consider that it is enough to cover the daily expenses (48.4% of the respondents).

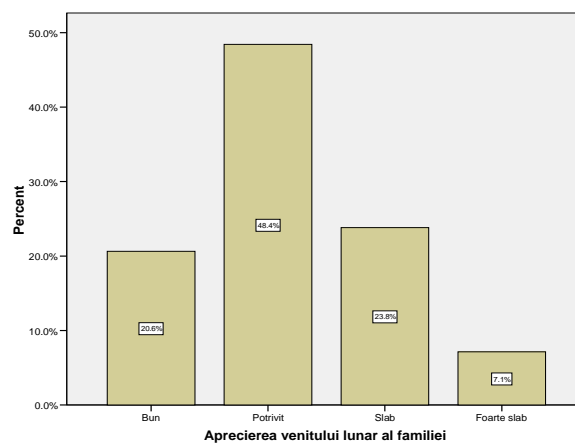


Figure 7. The Income Perception Distribution of the Sample

Regarding the actual value of their income we cannot show a conclusive statistic, because the respondents were very reluctant in answering this question. But through a calculation artifice, if we exclude those who did not want to give information on their income as being non-responses, out of a total of 126 respondents we are left with 74 cases - representing 58.7% that answered. Two important things need to be mentioned. First, we cannot check the income of our respondents or if what they declared is real - which leads us to believe that respondents who answered this question were honest. Second, the question was formulated in such a way as to provide data on the income of all members living in the same household with the respondent. Thus, responses ranged from a minimum of 0 and a maximum of 2600 RON. For a better understanding of this fact, we calculated that the average income of the respondents' families is 1298.77 RON.

To be able to get a better reflection of reality, we asked the respondents to specify the number of family members who are living in the same household. The distribution of respondents by the number of family members living in the same household is shown in Figure 8. We can notice a relatively normal distribution, with a maximum rate of 44.7% for the 3 family members living together category. Taking into consideration the distribution of the sample by the number of children and marital status, we can conclude that at least one family member is away at work in the country or abroad or left the household after getting married. This may be why the respondents were reluctant to declare the family's income. It is noted that there is a small number of non-responses (3), representing 2.4%. Continuing the calculation artifice used in calculating the average income, we get an average of 2.95 family members living in the same household. Reporting the average household income of 1298.77 RON to 2.95 family members living in the same household, we get an income of about 440 RON for each family member - which confirms the initial hypothesis of a state of poverty of the respondents in the studied group.

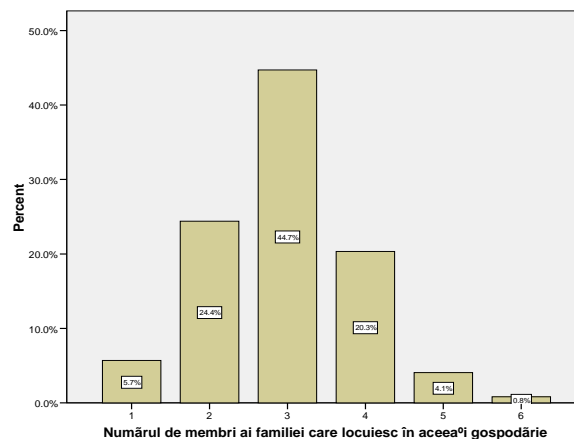


Figure 8. The Number of Family Members Living in the Same Household Distribution of the Sample

Voting absenteeism was another concern. To determine the impact of absenteeism we present the intention to vote in Figure 9.

As it can be seen in Figure 9, the intention to vote is 80%, while those determined not to vote represent 4% and the undecided and those who will not decline their intention to vote make up the remaining 16%. The experience of past elections and especially the number of people that were present at the last voting sessions, lead us to believe that the 80% is a bit exaggerated, which is why we used a control variable, namely the peoples' voting at the local elections in 2008. The answers to this question are presented in Figure 10.

Overall, it is noticeable that the frequency proportion of responses in terms of participation is similar 79.4%. Regarding absenteeism and not declaring the participation, there is almost a reversal of the proportions. People who did not participate make up less than 13% and people that are unwilling to declare less than 8%.

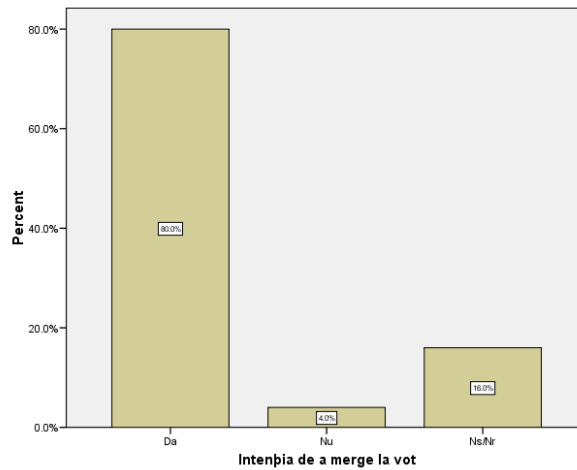


Figure 9. Voting Intention Distribution of the Sample

In an attempt to determine the cause and constancy of voting going we built the correlation between the participation intent in the local elections of 2012 and the participation in the local elections of 2008. The resulting table is Table 3.

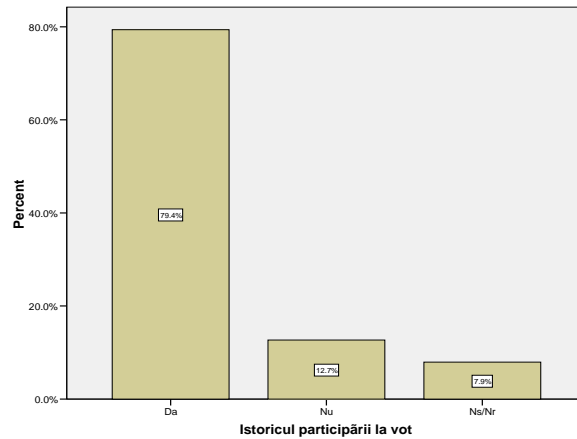


Figure 10. Vote Going in the 2008 Elections Distribution of the Sample

From Table 3. can be noticed that the constancy in expressing the right to vote is very low, as confirmed by the positive correlation indicator shown in Table No. 4, meaning that those who voted would be the ones that would keep voting in the future, but the indicator is very low - almost insignificant, because only 66.4% are in this position. This is the percentage of people that can be counted on and which can give a reference point on how the votes will be cast. The possible variations of the percentages will be due to the people who are not yet decided on their participation and on the candidate that they will support through the potential casting of their vote.

Table 3. The Voting Intention at the 2012 Local Elections and the Voting in the 2008 Local Elections Correlation

Intenția de a merge la vot * Istoricul participării la vot Crosstabulation

		Istoricul participării la vot			Total	
		Da	Nu	Ns/Nr		
Intenția de a merge la vot	Da	Count	83	10	7	100
		% of Total	66.4%	8.0%	5.6%	80.0%
	Nu	Count	4	1	0	5
		% of Total	3.2%	.8%	.0%	4.0%
	Ns/Nr	Count	12	5	3	20
		% of Total	9.6%	4.0%	2.4%	16.0%
Total	Count	99	16	10	125	
	% of Total	79.2%	12.8%	8.0%	100.0%	

Another important issue our research focused on was to measure the proportion of the sample population that considered being able to have a saying regarding the decisions made by the City Council. In this respect we made Figure 11. It is easy to notice that only 12% believe that they can influence the decisions of the City Council, while the great majority of 52.4% believe that they cannot influence the decisions of the local council. The rest of the respondents, representing 35.7% cannot decide.

Table 4. The Correlation Coefficient of the Voting Intention at the 2012 Local Elections and the Voting in the 2008 Local Elections Correlation

		Symmetric Measures			
		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Interval by Interval	Pearson's R	.179	.104	2.020	.046 ^c
Ordinal by Ordinal	Spearman Correlation	.189	.101	2.135	.035 ^c
N of Valid Cases		125			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

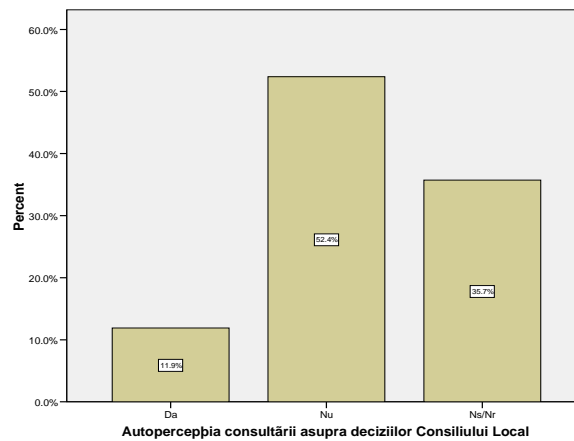


Figure 11. The Power to Influence the Decisions of the City Council Distribution of the Sample

The most important issue remains to be presented at the end of this study and it is related to the priorities that need to be addressed in the 2012-2016 mandate of the local government. This issue has been addressed in a more complex way – given the fact that it is a matter of great importance. Respondents, regardless of political preferences and likes or dislikes, have an idea, more or less well defined, as to what should be done - no matter by whom. Two questions were asked, that covered the same issue to see the differences between the way in which the choice is made when the available options are given to the respondents by the researchers compared to the way the choice is made when the question is an open one and the respondent may chose anything he/she likes, but the available options have to come from him/her.

First, the respondents were asked to rank a set of given problems according to their priorities, choosing only three of them. The first choice was regarded as being the most important one and was represented in Figure 12. The order in which the priorities are ranked is as follows: streets modernization (45.2%), job creating (28.6%), gas connection (11.1%), house building for the youth (7.1%), stray dogs problem solving (3.2%), sewerage expansion and modernization (2.4%), establishing an emergency

reception centre is requested by only 1,6%, and organizing cultural events is requested by only one respondent.

In order to better point out the opinion of our respondents regarding the second priority we made Figure 13. As it can be seen the list of problems is the same but the prioritization is radically different. After analyzing the hierarchy in peoples' opinion, the order is as follows: job creating 30.2%, house building for the youth 23%, streets modernization 16.7%, sewerage expansion and modernization 11.9%, gas connection 9.5%, establishing an emergency reception centre 4.8%, stray dogs problem solving 2.4%, playgrounds building 1.6%.

In Figure 14. we synthetically display the options for the third priority.

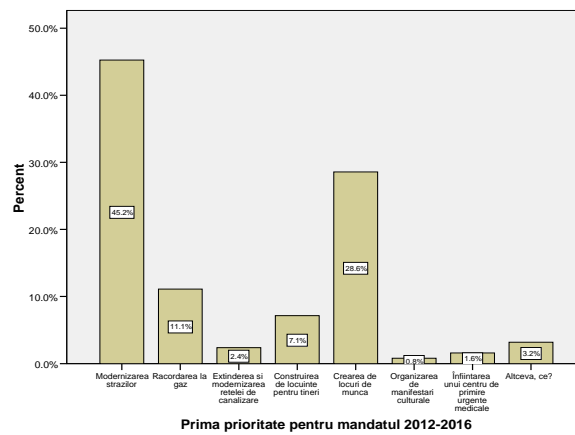


Figure 12. The Most Important Priority for the 2012-2016 Mandate Distribution of the Sample

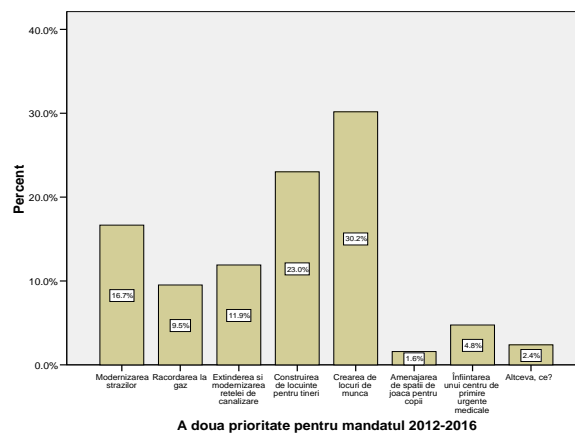


Figure 13. The Second Most Important Priority for the 2012-2016 Mandate Distribution of the Sample

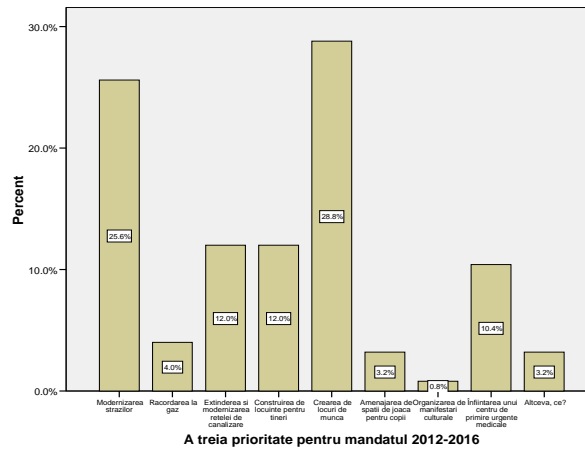


Figure 14. The Third Most Important Priority for the 2012-2016 Mandate Distribution of the Sample

As shown in Figure 14., the third most important priority is as follows: job creating 28.8%, streets modernization 25.6%, sewerage expansion and modernization and house building for the youth with 12% each, establishing an emergency reception centre 10.4%, gas connection 4%, playgrounds building and stray dogs problem solving with 3.2% each, and finally, one of the respondents said that he would like more cultural events.

