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AN ANALYSIS REGARDING THE IMPLEMENTATION OF HUMAN RESOURCES MANAGEMENT IN A CARAS-SEVERIN TOWN HALL

Solomia ANDREŞ

ABSTRACT
The paper presents a few theoretical and practical aspects regarding the implementation of Human Resources Management (HRM) in a town hall, representing in fact the beginning of a research that will be developed in the future at the level of other economic agencies or organizations, different in size and legal entity. The aspects researched will then be compared in order to offer a general conclusion relevant for this subject and in order to be able to propose improvement measures for HRM implementation and practices at the level of all Caras-Severin county organizations.

KEY WORDS: management, human resources, town hall, analysis, performances

JEL: A11, L11, M13

1. INTRODUCTION

The specialty literature studied helps us appreciate if the activity of an economic agency or of any other type of organization is directed towards well established directives. It is supposed that human resources represent the only creators of values, thus employees are the ones orienting their organization in that director.

Thus, being aware that one most occasions an organization might be identified with the people that build it, than the most important HRM contribution in the insurance of a favorable frame for the organizational development is represented by the investment in the organization personnel.

Human resources practically represent an extraordinary vital potential for the organization, in the measure in which general and department managers know how to attract, to form, motivate and train their employees in an activity; they understand how to diminish negativism and the specific insertion of not knowing, thus replacing the desire to learn with a capacity to adapt.

It results that the human resources activity may be produced only in certain conditions of recognition of: merits and the freedom to evolve in the chosen organization, in their career, according to their own expectations and according to their impact of work efficiency on the organization efficiency.

Thus, the idea of a competitive management of human resources could be underlined as being essential for the success of any organization; this is the reason for considering useful the approach of researching the manner in which HRM is implemented at the county level organizations.
2. ANALYSIS REGARDING THE IMPLEMENTATION OF HUMAN RESOURCES MANAGEMENT IN A CARAS-SEVERIN TOWN HALL

In order to apply this research, the survey method was applied together with the use of questionnaire type instruments, the interview and discussions thematically directed applied on only 10 respondents, the other employees of the town hall from Caras-Severin, not being contacted because they were in rest or illness holidays.

The following ideas summarize the graphical representation of demands and results obtained regarding the implementation of human resources management at the level of public institution, that is the town hall of a town from the Caras-Severin county.

I. Data regarding survey respondents:

![Graph 1: Job Management vs. Execution](chart1)

![Graph 2: Gender](chart2)

![Graph 3: Age](chart3)
4. Studies graduated

5. Institutional work experience:

6. Which is your activity domain inside the institution?
II. Questions asked:

1. In what measure do you consider sufficient the human resources planning activity in your work institution?

![Bar chart showing responses to the first question]

2. Which do you consider the most important criteria needed to be taken into consideration in planning the necessary of human resources?

![Bar chart showing responses to the second question]

3. In what measure do you consider qualified personnel resources sufficient for occupied positions?

![Pie chart showing responses to the third question]
4. In what measure do you consider personnel changing a threat for the institution?

- Low
- Medium
- Highly

5. The recruitment process inside the institution is realized by:

- A selection interview
- Competition ranking
- Competition/Written exam

6. In what measure do you know the tasks mentioned in your job description?

- Highly
- Medium
- Low
7. Do you consider your basic attributions exceeded by the task fulfilled?

![Bar chart showing preferences for basic attributions exceeding task fulfillment.]

- Not at all
- Occasionally, according to the work volume
- Yes, highly

8. The frequency of opportunities to attend professional development courses inside the institution is:

![Pie chart showing frequency of professional development courses.]

- Monthly
- Semestrially
- Trimestrially
- Annually
- Never

9. Personnel performance evaluation in your institution is realized:

![Bar chart showing performance evaluation frequency.]

- Semestrially
- Annually
- Occasionally
10. The evaluation of job performances inside the institution is realized by:

- Performance evaluation questionnaire
- Observations from direct superiors
- The analysis of key performance indicators

11. In what measure are you satisfied with the institutional direct rewarding system?

0 1 2 3 4 5 6 7 8
Highly Medium Low

12. There is a feeling of equality between employees and the principle of non-discrimination is respected by your institution?

0 2 4 6 8 10 12
Highly Medium Low
13. Individual performances are mainly rewarded by:

- Financial rewards
- Non-material rewards (appreciations, praises)
- The opportunity to advance
- Others

14. In what measure do you consider that the manager respects his responsabilities inside the organization?

- Highly
- Medium
- Low

15. In what measure do you appreciate the strategy of human resources management, in its ensemble, as being efficient?

- Low
- Medium
- Highly
The interpretation of these schemas, respectively of the results of the questionnaire regarding the implementation of human resources management at the level of a Caras-Severin county town hall is the following one:

I. In the town analyzed, the execution function predominates in comparison to the management one. From a employees total, 40% are males and 60% females. Most of the employees are aged between 35 and 45 years, the following category being that of employees over 45 years. According to the last school graduated, most of them have graduated university studies, and the smallest category is that of high school graduates. From the people working in this institution, the highest percentage regarding their working experience is contained between 1 and 5 years, 5 out of 10 employees and these work in the communication and client relation department.

II. Regarding the manner in which the HRM is implemented at the level of this town hall 9 out of 10 employees consider that the planning activity of human resources is highly sufficient, 1 answering that the level is a medium one. They believe that the most important criteria that need to be taken into consideration in planning the necessary of human resources are represented by a high volume of individual attributions and multitasking, as the ensuring of quality services offered to the town citizens. The consider that of personnel rapid replacement – represented by a percentage of 80% - is a threat, and 20% of them considers that this fact doesn’t seriously affect the institution situation.

In the case of this public institution, the town hall, the recruitment process is 100% made by selection interviews and competitional written exam. Most employees – 80% are highly familiarized with their job description attributions, and as a result, 30% of them consider that their attributions are highly overlapped by the tasks written in their job description, 70% sustaining that the opposite happens only when there is a high working volume.

Regarding the professional development of its employees, 90% of the town hall employees sustain that they are offered the opportunity to follow professional development courses inside the town hall on an annual basis, and 10% - receive this opportunity according to the position occupied.

The evaluation of professional performances is realized on an annual basis. The method used in this case is the analysis of performance key indicators, followed by the results of questionnaires regarding the evaluation of professional performances and finally by observations of their direct superiors, who participated in thematically directed discussions with their employees.

70% of the town hall employees are satisfied at a medium level of their direct rewarding system used by the town hall, 20% are highly satisfied and 10% are satisfied in a low measure. Their performances are generally rewarded according to expectations, and 46% of the cases appreciate financial rewards, 36% non-material rewards and 18% mentioned the opportunity of job advancement, respectively of career advancement.

Between the town hall employees the feeling of equality and the principle of non-discrimination is respected on a percentage of 100%. The principle of discrimination among employees doesn’t exist, because 100% of them considered that this principle is not breached.

Half of them consider that the manager respects his responsibilities inside the organization in a high measure and half of them agree in a medium measure. Thus, they appreciate in a percentage of 60% at a medium level the strategy of human resources management as being efficient and the rest of 40% consider it efficient in a high measure, the
efficiency being also reflected by a positive evolution of relevant indicators of the annual financial records, analyzed for the last three years.

3. CONCLUSIONS

Inside the organization analyzed one could observe that the importance of human resources and of financial resources is underlined, situation which explains the managers’ responsibility inside town halls, regarding the administration and management of all types of resources.

Even if the analysis of managerial efficiency indicators reflected by annual financial records underlines the efficiency of an economic-financial activity at the level of the town hall analyzed, the analysis of HRM implementation at the level of this town hall, highlights a medium social efficiency assumed by the human resources manager from this town hall for the period 2012-2015, fact which imposes a review of internal regulations, of the Organization and Functioning Regulation, the perfecting of the personnel record system, the improvement of the recruitment process, the personnel and professional development programs, the harmonization of appreciation criteria of performances and of rewarding criteria, by insuring a correlation between performances-work satisfaction-rewards.

Only in these conditions will the institution personnel, implicitly the personnel of HRM would be satisfied in a percentage of 100% for the results obtained in conditions of efficiency at the department level and at the level of the town hall analyzed from these points of view.

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*** www.mfinante.ro
METHODS FOR TESTING THE MANAGEMENT PROCESS OF NEW PRODUCTS DEVELOPING IN ENTERPRISES OF MANUFACTURING INDUSTRY IN BULGARIA

Diana ANTONOVA\(^1\)
Bozhana STOYCHEVA\(^2\)

ABSTRACT

Innovation is a key factor in achieving competitive advantage for industrial enterprises. It is widely accepted that invention should be viewed as a process, emphasising on its perception as a set of separate interrelated phases. This is aimed at conscious optimisation of management and organization of the innovation process in order to create products that will be successful on the market. The issue of developing new products has long captured the attention of scientists. Considerable efforts are put into investigating the practices of developing new products and identifying the best among them.

KEY WORDS: innovation, innovation process, new product development, manufacturing

JEL: L60, M11

1. INTRODUCTION

The success of organizations is inevitably linked to conducting innovations (Jiménez-Jiménez & Sanz-Valle, (2011)). Innovations are these new approaches, ways of thinking and action, ways of combining that allow the use of resources and potential in such a way that new products can be better, more useful for customers and bring more success to any organizational structure. (Chwastyk and Kołosowski, (2014); Cedergren, Wall and Norström (2010)). Several studies have explored the reasons for the success or failure of new products and what managers can do to increase the chances of developing a successful innovation (Hong and Roh. (2009); Sundström and Zika-Viktorsson (2009)).

This question captures the attention of Bulgarian scientists who conduct research focused on the process of new product development (NPD) in Bulgarian medium-size and large industrial enterprises.

The object of research, according to the headcount criterion, are medium-size and large industrial enterprises, which are registered in the sector "Manufacturing" of the National Classification of Economic Activities (NACE-2008) and are engaged in the manufacturing of food products (section 10); manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials (section 16); production of paper, cardboard and paper products and cardboard (section 17); production of rubber and plastics (Section 22) and manufacture of machinery and equipment of general and specific purpose (Section 28) in Bulgaria.

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The aim of the study is to analyse the management of the innovation process in the industry in order to improve the technology and organization of new product development, on the basis of which to synthesize and summarize a set of specific methods, tools and practices for improving the management of research process in medium-size and large enterprises in manufacturing, with the aim to improve their competitiveness.

The starting point for conducting comparative analysis of the status and trends in new product development (NPD) in Bulgarian industrial enterprises is their positioning in respect to organizations operating in the industry of innovative economies such as the US (America), Sweden (Europe) and Malaysia (Asia).

2. CONCEPTUAL FRAMEWORK

2.1. Methodological framework of the study

A study of applied scientific literature on similar research in other countries with a focus on the process of NPD has been conducted. As a result, the questionnaire form and this methodology of the study conducted in Bulgarian industrial enterprises have been developed. When drawing up the methodology of the survey in Bulgaria, many more tools have been applied, compared to the previous studies on the research problem reviewed.

One of the organizations focused on improving the effectiveness of individuals and businesses in the development and management of new products and encouraging their development is a Product Development and Marketing Association (PDMA) (official website of PDMA, http://www.pdma.org/, accessed on 09.19.2016). In fulfillment of part of the mission of PDMA in connection with the creation and dissemination of knowledge for the management and improvement of the process of the NPD, a number of studies have been conducted.

The first phase of the analysis of the state of product design was a survey of PDMA, conducted in 1989 (Griffin, 1997), aimed at measuring the success of NPD, creating a profile of developing new products and distribution of NPD management practices.

The second phase of the study of PDMA was carried out in 1995 under the direction of Griffin (Griffin, (1997)). The aim of this study was to determine the status of implementation methods and tools for NPD and to compare the results with those from the survey in 1989. The questions were aimed at: the process, organization and instruments supporting NPD, as well as NPD measurements and information about the respondents.

Later, the questionnaire of PDMA was partially used as a tool by Rundquist and Chibba to study the Swedish industrial companies in 2004 (Rundquist and Chibba (2004)). The interest for studying the processes taking place in Sweden was determined by the fact that the Swedish economy is known for its innovative organizations. There were two objectives: (1) to determine the current status of the process of NPD in the Swedish organizations and to identify the practices employed in NPD; (2) to compare the results with PDMA survey conducted in 1995 (Griffin, 1997).

Building on the methodological foundations of the tools of PDMA (1995) and Sweden (2004), a parallel field of research on the process of NPD was held in Malaysia in 2006. Coordinators of this project were A. Al-Shalabi, M. Omar and J. Rundquist (Al-Shalabi, Omar and Rundquist (2008); Al-Shalabi, Omar and Rundquist (2010). The study was the first of its kind among Malaysian organizations with a focus on the process of NPD. It was initiated as a result of the fact that the Malaysian economic priorities, targeted at the development of
agriculture in the recent past, took a sharp turn towards industrialization and development of high technology.

The third phase of studying the trends in NPD and good practices in the US was conducted by PDMA in 2003 (Barczak, Griffin and Kaht (2009). Project coordinators were Barczak, Griffin and Kahn. The efforts of the authors focused on conducting complex research, aimed at determining the best practices related to the management of NPD. The special feature of the survey conducted in 2003 was that respondents were asked to answer separately questions about radical, adapting and imitating innovations developed. The survey contained 7 modules of questions: (1) NPD within the organization; (2) generating phase and management product portfolio; (3) organisation in the process of NPD; (4) tools and methods used in NPD; (5) the outcome of NPD; (6) general information on respondents and (7) questions allowing respondents to make summaries and comments.

The previous similar studies have been the basis for developing a survey, founded on indicators already tested. When selecting objects to perform sector analysis on and size of the organizations surveyed, parallels with the studies conducted in the US, Sweden and Malaysia have been sought, in order to achieve consistency and comparability of results.

The main research thesis is based on the assertion that efficient management, planning and control of all impact factors ensures market success both to each new product and the programs for new products in industrial enterprises as a whole. The innovation process includes three phases: generating, genuine new product development and commercialization. Competition, technological innovation, whose speed is still growing, the rapidly changing consumer requirements and the shortening of product life cycle, determine the need for businesses to update their products constantly. Of vital importance is the successful launch of products on the market. This requires deep knowledge of the innovation process phases, their effective organization and management, as well as a good structure and formalization of increasing organizational competitiveness, corporate revenues and profits.