After presenting the priorities ranked by the proportion of respondents that request each issue, we can now merge the three lists into one, also aided by a calculation artifice by weighting each issue inversely to its rank and also by the frequency that it is requested. Thus we are obtaining a rank for each problem that is pointing out its importance (see Table 5.).

The second method we proposed for questioning the problems of the respondents of our questionnaire was to ask an open question to which they could answer by any and all problems. Using this method we obtained almost the same results, but with some variations of the problems. Thus, after post-encoding we obtained the following problems and their intensities as presented in Table 6. It can be noticed that the problem with the street is maintained here also as being the main problem. Also, the second most important issue is the creation of jobs and employment opportunities in order to reduce poverty. In contrast, the third issue – the stray dogs, appears much earlier than in the case of the previous semi-closed question. The rehabilitation and expansion of the sewerage network is seen to be just as important as the stray dogs problem. Then, there is the gas connection problem, which can be easily introduced in the election speech, but because of the poverty it is actually a rising problem because there will be a big number of people that will encounter difficulties in paying their invoices. The last issue worth mentioning, although it is not strongly felt, is the demand for rehabilitation of the colonies and roofs. It should also be noted that among the needs and problems experienced by the studied population the emergency reception centre was not included.

Table 5. Priorities for the 2012-2016 Mandate (I)

Issue	Rank
Streets Modernization	245
Job Creating	220
House Building for the Youth	100
Gas Connection	71
Sewerage Expansion and Modernization	54
Establishing an Emergency Reception Centre	31
Stray Dogs	22
Playgrounds Building	8
Cultural Events Organizing	4

Table 6. Priorities for the 2012-2016 Mandate (II)

Issue	Rank
Street Paving	77
Job Creating and Poverty Reduction	61
Stray Dogs	15
Sewerage Rehabilitation and Expansion	15
Gas Connection	14
Colonies Rehabilitation and Roofs Repairing	11
Trash	3
House Building for the Youth	3
New Mayor	3
Playgrounds Building	2
Cultural Events Organizing	1
Everything	1

ASSESSMENT OF STUDY CONDITIONS AND PROGRAMS BY UNIVERSITY GRADUATES AT THE LEVEL OF PETROȘANI UNIVERSITY AND AT NATIONAL LEVEL, IN VIEW OF INSERTION IN THE WORK MARKET

**ILIE RĂSCOLEAN, ION PÂRVULESCU, ROXANA PLEȘA,
CAMELIA LĂCĂTUȘU ***

ABSTRACT: *This is a comparative approach – at institutional and national level – of the condition of study and competencies acquired by the bachelor graduates, promotion 2009.**

The analysis of information indicates an average to high degree of satisfaction regarding both the conditions in which the study program was performed, and regarding the competencies acquired. The relatively low level of use of knowledge and competencies on the job is due to the fact that only 15% at institutional level and 27% at national level work in a field corresponding to the study program graduated.

KEY WORDS: *assessment; competencies; domains; workplace; field of activity.*

The aspects analyzed in this paper are presented comparatively between the appreciations of the Petroșani University graduates and those at national level.

The assessment of the study program by graduates is a modest one, the global average being on a scale of intensity at the „so and so” variant, 3 as arithmetical mean, for both the batches of subjects. (Figure 1)

At institutional and national level, the least appreciated variant was „the students can figure out by themselves the study program”, with 2,5 and 2,4 respectively. The highest value for both levels was given to the variant „the program has a good academic reputation”.

* *Assoc. Prof., Ph.D., University of Petroșani, Romania*

Assoc. Prof., Ph.D., University of Petroșani, Romania

Assist. Prof., Ph.D., University of Petroșani, Romania, rpmita@yahoo.com

Graduate in sociology, University of Petroșani, Romania

** *The data analyzed were collected within the national monitoring study of insertion in the employment market of higher education graduates(POSDRU/60/2.1/41750)*

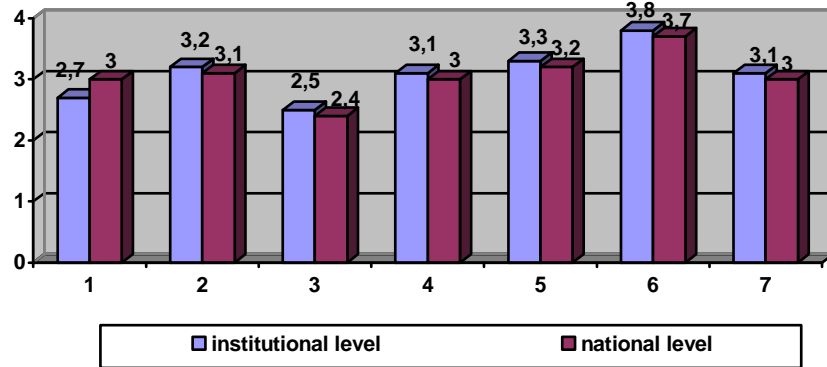


Figure 1. Comparison between institutional and national level regarding the assessment of the study program (arithmetical mean)

- 1- the program can be considered demanding in general
- 2- the content of the program is known to most of the employers in the field
- 3- the undergraduates have the possibility to figure out the study program by themselves
- 4- the program has a wide orientation
- 5- the program is oriented towards vocational education
- 6- the program has a good academic reputation
- 7- global average

Considering the fields of study, the situation is the following (Table 1):

At institutional level:

- Exact sciences
The best position:
 - the program is oriented to vocational education 3,5
 - the program has a good academic reputation 3,5
 The worst position:
 - the program can be generally considered demanding 2,3
- Social and political sciences
The best position:
 - the program has a good academic reputation 3,9
 The worst position:
 - the undergraduates can figure out the study program by themselves 2,5
 - the program has a wide orientation 2,5
- Economic sciences
The best position:
 - the program has a good academic reputation 3,7
 The worst position:
 - the program can be generally considered demanding 2,6
- Engineering sciences
The best position:

- the program has a good academic reputation 3,9
 - The worst position:
 - the undergraduates can figure out the study program by themselves 2,4
- National level:
- Exact sciences
 - The best position:
 - the program has a good academic reputation 3,7
 - The worst position:
 - the undergraduates can figure out the study program by themselves 2,4
 - Social and political sciences
 - The best position:
 - the program has a good academic reputation 3,7
 - The worst position:
 - the undergraduates can figure out the study program by themselves 2,6
 - Economic sciences
 - The best position:
 - the program has a good academic reputation 3,6
 - The worst position:
 - the students can figure out the study program by themselves 2,5
 - Engineering sciences
 - The best position:
 - the program has a good academic reputation 3,7
 - The worst position:
 - the undergraduates can figure out the study program by themselves 2,1

Table 1. Comparison between institutional and national level regarding the assessment of the study program per study domains (arithmetical mean)

Assessment of study program	Exact sciences		Social and political studies		Economic sciences		Engineering sciences	
	I	N	I	N	I	N	I	N
The program can generally be considered demanding	2,3	3,0	2,9	2,7	2,6	2,8	2,7	3,3
The content of the program is known to most of the employers in the field	3,0	3,2	3,2	3,2	3,0	3,0	3,3	3,0
The undergraduates have the possibility to figure out the study program by themselves	2,6	2,4	2,5	2,6	2,7	2,5	2,4	2,1
The program has a wide orientation	3,2	3,0	2,5	2,9	3,3	3,3	3,2	3,0

The program is oriented to vocational education	3,5	3,0	3,8	3,4	3,1	3,0	3,2	3,0
The program has a good academic reputation	3,5	3,7	3,9	3,7	3,7	3,6	3,9	3,7

I – institutional level

N – national level

Figure 2 shows the assessment of various methods of teaching-learning, used along the study program. The global arithmetical mean is situated, for both batches of subjects a little over 3, which means that there is room for better. The method which, for the two levels is the most appreciated is the professor-undergraduate conversation during the course/seminar, being around the value 4, with a slight superiority at institutional level; the greatest “sorrow” is, for both levels as well, the participation in research project, which does not reach at least the variant “so and so”.

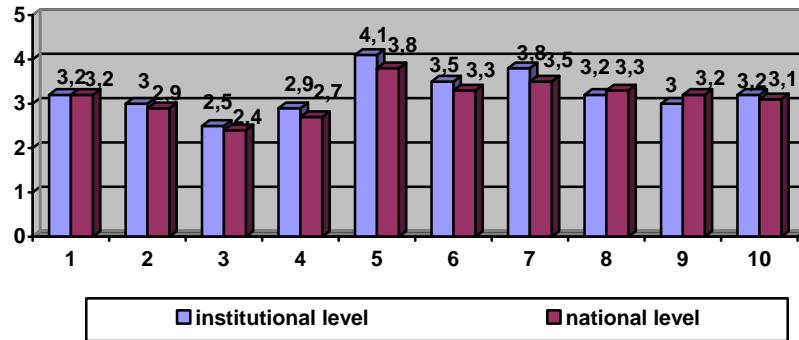


Figure 2. Assessment of teaching-learning methods, by graduates at institutional and national level (arithmetical mean)

- 1- lectures
- 2- demonstrations
- 3- participation in research projects
- 4- stages, placement in practical activities out
- 5- professor-undergraduate conversation during courses/seminars
- 6- debates between undergraduates during courses/seminars
- 7- exercises and practical applications during courses/seminars
- 8- learning by individual or group projects
- 9- oral presentations by undergraduates
- 10- arithmetical mean

Considering study domains, the configuration is the following (Table 2):

Institutional level:

- Lectures are best appreciated in engineering sciences (3,3) and less, but over average, in social and political sciences;
- Demonstrations take the first place in exact and engineering sciences (3,4) and less than average in economic sciences (2,6);

- Stages and placements in practical activities out are better evaluated by graduates in social and political sciences (3,3) and dissatisfy those in economic domain (2,6);

- Undergraduate-professor conversations during courses/seminars are the most appreciated of all the methods by all the subjects, at more than satisfying level, except economic domain, where the value is 3,9, being rather high as it is;

- Exercises and practical applications during courses/seminars tend towards satisfying for all domains;

- Learning by individual or group projects dissatisfy those in exact sciences (2,8) and is more appreciated by graduates in engineering;

- Oral presentations by undergraduates are used more by those in exact sciences (3,4), but are not satisfactory for those in economic sciences (2,7);

National level:

- Lectures are appreciated by the four domains at average level and a little more;

- Demonstrations are used more in exact and engineering sciences (3,4) and less in economic sciences (2,6);

- Participation in research projects is poorly appreciated by all domains – less than average - , the most dissatisfied being those in economic domain (2,1);

- Stages, placement in practical activities out are more appreciated by those in social and political sciences (3,3) and less by those who graduated in economic domain (2,6);

- Professor-undergraduate conversations during courses/seminars, as well as at institutional level, is best positioned in the assessment of all graduates, mainly by those in exact sciences (4,3);

- Debates among undergraduates during courses/seminars, except for economic domain (3,2) are estimated as satisfactory;

- Almost satisfied are the graduates regarding exercises during courses/seminars (between 3,7 and 3,9);

- Learning by projects dissatisfy less the engineers (3,3), but dissatisfy the exact sciences graduates (2,8);

- oral presentations of undergraduates, except for economic domain (2,7) are estimated a little over average;

In what participation in stages/placements in practical activities out there are no essential differences, but what is not normal is the fact that, for both levels – institutional and national – more than one third(35%) did not participate in these activities. The number of hours allotted to study programs is almost the same for the two levels, and mobility abroad is far from being satisfactory.

Table 2. Assessment of teaching-learning methods by graduates at institutional and national level by domains of study (arithmetical mean)

Teaching learning methods	Exact sciences		Social and political sciences		Economic sciences		Engineering sciences	
	I	N	I	N	I	N	I	N
lectures	3,1	3,3	3,0	3,3	3,1	3,0	3,3	3,2
demonstrations	3,4	3,4	2,8	2,8	2,6	2,5	3,4	3,0
participation in research projects	2,7	2,3	2,6	2,7	2,1	2,3	2,8	2,3
stages, placements in practical activities out	3,1	2,3	3,3	3,0	2,6	2,4	3,1	2,5
professor-undergraduate conversation during courses/seminars	4,5	3,9	4,4	4,0	3,9	3,7	4,2	3,8
debates between undergraduates during courses/seminars	3,6	3,2	3,7	3,7	3,2	3,3	3,6	3,2
exercises and practical applications during courses/seminars	3,7	3,9	3,9	3,5	3,7	3,5	3,9	3,6
learning by individual or group projects	2,8	3,4	3,2	3,5	3,0	3,3	3,3	3,4
oral presentations by undergraduates	3,4	3,2	3,3	3,5	2,7	3,1	3,1	3,0

I – institutional level

N – national level

The scope of mobility abroad is different between the two batches (Figure 3). Thus, for those at institutional level, the main motive is the stage of practice, invoked by two thirds of the subject (38%), and at national level, the main scope is the job with almost one third (32%) of the answers, a reason which in almost the same measure made those at national level to migrate as well.

The considerable difference between the two batches regarding the mobility in view of attending foreign education, those at national level having a share of one quarter and those at institutional level only 3% benefited of this advantage. Of course, considering the scope of mobility, it is only natural for its duration to be longer for those at national level.

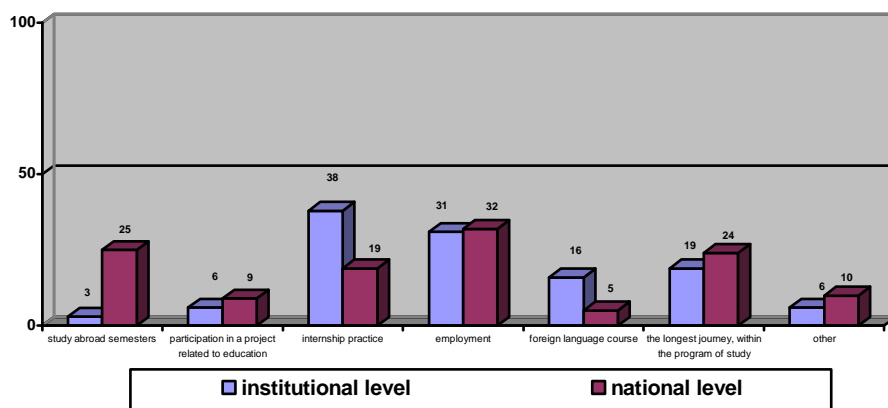


Figure 3. The scope of mobility abroad (%), multiple answers)

Comparison between the institutional and national level, regarding the evaluation of study conditions (arithmetical mean) is shown in Figure 4. A first observation of general character deriving from the data of the graph is that the values of the arithmetical mean at institutional are, with the exception of “interaction with the other students”, superior for all the other assessed conditions, the differences varying between +0,2 to +0,6, which makes the global value to be higher by 0,3. To be noticed that for both batches of subjects, only three of the study conditions are assessed under the average value of 3, these being: possibility of undergraduates to influence the policy and strategic decisions of the university; stages of practice at national and international level.

The significant differences in favour of the University of Petroșani graduates are recorded for the following aspects;

- facilities to have meals(canteens) in the university campus +0,6
- possibility to participate in stages of practice at international level +0,6
- accommodation facilities(hostels) in the university campus +0,6
- guidance offered by the teaching staff to prepare exams and bachelor graduation exam +0,4
- guidance offered by the teaching staff in general +0,4
- state of the buildings +0,4
- quality of libraries +0,4
- availability of technical equipment +0,4
- emphasis on the research component of the teaching-learning process +0,4

For institutional level, the highest values were obtained for:

- guidance offered by the teaching staff to prepare exams and bachelor graduation exam 4,2;
- quality of libraries 4,1;
- guidance offered by the teaching staff in general 4,0;

- quality of teaching - scientific content of course 4,0;

The least appreciated were:

- possibility of undergraduates to influence policy and strategic decisions of the university 2,6;
- possibility of participation in stages of practices at international level 2,8;

At national level, the highest values were given to the following aspects:

- guidance offered by the teaching staff to prepare exams and bachelor graduating exam 3,8;
- quality of teaching – scientific content of courses 3,8;
- quality of libraries 3,7.

The smallest values were recorded for:

- possibility of participating in stages of practice at international level 2,2;
- possibility of undergraduates to influence policies and strategic decisions of the university 2,3;
- possibility of participation in stages of practice at national level 2,5.

A positive aspect for institutional level is that the highest values recorded are 4,0 and over, and at national level the highest value is 3,8.

To be noticed that for the two batches of subjects, the most appreciated aspects and the least appreciated – at different quotas – are approximately the same.

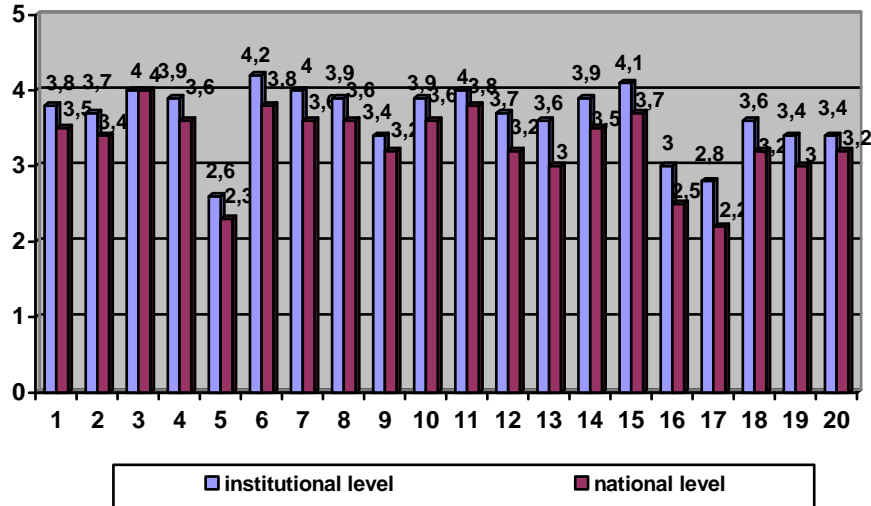


Figure 4. Assessment of study conditions at institutional and national level (arithmetical mean)

- 1- organization and structure of study program
- 2- possibility to interact with the teaching staff outside the teaching classes
- 3- interaction with the other undergraduates
- 4- testing/assessment system

- 5- possibility of undergraduates to influence university policies and strategic decisions
- 6- guidance offered by the teaching staff to prepare exams and bachelor graduation exam
- 7- guidance offered by the teaching staff in general
- 8- providing teaching means
- 9- equipping from a quantitative point of view with equipment and instrument for practice/workshops/classes of specialty/laboratories/seminars
- 10- quality of teaching - from didactic point of view
- 11- quality of teaching - scientific content of courses
- 12- facilities of accommodation(hostels) in the university campus
- 13- facilities of having meals (canteens) in the university campus
- 14- state of the building
- 15- quality of libraries
- 16- possibility of participating in stages of practice at national level
- 17- possibility of participating in stages of practice at international level
- 18- availability of technical equipment
- 19- emphasis o the research component of the teaching-learning process
- 20- quality of equipment and instruments for laboratory practice/seminars

As it is seen in Figure 5, the competency level at graduation is high, both for institutional and national level, the global value of the arithmetical mean being almost 4,0.

The following general aspects are seen in the data recorded:

- Assessment of the level of competencies is superior at institutional level compared to the national level in 13 situations, but with insignificant differences, in four situations the same level is recorded, and in two cases superiority is for the national batch, that is:
 - acquiring a foreign language +0,3;
 - computer proficiency and navigation on the internet +0,1.
- The greatest difference in favor of the institutional level is recorded for the ability of efficient negotiation(0,3), and in favor of the national one, acquiring a foreign language(0,3);
- To be noticed that all assessed components have values, for both batches, over the average value(3,0), and eleven of those of those at institutional level and seven at national level have values of 4,0 and more.

At institutional level, the highest values are recorded for:

- team work 4,4;
- computer proficiency and navigation on the internet 4,3;
- rapid acquiring of new knowledge 4,2;
- ability to clarify their point of view to others 4,2;

Less appreciated were;

- writing and speaking a foreign language 3,3;
- knowledge in other domains and specializations 3,4;

At national level, on the first positions there are:

- computer proficiency and navigation on the internet 4,4;
- team work 4,2;

Smaller values were recorded;

- knowledge in other domains/specializations 3,2;
- ability to present product, ideas or reports in front of an audience 3,3;
- ability to write and speak in a foreign language 3,6;

To be noted that by domains of study, both at institutional and at national level, no significant differences are recorded, the values being grouped at very small differences around a general mean.

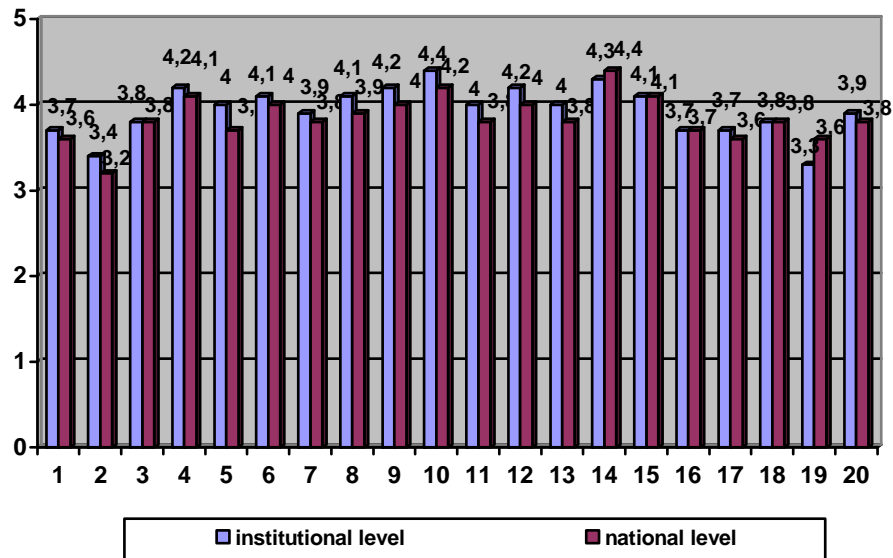


Figure 5. Assessment of competency level at graduation at institutional and national level (arithmetical mean)

- 1 – thorough knowledge of their own domain of study/specialization
- 2 – knowledge of other domains/specialization
- 3 – analytical thinking
- 4 – ability to rapidly acquire new knowledge
- 5 – ability to negotiate efficiently
- 6 – ability to act well in conditions of stress
- 7 – ability to identify new opportunities and act rapidly for follow up
- 8 – ability to coordinate activities
- 9 – ability to efficiently negotiate working time
- 10 – team work
- 11 – ability to mobilize the capacity of other persons
- 12 – ability to make one's ideas understood by others
- 13 – ability to exercise one's own authority
- 14 – computer and internet proficiency
- 15 – ability to come with new ideas and solutions
- 16 – availability to question ideas of one's own or of others
- 17 – ability to present products, ideas or reports in front of an audience
- 18 – ability to develop reports, notes or other documents
- 19 – writing and speaking proficiency in a foreign language
- 20 – global mean

The level of using knowledge and competencies at the first job after graduation was high for both batches of graduates (Figure 6), only 29% of the graduates appreciating that these competencies were required in a small and very small degree. To be noted that these appreciations were made in condition in which only 15% at institutional level and 27% at national level were employed in a domain related to the bachelor study program.