Based on primary research thesis presented in the introduction, we can deduce the following dependent variables that have a direct connection with the establishment of the hypotheses of the study: the process efficiency of NPD, leading to the achievement of market success, is determined by three factors: (1) success of new products against those of the competitors; (2) success of the program for NPD; (3) formalizing the process of NPD.

The following hypotheses have been formulated for testing:

H1 success of new products against those of the competitors depends directly on: Assurance and success of the program for NPD; formalizing the process of NPD; implementation of a strategy for NPD; practices used to organize the process of NPD (including the application of: a different type of personalization for project management, tactics used to form project teams, and the degree of support provided by the leaders of the NPD process), as

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1 Identifying the place occupied by the organizations in the most important markets for these new products, compared to the place of their competitors (the most successful in the industry; the upper third of the industry, the middle third of the industry; the lower third of the industry).
2 Respondents evaluated these indicators on a scale from 1 - "not responding"/ "failed" to 9 "fully responding"/ "completely successful". In order to achieve comparability of results with similar studies, it is assumed that the program to develop new products is successful for responses in the range of 7 to 9.
3 In this paper, formalizing the process of NPD is considered to be the use of formal documented procedures describing the process of NPD.
well as the marketing, research and design, technology and management methods and tools applied.

**H2 success of the program for NPD** is directly dependent on the success of new products against competitors; Assurance program for NPD; formalizing the process of NPD; implementation of a strategy for NPD; practices used to organize the process of NPD (including the application of a different type of personalization for project management, tactics used for forming project teams, and the level of support provided by the leaders of the NPD process) as well as marketing, research and design, technology and management methods and tools applied.

**H3 formalization of the process of NPD** depends directly on: the success of new products against competitors; Assurance and success of the program for NPD; implementation of a strategy for CHP; practices used to organize the process of NPD (including the application of a different type of personalization for project management, tactics used for forming project teams, and the degree of support provided by the leaders of the NPD) as well as marketing, research and design, technology and management methods and tools applied.

### 2.2. Aims and objectives of the study

The following aims and objectives, leading to their implementation, have been set in the experimental study:

1. Study the process of NPD in Bulgarian industrial organizations with staff of more than 50 people. The goal is realized by performing the following tasks: (1) Production of background information for the enterprise. (2) Study of the overall process for NPD. (3) Analysis of management of portfolios of innovative products. (4) Study of NPD through outsourcing. (5) Study of the organization in NPD. (6) Study of the methods and tools in NPD.

2. Systematise and analyses the results of the survey. The goal is realized through: (1) statistical methods for collecting and analyzing the results in general and sectoral form; (2) providing a basic model to effectively manage the process of NPD; (3) the method of expert assessments of the approbation of the basic model proposed in different studied sections of the sector "Manufacturing"; (4) final acceptance or rejection of the formulated hypotheses, based on the results displayed.

3. Determine the place of Bulgaria by performing comparative analysis of similar previous research conducted on the management process of NPD in the US, Sweden and Malaysia.

4. Display summaries, conclusions and guidelines to improve the management process of NPD in medium-size and large Bulgarian industrial enterprises.

Graphically the stages of the survey are presented in Fig. 2.1.
2.3. Methods of study

In this study was employed a combination of qualitative and quantitative research methods.

2.3.1. Qualitative research methods

- **Desk study.** Gathering statistics on the population surveyed with the help of public institutions - NSI databases of company information based in the commercial register (Official website commercial register, references, check the current status https://public.brra-bg.CheckUps/Verifications/ActiveCondition.ra) and "Apis register plus" (http://www.apis-
Desk research saves expenditure of time and resources.

- Survey. Previous similar studies that have been conducted by the PDMA, the foundation for developing a survey on basis of indicators already tested. Developing a questionnaire in Bulgaria is partly based on the questionnaire used by PDMA in 2003. The survey is carried out in two phases - a pilot and a genuine inquiry.

- Pilot survey. A preliminary test for suitability and readability issues. It is implemented in two stages, and its aim is to shape the final version of the questionnaire for the Bulgarian industrial enterprises:

  **Structure and content of the questionnaire**

  The questionnaire developed in Bulgaria is partly based on questionnaires from previous studies - PDMA in 2003 Sweden (2004) and Malaysia (2008). The final version of a questionnaire in Bulgaria contains a cover letter and six sections:

  **Module one** is related to "General questions about the enterprise". The module provides an overview of the organization and the activities developed around it.

  **Module two** - "General development of new products in the enterprise" partially presents issues contained in Module One "Development of new products in the enterprise" of PDMA (2003). The module of questions allows the drawing of a map of activities and their combination with the aim to develop new products in the enterprise.

  **Module Three** - "Managing portfolios of innovative products." The questions are intended to reflect the strategic decisions made in the enterprise.

  **Module four** - "Processes of product development through outsourcing" module forms the basis for compiling a map of activities and their combination with the aim to develop new products outside the enterprise.

  **Module five** - "Organizing the development of new products." The set of questions determines the activities and their combination, which have an organizational function in the development of new products in the enterprise.

  **Module six** - "Methods and tools for developing new products" - this category is new and is included only in the survey in the US (2003) and Bulgaria (2012). The module connects the practice of introducing a large number of tools and methods aimed at improving the process of developing new products.

  The questions in the survey form are directed to the enterprise in general, rather than to a separate business unit. The total number of sub-questions that are part of the survey was 253. It contains both open (76) and closed (177) questions, some of which are presented in tabular form with grading systems. In some questions, respondents were asked to give individual answers related to the development of radical innovations, as well as adapting and imitating innovations in their enterprises. For other questions, possible answers relate to the three categories.

  Responses were obtained from target respondents of the survey previously targeted: CEO or manager, brand manager, manager in charge of R & D in the enterprise. In the absence of analogous position in the organization, the inquiry is completed by the specialist responsible for NPD.

- Actual survey

  Data collection for the formation of the population surveyed is achieved using data collected from the National Statistical Institute (NSI) (http://www.nsi.bg/otrasal.php?otr=70,), where evidence of the general population has been obtained.
The survey is conducted in five sections of the sector "Manufacturing" in Bulgaria. To check the statistical significance, the calculator Raosoft is used (Sample size calculator), (http://www.raosoft.com/samplesize.html, last access 09/28/2016), which allows the calculation of the sample size \( n \). The statistical error is set to \( p = 0.05 \), with a confidence level \( \gamma = 0.95 \). The tendency of the activity level for the population studied was 63% (Table 1). The results can be considered statistically significant, both for the overall population and for each section.

<table>
<thead>
<tr>
<th>Section</th>
<th>Number of enterprises - General set (N)</th>
<th>Number of enterprises to be interviewed (n)</th>
<th>Number of interviewed enterprises</th>
<th>Execution (%)</th>
<th>Failures (no.)</th>
<th>Failures (no.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>335</td>
<td>179</td>
<td>125</td>
<td>70</td>
<td>54</td>
<td>30</td>
</tr>
<tr>
<td>16</td>
<td>26</td>
<td>24</td>
<td>16</td>
<td>67</td>
<td>8</td>
<td>33</td>
</tr>
<tr>
<td>17</td>
<td>33</td>
<td>30</td>
<td>8</td>
<td>28</td>
<td>22</td>
<td>72</td>
</tr>
<tr>
<td>22</td>
<td>79</td>
<td>66</td>
<td>35</td>
<td>53</td>
<td>31</td>
<td>47</td>
</tr>
<tr>
<td>28</td>
<td>86</td>
<td>70</td>
<td>50</td>
<td>71</td>
<td>20</td>
<td>29</td>
</tr>
<tr>
<td>Total:</td>
<td>559</td>
<td>369</td>
<td>234</td>
<td>63</td>
<td>135</td>
<td>37</td>
</tr>
</tbody>
</table>

- **Method of expertise.** The method of expert evaluations is used as an additional condition for final confirmation or rejection of the formulated hypotheses and sub-hypotheses of the study after treatment of statistical results.

### 2.3.2. Quantitative analysis methods

The method comprises applying a Statistical Program for the Social Sciences (SPSS), statistical analysis and reliable processing of the data collected.

- **Statistical analysis methods with SPSS**

Data processing using the software SPSS results will be used to perform cross-sectoral comparison of Bulgaria and compare it with similar studies on the research problem. In the present study the following statistical methods have been applied:

- **Narrative (descriptive) statistics** - descriptive methods used for classification and summary presentation (organization) of the data in tabular, graphical and analytical type. They provide an opportunity to obtain summaries of data organized in a systematic way, as raw data are too scattered to allow to be covered. Attached are the following techniques:
  - The results obtained can be analyzed by calculating the average results, allowing both sectoral and comparative analysis and comparison with previous studies of the process of NPD;
  - Part of the data is organized by creating tables for frequency allocation. Creation of tables of frequency distribution (frequency tables) is one of the first steps in organizing data from a sample.

The results of descriptive statistics serve to formulate a sub-hypotheses to the initially displayed hypotheses of the study. **The data obtained for each sector allow conducting of cross-sector analysis while the data for the whole sample is a basis for carrying out a comparative analysis with similar studies conducted.**
• **Statistical evaluation (summary statistics)** - methods of analyzing and interpreting data to formulate meaningful assessments, regarding the correctness of the hypotheses stated, as well as formulating generalizations.

- **Correlation analysis** - it is related to establishing statistical correlations between two variables. The values of the entitlement correlations are measured from -1 to +1. The stronger the connection is, the closer to 1 are the values obtained. In this paper, to establish correlations between the variables, the most commonly applied measure correlation coefficient of Pearson Pearson (r) is used for the connection and relationship between the two variables.

- **Regression analysis** - the change in the dependent variable due to the change in the independent variable. The study was administered as a standard multiple regression, the most widely applied type of regression analysis that is used (Palland (2006)).

### 3. CONCLUSIONS

1. Taking into account the specificity, complexity and resource time required for completing the questionnaire in collecting data for research population, it is most appropriate to implement direct contact with the respondents, through pre-arranged meetings, conducting interviews "face to face". Indirect methods such as sending the questionnaire form by mail, as well as making contact with the respondent solely on the phone are not effective.

2. High level of activity and interest among respondents to the study has been observed. They have expressed their desire to obtain results, readiness for further support and implementation of future contacts.

### REFERENCES


*** http://www.pdma.org/, last access 02/19/2016.

*** http://www.raosoft.com/samplesize.html, last access 28/02/2016

*** https://public.brra.bg/CheckUps/Verifications/ActiveCondition.ra


*** http://www.nsi.bg/otrasal.php?otr=70
METHODS AND TOOLS IN DEVELOPMENT OF NEW PRODUCTS IN BULGARIAN INDUSTRIAL ENTERPRISES - GENERAL, SECTORAL AND COMPARATIVE ANALYSIS

Diana ANTONOVA¹
Bozhana STOYCHEVA²

ABSTRACT

Innovation is a key element for competitiveness at the company level. The development of innovation can be presented as an aggregation of separate, interrelated phases. Placing emphasis on the process nature of the innovations, the scientists are attracted to studying the effective management of every phase of the innovation process and of the interactions between various stakeholders.

KEYWORDS: innovation, innovation process, methods and tools, developing new products

JEL: L60, M11

1. INTRODUCTION

In a business context the innovation is taken as a process of the company, which may be divided into separate phases (Rametsteiner and Weiss (2006), Herrera (2010), Gemser and Leenders (2011)). Coordination and parallel running of the different phases of the innovation process, better communication, characteristics of individuals and teams, as well as interactions between the different stakeholders have a significant role as a prerequisite for successful innovation (Felekoglu, Maier and Moultrie (2013). Chwastyk & Kolosowski, 2014); (Jong J, 2007)).

Of great interest to the researchers is the area of the effective management of the process of developing new industrial products, through which better performance against competitors can be achieved. In particular, factors that influence the effective management of the process of developing new products are explored, including applied practices for management and organization of the innovation process, survey about its structure and formalization and survey of the methods and tools that lead to obtaining a competitive advantage. Overall for our country, the Bulgarian industrial enterprises have not been studied with a focus on the process of developing new products.

Similar previous studies related to the study of the process of developing new products and influencing its factors: USA - 1989, 1995, 2003 (Griffin (1997), Barczak, Griffin and Kaht (2009)), Sweden 2004 (Rundquist and Chibba (2004)) and Malaysia 2006 (Al-Shalabi, Omar and Rundquist (2008); Al-Shalabi, Omar and Rundquist (2010)), provoke interest to carry out a comparative analysis of the status and trends of new product development (NPD) in Bulgarian

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industrial companies, positioning them in comparison to the organizations operating in industry from innovatively developed economies such as the USA (America), Sweden (Europe) and Malaysia (Asia). In composing the methodology of the survey in Bulgaria many more tools have been applied, compared to the previously reviewed studies on the research problem.

2. CONCEPTUAL FRAMEWORK

Result and discussion

This article presents the results only from module VI "Methods and tools for developing new products" from the questionnaire for Bulgarian industrial enterprises. The results of the comparative analysis carried out with similar studies are presented.

The aim is to determine the frequency of use of these methods and tools in NPD in order to identify gaps and provide guidance for their improvement.

2.1. Results from Module VI “Methods and tools for developing new products” - general and sectoral analysis

Respondents were asked to note how often the following methods and tools had been used by them in the process of NPD – a) applied marketing methods and tools; b) research and design methods and tools; c) technology methods and tools; and d) management methods and tools.

2.1.1. Applied marketing methods and tools (MMT)

The most commonly used MMT for the study sample (Table 1) are monitoring the clients and their reactions, assessment of the concept by the customer, as well as testing of the perfect product. Interviewing of focus groups is not applied in 34.6% of the cases and is not used for interview purposes in 39.74% of the cases. Visiting clients and carrying out interviews is even more rarely used (up to 51.4% of the cases, and the rate of application varies). Relatively common are carrying out analysis and inclusion of leading users (70.5% of the cases), professional modeling (67.1% of the cases) and engineering (69.2% of the cases) and the rate of application varies. The most limited is the implementation of web-based versions of the marketing tools - only in 20.08% of the cases. Alpha tests are not applicable in 47% of the cases, preliminary test of markets in 49.2% of the cases, analysis of trade-offs 50.4% of the cases, test markets 53.4% of the cases. Beta tests are not common in 36.7% of the cases.

<table>
<thead>
<tr>
<th>MMT</th>
<th>Frequency of Use (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus groups (interviewing for the needs of the group)</td>
<td>34.6 17.1 13.3 13.3 3.4</td>
</tr>
<tr>
<td>Visits to customers (Blitz interviews during their work)</td>
<td>49.6 16.7 17.9 5.5 10.3</td>
</tr>
<tr>
<td>Monitoring of customers and their reactions</td>
<td>9 6 23.9 23.5 37.6</td>
</tr>
<tr>
<td>Leading users (analysis and inclusion)</td>
<td>29.5 26.5 20.5 15 8.5</td>
</tr>
<tr>
<td>Voice of the customer (for interview)</td>
<td>39.74 22.22 16.2 10.3 11.54</td>
</tr>
</tbody>
</table>

Table 1. Applied marketing methods and tools - All sections (%)
The application of MMT for food producers is limited (Table 2). The most common marketing tool is monitoring customers and their reactions - it is always applied for 56% of the cases. Testings the concept is also used, and the frequency of application of the tool varies according to the invention. The application of alpha, beta and gamma tests is limited, and hence preliminary test markets, and test markets are justifiably not often used. Considering the specifics of the manufactured products, the engineering, the creative session, the analysis of the trade-offs and the web based versions are with extremely narrow application. Rarely used are also interviewing focus groups, visits to clients, analyzing consumers and interviews for their needs.

<table>
<thead>
<tr>
<th>MMT</th>
<th>Frequency of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Focus groups (interviewing for the needs of the group)</td>
<td>36</td>
</tr>
<tr>
<td>Visits to customers (Blitz interviews during their work)</td>
<td>46.4</td>
</tr>
<tr>
<td>Monitoring of customers and their reactions</td>
<td>1.6</td>
</tr>
<tr>
<td>Leading users (analysis and inclusion)</td>
<td>12</td>
</tr>
<tr>
<td>Voice of the customer (for interview purposes)</td>
<td>26.4</td>
</tr>
<tr>
<td>Creative session (professional modeling)</td>
<td>28</td>
</tr>
<tr>
<td>Engineering (official method for concept development)</td>
<td>40.8</td>
</tr>
<tr>
<td>Tests of the concept (customer’s evaluation of the concept)</td>
<td>14.4</td>
</tr>
<tr>
<td>Analysis of compromises (modeling of discrete choice)</td>
<td>42.4</td>
</tr>
<tr>
<td>Alpha testing (early tests with users)</td>
<td>31.2</td>
</tr>
<tr>
<td>Beta testing (testing of working models by the users)</td>
<td>24.8</td>
</tr>
</tbody>
</table>

Table 2. Applied marketing methods and tools - Section 10 (%)
Contrary to the initial expectations with the manufacturers of wood products, the MMT mentioned are more closely applicable (Table 3). The use of focus groups is unapplicable in 68.75% of the cases. The practice of visiting customers (about 81.25% of the cases), and the analysis and integration of leading customers and interview for their needs (for 68.75% of the cases) are not used. Surprisingly the monitoring of clients and their reactions is not applicable for 56.25% of the cases. The professional modeling (for 62.5% of the cases) and the modeling of discrete choice (for 81.25% of the cases) are not commonly used, either. Alpha, beta and gamma tests are also limited. About 66.25% of the cases rely on tests of the concept of the customer and the application rate varies. In 75% of the cases a preliminary test of the markets is not performed and test markets are not used. The implementation of Web-based versions of marketing tools is not typical for 87.50% of the cases. The most widespread is the application of engineering.

Table 3.  
Applied marketing methods and tools - Section 16 (%)
For the manufacturers of paper products and cardboard, monitoring of clients and their reactions and range tests is a practice and the rate of application varies. The evaluation of the customer’s concept is always used in 37.5% of the cases. Engineering also finds significant application. The remaining MMT, included in the questionnaire have weak application in the sector (Table 4).

Table 4. Applied marketing methods and tools - Section 17 (%)

<table>
<thead>
<tr>
<th>MMT</th>
<th>Frequency of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Focus groups (interviewing for the needs of the group)</td>
<td>37.5</td>
</tr>
<tr>
<td>Visits to customers (Blitz interviews during their work)</td>
<td>50</td>
</tr>
<tr>
<td>Monitoring of customers and their reactions</td>
<td>-</td>
</tr>
<tr>
<td>Leading users (analysis and inclusion)</td>
<td>50</td>
</tr>
<tr>
<td>Voice of the customer (for interview purposes)</td>
<td>50</td>
</tr>
<tr>
<td>Creative session (professional modeling)</td>
<td>37.5</td>
</tr>
<tr>
<td>Engineering (official method for concept development)</td>
<td>12.5</td>
</tr>
<tr>
<td>Tests of the concept (customer’s evaluation of the concept)</td>
<td>12.5</td>
</tr>
<tr>
<td>Analysis of compromises (modeling of discrete choice)</td>
<td>62.5</td>
</tr>
<tr>
<td>Alpha testing (early tests with users)</td>
<td>62.5</td>
</tr>
<tr>
<td>Beta testing (testing of working models by the users)</td>
<td>50</td>
</tr>
<tr>
<td>Range (gamma) tests (testing with the perfect product)</td>
<td>-</td>
</tr>
<tr>
<td>Preliminary test of markets (speeding information to enter markets)</td>
<td>62.5</td>
</tr>
<tr>
<td>Test markets</td>
<td>62.5</td>
</tr>
<tr>
<td>Web-based versions of the above instruments</td>
<td>87.5</td>
</tr>
</tbody>
</table>

For those who operate in section 22, the most commonly used MMT are focus groups and evaluation of the concept of the customer. About 80% of the cases are monitoring the reaction of the clients. In 65.7% of the cases engineering is applied. Professional modeling characterizes 54.3% of the cases. The rest of MMT are never used in over 50% of cases (Table 5).

Table 5. Applied marketing methods and tools - Section 22 (%)

<table>
<thead>
<tr>
<th>MMT</th>
<th>Frequency of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Focus groups (interviewing for the needs of the group)</td>
<td>28.6%</td>
</tr>
<tr>
<td>Visits to customers (Blitz interviews during their work)</td>
<td>60</td>
</tr>
<tr>
<td>Monitoring of customers and their reactions</td>
<td>20</td>
</tr>
<tr>
<td>Leading users (analysis and inclusion)</td>
<td>57.1</td>
</tr>
<tr>
<td>Voice of the customer (for interview</td>
<td>62.9</td>
</tr>
</tbody>
</table>
The manufacturers of general and special purpose machinery most frequently use monitoring the reactions of customers, engineering, evaluation of the customer’s concept, interview for the needs of the group, professional modeling and range (gamma) tests. The rate of application for them varies depending on the type of the invention. The application of other MMT is limited and the use of test markets and Web-based versions of the marketing tools are most closely applicable (Table 6).

Table 6.  
Applied marketing methods and tools - Section 28 (%)
2.1.2. Research and design methods and tools (RDMT)

RDMT are more widely used by MMT for the studied sample. The most commonly used are the value analysis/engineering analysis (in 88.5% of the cases), manufacturing planning, installation and testing (in 74.6% of the cases) and observation errors, and effective analysis (in 79.1% of the cases). Deploying the quality function has also frequent application (in 66.2% of the cases). More limited is the use of parallel engineering, (in 51.3% of the cases). Least is the use of sigma 6 analysis - it is not applicable to 85% of the cases. If the attention is focused on the application frequency of these RDMT, we can come to the conclusion that they are used irregularly (Table 7).

Table 7. Applied RDMT - All sections (%)

<table>
<thead>
<tr>
<th>RDMT</th>
<th>Frequency of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Value analysis / engineering analysis</td>
<td>11.5</td>
</tr>
<tr>
<td>Production design, installation, testing</td>
<td>15.4</td>
</tr>
<tr>
<td>Monitoring of errors and effective analysis</td>
<td>20.9</td>
</tr>
<tr>
<td>6 sigma analysis</td>
<td>85</td>
</tr>
<tr>
<td>Deployment of quality function</td>
<td>33.8</td>
</tr>
<tr>
<td>Parallel (concurrent) engineering</td>
<td>48.7</td>
</tr>
</tbody>
</table>

For the manufacturers of food products (Table 8), the most frequently used RDMT are: performing value analysis (in 84% of the cases), monitoring of errors and ensuring effective analysis (in 82.4% of the cases), production design and testing (in 71.6 % of the cases). The frequency of application varies depending on the invention. Relatively limited is the usage of "deployment of the quality function". 6 sigma analyses is not used in 90.4% of the cases and parallel engineering is not applicable in 72% of the cases, and these RDMT have the most limited use.

Table 8. Applied RDMT - Section 10 (%)

<table>
<thead>
<tr>
<th>RDMT</th>
<th>Frequency of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Value analysis / engineering analysis</td>
<td>16</td>
</tr>
<tr>
<td>Production design, installation, testing</td>
<td>22.4</td>
</tr>
<tr>
<td>Monitoring of errors and effective analysis</td>
<td>17.6</td>
</tr>
<tr>
<td>6 sigma analysis</td>
<td>90.4</td>
</tr>
<tr>
<td>Deployment of quality function</td>
<td>33.6</td>
</tr>
<tr>
<td>Parallel (concurrent) engineering</td>
<td>72</td>
</tr>
</tbody>
</table>

Compared to food producers, for the manufacturers of wood products the listed RDMT are more widely used (Table 9). Implementation of engineering analysis is a practice, as in 50% of the cases it is always applied. The percentage of application of the production design, installation and testing is high, it is always used in 43.75% of the cases. The usage of concurrent engineering is typical in 87.5% of the cases. 75% of the cases are using quality function deployment, monitoring mistakes and implementation of the effective analysis. The usage of sigma 6 assay is limited (not applicable to 81.25% of the cases).
Table 9.
Applied RDMT - Section 16 (%)

<table>
<thead>
<tr>
<th>RDMT</th>
<th>Frequency of Use</th>
<th>Never</th>
<th>25% of the cases</th>
<th>50% of the cases</th>
<th>75% of the cases</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value analysis / engineering analysis</td>
<td>-</td>
<td>-</td>
<td>6,25</td>
<td>12,5</td>
<td>31,25</td>
<td>50</td>
</tr>
<tr>
<td>Production design, installation, testing</td>
<td>12,5</td>
<td>6,25</td>
<td>12,5</td>
<td>25</td>
<td>43,75</td>
<td></td>
</tr>
<tr>
<td>Monitoring of errors and effective analysis</td>
<td>25</td>
<td>31,25</td>
<td>31,25</td>
<td>-</td>
<td>12,5</td>
<td></td>
</tr>
<tr>
<td>6 sigma analysis</td>
<td>81,25</td>
<td>-</td>
<td>12,5</td>
<td>-</td>
<td>6,25</td>
<td></td>
</tr>
<tr>
<td>Deployment of quality function</td>
<td>25</td>
<td>43,75</td>
<td>18,75</td>
<td>-</td>
<td>12,5</td>
<td></td>
</tr>
<tr>
<td>Parallel (concurrent) engineering</td>
<td>12,5</td>
<td>37,5</td>
<td>25</td>
<td>6,25</td>
<td>18,75</td>
<td></td>
</tr>
</tbody>
</table>

In comparison with the manufacturers of section 10 and section 16, the listed RDMT are most closely applicable for paper and cardboard producers (Table 10). In 50% of the cases production engineering, installation and testing, deployment of the quality function, as well as parallel engineering are never applied. The monitoring of errors and effective analysis is not applicable for 62.5% of the cases, and the most limited is 6 sigma analysis (in 12.5% of the cases). Only the value analysis is used in 50% of the cases.

Table 10.
Applied RDMT - Section 17 (%)

<table>
<thead>
<tr>
<th>RDMT</th>
<th>Frequency of Use</th>
<th>Never</th>
<th>25% of the cases</th>
<th>50% of the cases</th>
<th>75% of the cases</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value analysis / engineering analysis</td>
<td>12,5</td>
<td>25</td>
<td>50</td>
<td>12,5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Production design, installation, testing</td>
<td>50</td>
<td>-</td>
<td>25</td>
<td>12,5</td>
<td>12,5</td>
<td></td>
</tr>
<tr>
<td>Monitoring of errors and effective analysis</td>
<td>62,5</td>
<td>-</td>
<td>25</td>
<td>-</td>
<td>12,5</td>
<td></td>
</tr>
<tr>
<td>6 sigma analysis</td>
<td>87,5</td>
<td>-</td>
<td>12,5</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Deployment of quality function</td>
<td>50</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Parallel (concurrent) engineering</td>
<td>50</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

The indicated RDMT are significantly applicable for the manufacturers of rubber and plastics (Table 11). Among the most commonly used are the implementation of engineering analysis (in 91.4% of the cases), as well as production design, installation and testing (in 97.1% of the cases). Monitoring errors, implementation of effective analysis and parallel engineering is applicable in 77.1% of the cases. The application of sigma 6 assay is more limited (in 25.7% of the cases) and so is deployment of the quality function (in 54.3% of the cases).

Table 11.
Applied RDMT - Section 22 (%)

<table>
<thead>
<tr>
<th>RDMT</th>
<th>Frequency of Use</th>
<th>Never</th>
<th>25% of the cases</th>
<th>50% of the cases</th>
<th>75% of the cases</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value analysis / engineering analysis</td>
<td>8,6</td>
<td>2,9</td>
<td>22,8</td>
<td>45,7</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Production design, installation, testing</td>
<td>2,9</td>
<td>17,1</td>
<td>14,3</td>
<td>37,1</td>
<td>28,6</td>
<td></td>
</tr>
<tr>
<td>Monitoring of errors and effective analysis</td>
<td>22,85</td>
<td>37,1</td>
<td>8,6</td>
<td>8,6</td>
<td>22,85</td>
<td></td>
</tr>
<tr>
<td>6 sigma analysis</td>
<td>74,3</td>
<td>11,4</td>
<td>2,9</td>
<td>5,7</td>
<td>5,7</td>
<td></td>
</tr>
<tr>
<td>Deployment of quality function</td>
<td>45,7</td>
<td>28,6</td>
<td>5,7</td>
<td>11,4</td>
<td>8,6</td>
<td></td>
</tr>
<tr>
<td>Parallel (concurrent) engineering</td>
<td>22,9</td>
<td>37,1</td>
<td>20</td>
<td>5,7</td>
<td>14,3</td>
<td></td>
</tr>
</tbody>
</table>

For manufacturers of general and special purpose machinery the above-mentioned RDMT are widely used (Table 12). The most commonly used are engineering analysis - in 74% of the cases and production design, installation and testing - in 98% of the cases. About 80% of the
cases are characterized by the use of parallel engineering, monitoring of errors and efficient analysis. The deployment of the quality function is used in 26% of the cases. Application of sigma 6 the analysis is limited to 20%.