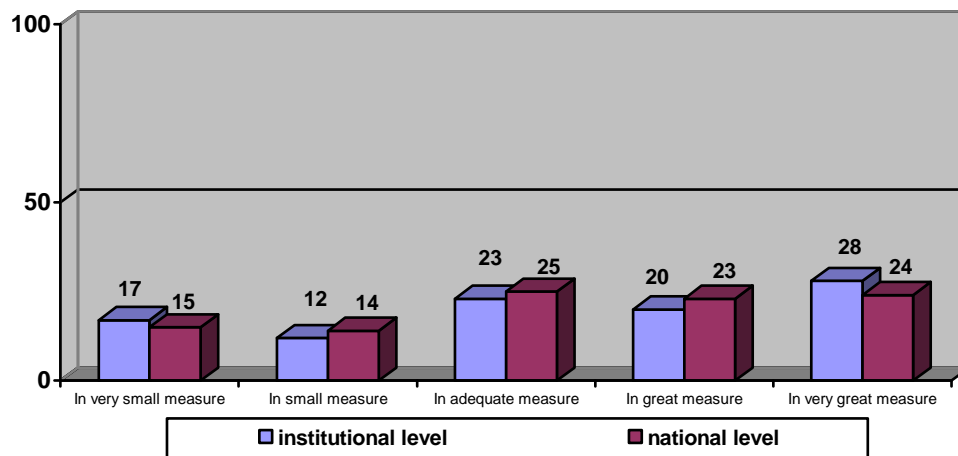


Figure 6. Use of knowledge and competencies at the first job after graduation, at institutional and national level (%)

Letting aside the category “other activities and services”, including various activities, the first positions are taken, at institutional level, by sectors of activity (Figure 7), the following:

- extractive industry 14% (Jiu Valley is still a mining area);
- public administration and defence; social insurance in public system 10%;
- production and delivery of electricity and thermal energy, gas, hot water and air conditioning 8% ;

At national level, the hierarchy of the main sectors is the following:

- education 15%;
- information and communication 8%;
- public administration and defence; social insurance in public system 8%.

It is noticed that among the first three positions at the two levels – institutional and national – only one sector of activity is common (public administration and defence).

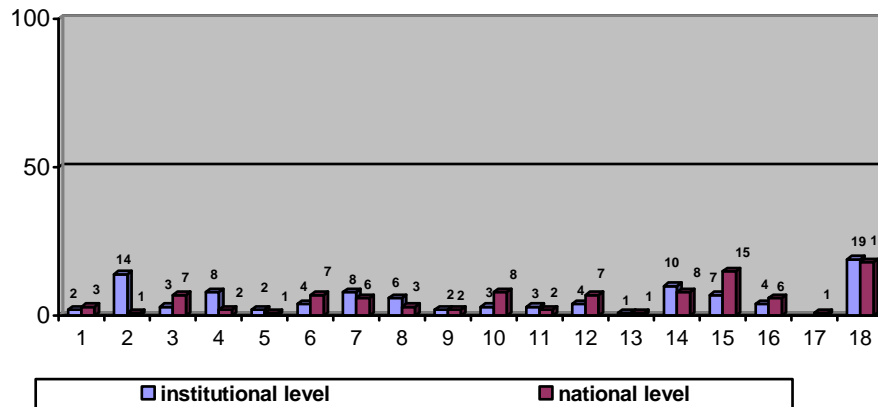


Figure 7. Sector of activity at present, at institutional and national level (%)

- 1 – agriculture, forestry and fishing
- 2 – extractive industry
- 3 – processing industry
- 4 – production and delivery of electrical and thermal energy, gas, hot water, air conditioning
- 5 – distribution of water, sanitation, waste management, decontamination activity
- 6 – constructions
- 7 – wholesale and retail trade; vehicles repair
- 8 – transport and deposit
- 9 – hotels and restaurants
- 10 – information and communication
- 11 – finance and insurance
- 12 – professional, scientific and technical activities
- 13 – administration, services, support
- 14 – public administration and defence; social insurance in public system
- 15 – education
- 16 – health and social assistance
- 17 – shows, cultural and recreation activities
- 18 – other activities and services

The use of knowledge and competencies at the workplace is appreciated almost similarly by the two batches of respondents, approximately on quarter of those being on the following levels of intensity: “in great measure” and “in very great measure”, and almost the same share for “adequately”. (Figure 8)

Among those that appreciate that they use in small and very small measure their competencies acquired during the study program, most definitely we might find those who work under their level of education and partly, those who work in other domains than those for which they were trained.

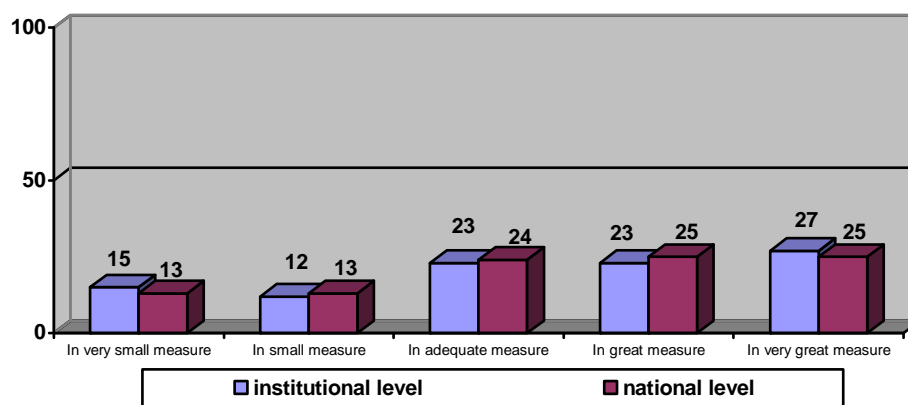


Figure 8. Use of knowledge and competencies at present workplace, at institutional and national level (%)

The following aspects are noted by domains of study, as seen in Table 3:

- at institutional level, those who use the most the competencies acquired in their activity (in great measure and very great measure), are graduates in exact sciences, and at national level, those in social and political sciences;
- the large share of those who declare that they do not really use the competencies acquired (in small and very small measure) are, at institutional level, graduates in social and political sciences, and at national level, in engineering studies.

Table 3. Use of knowledge and competencies at the present workplace, at institutional and national level, by domains of study (%)

Use of knowledge at the first job	Exact sciences		Social and political sciences		Economic sciences		Engineering sciences	
	I	N	I	N	I	N	I	N
In very small measure	--	9	29	12	12	12	14	16
In small measure	--	15	8	11	13	15	14	15
In adequate measure	22	26	16	20	26	28	23	27
In great measure	11	28	23	25	25	25	24	24
In very great measure	67	22	24	32	24	20	25	18
total	100	100	100	100	100	100	100	100

I – institutional level

N – national level

The present situation of the workplace is almost identical for both levels- institutional and national – approximately two thirds of the graduates being employed (including their own employer or in training stages), and a little more than 40% were

attending post-graduate courses (master, PhD) and one fifth were looking for a job (Figure 9).

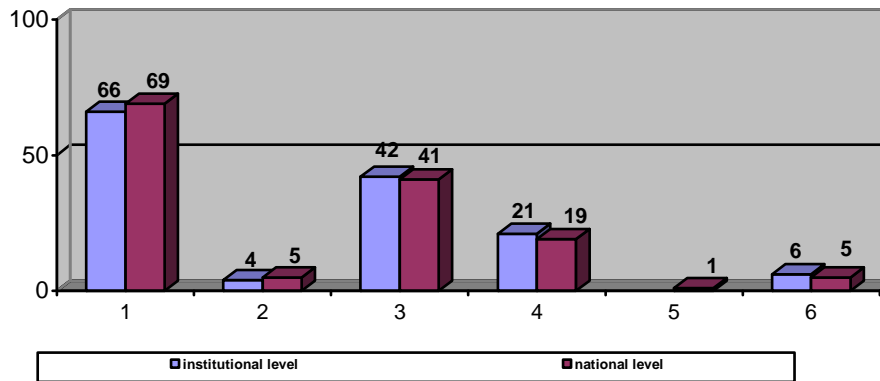


Figure 9. Present situation of workplace (% , multiple answers)

- 1 – employed (including their own employer or in training stages)
- 2 – attending professional training courses
- 3 – post-graduate study (master, PhD)
- 4 – unemployed, but looking for a job
- 5 – unemployed, with no intention to be employed
- 6 – other

The type of present work contract (Fig. 10) is similar with the first job after graduation, the differences being in the shares of the two types of contract, for undetermined and determined period. Thus, the increase of the number of contracts for undetermined period is noticed, and the decrease of those for determined period for both levels – institutional and national – with a superiority of the first type at institutional level (81% and 74%).

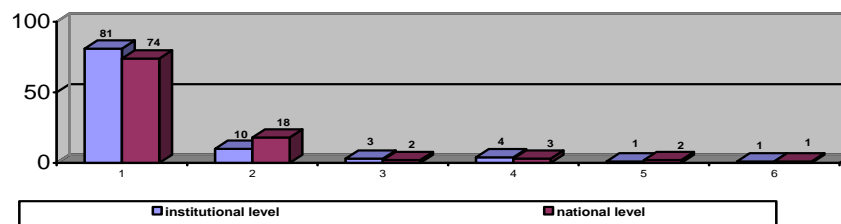


Figure 10. Type of present work contract (%)

- 1 – for undetermined period
- 2 – for determined period
- 3 – no contract
- 4 – free-lancer
- 5 – own business
- 6 – other form of contract

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 are three faculties functioning within the University of Petroșani: 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;
- as far as the assessment of study conditions is concerned - both at national and at institutional level - , the highest value was obtained by the guidance offered by the teaching staff for the preparation of exams and bachelor graduation exam (3,6 and 4,2, respectively);
- the competency level at graduation is, for institutional and national level, a high one, the global value of the arithmetical mean being almost 4,0, the highest values being recorded for the team work and computer and internet proficiency;
- comparing the opinions on their own competency at graduation with the competency levels developed during the year of study, for the two batches of subjects, the result is, with small exceptions, that the values allotted to the assessed competencies are identical or very close, which suggests the relation between the knowledge acquired/developed during the study program and those possessed at graduation, which highlights the contribution of the program in acquiring competencies;
- the level of using knowledge and competencies on the first job after graduation was high for both batches of graduates, only 29% of the graduates appreciating that these competencies were requested in small and very small measure;

- the beginning of activity at the present job, for those employed when the study was performed, was greatly, both for the institutional and for the national level, in the year of graduation of the study program and the next(2009 and 2010). In this period a little more than one third at institutional level(34%), and more than half at national level(55%) started their employment;
- the present situation of the workplace is almost identical for both levels – institutional and national – approximately two thirds of the graduates being employed(including their own employer or in training stages), a little more than 40% were attending post-graduate studies(master, PhD), and one fifth were looking for jobs;
- there are no significant differences – for both levels – between the type of contract at the present job and at the first job after graduation(in most of the cases it was for undetermined period); similarly, the number of working hours per week by those presently employed is approximately the same as at their first job after graduation(40 hours).

REFERENCES:

- [1]. **Blaa, E.** (2010) *Sociologia muncii*, in Otovescu, D. (coord), *Tratat de sociologie*, Editura Beladi, Craiova
- [2]. **Druță, F.** (1999) *Motivația economică*, Editura Economică, București
- [3]. **Pitariu. H.D.** (2006) *Proiectarea fișelor de post, evaluarea posturilor de muncă și a personalului*, Editura Irecson, București
- [4]. **Zlate, M.** (2004) *Tratat de psihologie organizațional-managerială*, Editura Polirom, Iași

HOW APPRAISERS DEVELOP FAIR VALUE

MIROSLAV ŠKODA*

ABSTRACT: *Management is responsible for its own financial decisions. If we take into account, that fair value concept was shown in financial crisis as something that does not work anymore in this way; there is a big need to develop it for the future. Non-professional readers of financial statements believe, however, that company financials are the work of the public accounting firm that had signed the audit certificate. The main reason for bringing this point up is that when companies disclose Fair Value (FV) information in their financial statements, they are taking responsibility for the values disclosed. Management may often be encouraged to utilize the services of an outside professional, but at the end of the day, the outside appraiser is a hired gun. Although the appraiser has to take responsibility for his own work, hiring the appraiser does not absolve management of its ultimate responsibility. The obverse of this is also true. Management does not have to hire the appraiser to develop any fair value disclosures made in the financial statements. Developing FV information is not recommended as a do-it yourself undertaking, there is nothing in Generally Accepted Accounting Principles (GAAP) or Securities Exchange Commission (SEC) regulations, however, that requires an outside appraiser.*

KEY WORDS: *fair value; financial executives; appraisers; SEC; GAAP; accounting; financial crisis.*

JEL CLASSIFICATION: *G12*

1. BASIC VALUATION PRINCIPLES

It is important to note that this is not a do-it-yourself guide for appraisals and valuation. There is a need of financial executives to understand what appraisers do, understand why they do it, and understand what the resulting valuation answers mean. Thus appraisers, looking for guidance in implementing Financial Accounting Standards Board (FASB) FV pronouncements, can skip this. Many books and articles describe the basic principles of valuation. Essentially, an appraiser uses one or more of

* *Dubnický Technologický Inštitút, Sládkovičova 533/20, 018 41 Dubnica nad Váhom*
miroslav.skoda@dti.sk

three approaches to value. Only three principles or approaches can be used to determine the value, and every appraisal technique is simply a variation of one of these.

The *cost approach* asks what it would cost today to acquire the same or similar assets. If you are valuing a building, the upper limit on value is going to be the price you would have to pay a contractor today to build the same building. A rational buyer would not acquire an existing building at a price of 120 money units (MU) if a new building could be constructed at 100 MU. Similarly, in valuing machinery and equipment, we look to the prices of new assets from the manufacturer. Where necessary, adjustments are made for technology and productivity improvements. The cost approach is highly reliable in dealing with tangible professional property and real estate. It is not generally used by appraisers in valuing financial assets, such as the income stream to be derived from security.

The *market comparable approach* looks to the market to see what the same or similar assets are actually selling for. For example, if you have 2005 Buick for-door sedan that you want to sell, how to determine its value? You go to classified ad pages and see how much other similar Buicks are selling for. Maybe no 2004 model is advertised, but 2003 and 2005 models are offered. You would then compare your car with those advertised and estimate what yours would bring. The market comparable method works very well when a well-established market exists. It is not ordinarily utilized by appraisers for intangible assets.

The *income approach* asks what investors are willing to pay for an asset with a given income stream in the future. Investors, and hence appraisers, adjust for perceived risk. To value an asset using the income approach requires a good projection of future income cash flows and choice of a proper discount rate. Whenever possible, appraisers prefer to utilize someone else's income projections, in as much as specifics are better known by the principals. The appraiser, in turn, is usually responsible for the choice of the discount rate. The higher the discount rate is chosen, the lower the value, and vice versa. Of course, using of this method these days is very complicated. In the age of financial crisis, potential future cash flows are simply unpredictable.

Generally speaking, appraisers are required by professional standards to use all three valuation approaches in every assignment. As a practical matter, this is not usually possible. So one of the first decisions that must be made is to determine how many of the approaches can be used.

2. CORRELATING THE ANSWER

Appraisers are required, by professional standards, to evaluate the strengths and weaknesses of each value indication. Basically, we look at the information base utilized in each approach and weight more heavily the answers that were derived from reliable sources. Similarly, the cost approach is often accurate for the building, but perhaps there is no land available in this business market, so the derived land value is relatively uncertain. The possible permutations and combinations are unlimited.

The bottom line is that the appraiser has to perform professional responsibilities by exercising judgment. Thus, in advance, it is probably unlikely that

an appraiser will be able to say which of the three approaches is going to work out best in any specific situation. By setting up a hierarchy of valuation approaches, always putting the market approach on top, inevitably the FASB seems to downgrade the reliability of the income approach and the cost approach. The FASB is putting its thumb on the scale, in advance. It is telling valuation specialists, auditors and financial statement users that using the income approach, much less the cost approach, is less reliable.

Yet Machinery and Equipment (M&E) appraisers have traditionally used the cost approach. In fact, using the market approach in an allocation of purchase price will positively give the wrong answer. These days it appears that the FASB may be rethinking its position on the reliability and relevance of the cost approach for M&E in the allocation situation.

3. VALUE IN USE VERSUS VALUE IN EXCHANGE

What may seem like an esoteric subject fit only for the appraisers – how to determine FV – may turn out to have a greater impact on financial reporting than the adoption of *SFAS 141* and *SFAS 142*. How should we determine the fair value of long-lived assets, usually Property, Plant and Equipment (PP&E)? This is not an esoteric question, because as we will see, appraisers use two separate premises of value, and the choice will affect the amount allocated to PP&E. The fewer money units allocated to PP&E, the lower will be annual depreciation charges, and the consequence would be more allocated to goodwill, which is not amortized anymore. Consequently, by choosing one premise of value over another, there will be a significant change in reported income. The issue, then, is what the correct premise of value is.

The difference between two premises is as simple as whether you are buying or selling an asset. If I am selling a 2002 Corvette to a dealer, I will receive for example 29 000 MU. However, if I go to the same dealer and buy 2002 Corvette, the dealer will charge some 39 000 MU. The premise of the value in this case is the answer to the question, “Are you buying or selling?” This concept is referred to by appraisers as determining Value in Exchange. It represents the current market price and requires specification of the appropriate market, in this case wholesale versus retail.

There is another premise of value, which appraisers refer to as Value in Use. Over the last 50 years, appraisers have developed a standard methodology or approach to determine for purposes of purchase price allocation, the FV of PP&E on an accurate and cost effective basis. We refer to this as Value in Use (VIU) premise of value, and it has worked well. The alternative approach, Value in Exchange (VIE), seems now to be preferred by the FASB because of its emphasis on market participants and market transactions. VIE provides a different and usually lower value for PP&E. Although corporate officers might welcome this change in valuation concepts, because of its immediate favorable impact on reported income, as appraisers we raise the question, “Are we moving forward, or backward, if we adopt the FASB VIE concept of FV, at least for purchase price allocation?”

Value in use is defined as *an amount of money that would be exchanged between a willing buyer and the willing seller with the equity to both, neither being*

under any compulsion to buy or sell and both being fully aware of the relevant facts, assuming that the assets will continue to function in its present capacity as a part of an ongoing business enterprise at its present location.

Value in exchange is defined as *an amount of money that would be exchanged between a willing buyer and the willing seller with the equity to both, neither being under any compulsion to buy or sell and both being fully aware of the relevant facts as of a certain date.* Market value excludes the cost of installation, foundations, piping and power wiring applicable to each machine unit and does not consider its contributory value as a part of an ongoing business enterprise at its present location.

The italicized portions of the standard definitions highlight the two different concepts. VIU is premised on the assumption that, in a business combination, the buyer acquired a going concern. The buyer should identify what it would cost today to have the same or similar assets in place, up and running and producing the output at the existing level.

Some of the equipment may be new state of the art, whereas others may be older technology, ever fully depreciated, that is still capable of cost-effective production. The fact is that the day before the business combination, the assets were working and producing, and we assume that no change occurs the next day simply because of new ownership. The purchase price for the business included as part of the going concern values the fact that existing equipment has been installed, tested and debugged and that the various components in, say, an assembly line are balanced. Although not handled in the SFAS 141 allocation, the fact that the seller has a skilled and assembled workforce also adds value.

In short, The VIU approach takes the perspective of the buyer. We look at the specific company and associated assets on an as-is, where-is basis. The purchase price for the overall business presumably was arrived at after due intelligence by the buyer, which understands what it is getting and what it is not getting, in terms of productive capacity.

The valuation methodology for VIU is straightforward. In theory, we identify all the assets, determining the costs today, including freight on, installation, testing and debugging. Then, based on physical inspection on the assets, the professional appraiser determines the age and actual condition of the subject assets and determines the depreciation from all causes. The assumption is that while the assets could be replaced with new like-kind equipment, the fact is that they will not be replaced. Instead, the old assets will be retained, but by using the older assets that are both physically worn and may be less than current technology, there is a cost penalty for existing assets in contrast to all-new complement. It is the appraiser's duty to apply professional judgment as to the amount of depreciation from all cause that exists at the date of business combination. Note that the appraiser's definition of depreciation is based on physical inspection and current technology, not on arbitrary accounting lives applied to original cost for purposes of financial reporting.

As a practical matter, appraisers usually do not determine the cost new of every asset, and separately determine the freight on, installation, testing and debugging. There are not enough appraisers in the world to do this. As a shortcut, appraisers will often take a client's property record system. If the original cost of the

asset is available, and the original date of acquisition, appraisers are able to apply either standard or proprietary indexes to that original cost. That provides the appraiser with a reasonable approximation of the cost today to acquire the same complement. Obviously, for major pieces of equipment, the appraiser has to test for indexing for accuracy by obtaining quotation from suppliers. The indexes are usually accurate, and appraisers find this approach providing a precise, yet cost effective answer.

VIE takes a different perspective. It asks one of two questions: (1) what would it cost if we *bought* these assets in the open market, either from a dealer in used equipment or at auction?, or (2) what could we *sell* assets for, as – is and where – is to a dealer or at an auction? The answers to these two questions are obviously different as discussed previously with the example of 2002 Corvette.

Before we can apply a VIE approach to meeting the needs of SFAS 141 – if that is the desired methodology – someone has to tell us whether the exchange is *buying from* or *selling to* the market. In the used equipment business, because of relatively low asset turnover, the difference between bid and ask price can go as high as 50%, while in our real example with Corvette, is approximately around 25%.

Historically, appraisers have not used a VIE approach very often in allocations of purchase price, but for financing, appraisers do use VIE. Why we use VIU for allocation of purchase price and VIE for financing? The two different premises represent two different types of transaction. The allocation represents the interest of the buyer in the business, which will use the assets for the purpose for which they were acquired. A bank, or other lending institution, does not want to run a business if the borrower is unable to meet the loan agreement. In the relatively rare cases when the lender takes over physical assets in settlement of a loan, the first thing that is done is to try to sell the assets, usually piece – meal, to a dealer or through an auction.

Thus the lender wants an appraisal that tells it what is the maximum amount that could be realized if the assets were to be sold separately, and not as a part of going concern, at this point the concern is not going, which is why the bank now owns the assets. If the old management could not make a go of the business, the chances of the bank or other lender doing so are usually remote. In short, the bank wants a worse – case scenario, which means selling the assets on a more or less distress basis.

It is easy to see now that the two premises of value in exchange and in use have their place. They are different in terms of the answer provided by an appraiser. They each are FV but to a different person for a different purpose. By and large, the VIE, even using the price from the dealer, is going to be lower than the developed from the VIU premise. The price of an asset new from a manufacturer always puts an upper limit on the used equipment price, but there is no lower limit. Particularly, when the economy is far from robust, auction prices and hence dealer prices are usually low. Auction prices are often determined in a bankruptcy or liquidation situation, where there is the pleasure on the seller. Dealers who buy at auction, and then resell to customers, have a pressure to turn their inventory as quickly as possible.

A second difference occurs in how to deal with inbound freight, installation and debugging. Present GAAP requires that these costs should be capitalized as the part of the cost of an asset. This appears reasonable, because without freight, installation and debugging, no assembly line, or other production process, could

conceivably work. GAAP, in effect, defines *Cost* as including everything necessary to make the asset fit for the function for which it was acquired.

These cost, and they can easily approach to 10% or more of the vendor price, are going to be lost as and when the assets have to be sold to someone else. Obviously, a used equipment dealer will not pay for the original installation and freight because it now has to pay reinstall the asset and pay freight to get it to the warehouse.

These commonsense issues require an appraiser always to ask the client, "What is the purpose of this valuation?" The appraisers answer is going to depend on what he hears the client wants. So, contrary to cynical opinions, the fact that the appraiser provides useful answer to the client is not because he is selling answers, but because values do differ depending on the assumed transaction.

One word of caution to lenders: More than once, unscrupulous borrowers have given a lending institution an appraisal report that was requested for placement of insurance. Remember that insurance appraisal values are based on current replacement cost, not necessarily adjusted for physical and functional depreciation. Insurable values are usually at the highest end of the range of values for any asset, and values for collateral are at the lowest end of the range.

Put yourself in the place of an appraisal firm that gets a call from a very unhappy bank, stating that "Your appraisal reported dated six months ago shows that asset values are X. We just took over the assets and tried to sell them and the maximum we can get is 0,3X. We want you, the appraiser, to make up the difference because of your professional negligence." This actually has happened, and appraiser merely points to the wording in the appraisal report that clearly specified the premise of value, insurance placement, and said nothing about the value of the assets in the used equipment market that the bank really had needed.

In effect, the borrower understood the valuation business much more clearly than did the banker, and took advantage of this lack of knowledge. The appraisal firm did its job, and the misuse of the final valuation report could not be traced back to the appraiser.

4. CAN FAIR VALUE BE AUDITED?

If the Public Company Accounting Oversight Board (PCAOB) truly believes that certain FV information, essentially that derived from management judgment or assertions about the future cannot be audited, this puts the FASB in a tight spot. In situation where there is an active market, with several market participants, appraisers can develop the information and auditors can verify the data.