Table 12.
Applied RDMT - Section 28 (%)

<table>
<thead>
<tr>
<th>RDMT</th>
<th>Frequency of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Value analysis / engineering analysis</td>
<td></td>
</tr>
<tr>
<td>Production design, installation, testing</td>
<td></td>
</tr>
<tr>
<td>Monitoring of errors and effective analysis</td>
<td></td>
</tr>
<tr>
<td>6 sigma analysis</td>
<td></td>
</tr>
<tr>
<td>Deployment of quality function</td>
<td></td>
</tr>
<tr>
<td>Parallel (concurrent) engineering</td>
<td></td>
</tr>
</tbody>
</table>

2.1.3. Technological methods and tools (TMT)

For the sample studied (Table 13), the most widely used of these TMT are document management systems (always in 59% of the cases) and resource management systems (always in 32.9% of the cases). The remaining TMT indicate relatively narrow application. Least is the usage of remote collaborative design systems (in 22.2% of the cases), web-based management software (in 24.8% of the cases) and implementation of software for portfolio management (at 37, 6% of the cases).

Table 13.
Applied MI All Section (%)

<table>
<thead>
<tr>
<th>TMT</th>
<th>Frequency of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Rapid prototyping Systems</td>
<td>42.3</td>
</tr>
<tr>
<td>Simulation Systems</td>
<td>44.01</td>
</tr>
<tr>
<td>Virtual design</td>
<td>33.8</td>
</tr>
<tr>
<td>Remote collaborative design systems</td>
<td>77.8</td>
</tr>
<tr>
<td>Product data Management system</td>
<td>41.5</td>
</tr>
<tr>
<td>Portfolio management Software</td>
<td>62.4</td>
</tr>
<tr>
<td>Web-based management software</td>
<td>75.2</td>
</tr>
<tr>
<td>Configuration management systems</td>
<td>57.7</td>
</tr>
<tr>
<td>Resource management systems</td>
<td>4.7</td>
</tr>
<tr>
<td>Project management systems</td>
<td>33.8</td>
</tr>
<tr>
<td>Knowledge management systems</td>
<td>12.4</td>
</tr>
<tr>
<td>Document management systems</td>
<td>2.6</td>
</tr>
</tbody>
</table>

For the food producers (Table 14) the most widely implemented TMT are the document management systems - used always in 56% of the cases. Resources management systems are used in 96% of the cases and systems for knowledge management - in 81.2% of the cases, with fluctuations in the frequency of application. Product data management systems are also used in 62.4% of the cases. The organisations are trying to introduce project management systems in 54.6% of the cases. The virtual design is used in 59.2% of the cases. The remaining TMT are not used in over 54% of the cases. The remote collaborative design systems are not applicable for 80% of the organizations.
Table 14.  
Applied TMT - Section 10 (%) 

<table>
<thead>
<tr>
<th>TMT</th>
<th>Frequency of Use</th>
<th>Never</th>
<th>25% of the cases</th>
<th>50% of the cases</th>
<th>75% of the cases</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid prototyping Systems</td>
<td></td>
<td>60</td>
<td>26.4</td>
<td>9.6</td>
<td>3.2</td>
<td>0.8</td>
</tr>
<tr>
<td>Simulation Systems</td>
<td></td>
<td>54.4</td>
<td>29.6</td>
<td>13.6</td>
<td>1.6</td>
<td>0.8</td>
</tr>
<tr>
<td>Virtual design</td>
<td></td>
<td>40.8</td>
<td>25.6</td>
<td>28.8</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Remote collaborative design systems</td>
<td></td>
<td>80</td>
<td>4</td>
<td>4</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Product data Management system</td>
<td></td>
<td>37.6</td>
<td>21.6</td>
<td>24</td>
<td>4.8</td>
<td>12</td>
</tr>
<tr>
<td>Portfolio management Software</td>
<td></td>
<td>66.4</td>
<td>14.4</td>
<td>9.6</td>
<td>4</td>
<td>5.6</td>
</tr>
<tr>
<td>Web-based management software</td>
<td></td>
<td>78.4</td>
<td>7.2</td>
<td>10.4</td>
<td>3.2</td>
<td>0.8</td>
</tr>
<tr>
<td>Configuration management systems</td>
<td></td>
<td>67.2</td>
<td>22.4</td>
<td>5.6</td>
<td>2.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Resource management systems</td>
<td></td>
<td>4</td>
<td>14.4</td>
<td>17.6</td>
<td>35.2</td>
<td>28.8</td>
</tr>
<tr>
<td>Project management systems</td>
<td></td>
<td>45.4</td>
<td>38.4</td>
<td>5.6</td>
<td>4.8</td>
<td>5.6</td>
</tr>
<tr>
<td>Knowledge management systems</td>
<td></td>
<td>12.8</td>
<td>13.6</td>
<td>19.2</td>
<td>33.6</td>
<td>20.8</td>
</tr>
<tr>
<td>Document management systems</td>
<td></td>
<td>1.6</td>
<td>6.4</td>
<td>6.4</td>
<td>29.6</td>
<td>56</td>
</tr>
</tbody>
</table>

For wood products manufacturers the using of document, knowledge and resources management systems is a rule. In 68.75% of the cases document management systems are always used, in 62.5% of the cases management of resources and knowledge systems is always applied, and in 50% of the cases project management systems are always used. Systems managing product data also find a significant application, they are always used in 25% of the cases. The remaining TMT find limited application and the most poorly implemented is the web-based management software, with only 18.75% of the cases (Table 15).

Table 15.  
Applied TMT - Section 16(%) 

<table>
<thead>
<tr>
<th>TMT</th>
<th>Frequency of Use</th>
<th>Never</th>
<th>25% of the cases</th>
<th>50% of the cases</th>
<th>75% of the cases</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid prototyping Systems</td>
<td></td>
<td>43.75</td>
<td>12.5</td>
<td>18.75</td>
<td>18.75</td>
<td>6.25</td>
</tr>
<tr>
<td>Simulation Systems</td>
<td></td>
<td>50</td>
<td>6.25</td>
<td>12.5</td>
<td>12.5</td>
<td>18.75</td>
</tr>
<tr>
<td>Virtual design</td>
<td></td>
<td>50</td>
<td>-</td>
<td>12.5</td>
<td>18.75</td>
<td>18.75</td>
</tr>
<tr>
<td>Remote collaborative design systems</td>
<td></td>
<td>62.5</td>
<td>12.5</td>
<td>6.25</td>
<td>6.25</td>
<td>12.5</td>
</tr>
<tr>
<td>Product data Management system</td>
<td></td>
<td>37.5</td>
<td>12.5</td>
<td>6.25</td>
<td>18.75</td>
<td>25</td>
</tr>
<tr>
<td>Portfolio management Software</td>
<td></td>
<td>68.75</td>
<td>6.25</td>
<td>-</td>
<td>12.5</td>
<td>12.5</td>
</tr>
<tr>
<td>Web-based management software</td>
<td></td>
<td>81.25</td>
<td>-</td>
<td>6.25</td>
<td>-</td>
<td>12.5</td>
</tr>
<tr>
<td>Configuration management systems</td>
<td></td>
<td>31.25</td>
<td>31.25</td>
<td>12.5</td>
<td>18.75</td>
<td>6.25</td>
</tr>
<tr>
<td>Resource management systems</td>
<td></td>
<td>-</td>
<td>6.25</td>
<td>12.5</td>
<td>18.75</td>
<td>62.5</td>
</tr>
<tr>
<td>Project management systems</td>
<td></td>
<td>6.25</td>
<td>12.5</td>
<td>12.5</td>
<td>18.75</td>
<td>50</td>
</tr>
<tr>
<td>Knowledge management systems</td>
<td></td>
<td>-</td>
<td>6.25</td>
<td>12.5</td>
<td>18.75</td>
<td>62.5</td>
</tr>
<tr>
<td>Document management systems</td>
<td></td>
<td>-</td>
<td>6.25</td>
<td>6.25</td>
<td>18.75</td>
<td>68.75</td>
</tr>
</tbody>
</table>

For the manufacturers of paper and cardboard products the usage of document management systems and knowledge and resources management systems is a rule. The frequency of use varies depending on the invention. Remote collaborative design systems are not used in the industry. Application of the other TMT is limited (Table 16).
Table 16.
Applied TMT - Section 17(%)

<table>
<thead>
<tr>
<th>TMT</th>
<th>Frequency of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Rapid prototyping systems</td>
<td>25</td>
</tr>
<tr>
<td>Simulation systems</td>
<td>37,5</td>
</tr>
<tr>
<td>Virtual design</td>
<td>37,5</td>
</tr>
<tr>
<td>Remote collaborative design systems</td>
<td>100</td>
</tr>
<tr>
<td>Product data Management system</td>
<td>62,5</td>
</tr>
<tr>
<td>Portfolio management Software</td>
<td>87,5</td>
</tr>
<tr>
<td>Web-based management software</td>
<td>87,5</td>
</tr>
<tr>
<td>Configuration management systems</td>
<td>62,5</td>
</tr>
<tr>
<td>Resource management systems</td>
<td>-</td>
</tr>
<tr>
<td>Project management systems</td>
<td>50</td>
</tr>
<tr>
<td>Knowledge management systems</td>
<td>-</td>
</tr>
<tr>
<td>Document management systems</td>
<td>-</td>
</tr>
</tbody>
</table>

For the manufacturers of rubber and plastic the most commonly used TMT are document management systems (always for 71.4% of the cases), management of resources (always for 42.8% of the cases), knowledge management systems (always in 34.2% of the cases) and projects management systems (always in 37.1% of cases). Among the frequently used systems are rapid prototyping and virtual design (80% of the cases) and simulation systems (62.8% of the cases). The rest of the TMT are not applied for over 54% of the cases (Table 17).

Table 17.
TMT applied Section 22 - (%)

<table>
<thead>
<tr>
<th>TMT</th>
<th>Frequency of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Rapid prototyping Systems</td>
<td>20</td>
</tr>
<tr>
<td>Simulation Systems</td>
<td>37,2</td>
</tr>
<tr>
<td>Virtual design</td>
<td>20</td>
</tr>
<tr>
<td>Remote collaborative design systems</td>
<td>80</td>
</tr>
<tr>
<td>Product data Management system</td>
<td>60</td>
</tr>
<tr>
<td>Portfolio management Software</td>
<td>68,6</td>
</tr>
<tr>
<td>Web-based management software</td>
<td>77,1</td>
</tr>
<tr>
<td>Configuration management systems</td>
<td>54,3</td>
</tr>
<tr>
<td>Resource management systems</td>
<td>8,6</td>
</tr>
<tr>
<td>Project management systems</td>
<td>28,6</td>
</tr>
<tr>
<td>Knowledge management systems</td>
<td>14,3</td>
</tr>
<tr>
<td>Document management systems</td>
<td>8,6</td>
</tr>
</tbody>
</table>

For manufacturers of general and special purpose machinery the TMT mentioned are the most widely used compared to other sections. With the exception of remote collaborative design systems and the web based management software, the other TMT are often used in the development of new products (Table 18).
Table 18.
Applied TMT - Section 28 (%)

<table>
<thead>
<tr>
<th>TMT</th>
<th>Frequency of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid prototyping Systems</td>
<td>Never</td>
</tr>
<tr>
<td>Simulation Systems</td>
<td>25% of the cases</td>
</tr>
<tr>
<td>Virtual design</td>
<td>50% of the cases</td>
</tr>
<tr>
<td>Remote collaborative design systems</td>
<td>75% of the cases</td>
</tr>
<tr>
<td>Product data Management system</td>
<td>Always</td>
</tr>
<tr>
<td>Portfolio management Software</td>
<td>62</td>
</tr>
<tr>
<td>Web-based management software</td>
<td>44</td>
</tr>
<tr>
<td>Configuration management systems</td>
<td>22</td>
</tr>
<tr>
<td>Resource management systems</td>
<td>16</td>
</tr>
<tr>
<td>Project management systems</td>
<td>12</td>
</tr>
<tr>
<td>Knowledge management systems</td>
<td>44</td>
</tr>
<tr>
<td>Document management systems</td>
<td>2</td>
</tr>
</tbody>
</table>

2.1.4. Management methods and tools (MMT)

The most commonly used MMT are the face to face meetings for 87.2% and a special project internal network in 57.3% of the cases. The rest of MMT are not used in over 50% of the cases. The most limited usage is the application of parallel teams for 6.8% and locked teams in 12% of the cases (Table 19).

Table 19.
Applied MMT - All sections (%)

<table>
<thead>
<tr>
<th>MMT</th>
<th>Frequency of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project management tools (critical path, gant schedules)</td>
<td>Never</td>
</tr>
<tr>
<td>Team building exercises</td>
<td>78,2</td>
</tr>
<tr>
<td>Parallel teams (2 teams working separately on the same project)</td>
<td>93,2</td>
</tr>
<tr>
<td>Locked teams (multi-teams connected by internal staff)</td>
<td>88</td>
</tr>
<tr>
<td>Face to face meetings</td>
<td>12,8</td>
</tr>
<tr>
<td>Video- conference</td>
<td>59,8</td>
</tr>
<tr>
<td>Tele-conference</td>
<td>56,8</td>
</tr>
<tr>
<td>Special project internal network</td>
<td>42,7</td>
</tr>
<tr>
<td>Software allowing interaction in group</td>
<td>52,6</td>
</tr>
</tbody>
</table>

For food producers the most commonly used MMT are face to face meetings (in 96% of the cases) and use of special project internal network (in 66.4% of the cases). The rest of the MMT are with limited usage, and over 53% of the cases are not applicable (Table 20).

Table 20.
Applied MMT - Section 10 (%)

<table>
<thead>
<tr>
<th>MMT</th>
<th>Frequency of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project management tools (critical path, gant schedules)</td>
<td>Never</td>
</tr>
<tr>
<td>Team building exercises</td>
<td>80</td>
</tr>
</tbody>
</table>
Parallel teams (2 teams working separately on the same project) & 92 & 4,8 & 2,4 & 0,8 & - \\
Locked teams (multi-teams connected by internal staff) & 88,8 & 6,4 & 3,2 & 43,2 & 12,8 \\
Face to face meetings & 4 & 12 & 28 & 43,2 & 12,8 \\
Video-conference & 61,6 & 8 & 23,2 & 7,2 & - \\
Tele-conference & 58,4 & 8,8 & 23,2 & 7,2 & 2,4 \\
Special project internal network & 33,6 & 26,4 & 24,8 & 12,8 & 2,4 \\
Software allowing interaction in group & 53,6 & 19,2 & 16,8 & 5,6 & 4,8 \\

The application of the above-mentioned MMT for the wood product manufacturers is more limited compared to that for food producers. In 81.25% of the cases the face to face meetings and video and tele-conferencing usually have no application. In 75% of the cases the special project internal network and software allowing interaction in the group are not applicable. Teambuilding exercises, as well as parallel teams are not used. In 93.75% of the cases locked teams have no usage. Critical path and gant schedules are used in 37.5% of the cases (Table 21).

### Table 21.
Applied MMT - Section 16 (%)

<table>
<thead>
<tr>
<th>MMT</th>
<th>Never</th>
<th>25% of the cases</th>
<th>50% of the cases</th>
<th>75% of the cases</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project management tools (critical path, gant schedules)</td>
<td>62,5</td>
<td>25</td>
<td>6,25</td>
<td>6,25</td>
<td>-</td>
</tr>
<tr>
<td>Team building exercises</td>
<td>100</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Parallel teams (2 teams working separately on the same project)</td>
<td>100</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Locked teams (multi-teams connected by internal staff)</td>
<td>93.75</td>
<td>6,25</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Face to face meetings</td>
<td>81,25</td>
<td>6,25</td>
<td>-</td>
<td>12,5</td>
<td>-</td>
</tr>
<tr>
<td>Video-conference</td>
<td>81,25</td>
<td>12,5</td>
<td>6,25</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tele-conference</td>
<td>81,25</td>
<td>12,5</td>
<td>6,25</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Special project internal network</td>
<td>75</td>
<td>12,5</td>
<td>12,5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Software allowing interaction in group</td>
<td>75</td>
<td>12,5</td>
<td>6,25</td>
<td>-</td>
<td>6,25</td>
</tr>
</tbody>
</table>

For paper products and cardboard manufacturers the above-mentioned MMT are rarely applied. In 50% of the cases face to face meetings are not used and the other MMT do not find application in over 75% of the cases (Table 22).

### Table 22.
Applied MMT - Section 17 (%)

<table>
<thead>
<tr>
<th>MMT</th>
<th>Never</th>
<th>25% of the cases</th>
<th>50% of the cases</th>
<th>75% of the cases</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project management tools (critical path, gant schedules)</td>
<td>87,5</td>
<td>-</td>
<td>-</td>
<td>12,5</td>
<td>-</td>
</tr>
<tr>
<td>Team building exercises</td>
<td>75</td>
<td>25</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Parallel teams (2 teams working separately on the same project)</td>
<td>100</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Locked teams (multi-teams connected by internal staff)</td>
<td>87,5</td>
<td>12,5</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Face to face meetings</td>
<td>50</td>
<td>25</td>
<td>-</td>
<td>-</td>
<td>25</td>
</tr>
<tr>
<td>Video-conference</td>
<td>87,5</td>
<td>-</td>
<td>-</td>
<td>12,5</td>
<td>-</td>
</tr>
<tr>
<td>Tele-conference</td>
<td>87,5</td>
<td>12,5</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Special project internal network</td>
<td>75</td>
<td>25</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Software allowing interaction in group</td>
<td>87,5</td>
<td>-</td>
<td>-</td>
<td>12,5</td>
<td>-</td>
</tr>
</tbody>
</table>
For the manufacturers operating in section 22 face to face meetings are used in 91.4% of the cases. In 48.6% of the cases, there is no usage of special project internal network and software allowing interaction in a group. The remaining MMT are not applicable in 50% of the cases. The most limited application is the use of parallel teams - only 8.6% of the cases (Table 23).

Table 23.
Applied MMT - Section 22 (%)

<table>
<thead>
<tr>
<th>MMT</th>
<th>Frequency of Use</th>
<th>Never</th>
<th>25% of the cases</th>
<th>50% of the cases</th>
<th>75% of the cases</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project management tools (critical path, gant schedules)</td>
<td>60</td>
<td>22.8</td>
<td>8.6</td>
<td>-</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td>Team building exercises</td>
<td>71.5</td>
<td>11.4</td>
<td>11.4</td>
<td>-</td>
<td>5.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Parallel teams (2 teams working separately on the same project)</td>
<td>91.4</td>
<td>-</td>
<td>5.7</td>
<td>-</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>Locked teams (multi-teams connected by internal staff)</td>
<td>85.7</td>
<td>2.85</td>
<td>2.85</td>
<td>2.9</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>Face to face meetings</td>
<td>8.6</td>
<td>2.9</td>
<td>34.3</td>
<td>37.1</td>
<td>17.1</td>
<td></td>
</tr>
<tr>
<td>Video-conference</td>
<td>51.4</td>
<td>20</td>
<td>17.1</td>
<td>8.6</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>Tele-conference</td>
<td>51.4</td>
<td>11.4</td>
<td>28.6</td>
<td>5.7</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>Special project internal network</td>
<td>48.6</td>
<td>8.6</td>
<td>25.7</td>
<td>5.7</td>
<td>11.4</td>
<td></td>
</tr>
<tr>
<td>Software allowing interaction in group</td>
<td>48.6</td>
<td>5.7</td>
<td>22.9</td>
<td>5.7</td>
<td>17.1</td>
<td></td>
</tr>
</tbody>
</table>

The most widely used MMT by the general machinery and special purpose manufacturers are face to face meetings - in 90% of the cases. The application of software allowing interaction in group is most common in this section in comparison to the other studied branches - 60% of the cases. The rest of the MMT are used in over 44% of the cases. The most limited is the application of parallel teams with only 6% of the cases (Table 24).

Table 24.
Applied washed - Section 28 - (%)

<table>
<thead>
<tr>
<th>MMT</th>
<th>Frequency of Use</th>
<th>Never</th>
<th>25% of the cases</th>
<th>50% of the cases</th>
<th>75% of the cases</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project management tools (critical path, gant schedules)</td>
<td>62</td>
<td>12</td>
<td>16</td>
<td>6</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Team building exercises</td>
<td>72</td>
<td>16</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Parallel teams (2 teams working separately on the same project)</td>
<td>94</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Locked teams (multi-teams connected by internal staff)</td>
<td>86</td>
<td>2</td>
<td>8</td>
<td>4</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Face to face meetings</td>
<td>10</td>
<td>12</td>
<td>24</td>
<td>36</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Video-conference</td>
<td>50</td>
<td>22</td>
<td>8</td>
<td>16</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Tele-conference</td>
<td>44</td>
<td>26</td>
<td>10</td>
<td>16</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Special project internal network</td>
<td>46</td>
<td>8</td>
<td>20</td>
<td>14</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Software allowing interaction in group</td>
<td>40</td>
<td>10</td>
<td>24</td>
<td>8</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>
2.2. Results of Module VI "Methods and tools for develop new products" benchmarking

The aim is an analysis to be presented, based on comparable indicators between similar studies conducted of the process of NPD. The module of questions, concerning the methods and tools at NPD is included in the study conducted in the US (2004) and Bulgaria (2012).

- MMT - for the US organizations the first three most commonly used marketing tools are beta tests, visits to clients (blitz interviews during their work) and the voice of the user (interview for purposes). The first two instruments are applied in over 50% of the cases in developing radical and adaptive innovation. Other instruments with substantial application include alpha tests, leading users (analysis and integration), tests of the concept (evaluation of the concept by the customer) and focus groups, used in over 30% of the cases. Gamma tests, observation of the clients and their reactions are applied in 25% of the cases. The techniques applied in less than 25% of the cases are test markets, preliminary markets tests (speeding information for entering markets), analysis of trade-offs (modeling of a discrete choice) and creative session (professional modeling).

For Bulgaria the results are significantly different compared to those in the US. The most commonly used MMT for the study sample are monitoring customers and their reactions, evaluation of the concept by the customer, as well as testing the perfect product. Relatively more commonly used are analysis implementation and inclusion of leading users (70.5% of the cases), professional modeling (67.1% of the cases) and engineering (69.2% of the cases) in which the rate of application varies. Focus groups interviews are used in 65% of the cases with different application depending on the project. Interview for the purpose is used in 60% of cases with different frequency. Visiting clients and carrying out interviews are used in rare occasions, unlike the data from the survey in the US. The most limited application have the web based versions of the marketing tools - in only 20.08% of the cases. Not applicable are alpha testing - in 47% of the cases, preliminary markets tests - in 49.2% of the cases, trade-offs analysis 50.4% of the cases, markets test – in 53.4% of the cases. Beta tests are not common in 36.7% of the cases, as opposed to the study conducted in the US, where it is a leading marketing tool.

The RDMT most commonly used in the US are product engineering, installation, testing and concurrent engineering in 40% of the cases. The rest of the instruments are applied in 40% of the cases. 6 sigma tools are least used - in less than 25% of the cases, despite the emphasis on its importance in the scientific research.

For the studied sample, RDMT find wider application than MMT in Bulgaria. The most commonly used are the value analysis/engineering analysis (in 88.5% of the cases), manufacturing planning, installation and testing (in 74.6% of the cases), observation of errors, and effective analysis (in 79.1% of the cases). Deploying quality function also has frequent application (in 66.2% of the cases). More limited is the usage of parallel engineering - in 51.3% of the cases. The least used implementation, similar to the survey of the American organizations, is the 6 Sigma analysis. For Bulgaria it is not applicable in 85% of the cases.

- The most applied TMT in the US organizations are products management system (over 50% of cases), documents management system (over 50% of cases) and rapid prototyping systems (just under 40% of cases). Least applied TMT include systems for knowledge management and portfolio management software. One of the alleged reasons for the low usage of these tools can be their perception as rather complex in view of the time necessary for the research, purchase, training and the actual use of these tools.
The results for Bulgaria, similar to the results obtained in the US, show a relatively narrow application of the pointed TMT. However, the most widely used of those mentioned are the document management systems (always in 59% of the cases) and the resource management system (always in 32.9% of cases). Least applicable is the use of the remote collaborative design systems (in 22.2% of the cases), web-based management software (in 24.8% of the cases) and implementation of portfolio management software (at 37.6% of the cases).

In the research, conducted in the US, the leading MMT are face to face meetings (over 80% of the cases). They enable faster and informal communication, contributing to the acquaintance of the team's members and establishing trust, which is essential for the formation of effective teams. The teleconferencing (just over 60% of the cases) as a reliable communication tool if the team members are geographically dispersed and tools in project management (critical time, gant schedules - just over 60% of the cases), provide an illustration of the project milestones and deadlines. The specially designed intranet is used in only 40% of the cases and only 29% of projects use software that allows interaction in the group. Videoconferencing is applied in a little bit over 30% of the cases. Less than 29% of the teams apply exercises related to team building. It can be assumed that the low use of these tools can create significant communicative difficulties, especially having in mind that the use of related team is less than 36% while less than 29% apply exercises related to team building. The usage of the parallel teams is not typical for about 10% of the cases.

The most commonly used MMT for Bulgaria are meeting face to face, similar to the research in the US, for 87.2% of the cases and the use of special project internal network in 57.3% of the cases. In contrast to the study in the USA, other MMT do not find application in over than 50% of the cases. The most limited is the use of parallel teams in 6.8% of cases and locked teams in 12% of cases.

3. CONCLUSIONS

Regarding the methods and tools in developing new products we may conclude that:

1. The most commonly used MMT are monitoring customers and their reactions, evaluation of the concept by the customer and testing the ideal product. Interviewing focus groups is not applied in 34.6% of the cases The interview for needs is not used in 39.74% of the cases. Even more rarely used are the visits to clients and realization of interviews (51.4% of the cases). Relatively frequently used are analysis and inclusion of leading users (70.50% of cases), professional modeling (67.1% of the cases) and engineering (69.2% of the cases). The most limited is the use of Web-based versions of the marketing tools - only in 20.08% of the cases. In NPD are not applied alpha testing - in 47%, beta testing in 36.7%, preliminary market testing in 49.2%, and analysis of trade-offs - 50.4% of the cases.

The pointed MMT are much more closely applicable in the Bulgarian industrial companies compared to the companies in the US (2004).

2. The most frequently used RDMT are value analysis/engineering analysis (in 88.5% of the enterprises), production design, installation and testing (in 74.6%) and monitoring of errors and effective analysis (in 79.1%). Regular application has the deployment of the quality function (in 66.2%). More limited is the use of the parallel engineering - in 51.3% of the cases. 6 sigma analysis is used only in 15% of the project activities.
If the frequency of application of the above-mentioned RDMT is closely reviewed, a conclusion for their irregular use in the studies conducted - USA (2004) and Bulgaria could be made.

3. The use of TMT is relatively narrow. Bulgarian industrial organizations still do not realize that the need of designing and implementation of production information systems has never been more relevant. In the US (2004) and in Bulgaria relatively narrow application of TMT is quite typical, and this is an area that needs strengthening.

4. The application of MMT in the Bulgarian industrial enterprises is limited compared to the US organizations (2004). It can be assumed that the low use of these would create significant obstacles in communication during NPD.

5. The organizations argue that they recognize the specific value of the technology tools supply and and they are aware of them, but uncertain return on the costs (for 53.8% of the respondents), insufficient budget (for 46.2%), the need of excessive training (for 43.6%) and the technical, resource, socio-cultural and process difficulties in application (for over 40% of the respondents) transform them into serious barrier. Most commonly applicable in the implementation of the technological tools from systemic perspective is the use of computer-based system across the enterprise (for 29.1%). The application of computer-based system within the project team, the working group/department is preferred in 21.8% of the cases. Considering that the Bulgarian industrial enterprises do not use outsourcing for NPD, for 2.1% it is substantial the computer-based system that includes joint partners to be applied. More than 1/4 of companies indicate that they use these technological tools.