The problem is that for many types of valuation, particularly intangibles, there is no active market with market participants. Just a simple example will suffice: Suppose that an appraiser is asked to value the TIDE® brand name, owned by P&G. As will be discussed later, the valuation of intangibles inherently requires projections about future sales price and volume, as well as future expenses. In turn, this obviously requires some assumptions about future consumer demand, competitive conditions and technology. Just imagine that some Japanese technology company invents an ultrasound washing machine. What is the impact on current models of washing

machines and the demand for detergents? What if Colgate comes out with a new detergent that is really better than TIDE? What happens if a new style of grunge clothing takes hold and people wash their clothes less often? None of these scenarios is particularly likely, but the chances of any one of them happening are more than zero.

Getting back to the valuation of TIDE, the appraiser would talk to P&G management and obtain an understanding of their projections for volume and price. The appraiser would discuss the future demand, competitive conditions and technology, and arrive at the judgment as to whether P&G own projections are reliable enough to utilize in valuing the brand name.

The point is that appraisers make judgments every day, and in the final analysis most valuations are based on the appraiser's judgment. The PCAOB is correct: You cannot prove the judgment is correct. Similarly, you cannot prove a negative, but does not stop the people from leaving their umbrellas at home because they do not think it will rain today. You cannot prove it will rain, but most people are willing to go with the odds, knowing that once in a while it will be wrong and when it does rain they get wet. Meanwhile, they have not had the bother of carrying an umbrella for at least 30 days when it truly was needed.

Put another way, anyone who makes a judgment call risks being wrong, even though they are correct more often than not. Most judgment call made by an appraiser – in this case the future sales revenue and expenses of TIDE – are correct. The values so derived are accurate enough for most business decisions. That is why for example the United States spends more than 1 billion dollars on appraisals each year. It is cost effective.

But to try and prove that any one valuation is correct is impossible. A skeptical auditor can always pick holes in any appraisal report. There never has been, and never will be, a totally bulletproof valuation – unless someone who wants the value of 100 shares of for example Cisco stock and you can go to The Wall Street Journal and get the closing price yesterday. Even that does not absolutely guarantee that you could call Merrill Lynch next morning at 9:30 when the market opens and obtain that exact price to the penny.

When the PCAOB, or the FASB, states that they are uncomfortable with the judgments in developing FV, they are correct. They should be uncomfortable – except for the alternative. Complaints about difficulty of auditing management judgment, and appraiser's assumptions, have validity. However, one should not forget that today's financial reporting already has numerous assumptions, most of that based on management judgment. Somehow auditors are able to work around these imprecise values by looking at past experience and applying their own judgment.

The problem for an auditor today is that the PCAOB is coming in and auditing the auditors work. Thus, anytime a financial scandal occurs, it is easy to review the audit work papers. After the fact, if something did go wrong, it is easy for government auditor to question: "Why did you accept this value, this management assertion, this liability estimate?" Hindsight is easy, and auditors are trying to protect themselves more than ever, with the threat of a PCAOB review of each audit, there are going to be extraordinary efforts to verify values developed by appraisers. At the end of the day, this is impossible.

Ultimately, the choice is going to come down to auditors applying their judgment of the appraiser's judgment regarding management's assertions. Maybe it will be only one time out of a hundred, but all three will be wrong and the situation will have been set up for the financial press, the SEC and the PCAOB to demand reform of the system. One of the prices we pay for relevant and useful information is the chance that once in a while it will turn out not to have been reliable.

Relevance and reliability are the touchstones of the FASB, according to its own objectives of financial reporting. The fact is that tension sometimes exists between relevance and reliability. It is much easier for the business press to come up with the numerous examples of the unreliability of certain information than it is to complain about relevance of required GAAP disclosures, including FV.

In as much as this topic has no permanent answer, we will not discuss it further. The reader, however, should keep in mind that at some point, the FASB is either going to have to change its attitude toward company – specific information or back off its commitment to FV financial reporting. We predict that more than 100 years of appraisal and valuation experience – showing that company information is usually valid – will grudgingly be accepted by FASB, and that push for FV financial reporting will continue.

5. MARKET PARTICIPANTS

As noted earlier, the FASB holds strongly to the belief that the only valid value information is that derived from the market. They admit, indirectly that there may be different markets, with different prices. Appraisers, therefore, are supposed to select the appropriate market and derive transaction prices from the market.

This concept of the appropriate market, and market participants within the market, was illustrated previously with our example of a used car. An individual owner can sell his used vehicle privately through newspaper ads or to a dealer. These are two separate markets, with different prices and hence separate values to the owner. In one case, selling to the dealer, it is a quick transaction with a little effort, but at a lower price. Selling a used car to a private party utilizing newspaper ads is going to take longer, involve numerous inquiries from buyers who may not be interested, and acceptance of risks involved in test drives and bad checks. On balance, however, one will receive a higher price. The reason is that the individual buyer will pay for a similar car at a used car dealer. From the buyer's perspective, acquiring a car from private party involves risk as to possible mechanical defects. Buying from a dealer, while not guaranteeing a perfect car, at least has the advantage that the dealer could fix something that subsequently turns out to be defective.

One more piece of the puzzle has to be addressed. From the perspective of new – car dealer accepting used car in trade, there are two alternatives. The dealer can fix up the car, put it in inventory, and sell it at the price close to retail price. Alternatively, the dealer can decide to wholesale the car at a local auction, receiving less for the vehicle but not having to make repairs and cover the cost of keeping it in inventory until it is sold.

Essentially, what the FASB means by looking to market participants is first to identify the relevant market, and then do enough research to find out what such participants are actually paying for the subject asset. So far most readers would consider what was said about to be little more than common sense, although they might not have thought about these issues in these terms, it does not appear as though any difficult decisions have to be made.

Nonetheless, the question of just who is market participant is often in dispute. As an example, consider an auto parts supplier, for example an Original Equipment Manufacturer (OEM) whose customer base is the ten major automobile manufacturers such as Toyota and Ford. The customer relationship with the OEM has with the ten firms are clearly important. The ability to call on the appropriate buyers, the reputation for the delivery and price, and the quality of the parts produced are all issues that, when performed satisfactorily, lead to more business in the future.

In deciding whether to acquire such a company, the prospective buyer would perform significant due diligence on the targets reputation in the industry, its product line, its workforce, and its proprietary patents and technology. Each of these attributes is an intangible asset identified by the FASB and discussed in detail on the previous pages. For another purpose of this discussion, market participants, we must focus just on the customer relationships.

What is the real value of the target company's relationships with Toyota, Ford and the other major auto makers? To another auto parts company, the relationships may not be worth much. Why? Because that prospective buyer already calls on the same ten buyers. In fact there are only ten prospective customers in the world, and most of the major parts suppliers already sell to virtually all of them.

Thus, and this is the point, customer relationships that the target company has are really worth very little, if anything, to another auto parts company. However, consider a financial buyer, a private equity firm, for example. These groups raise large amounts of money to invest in individual companies. They hope to turn around the target and sell it someone else, or to have Initial Public Offering (IPO). To a financial buyer that is not already into the auto parts business, what is the value of relationships the target has with customers? Now the shoe is on the other foot. A financial buyer has no existing relationships, it must maintain the goodwill of the auto companies to this supplier or the buyout will be a failure.

Now comes the valuation dilemma. Are the customer relationships worth only a nominal amount to another supplier, or are they worth a lot to the financial buyer? As we have seen elsewhere from the perspective of an appraiser, either answer is correct depending on who the buyer is.

The concept of market participants is used in broadest sense. In practice, this means that the customer relationships have to be valued in relation to prospective buyers who are not already in the industry, even though for practical terms those may be the only realistic acquirers. Given the pressure the major auto companies are under, they are very reluctant to have a major supplier who is not already intimately familiar with the industry and its requirements. Thus, by far the most likely buyer for an auto parts company's another firm in the same industry, one to whom the target customer relationships may have little value.

Lest this seem like an esoteric or theoretical point, keep in mind that financial reporting consequences are far reaching. If one assigns a low or nominal value to the customer relationships in the purchase price allocation, the more of the total purchase price ends up in goodwill. Remember that goodwill does not have to be amortized, although it does have to be periodically tested for impairment. If a high value is assigned to customer relationships, then obviously less is assigned to the goodwill. The downside, however, is that those customer relationships usually have a relatively short life, and the amount assigned must be amortized over that short life. Consequently, evaluating the value of customer relationships in terms of a broad concept of market participants will likely cause a significant decline in subsequent reported earnings. Accounting, unlike the physical sciences, is not based on uniform relationships like the laws of gravity.

Accounting is manmade, so it is not possible to say that one or another of the alternatives to valuing customer relationships in terms of market participants is correct and the other alternative is wrong. Either is right and either can be considered wrong. The FASB and the SEC have chosen the alternative that tends to lower reported earnings.

6. SELECTING AN APPRAISER

A strong argument can be made that as with other professional services, experience is the best teacher. In fact, experience is essentially the only teacher because very few formal college programs exist on appraisals and valuation. Virtually all appraisers today learn directly on the job. Just as you would want to be a surgeon who had performed many gall bladder operations if you suffered a severe attack, so too you should want an appraiser or appraisal firm, that has had a lot of experience.

However, experience in the valuation business may not be the same as experience in valuing a specific type of an asset. The single most common question asked of any appraiser by a prospective new client is, "What other companies in our industry have you appraised?" The implication always is that unless you have great familiarity with a specific industry, you probably are not qualified, and that assumption may be based on experience with other professions.

Fortunately or unfortunately, this is not the case for business valuations. There are appraisers who specialize in real estate, or sport teams, or media, but any competent appraiser could readily perform an appraisal in any of these areas. The reason is straightforward: as we have seen, there are three and the only three approaches to valuing any asset. Once you understand the principles and application of these principles, all valuations fall under one or more of these approaches.

If a prospective client is selecting an appraiser, make sure the individual or firm has significant overall valuation experience. It is questionable whether for example ten years of experience is sufficient to have provided an appraiser with sufficient range of issues and industries that he can take on virtually any valuation assignment. With regard to fees, although appraisers may not like it, there is nothing wrong with a client insisting on obtaining a firm fee estimate. In the unlikely

circumstances that unforeseen things occur, the appraiser will come back for an additional fee.

7. CONCLUSION

Management is ultimately responsible for the FV information disclosed in financial statements. Although there is nothing in GAAP or SEC instructions that require use of outside valuation specialists, most companies are choosing to delegate or to outsource this task. Under current Sarbanes – Oxley Act requirements, a company’s own auditors cannot perform any valuation that they will be auditing, so companies choose valuation specialists either from independent appraisers and appraisal firms or from one of the other accounting firms.

The one thing that should be clear at this point is that there is no such thing as “the” value of any asset. Is the asset going to be used for its present function or will it be sold? The value in each case is different. Will the asset be sold or acquired in the retail market or wholesale market? The value in each case is different. Is the value being determined for insurance purposes or for loan collateral? The value in each case is different again.

The FASB has asserted that so-called market valuations are more reliable and have a higher standing in their hierarchy than values derived from cost or income approaches to valuation. We do not share this belief, and in the long run this unsubstantiated assertion is going to come back and haunt the FASB, but meanwhile they write the rules and we follow them.

Admittedly, it is difficult to audit professional judgment, and auditors are going to have to utilize their judgment in opining on FV information developed by others, either management or valuation specialists. We have asserted, and fully believe, that to appraisers given the same assignment will come within 10% of each other in their final value indications. This may or may not be close enough for auditors, the SEC, and the PCAOB. Nonetheless, given the judgment and assumptions inherent in any valuation, this appears reasonable, and furthermore, irrespective of one’s desires, that is as close as will get.

It is our further belief that any competent appraiser, with a minimum of perhaps ten years’ experience, is capable of performing most valuations for financial reporting. Irrespective of the industry or type of asset, the final definition of FV assumes what a willing buyer and a willing seller might transact a purchase and sale. Appraisers use specific techniques and methodologies in developing these assumptions about market participants. These range from verifying actual transactions for similar assets to involving discounting future cash flows and income. In a significant number of valuations for financial reporting, those involving allocation of purchase price, appraisers determine FV through physical inspection and developing the current replacement cost of the assets.

Consequently, all three approaches to value (cost method, market method and income method) and the two major premises of value (Value in Use and Value in Exchange) are utilized by appraisers. As long as financial managers understand what

these are and can provide proper direction to the appraiser, the resulting values will surely suffice for financial reporting.

Only when the results of a valuation are going to directly affect cash flows of the parties (divorce or gift tax) will appraisal reports from either party likely differ. This is all about financial reporting, not about dispute settlement, so we wanted to alert readers as to why two appraisers can at times provide widely different answers. In those situations, the differences can be narrowed, if not eliminated, if the same assumptions about the future are used by both parties. Perhaps that is wishful thinking when dealing with an ex-spouse or the IFRS, but it does get to the heart of any questions about the answers or how the appraisers arrived at the answers.

REFERENCES:

- [1]. **Ball, R.** (2006) *International Financial Reporting Standards (IFRS): Pros and Cons for Investors*, UC, London
- [2]. **Bignon, V.; Biondi, Y.** (2004) *The Economic Analysis of Fair Value: The Evolution of Accounting Principles in European Legislation*, Prisme No. 4, pp. 19-34
- [3]. **Enria, A.** (2004) *Fair Value Accounting and Financial Stability*, European Central Bank: Occasional Paper Series, Brussels
- [4]. **Horváthová, M.; Mihalíková, D.** (2010) *Účtovná závierka, daňové priznanie k dani z príjmov právnických osôb*, Sféra, Bratislava
- [5]. **Krištofík, P.; Saxunová, D.; Šuranová, Z.** (2011) *Finančné účtovníctvo a riadenie s aplikáciou IAS / IFRS*, Iura Edition, Bratislava
- [6]. **Laux, Ch.** (2009) *The Crisis of Fair Value Accounting: Making Sense of the Recent Debate*, The University of Chicago Booth School of Business & NBER, Chicago
- [7]. **Meluchová, J.** (2009) *Účtovníctvo a vykazovanie poisťovní podľa IFRS*, Iura Edition, Bratislava
- [8]. **Novoa, A.; Solé, J.** (2009) *Procyclicality and Fair Value Accounting*, IMF Working paper, Washington
- [9]. **Soukupová, B.; Šlosárová, A.** (2003) *Účtovníctvo*, Iura Edition, Bratislava
- [10]. **Šlosárová, A.** (2006) *Analýza účtovnej závierky*, Iura Edition, Bratislava
- [11]. http://cfuc.vse.cz/media/cfuc/2006/cfuc_2006-02_025.pdf, [Accessed 12 July 2012]
- [12]. <http://eifrs.iasb.org/eifrs/bnstandards/en/ias16.pdf>, [Accessed 16 June 2012]
- [13]. <http://eifrs.iasb.org/eifrs/bnstandards/en/ias40.pdf>, [Accessed 17 June 2012]
- [14]. www.ifrs.org, [Accessed 29 June 2012]

TRADE-OFF VERSUS PECKING ORDER THEORY IN LISTED COMPANIES AROUND THE WORLD

SORANA VĂTAVU *

ABSTRACT: *This paper provides an insight into the literature on capital structure and its determinants. The capital structure refers to the specific combination of debt and equity and their use in financing the corporate operations. Considering there are various determinants of corporate financing patterns, many theories have been developed over time. From Modigliani and Miller theory, which was the first to examine the impact of capital structure on firm value, the trade-off theory and the pecking order theory are probably the most influential theories of corporate finance. The paper reveals the main financial indicators that have a significant impact on the capital structure of companies operating in both developed and under-developed financial markets. According to the particular preference for a capital structure theory, researchers showed that asset tangibility, profitability and tax shield are significant in the trade-off theory while in the pecking-order theory, the most influential factors are long-term profitability and investment opportunities. Regardless the presumed theory, most studies found firm size as essential to financing decisions.*

KEY WORDS: *trade-off theory; pecking order theory; financing patterns.*

JEL CLASSIFICATION: *G32; O16.*

1. INTRODUCTION

In literature, all financing decisions theories try to demonstrate the purpose of capital structure, and that is maximizing company value. Since the Modigliani and Miller (MM) irrelevance theory, theories developed over time, but the research is dominated by the trade-off theory and the pecking order theory. Although financial leverage is correlated to both firm and country specific factors, this study will refer to five firm specific factors, those that show most significance in the capital structure literature: asset tangibility, size, investment opportunities, profitability and tax shield.

* *Ph.D. Candidate, West University of Timișoara, Romania*

2. CAPITAL STRUCTURE THEORIES

Miller and Modigliani (1958) demonstrated that capital structure is irrelevant to firm value in perfect market conditions. These conditions assume that all market investors have free access to information, there are no transaction costs and no differences between capital gains and dividend taxation.

When referring to real economies, market imperfections cannot be excluded from the role of capital structure in firm's value. The trade-off theory refers to the balance between tax gains provided by debt and bankruptcy costs, a balance obtained through a debt to equity ratio that ensures an optimal structure. The pecking order theory contradicts the existence of an optimal ratio, and considers that organizations operate on a financing hierarchy: internal funds, debt and equity as a last resort.

3. FACTORS THAT INFLUENCE THE CAPITAL STRUCTURE

3.1. Asset tangibility

Tangible assets play the role of collateral in debt issuance. This means that companies with a large amount of tangible assets can access more debt, under favorable conditions and lower costs.

Over time, the relationship between tangibility and the proportion of debt was demonstrated through various empiric studies, although opinions are very different. Rajan and Zingales (1995) discovered a positive relationship, normal in all companies following the trade-off theory. Pandey (2001) proved a negative correlation between fixed assets and leverage: if companies face a high level of debt they are limited to use their internal funds because lenders are closely monitoring them. However, this represents a benefit for small companies that would not afford controlling managers in spending the internal resources, and thus they access a large amount of debt to ensure monitoring. There are also studies which could not find any support for the importance of collateral in the proportion of debt (Eldomiatty, 2007).

Considering the actual financial crisis, the role of fixed assets in mortgage loans is confirmed. Nowadays, the standard loan conditions are more severe, debt became more expensive and consequently, fixed assets are necessary for accessing loans.

3.2. Size

Based on the trade-off theory there is a positive relationship between size and debt, because large firms are usually more diversified, face less bankruptcy risk and support a great proportion of debt. While larger firms have an easier access to financial markets due to their reputation, they can also obtain better credit conditions (Rajan & Zingales, 1995; Booth et. al., 2001; Chen, 2004). However, Rajan and Zingales (1995) did not find significant relationship between size and debt in all stable economies studied, and concluded that small companies also use debt because they face a low systematic risk.

But liabilities are divided in short-term and long-term debt. Titman and Wessels (1988) were the first to demonstrate a negative correlation between size and short-term debt, because in small firms the conflict between shareholders and managers is severe and the access to long-term liabilities is very limited. Moreover, when companies perform under the risk of bankruptcy, managers tend to accumulate funds internally and avoid increasing risk through external financing. If the profits are insufficient, firms will access short-term debt to protect against enduring risk. This assumption was proved by Lim (2012) who demonstrated that size is positively related to leverage but negatively associated to long-term debt. The pecking order theory assumes a negative relationship between size and leverage because big companies register high profits and thus undertake investments based on their internal funds.

3.3. Investment opportunities

When firms are in the growth stage they avoid debt because they do not want to offer lenders the possibility of interfering in their institutional decisions. Therefore, companies with significant future perspectives choose to retain more profit in order to reduce the cost of capital (Barclay & Smith Jr., 1996; Pandey, 2001). Since 1977, Myers assumed a positive relationship between investment opportunities and firm value, but he added that highly leveraged companies are not able to undertake investments due to the agency conflict caused.

Shih and Fan (2009) gave another explanation for the direct correlation between growth opportunities and company value considering that investors are willing to pay higher prices for shares when companies have profitable investment opportunities. Moreover, the more capital a company owns the more investments it can undertake. This assumption confirms the previous described by Titman and Wessels (1988) who confirmed an indirect correlation between investment opportunities and long-term debt. However, the short-term debt is widely used in financing new investments.

The trade-off theory suggests that capital structure in companies with important growth prospects includes a small proportion of liabilities because managers are rewarded when the cost of financial leverage is at minimum and no agency conflict exists to affect future growth (Drobetz & Fix, 2003). However, the pecking order theory assumes high leverage for companies with investment opportunities: when firms have high growth potential, they demand more capital and thus debt is preferred as external finance (Chen, 2004).

3.4. Profitability

In the literature, there are contradicting opinions referring to companies' effectiveness in generating profits and the influence it has on the proportion of debt. The pecking order hypothesis predicts a negative relationship between leverage and profitability because firms with large profits afford to undertake investments based on internal funds and thus debt is unnecessary (Titman & Wessels, 1988; Rajan & Zingales, 1995). However, Jensen (1986) argued that future prospects influence the

corporate behavior and assumed that the more profitable the companies are, the more debt they owe. Hovakimian et al. (2001) demonstrated that firms with high profitability over a long period of time choose equity in favor of debt and use share buybacks to disburse their earnings. Additionally, firms with significant internal rate of return tend to use less borrowed funds and reinvest their operating cash flows. As Frank & Goyal (2003) assumed, profitable businesses attain a great level of cash flows, and so they face reduced financial risk. Opposite to the correlation assumed by the pecking order theory, the trade-off theory describes that profitable companies may access funds externally, mostly if they own fixed assets that can be used as collateral.

When other indicators such as investors' behavior, economic conditions or financial markets are taken into consideration, the correlation between profitability and capital structure becomes indirect. This is the main reason for obtaining different results. Shenoy & Koch (1996) emphasised that opposite assumptions in the profitability-financial leverage relationship appear because the pecking order theory considers a correlation between the two indicators while the trade-off hypothesis describes the dynamic aspect of the variables.

3.5. Tax shield

Rajan & Zingales (1995) tried to demonstrate the great impact taxes have on corporate debt. It is widely known that the interest of debt is a deductible expense, offering the major benefit in issuing debt, as it raises the amount of after-tax income. Although this tax-based hypothesis was long debated and some studies included tax benefits among the factors with significant impact on financing option (Lim, 2012) whilst other did not find any evidence to support it (Titman & Wessels, 1988; Chen, 2004).

According to trade-off theory, companies prefer debt mainly because this provides a non-debt tax shield. With this tax advantage, the more higher the tax rate is, the more funds will borrow businesses. In conclusion, taxation has a direct impact on debt maturity and financial leverage, but it is more significant in large companies than small ones.

Debt is not the only one tax-free, non-cash expenses being also tax-deductible. Hence, when firms have to deal with agency problems, additional debt as supplementary financing is never a good choice. But tax allows deductions from the before-tax income, such as depreciation on tangible and intangible assets (Tekler et al., 2009).

4. DETERMINANTS OF CAPITAL STRUCTURE IN LISTED COMPANIES

This section investigates the correlations between determinants of capital structure and leverage ratios in listed companies from both, developed capital markets and emerging ones. Table 1 summarises the main findings of six researches, offering a perspective on the similarities and differences across economies.

The first two studies are based on a comparison between countries: Rajan & Zingales (1995) focus on the developed G-7 countries (Canada, France, Germany,

Italy, Japan, USA, UK) and Booth et al. (2001) observe ten developing states (Brazil, India, Jordan, Korea, Malaysia, Mexico, Pakistan, Thailand, Turkey, Zimbabwe).