REFERENCES
INVESTMENT ALTERNATIVES ON THE ROMANIAN CAPITAL MARKET

Andreea Cristina BEJINARİU
Adrian MATEESCU

ABSTRACT
Investment alternatives on the market of capital are recognized as processes of special attention and interest for households which along the time saved and want to invest for achieving profit. Investment alternatives on the market of capital are influenced by the yield on which they generate. In this context, the paper’s objectives is to analyze two of the investment alternatives on the market for Romanian capital, in particular investment in the Romanian banking system and in shares on the Bucharest Stock Exchange (BVB) market. The case study debate will be demonstrate for an amount of 50,000 lei, which is invested in the period June 1, 2016 till August 31, 2016, in: (1) two term deposits (3 months) on the banking market, in the case of two commercial Romanian banks, and (2) market shares which are components of the Bucharest Exchange Trading index (BET) on the BVB. The case studies calculations will allow comparative conclusions to be presented.

KEY WORDS: Investment, market of capital, saving, profit

1. INTRODUCTION

In literature the most important and permanent sources of savings, are considered to be the population and small entrepreneurs forming the households. They make savings for several reasons, among them are: to pursue profits, to provide a source of income in his old age to get income to cover certain future expenses, etc. The households is considered to be the most important.

Investment alternatives on the market of capital are recognized as processes of special attention and interest for households which along the time saved and want to invest for achieving profit.

If the report savings of households is too high, there may be insufficient expenditure in the economy. This will be beneficial in the case in which the economy is growing too fast, but it also represents a problem if the economy is in deep recession or rises slowly. A low level of savings rate indicates an increase in consumption which may be in some cases too large. In the short term, small economies will increase living standards, but long term, economic growth could suffer as a low savings rate and investment funds means lower because investments are closely linked savings rate.

The table below provides the household saving rate in the European Union for the period 2003 – 2013.

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influenced household saving rate, both across the UE and the member states. Countries such as Slovenia, Latvia registered a negative savings rate level.

Table 1 - Household savings rate (% of GNI)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Danemarca</td>
<td>9.35</td>
<td>5.48</td>
<td>3.22</td>
<td>5.84</td>
<td>4.95</td>
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<td>7.83</td>
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<td>11.85</td>
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<td>10.36</td>
<td>12</td>
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<td>-3.95</td>
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<td>6.42</td>
</tr>
</tbody>
</table>

Source: Eurostat

From the above data we can see that the onset of the financial crisis has negatively influenced household saving rate, both across the UE and the member states.
According to the World Bank savings as % of GDP in Romania, with the exception of 2005 showed continued growth. This shows that there are prerequisites for people to want placement savings achieved increasingly higher efficiency at attractive conditions.

If a person who saved wants to invest the saved amount can opt for direct investment and transfer funds available to a company through the acquisition of new shares or bonds, buying bonds it borrows in the company, thus participating in investment capital which the company wishes you to accomplish through direct funding or if the saving is unwilling to invest directly may opt for a bank deposit that obtained from bank interest and then uses it along with other bank deposits to purchase bonds from the same company or by crediting the firm, so the saving participate in the investment capital of the company through indirect financing, such financing was brokered by the bank.
Interest rate and the marginal efficiency of capital investments strongly influence developments. According to Irving Fisher, an increase in investment is determined primarily by a higher level of profitability than the interest rate.

A low interest rate bank deposits and avoid causes investors to take investment risks, and when the return is lower than the interest rate potential investors are tempted to deposit the money saved in bank deposits.

The table below shows the rate of population at Union Euroene investments for 2003 - 2013.
Table 3 - Investments population rate (% of GNI)

<table>
<thead>
<tr>
<th>geo\Time</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
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<td>UE (28 Counry)</td>
<td>9.55</td>
<td>9.73</td>
<td>9.97</td>
<td>10.3</td>
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<td>16.68</td>
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<td>6.69</td>
<td>5.99</td>
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<td>Croația</td>
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<td>:</td>
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<td>6.57</td>
<td>7.33</td>
<td>7.6</td>
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<td>5.01</td>
<td>5.12</td>
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<td>Italia</td>
<td>9.69</td>
<td>9.67</td>
<td>10.15</td>
<td>10.5</td>
<td>10.66</td>
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<td>12.31</td>
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<td>17.94</td>
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<td>11.37</td>
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<td>6.18</td>
<td>5.98</td>
<td>5.4</td>
<td>6.14</td>
<td>6.06</td>
<td>5.01</td>
<td>4.77</td>
<td>5.14</td>
<td>4.74</td>
</tr>
<tr>
<td>Ungaria</td>
<td>10.24</td>
<td>10.45</td>
<td>8.86</td>
<td>7.62</td>
<td>8.46</td>
<td>8.9</td>
<td>8.61</td>
<td>6.82</td>
<td>5.19</td>
<td>4.87</td>
<td>4.77</td>
</tr>
<tr>
<td>Austria</td>
<td>8.79</td>
<td>8.7</td>
<td>8.35</td>
<td>8.19</td>
<td>8.26</td>
<td>8.39</td>
<td>8.29</td>
<td>8.48</td>
<td>8.69</td>
<td>8.49</td>
<td>8.5</td>
</tr>
<tr>
<td>Portugalia</td>
<td>10.12</td>
<td>9.79</td>
<td>9.61</td>
<td>8.98</td>
<td>8.42</td>
<td>7.5</td>
<td>6.52</td>
<td>6.28</td>
<td>5.88</td>
<td>4.91</td>
<td>4.3</td>
</tr>
<tr>
<td>Slovenia</td>
<td>8.26</td>
<td>8.71</td>
<td>9.07</td>
<td>10.1</td>
<td>10.24</td>
<td>10.55</td>
<td>7.84</td>
<td>6.9</td>
<td>6.2</td>
<td>5.93</td>
<td>5.45</td>
</tr>
<tr>
<td>Suedia</td>
<td>4.87</td>
<td>5.51</td>
<td>5.7</td>
<td>6.19</td>
<td>6.45</td>
<td>5.8</td>
<td>5.03</td>
<td>5.58</td>
<td>5.18</td>
<td>4.3</td>
<td>4.09</td>
</tr>
<tr>
<td>Marea Britanie</td>
<td>8.49</td>
<td>8.79</td>
<td>8.7</td>
<td>8.73</td>
<td>9.02</td>
<td>7.55</td>
<td>5.67</td>
<td>5.99</td>
<td>6.31</td>
<td>6.21</td>
<td>6.65</td>
</tr>
</tbody>
</table>

Source: Eurostat

From 2008 can be seen a decrease in investments, due to the onset of the financial crisis. At the EU level can be seen as investments rate decreased continuously since 2007, the year in which a record level of 10.56%, reaching just 7.81% in 2013. Related to the edge of the savings we might conclude that because of the crisis, the population has become more distrustful of the financial system and prefer to keep their savings in other forms than investment (gold, cash, etc.). Once, however, with the economic recovery and the rising living standards, investment should return to its original level and may even increase.

2. CASE STUDY

The main financial intermediary Romanian capital market, is the banking system.

In recent years the stock market, although less significant in the economy (and market capitalization to GDP) has evolved important.
In the context of the continuous decrease of the interest rates paid on time deposits in the banking system there is lately a rise in investor interest in the stock market investments. Investors are attracted as investments in shares and bonds (especially the state and municipal bonds, corporate bonds at the stock exchange is virtually nonexistent).

Analyzing two of the investment alternatives on the market for Romanian capital, in particular investment in the Romanian banking system and in shares on the Bucharest Stock Exchange (BVB) market. The case study debate will be demonstrate for an amount of 50,000 lei, which is invested in the period June 1, 2016 till August 31, 2016, in:

1. two term deposits (3 months) on the banking market, in the case of two commercial Romanian banks,
2. market shares which are components of the Bucharest Exchange Trading index (BET) on the BVB. The case studies calculations will allow comparative conclusions to be presented.

To perform the analyzed of efficiency achieved if we invest in bank term (3 months), we analyzed and processed information on the interest rate but also of commissions and other details related to this type of deposit at the two banks (Banca Transilvania and RAIFFAISEN BANK).

The annual interest rate for time deposits (3 months) is:

<table>
<thead>
<tr>
<th>Bank</th>
<th>Interest paid at maturity</th>
<th>Interest paid monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td>BANCA TRANSILVANIA</td>
<td>0,75%</td>
<td>0,70%</td>
</tr>
<tr>
<td>RAIFFEISEN BANK</td>
<td>0,75%</td>
<td>-</td>
</tr>
</tbody>
</table>

(Source: Create by Author)

To carry out the analyze of the yield obtained if investing in shares on the stock exchange, we have invested amount of 50,000 lei on 01.06.2016 with a view to the acquisition of shares of the ten companies that are part of the structure of the index BET. I purchased these actions according to the share of the company in the structure of the index BET, actions which they have I kept in the portfolio until 31.08.2016, at which time we have calculated the yield of which I have obtained for each issuer to which we have held shares but also the profit for the entire portfolio.

The analysis was based on the acquisition on 01.06.2016 of actions for each company to the value of the price of closure from that date, which they have I kept in the portfolio until 31.08.2016 (3 months), for the same period as on bank deposits. The prices of purchase (closing price in 01.06.2016) per share and the sale (closing price on 31.08.2016) is given in the following table, but also the yield/loss per share for each issuer.
Table 5 - The amount invested in each issuer and the number of shares purchased

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Company</th>
<th>Percentage in BET (%)</th>
<th>Amount (lei)</th>
<th>Date</th>
<th>Closing price (lei)</th>
<th>The number of shares acquired</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLV</td>
<td>BANCA TRANSILVANIA S.A.</td>
<td>20,59</td>
<td>10,295.00</td>
<td>01.06.2016</td>
<td>2,21</td>
<td>4,658</td>
</tr>
<tr>
<td>FP</td>
<td>FONDUL PROPRIETATEA</td>
<td>20,52</td>
<td>10,260.00</td>
<td>01.06.2016</td>
<td>0,74</td>
<td>13,865</td>
</tr>
<tr>
<td>SNP</td>
<td>OMV PETROM S.A.</td>
<td>15,75</td>
<td>7,875.00</td>
<td>1.06.2016</td>
<td>0,2285</td>
<td>34,464</td>
</tr>
<tr>
<td>BRD</td>
<td>BRD - GROUPE SOCIETE GENERALE S.A.</td>
<td>11,61</td>
<td>5,805.00</td>
<td>01.06.2016</td>
<td>9,44</td>
<td>615</td>
</tr>
<tr>
<td>SNG</td>
<td>S.N.G.N. ROMGAZ S.A.</td>
<td>9,98</td>
<td>4,990.00</td>
<td>01.06.2016</td>
<td>23,85</td>
<td>209</td>
</tr>
<tr>
<td>EL</td>
<td>SOCIETATEA ENERGETICA ELECTRICA S.A.</td>
<td>8,87</td>
<td>4,435.00</td>
<td>01.06.2016</td>
<td>12,22</td>
<td>363</td>
</tr>
<tr>
<td>TGN</td>
<td>S.N.T.G.N. TRANSGAZ S.A.</td>
<td>6,75</td>
<td>3,375.00</td>
<td>01.06.2016</td>
<td>276,00</td>
<td>12</td>
</tr>
<tr>
<td>TEL</td>
<td>C.N.T.E.E. TRANSELECTRICA</td>
<td>4,04</td>
<td>2,020.00</td>
<td>01.06.2016</td>
<td>30,15</td>
<td>67</td>
</tr>
<tr>
<td>SNN</td>
<td>S.N. NUCLEARELECTRICA S.A.</td>
<td>1,11</td>
<td>555.00</td>
<td>01.06.2016</td>
<td>5,18</td>
<td>107</td>
</tr>
<tr>
<td>BVB</td>
<td>BURSA DE VALORI BUCURESTI SA</td>
<td>0,77</td>
<td>385.00</td>
<td>01.06.2016</td>
<td>23.00</td>
<td>17</td>
</tr>
</tbody>
</table>

(Source: Create by Author)

The analysis was based on the acquisition of shares on June 1, 2016 at value price for each company closures that time, they've kept up on August 31, 2016 portfolio (3 months), for the same period as bank deposits. Purchase prices (closing price on June 1, 2016) per share and sales (closing price on August 31, 2016) are presented in the table below, and return / loss per share for each issuer.

In order to determine the yield or loss per symbol we used the following formula:

\[ \text{ran/pierdere} = \text{nr.act} \times PV - \text{nr.act} \times PC \]

Where:
- \( \text{nr.act} \) - The number of shares;
- \( PV \) – Sale price (Closing price in August 31, 2016);
- \( PC \) – Purchase Price.
In the table above can be noticed that for two of the ten companies (TEL, SNN) at which I purchased the shares in 01.06.2016, obtained at the time of the sales (31.08.2016) a total loss of approximately 20,89 lei a loss very small compared to the profit obtained, but this was covered in the profit than we have obtained from the sale of other shares held.

In order to calculate the yield on which it get listed on the stock exchange we used the following formula:

$$\text{yield} = \frac{\text{profit}}{\text{capitalinvestit}}$$

$$\text{yield} = \frac{4637.60}{50000} \times 100 = 9.28\%$$

In conclusion if the investors assume the risk to invest on the BVB in shares of the companies in the structure of the index BET, for the sum of 50,000 lei, during the period from 01.06.2016 - 31.08.2016, in which there not been operated changes in the portfolio they obtained a net profit of approximately 4637,6 lei, while if you invest in bank deposits at a profit of approximately 93,75 lei from the warehouse held at the two banks.
3. CONCLUSIONS

From the analysis we conclude the following:
- Bank deposits is the obvious advantage of certainty of achieving profit, we know from the time of filing the return that you get, but it is very small;
- We can say that the investment on the Romanian stock market currently represents an investment option more attractive yield than the terms of the investment banking market; current conditions of remuneration of deposits in the banking market could lead to an increase in investors on the stock market and the value traded, especially as the stock market has experienced in the last two years a growing, recovering and after the financial crisis;
- In the case study performed on data for the year 2016 I noticed that when I opted for the term bank deposits (three months) the interest rate is only 0.75% at both Banks;
- If you opt for investment in shares on the Bucharest Stock Exchange made a profit of about 4637.6 lei, ie a yield of 9.28%, compared with the highest yield obtained from Bank, for term deposits for 3 months, the only 0.75%.

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Viorel-Ionuț BIZĂU

ABSTRACT
In this paper, we have presented a comparative analysis of the taxing legislation of the income achieved from PFA, PFI, II, IF for 2016 and 2015.

KEY WORDS: comparative analysis, PFA, PFI, free profession, regulated profession, VAT, tax on income.