Table 1. Correlations between determinants of capital structure and debt ratios in listed companies

Studies	Dependent variable used in study	Determinants of capital structure and their correlation to dependent variable				
		Tangibility	Size	Investment opportunities	Profitability	Taxation
<i>Rajan & Zingales (1995)</i> - 7 developed states - period: 1987 – 1990	Book leverage	(+) Book leverage in all countries	(-) Book leverage in Germany (+) Book leverage in the rest of the states	(-) Book leverage in all states	(-) Book leverage in Japan, Italy, Canada (+) Book leverage in UK No significant impact in Germany & France	(-) Book leverage, not statistically significant
<i>Booth et al. (2001)</i> - 10 developing states - period: 1980 – 1990	Long-term debt Total debt	(+) Long-term debt; (-) Total debt	(-) Long-term debt; (+) Total debt	(-) Long-term debt	(-) Long-term debt (-) Total debt	(-) Long-term debt (-) Total debt
<i>Frank and Goyal (2003)</i> - United States - period: 1971 - 1998	Net debt	(+) Net debt	(+) Net debt	(-) Net debt	(-) Net debt	Variable not included
<i>Chen (2004)</i> - China - period: 1994 - 2000	Total debt Long-term debt	(+) Total debt (+) Long-term debt	(+) Total debt, not statistically significant (-) Long-term debt	(+) Total debt (+) Long-term debt	(-) Total debt (-) Long-term debt	(-) Total debt, not statistically significant (-) Long-term debt
<i>Pandey (2001)</i> - Malaysia - period: 1988 - 1999	Short-term debt Long-term debt Total debt	(-) Short-term debt (-) Long-term debt (-) Total debt	(+) Short-term debt (+) Long-term debt (+) Total debt	(+) Short-term debt (+) Long-term debt (+) Total debt	(-) Short-term debt (-) Long-term debt (-) Total debt	No variable included (-) Debt hypothesized
<i>Eldomiaty (2007)</i> - Egypt - period: 1998 - 2004	Short-term debt Long-term debt	No significant impact	(+) Short-term debt (+) Long-term debt	No significant impact	(+) Short-term debt (-) Long-term debt	(+) Short-term debt (+) Long-term debt
Correlations between leverage and determinants of capital structure presumed by trade-off and pecking order theory		(+) Trade-off theory	(+) Trade-off theory (-) Pecking order theory	(-) Trade-off theory (+) Pecking order theory	(+) Trade-off theory (-) Pecking order theory	(+) Trade-off theory

The second part of the table includes two studies of developed economies from the United States and China – Frank & Goyal (2003), Chen (2004) – and another two researches on emerging financial markets, Malaysia and Egypt – Pandey (2001), Eldomiatiy (2007).

The cross-country analysis in developed financial markets reveals significant positive relationships between debt on one side and tangibility and size on the other. All countries show that investment opportunities have a negative effect on leverage. Moreover, the same effect is produced by profitability in Japan, Italy and Canada. These correlations are expected in stable economies, where companies can raise funds through stock issue, especially when their profitability is high and their shares are overpriced. Referring to tax advantages that support debt, the trade-off theory is rejected in this case, as companies from G-7 Countries avoid lenders' constraints. Considering Chen's and Pandey's studies, the table shows similar results to Rajan and Zingale's, which means that firms from developed economies follow similar financing decisions. Both U.S.A. and China indicate a significant positive relationship between debt and tangibility and debt and size, with the specification that in China, companies use a greater proportion of short-term debt. The main difference is observed in China, where it is shown that the more growth opportunities exist, the higher the debt ratios will be. This means that banks are willing to offer long-term debt for companies with development prospects. However, the negative relationship between profitability and debt and between taxation and debt indicates support for pecking order model, but with the following hierarchy: retained profit, equity finance and finally debt. These correlations indicate that Chinese companies avoid the state interference in corporate activities, preferring equity to debt because in this case, besides being the tax beneficiary, the state is also the owner of banks.

For the cross-sectional analysis of listed companies in emerging markets, Booth et al. demonstrated similar results with the ones in developed markets. Companies owning an important amount of tangible assets use more long-term debt showing that companies match fixed assets with long-term liabilities.. But the total debt ratio decreases and this indicates that the majority of debt consists in short-term funding. This indicates that companies keep a low financial risk because in emerging markets they face high economic risk. In terms of distress costs, this supports the static trade-off theory. Large firms owe little long-term debt, as the debt-size correlation indicates a preference for short-term funding. The other determinants - investment opportunities, profitability and taxation - show the same importance proved for companies in stable financial markets. However, looking at the single-country studies, results are not very consistent. In Malaysia, tangibility is negatively correlated to debt ratios, contradicting the trade-off theory, while in Egypt this determinant is not even significant to leverage. The size variable is directly correlated to debt ratios, indicating that companies grow based on liabilities. The same assumption is proved by the relationship between investment opportunities and debt-ratios, but in Egypt it was not found statistically significant. As shown in the cross-sectional study, the more profitable companies are, the less debt they use, sustaining the Pecking order theory. Finally, from all six studies, the case of Egypt is the only one to benefit from tax savings through debt increases.

5. CONCLUSIONS

Comparing studies from emerging countries and developed ones, some inconsistency between results was observed. This shows that the economic environment has a great impact on financing decisions and capital mix and thus the influence of macroeconomic indicators such as inflation or interest rates should also be considered.

Regardless of how developed financial markets are, listed companies show higher debt proportions when they own an important amount of tangible assets. This represents a proof that the trade-off theory is relevant, indicating that fixed assets are used for accessing loans, especially on the long-term.

Most studies indicate that size has a positive influence on debt, so listed companies can access more debt when they have a good reputation on the financial market. There is also some evidence that larger listed firms access less long-term debt, preferring short-term funding. While the positive correlation between size and debt is an assumption of the trade-off theory, the negative one refers to pecking order model. In cross-country analysis, it was proved that the larger the companies are, the less liability they owe, following the former theory. However, these results were not consistent in all the single country studies.

Most countries indicate a negative relationship between investment opportunities and leverage ratios, except for China and Malaysia which show support for the pecking order theory. In these countries, companies with high leverage and significant investment opportunities demand more capital and they obtain it through debt. This means that the Asian banking system sustains the economic growth through business development.

As all the observed studies show, profitable companies use less debt because they operate based on internal funding. This is one of the pecking order theory assumptions.

In terms of taxation, most results either indicate that companies do not take advantage of the tax shield or that this indicator is found irrelevant for the model. However, the inconsistency is understandable, as taxation is specific to every country. The only evidence for trade-off theory is suggested in Egypt where it is shown that the tax advantage persuade businesses into accessing more borrowed funds.

REFERENCES:

- [1]. **Barclay, M.J; Smith Jr., C.W.** (1996) *On Financial Architecture: Leverage, Maturity, and Priority*, Journal of Applied Corporate Finance, Vol. 8 (4), pp. 4–17
- [2]. **Booth, L.; Aivazian, V.; Demirgüç-Kunt, A.; Maksimovic, V.** (2001) *Capital structure in developing countries*, Journal of Finance, Vol. 56, pp. 87–130
- [3]. **Chen, J.J.** (2004) *Determinants of capital structure of Chinese-listed companies*, Journal of Business Research, Vol. 57, pp. 1341–51
- [4]. **Drobtz, W.; Fix, R.** (2003) *What are Determinants of Capital Structure? Some Evidence for Switzerland*, WWZ Working Paper, No. 4/03

-
- [5]. **Eldomiaty, T.I.** (2007) *Determinants of corporate capital structure: evidence from an emerging economy*, International Journal of Commerce and Management, Vol. 17 (1/2), pp. 25-43
- [6]. **Frank, M.Z.; Goyal, V.K.** (2003) *Testing The Pecking Order Theory of Capital Structure*, Journal. of Financial Economics, Vol. 67, pp. 217-48
- [7]. **Hovakimian, A.; Opler, T.; Titman, S.** (2001) *The Debt-Equity Choice*, Journal of Financial and Quantitative Analysis, Vol. 36 (1), pp. 1-24
- [8]. **Jensen, M.** (1986) *Agency costs of the free cash flow, corporate finance and takeovers*, American Economic Review, Vol. 76, pp. 323-29
- [9]. **Lim, T.C.** (2012) *Determinants of capital structure empirical evidence from financial services listed firms in China*, International Journal of Economics and Finance, Vol. 4 (3), pp. 192-203
- [10]. **Modigliani, F.; Miller, M.H.** (1958) *The Cost of Capital, Corporation Finance and the Theory of Investment*, American Economic Review, Vol. 48 (3), pp. 261–97
- [11]. **Myers, S.C.** (1977) *Determinants of Corporate Borrowings*, Journal of Financial Economics, Vol. 5, pp. 147-75
- [12]. **Pandey, I.M.** (2001) *Capital Structure and the Firm Characteristics: Evidence from an Emerging Market*, Working Paper, Indian Institute of Management, Ahmedabad, India
- [13]. **Rajan, R.G.; Zingales, L.** (1995) *What Do We Know about Capital Structure? Some Evidence from International Data*, Journal of Finance, Vol. 50 (5), pp. 1421-1460
- [14]. **Shenoy, C.; Koch, P.D.** (1996) *A Dynamic Model of the Firm's Leverage-Cash Flow Relationship*, Journal of Empirical Finance, May, pp. 307-331
- [15]. **Teker, D.; Tasseven, O.; Tukul, A.** (2009) *Determinants of Capital Structure for Turkish Firms: A Panel Data Analysis*, International Research Journal of Finance and Economics, No. 29, pp. 179-187
- [16]. **Titman, S.; Wessels, R.** (1988) *The Determinants of Capital Structure Choice*, Journal of Finance, Vol. 43 (1), pp. 1–19

BOOK REVIEW

ON

„OPERATIONS MANAGEMENT RESEARCH AND CELLULAR MANUFACTURING SYSTEMS: INNOVATIVE METHODS AND APPROACHES“

FORMAL ATTRIBUTES: *Hardcover, 440 pages, Publisher: IGI Global (USA), 1 edition (October 31, 2011), Language: English, ISBN-10: 1613500475, ISBN-13: 978-1613500477.*

The book is edited by **Vladimir Modrak** who is Professor of Manufacturing Technology at Technical University of Kosice (Slovakia) and Dr. **R. Sudhakara Pandian** from Kalasalingam University (India). The book consists of 20 chapters and is written by 44 authors from 13 countries.

Its authors were apparently motivated by the fact that traditional manufacturing concepts with long manufacturing lead times and extremely high work-in-process inventories are no longer able to satisfy current requirements of customers.

Accordingly, their focus is on innovative methods and approaches towards the development and implementation of lean manufacturing layouts to improve material flow and material. Moreover, chapter 1 by Modrak and Semanco includes a motivation for the topic, which leads to the review of the modern cell formation approaches. The rest of the book covers the following subjects:

- ◆ Cluster Analysis for Cell Formation
- ◆ Connected and Disconnected Cellular Systems
- ◆ Flexible Manufacturing Cells
- ◆ Flow Stop Scheduling Problems
- ◆ Genetic and Hybrid Algorithms in Cell Formation
- ◆ Graph Theory and Design of Manufacturing Cells
- ◆ Lean Thinking Based Investment Planning
- ◆ Non-Traditional Optimization Algorithms
- ◆ Operator Assignment Decisions
- ◆ Petri Net Models

It has been a good choice to prioritize methods of operational research for decision making in various functional areas of manufacturing management. Thanks to this approach the book has become one of the most complete comprehensive literature resources on the methodological aspects of cellular manufacturing systems.

This book, in spite of its academic nature, has a potential to generate interest among industrial engineers and production managers which are concerned in implementing cellular manufacturing techniques in their plants. In this respect, it is possible, for example, to refer to the case study “Multi-Modal Assembly-Support System for Cellular Manufacturing” by Feng Duan, Jeffrey Too Chuan Tan, Ryu Kato, and Tamio Arai.

The comprehensive list of references that is accompanying every chapter confirms the academic usefulness of this book. Additionally, this book is providing further theoretical understanding the subject with more fruitful ideas to academic researchers and managers of organizations.

Index of Authors

A

Achim, M.L. (5, 14)
Anghel, M. (21)
Armășelu, S. (179)
Avram, M. (29)
Avrănescu, T.C. (39)

B

Bâldan, C. (47)
Bâlțeanu, C. (55, 63)
Bărbulescu (Șeitan), O. (55, 63)
Botea, M. (71)
Burcea, F.C. (47)
Bușe, G.F. (77)

C

Ciobanu, D. (85)
Ciocodeică, V. (244)
Ciuhureanu, A.T. (93,105)
Criveanu, R.C. (135)
Croitoru, E.L. (117)

D

Dimitriu, D.S. (127)

F

Fleșer, A. (135)

G

Gruiescu, M. (71)

I

Ioanăș, C. (71)
Isac, C. (143)

L

Lăcătușu, C. (257)

M

Man, M. (151)
Militaru, D.N. (163)

N

Nedeluț, M. (71)

O

Oprîțescu, E.M. (171)

P

Pârvulescu, I. (257)
Pătruțescu, M. (179)
Pleșa, R. (257)
Pop, M.G.S. (193)
Popa, C.E. (205)
Popp, L.E. (213, 223)
Prodanciuc, R. (236, 244)

R

Răscolean, I. (257)

Răvaș, B. (151)

S

Simion, D. (179)

Škoda, M. (273)

Ș

Șerban, C. (179)

Ț

Țogoe, G.D. (29)

U

Ungureanu, E. (47)

V

Vătavu, S. (285)

*The authors are entirely responsible for the content of their article.
The publication of the papers in the Annals of the University of Petroșani - Economics
is the result of a peer review evaluation process.
The papers were reviewed by the members of the Advisory Board.*