JEL: D14, D22

1. INTRODUCTION

Starting with 2016, once with the new fiscal code getting into force, there appeared a series of modifications on the legislation of taxing the income obtained by PFA (self-employed person), PFI, II, IF or by a person who achieves income from similar activities. Comparing the text in the IV title referring to the tax on income, of the fiscal code afferent to 2015, respectively 2016 we can observe some changes.

The redefinition of the income from independent activities. The change has as aim the updating of the regulations in the Fiscal Code regarding the terminology used by the Civil Code.
(1) The income from independent activities contain commercial income from services, production and commerce activities, the income from free professions and the income from the rights of intellectual property achieved individually and/or in an association form, including adjacent activities.
(2) There are considered commercial income, the income from commerce facts of the taxpayers, from services, others than those presented in paragraph (3) and those from practising a job as well.
(3) It constitutes income from free professions, the income obtained from services with professional character, according to the special norms which regulate the organisation and exercising medical professions, lawyer, notary, financial auditor, fiscal consultant, chartered accountant, certified accountant, counsellor in placement of mobilities values, architect and other professions regulated and developed independently in the conditions of the law. (4) of the respective profession.
(3) The income from the valorisation of any form of intellectual property rights come from invention patents, drawings and models, samples, factory and commerce brands, technical procedures, know-how, from author rights and connected rights to the author rights and others as such.

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Notă: Textul tăiat este eliminat din noul cod fiscal, textul subliniat este adaugat in noul cod fiscal, iar restul este textul comun între codul fiscal valabil până in 2016 și cel valabil din 2016.
At first sight, the most important change refers to the fact that the regulated professions are not included in this title of the fiscal code. This represents a major impact for people with such jobs and who achieved income in this form. Likewise in the new fiscal code there are a series of terms. Besides the notion of “liberal professions”, the new fiscal code also uses phrases such as “independent professions”, “independent activity”, “income from independent professions”, “income from independent activities”, “income from liberal professions”, activities developed “in an independent manner”, “the activities of the liberal professions or assimilated to these ones”.

In this terminological vastness, we should clarify the meaning of each expression according to the title in which it is approached: income tax, social contributions or tax on value added.

A first observation is that the fiscal law makes distinction between the income from independent respectively liberal professions and income from independent respectively dependent activities. From the whole normative act we can observe that the law makes reference to the income “from independent/liberal professions” when it generally counts the taxable income but in the application regulations it refers to “activities”. As such, regardless whether the income comes from the exercise of some independent/liberal professions according to definitions, the nature of concrete activities developed by those independent, respectively dependent, determines the applicable dispositions.

2. COMPARATIVE ANALYSIS

The analysis is important under the aspect of the application of legal dispositions regarding the tax on income, VAT and social contributions. But they are not always clear, we can remark an inconsistency in using the terminology.

2.1. Liberal professions versus free professions

A first observation is that the new fiscal code renounces at the phrase “free professions” from the present fiscal legislation replacing it with that of „liberal professions” which is more accurate under terminological aspect. By using the attribute „free” per a contrario, meaning that the other professions would not be free, which is against the logic. Art.7(34) from the new fiscal code defines the liberal professions as being „those occupations exercised on one’s own by a natural person, according to special normative acts which regulate the organization and exercise of the respective profession”. As a consequence, the law envisaged two conditions for the qualification of a liberal profession:

- to be exercised according to the special normative acts which regulate the organization and exercise of the respective profession;
- to be exercised on their own (thus, excluding a work report).

Another aspect can be remarked, so that for the definition of the liberal profession, the fiscal law uses the term “occupation”, not “activity”, then we can ask the question if the notion of income from „free” professions in the sense of the fiscal code valid in 2015 is equivalent to that of income from liberal professions envisaged in the new fiscal code.

The fiscal code in force does not define the free professions but it only enumerates the income from free professions. According to art. 46, paragraph (3) “it constitutes income from
free professions the income obtained from the exercise of medical professions, lawyer, notary, financial auditor, fiscal counsellor, chartered accountant, certified accountant, counsellor of placement in mobile values, architect or other regulated professions, independently developed in the conditions of the law.” However, in paragraph 1 art. 46 which enumerates the income which come from free professions with the condition to be exercised individually and/or in an association form.

According to the new fiscal code - Art. 67, paragraph 2 – constitutes income from liberal professions the income obtained from services with professional character, according to special normative acts which regulates the organisation and exercise the respective profession. The same condition of exercising liberal profession individually and/or in an association form is also stipulated in the art. 67 paragraph 1 which enumerates income in independent activities. The new fiscal code envisages a larger definition of liberal professions based on a criterion and renouncing to the enumeration of professions which could be very limitative in the context of the fast evolution of liberal professions.

Moreover, in a fiscal sense, the income is considered „from liberal professions” only if this profession is exercised individually or in association. For example, the medical profession which is a profession regulated and considered as traditional liberal can be exercised both individually and by work contract but under fiscal aspect, this profession will be considered independent and liberal only in the conditions in which it is exercised individually and/or in an association form.

2.2. Liberal professions, independent professions and regulated professions

The new fiscal code does not define the independent professions, although it makes reference to this phrase, also enumerating among these the lawyer profession. In art. 223 letter (l) the taxable income obtained in Romania …. (l) income from independent professions achieved in Romania – doctor, lawyer, engineer, architect, auditor and other similar professions (…). In the sense of the fiscal law, the liberal professions are part of the category of independent professions, but they are not confounded to these ones. The liberal professions are limited only to those regulated by special laws of organisation and exercise of the respective profession. The independent professions are a larger category which contains any way of exercising of a profession independently, regardless if it is or not brought under regulation by special laws, excluding a work contract or other employment relationship. The new fiscal code does not make reference to the professions brought under regulation. It is important to mark the distinction between independent professions, liberal professions and those brought under regulation because they are very often confused. The liberal professions are not to be confounded with the professions brought under regulation whose common right is represented by Law no. 200 of 25 May 2004 regarding the recognition of degrees and professional qualifications for the professions brought under regulation in Romania.

According to art. 2 of the Law no. 200/2004:

(1) The professional activity brought under regulation represents the professional activity for which the access or exercise in Romania is conditioned, directly or indirectly, according to the Romanian legislation in force, by owing a document which should attest the level of your professional formation.
(2) We consider as professional activities brought under regulation the activities exercised with professional title, if the use of such a title is reserved only to a titular of some documents which attest the level of professional formation.

(3) There are also considered as professional activities brought under regulation the activities developed by the members of a professional organisation if the respective organisation:
   a) has as ultimate objective the promotion and maintenance of a high level in a certain professional field;
   b) it is recognised by the Romanian law having in view the achievement of an objective;
   c) it issues to its members a document which attests the level of their professional formation;
   d) it imposes to its members to observe the rules of professional conduct elaborated by this one;
   e) it confers to its members the right to use a professional title or its abbreviation and to benefit from a corresponding status of the level of professional formation.

So, the basic condition of the profession brought under regulation is the existence of a professional title relegated by a public authority or by a professional organisation, thus, the activities can be exercised both independently and as an employer.

2.3. Independent activities

Although the new fiscal code does not define the independent professions (only the liberal ones), it defines the independent activities in art. 7 point 3 of the Chapter III “Definitions”.

Art. 7 (3). Independent activity – any activity developed by a natural person with the aim of obtaining income, which fulfils at least 4 of the following criteria:

3.1. a natural person who disposes of the liberty to choose the place and way of developing the activity and the work program;
3.2. a natural person who disposes of the liberty to develop the activity for more clients;
3.3. the inherent risks of the activity are assumed by the natural person who achieves the activity;
3.4. the activity is achieved by using the patrimony of the natural person who achieves it;
3.5. the activity is achieved by the natural person by using the intellectual capacity and/or the physical strength of this one, according to the specific of the activity;
3.6. the natural person is part of a professional association/assembly with a representation role, controlling and supervising the achieved profession, according to the special normative acts which control the organisation and exercise of the respective profession;
3.7. a natural person disposes of freedom to develop the activity directly, with employed staff or by collaboration with third parties in the conditions of the law;

Therefore, so that an activity is considered independent it must fulfil 4 out of the 7 criteria enumerated above.

We can come to the conclusion that regardless of the independent, respectively liberal profession, in the framework of which the respective activities are exercised, the fiscal organisation can reconsider the income obtained as being obtained from dependent activities, in the case when there are no 4 out of the 7 criteria envisaged above.
2.4. Income which comes from independent professions or activities

The new fiscal code defines at art. 7 (3) “independent activities” as it was shown above, in the case of the application of the tax on income, makes reference to “income from independent activities, defined according to art. 67”. According to art. 61 – „Categories of income subject to the tax on income”, the categories of income subject to tax on income, according to the previsions of the present title, are the following: a) income from independent activities, defined according to art. 67 „The definition of income from independent activities”:

1) Income from independent activities include income from activities of production, commerce, services, income from liberal professions and income from rights of intellectual property, achieved individually and/or in an association form, including from adjacent activities.

2) It constitutes income from liberal professions, the income obtained from services with professional character according to the special normative acts which control the organisation and exercise of the respective profession.

At its turn, art. 67 paragraph 2 from the same code makes the difference between “income from independent activities” and “income from liberal professions”.

From the context of the normative act it comes out that these distinctions are made in order to control the application of the general rule to establish the net annual income from independent activities, determined in real system, based on the accounting data and to except the income from liberal professions from the establishment of the net yearly income based on the income norms.

At a summary interpretation of the art. 67 paragraph 1, it results that when we speak about the tax on income, the income which come from liberal professions are always income from independent activities, these being enumerated especially in “the definition” of the notion of income from independent activities. We also observe that the art. 67 paragraph 1 does not envisage a definition, although many regulations from the Fiscal Code make a reference to the income from independent activities, „defined” according to art. 67. This paper contains only an enumeration of all the categories of taxable income, which as well can enter in the category of income from the activities considered dependent (production activities, commerce, services etc.)

As such, the references to the Fiscal Code in art. 67 are improper and they can create confusions. Also in the framework of the regulations referring to the contributions of social insurances of health there are references to the “definition” presented in art. 67. According to art. 155 regarding the categories of income subject to the contributions to the health social insurances: (1) The taxpayers of income at the system of social insurances of health, envisaged in art. 153 owes according to the case contributions of social insurance of health for the following categories of income: (…) c) income from independent activities, defined according to art. 67”.

For the chapter regarding the Tax on the income obtained in Romania by non-residents in art. 223 regarding the taxable income obtained in Romania, the law makes reference to the income obtained from independent “professions” but regarding the provisions regarding the application of the tax make reference to the income which come from independent activities. According to art. 223 – “Imposable income obtained in Romania” letter l, “income from independent professions achieved in Romania – physician, lawyer, engineer, dentist, architect, auditor and other similar professions – in the case when they are obtained in other conditions than by means of a permanent headquarters or in a period or in several periods which do not surpass a total of 183 days during the interval of 12 consecutive months
However, article 226 speaks about the fiscal treatment of the categories “income from independent activities” imposable in Romania obtained by a natural person resident in a member state of the European Union or of the European Economic Space.

3. CONCLUSIONS

From those mentioned above we can observe that the legislation and terminology used until 2016 is ambiguous and it leaves place for interpretations, these ambiguities could generate abuses. Likewise we can observe that these problems are not resolved in the new fiscal code.

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THE RELATION BETWEEN ETHICS, SOCIAL REASONABILITY AND ECONOMIC CRISES

Alina BOSÂNCEANU

ABSTRACT
The subject of this paper is dynamic because treat ethics, social responsible and crises. The economical experts are preoccupied to analyze the economical crisis that started in 2008 in the United States of America which had world wide repercussions. At this time the economical specialists study the possibility of a new economic collapse. The economical crisis from the ethics and the social responsibility are the analysis subjects of this paper. A very important point of the analysis is the common aspects of the two economical crises from 2008 and the one from 1929 and the importance of adopting the concept of corporate social responsibility (CSR). When we say that the MIRRORS OF THE ACTUAL GLOBAL ECONOMICAL CRISIS could be approached from THE ETHICS PERSPECTIVE IN BUSSINESS we base that statement on the research made by the economical analysts of the cyclic aspect of the economical crisis: N.D. Kondratieff, W.F. Stolper, Schumpeter, Clement Juglar, Paul Mattick, Paul Krugman, Simion Kuznets. Schumpeter identifies 2 phases in the Kondratieff cycle, first phase of expansion due to some innovation that generates the creation in an “engine” sector and which on its turn trains the rest of the economy sectors, and the second phase is the recession phase which is caused by the obsolescence of innovation. I think it’s very important that the economical sector shod be ethic and socially responsible in front of the environment from the economical expansion phase.

KEY WORDS: ethics, corporate social responsibility, crises

JEL: E69, E32, M31, M00

1. RELATION BETWEEN ETHICS, SOCIAL REASONABILITY

Over the years many papers have been published which have analyzed the human behavior in the period of the cycles determined by Kondratieff, the price and inflation being tow of the elements of the variation of the economical cycles which have influenced human behavior. The analyst Theodore Modis reminds us that in N. Kondratieff view, a season, from an economical cycle can last up to 15 years and in this time the human behavior and the economical evolution are closely interrelated and influence each other. Together with the economical and social elements as well as crimes, feminism, alcoholism, education, the responsibility towards society and the environment evolve at the same time as the cycles that Kondratieff describes. In the capitalist world “modern crisis”, are not characterized by the influence of the stock or resources to cover the demand. In this modern era the disruption is about overproduction, the big amount of products that is not selling in proper time. The overproduction period is accompanied by social crisis which are characterized by high unemployment. The social crisis is tightly related to the economical crisis and it takes place due to this one. The social crisis can’t create an economical crisis; it stimulates the expansion. The social crisis exists when the mass the
individuals, the institutions call in to question the rules the standards and the values, when the
groups band together to overthrow the “old order” and to create solutions.

“The Ludwig von Mises” Institute has analyzed the causes of the economical crisis. After they analyzed the cycles of the economical crisis from the years: 1923, 1928, 1931, 1946 the main causes are: inflation, depreciation, speculation, bank loans without coverage, the exchange ratio, overconsumption, forced savings, unemployment and last but not least government intervention.

In 1920 the United States of America was caught in the acquisition frenzy, a lot of the goods where purchased trough loans, the fake feeling of getting rich fast trough acquisition of shares was done also trough loans being convinced that the ever growing values will guarantee their investment.

In that moment the concept of “buy now pay later” spread like wild fire, which has led to the increase of consumption due to the fact that anyone could loan money having to guarantee with just 10% of the amount. Manny shares and investment where made with loaned money, there were no rules to limit the loaned from banks for personal individual or private corporation. The prices and the economy started to grow.

In October 24th 1929 when the economical collapse took place, there was a huge drop of the value of shares which lasted till November 12 that same year. Banks went bankrupt and their clients are the victims of the process due to the fact that there was no system of customer protection or a system of recovering deposited money. The poverty, unemployment and the number of people loosening their houses due to the fact that they couldn’t afford rent anymore has increased. We can safely say that the main causes of the financial disaster from 1929 are represented by the sum of the factors that have gathered over a long period of time.

The most relevant for this study are:
- The political decisions made by American politicians, to create insurance policies with the state dept;
- The lack of an informing system for the middle class and of a forming system of those who were going to buy these policies;
- Lack of a protection system for bank clients;
- Lack of a protection system of stakeholders;
- Lack of a cautionary system of loan granting from banks;
- Decrease of consumption which has led to a decrease of work places.

The financial crisis that took place in 2007 is characterized as being a collapse of ethic due comportment: lack of risk control and giving massive loans without coverage. The economist Aurelian Dochia has published in the “Economistul” paper in 1012, in which he speaks about the economical crisis trough which we are still going, that this was triggered by the “fake money illusion”. In 2001, in America, the “cheap and abundant” money where introduced in the economy by the Central American bank, in their attempt to increase the demand.

Due to the economical instruments the economical crisis has extended to the furthest corners of the world. In Europe, following almost the same American network has revealed the impossibility of living “from depts.”. The money that had no cover, after they where reinvested with the purpose of getting profit led to the economical collapse.

Trough the collapse of the ethic comportment we understand: “a result of an irresponsible behavior over an extent of time”. The irresponsible comportment of banks manifested firstly trough the greedy policies of giving basifications to agents who gave the most loans to companies or to individual. The ethic fail of the banks is due to the fact that banks where giving
loans to individuals and companies that didn’t have the capacity to pay back their loan and they
didn’t have with what to guarantee the given loan.

The politics that were adopted in the period before the crisis had no ethic landmarks, sustainable over long term, these where made to have “immediate” results and to cover the economical problem not to solve its cause.

They unethical events that resulted in the collapse of the real estate system, bank system and of stock market are: favoring some groups of interest in the expense of other groups, granting risky loans with no coverage, corruption, lack or ethics, estimate of an income growth which led to inflation, getting loans to cover other depts. All of these together with the lack of economical ethics especially the way in which “the bets and the way they shares where played at the stock market bought by loans” have lead to a chain fall of the economy in 2008.

Gregor Curtis states that ‘the lack of an ethic comportment leads to collapse’, theory that is backed up by the analysis of the fail in industry, have lead to financial crisis. Another author that backs up this concept is Bundewijn de Bruin which is pointing out in one direction only, this underlines that the lack of ethics can be imputed to both service industry as well as to consumers. Another opinion over this subject belongs to the authors Regina Wentzel and Stephen M. Wolfe which encourages us to focus our attention on the dimension of the ethics of the institutions but also of individuals, who together are responsible in equal measure for the financial crisis. Because of the irresponsible comportment in loan granting and accessing bank loans called “liar’s lone”.

The economical collapses of 1929 and 2008 where triggered by a sum of factors: politically, socially, and macro-economically.

Both periods have developed with the help of investments made by loans with no coverage. We have to mention that in 1929 there were more loans made for buying shares then for investing in creating new businesses. Both economical collapses have triggered deflation and economical depreciation in chain reaction for a long period of time.

In present the Romanian Banking Institute defines “the corporation social responsibility being and ensemble of initiative tough which the companies get involved in developing the society”.

In Romania we can identify the terminology used by corporations even if the concept of CSR is not legally regulated: responsible acquisition, social antreprenoriat, social responsibility, branding CSR, social campaign, CSR research, CSR competition, human rights, CSR events, found raising, involving in the community, inclusion and diversity, social innovation, sustainable infestation, cause marketing, social marketing, responsible products, nongovernmental projects, environment protection, CSR rapports, recycling, CSR social media, stakeholder, engagement, CSR trends, volunteering.

The corporations in Romania that declare they are social responsible: 29 organization from Romania (Coca-cola, Bayer – scholarships for students, Raiffeisen bank – Raiffeisen community –grant competition for ONG- projects CSR, Samsung- Ministeru of education, Telekom Romania grants for ONG- project CSR, ORANGE, AVON –Campaign, BCR -2009 –now, BRD, Cosmote, Dacia, Danone, Enel Romania, Eco-Rom Ambalaje, Praktiker România, Petrom, Mol, Romstal, Tuborg România) (Mediul online CSR Romania http://www.csr-romania.ro/), (http://www.responsabilitatesociala.ro/).
CONCLUSION

In conclusion, human behavior does not define human nature. War, poverty, corruption, famine, misery, suffering won’t change in a monetary system. It is needed a new set of values to change our culture and it needs to be combined with the capacity of sustaining our planet.

We are talking about CSR or ethics then „whe- when`` a company is spilling waste in a water resource, it’s easy to catalog that company as acting non-ethic, unmoral, corrupted, but if a hypermarket opens in a small town and constrains all the small businesses to close because they are not capable to compete, the hypermarket is in the mind of consumers in a gray area. When a person is fired because a machine is taking its place because it produces more with less money, people tend to categorize this as a part of evolution. Biggest majority of people remain passive to this actions, most of them see the unfairness of it but don’t take action because the system made it so tough on them that they can’t fight psychically or physically for such causes.

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OUTCOME INDICATORS - ESSENTIAL COMPONENT IN ANALYZING THE PERFORMANCE OF INSURANCE COMPANIES

Adela Suzana COLŢA1, Cristina Mihaela NAGY2

ABSTRACT
Financial and economic results represent a positive or negative effect of the effort made by a company that can be determined at a certain period of time. The analysis of results is an essential component of a company's performance management since results characterize the outcome of the working activity. Outcome analysis can be a good way to assess the level of achievement of performances, as well a support of future performance guidance.

This paper aims to analyse the technical results obtained by insurance companies, and given the fact that life insurance are in great demand we intend to point out, during the analysed period, that they are also the most profitable activity performed by insurance companies.

KEY WORDS: financial results, outcome indicators, insurance management, insurances, profit and loss

JEL: M11, G22

1. INTRODUCTION

Management is the process that directs the activities of others, leading to achieve the objectives set by the company, and at the same time, an efficient management process involves the compliance with several functions.

Insurance management seeks to create optimal conditions for the activity and make it more efficient3.

Managerial performance reflects how well managers performed their work or what is their managerial performance in terms of efficiency and effectiveness.

In general terms, a company is performing if the following conditions are met: rapid innovation, greater flexibility, maximizing the quality-price ration, competitive people, assuming responsibilities, and time as a parameter of competitiveness4.

Management of insurance companies is mainly related to risks, thus the manager wants to minimize and immunize risks5.

Management of the insurance business6 has its specific particularities which derive from the fact that this economic activity appears, on the one hand, as a relation of distribution in cash,

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2 PhD Lecturer, ”Tibiscus” University of Timisoara, Faculty of Economics, Romania
3 Coană Florin-Ion - Reasigurările comerciale, managementul şi marketingul specific asigurărilor comerciale, Editura Gutenberg Univers, Arad, 2005, p. 25
4 Abrudan Denisa - Elemente de management performant, Editura Eubeea, Timişoara, 2000, p. 8
5 Bercean Radu (coordonator) - Asigurări şi reasigurări, Editura Limes, Cluj-Napoca, 2007, p.123
and on the other hand, as a supply of services of a particular type that are carried out based on the insurance contract. Insurance management must ensure optimal conditions for the constitution on time and in the amount provided by the insurance fund and for the continuous adaptation of the insurance types (voluntary and by law) of goods, people and civil liability, to the requirements that appear on the insurance and reinsurance market, domestic, European and international.

In insurance, management is influenced by a variety of factors, namely:

- randomness of damages;
- legal form of insurance (mandatory or voluntary);
- the insurance branch (insurance of goods, persons or civil liability);
- territorial coverage of insurances (domestic or foreign);
- dimension of the funds established by an insurance company.

The organization and management of the insurance activity is different than in the case of insurance by law (mandatory insurance) and of contractual insurance (optional insurance), because mandatory insurance does not require improvement of the insurance activity, but only creating the necessary conditions for collecting insurance premiums at the deadline provided by law for damage assessment, settlement and payment of compensations (or insured amounts) to be performed quickly and on a real basis.

Insurance management should ensure the following basic elements:

- setting up the insurance fund both in terms of quantity and stipulated period;
- operative granting of damages – if ensured risks take place;
- permanent adaptation of insurance types to market requirements;
- increasing efficiency of insurance companies.

A particularly important element, which must be taken into account is the random character of creating funds and that of granting compensations, as a defective management can easily lead to bankruptcy of companies (for example ASTRA S.A.).

Results management of insurance companies is different from that of other economic companies because the price of the insurance product sold is not known at the time of the transaction, being encumbered by the element called risk.

2. DATA ANALYSIS AND RESEARCH RESULTS

Outcome indicators are commonly used to assess the following issues:

- management of the resources used and their effective management;
- level of profitability of the company's activity;
- profitability of the capital made available to the business, irrespective of background.

Insurance management will achieve maximum efficiency when financial management, sales and risk management will determine together the achievement of an optimal balance between the desires of the insured and the insurer.

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4 Medinschi Silvia – *Performanțele întreprinderii și gestiunea financiară*, Editura Orizonturi Universitare, Timișoara, 2003, p. 46
Obtaining this balance requires the satisfaction of the policyholder in terms of providing services and obtaining by the insurance company the expected economic and financial result.

The economic and financial results represent the favorable or unfavorable result of the effort made by the company, determined at a certain time.

The data presented are processed according to data from the Insurance Supervisory Commission, respectively "Annual reports on the activity performed and developments in the insurance market for 2004-2007" and the "Report on the insurance market and activity performed during the years 2008-2012". We also used data from the reports issued by the Financial Supervisory Authority - "Annual Report" for the years 2013-2014.

From figure no. 1 it can be observed that during the period 2004-2005 more companies registered profit (respectively, 28 in 2004 and 31 in 2005) than losses (namely, 14 in 2004 and 11 in 2005), and during the period 2006-2014 the situation is reversed, except the years 2011, 2012 and 2014. During the period 2004-2014 we can observe that the number of companies that
registered profit decreased from 31 in 2005 to 21 companies in 2004, however, the number of companies that reported losses registered an ascendant trend during the period 2004-2008, from 14 to 28 companies, after that the trend was descendant until 2014, almost reaching the level registered in 2004. In 2014 the number of companies that recorded profit was 21, and the number of companies that registered loss was 16 companies.

Table no. 1
Net financial result during the period 2004-2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Net profit</th>
<th>Loss</th>
<th>Net financial result</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>121.384.856</td>
<td>-69.632.094</td>
<td>51.752.762</td>
</tr>
<tr>
<td>2005</td>
<td>140.287.254</td>
<td>-101.295.761</td>
<td>38.991.493</td>
</tr>
<tr>
<td>2006</td>
<td>175.446.137</td>
<td>-243.975.410</td>
<td>-68.529.273</td>
</tr>
<tr>
<td>2007</td>
<td>162.868.733</td>
<td>-416.021.299</td>
<td>-253.152.566</td>
</tr>
<tr>
<td>2008</td>
<td>266.580.284</td>
<td>-849.037.715</td>
<td>-582.457.431</td>
</tr>
<tr>
<td>2009</td>
<td>315.048.975</td>
<td>-418.264.729</td>
<td>-103.215.754</td>
</tr>
<tr>
<td>2010</td>
<td>235.268.398</td>
<td>-276.637.639</td>
<td>41.369.241</td>
</tr>
<tr>
<td>2011</td>
<td>257.054.506</td>
<td>-582.921.060</td>
<td>-325.866.554</td>
</tr>
<tr>
<td>2013</td>
<td>222.215.253</td>
<td>-1.506.025.310</td>
<td>-1.283.810.057</td>
</tr>
<tr>
<td>2014</td>
<td>326.193.638</td>
<td>-361.737.069</td>
<td>-35.543.431</td>
</tr>
</tbody>
</table>

Source: Data processed according to reports ISC and FSA during the period 2004-2014

The net financial result is calculated as a difference between profit and loss, net positive result means profit, while the negative one means loss; this is applied to the entire insurance market. Net profit represents the profit obtained by insurance companies which registered an increase of over 268%, from 121.384.856 lei in 2004 to 326.193.638 lei in 2014. In 2014 the loss registered was of minus 361.737.069.

Unfortunately for insurance companies the losses registered have increased at a much faster rate than the profit, from minus 69.632.094 Lei in 2004 to minus 1.506.025.310 Lei in 2013, meaning a loss of more than 2150 times higher. In 2014 the loss registered was of minus 361.737.069. It is obvious that these "increases" led to negative results starting with 2006 in the entire insurance market.

After centralizing data registered in the financial statements of the 42 insurance companies which conducted insurance activities in 2004 (see figure no. 1), positive net results (profit) were registered by 28 companies, while 14 companies registered negative net results, the result at the entire insurance market was positive, respectively 51.752.762 lei (see table no. 1). The most dramatic result was registered in 2013, respectively minus 1.283.810.057 lei, when over 50% of the losses registered on the market was registered by a single company (Astra S.A.).

After centralizing the data registered in the financial statements of the 37 companies which conducted insurance activities in 2014 (see Figure 1), 21 companies recorded positive net results (profit), while 16 companies recorded negative net results, the result at the entire insurance market was negative, respectively minus 35.543.431 Lei (see Table 1).
3. CONCLUSIONS

We can conclude that in the insurance sector, the highest peak of the crisis was in 2008, when it was registered the biggest loss in the history of Romania insurance (approximately 850 million lei). Since 2010 here has been an increase, but that was not enough to cover the losses, the ascending trend was not maintained in the coming period.

Unfortunately we can say that 2013 is the beginning of a new crisis for the Romanian insurance market, influenced by the losses registered by Astra S.A.

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*** Annual reports on the activity and development of the insurance market for 2004-2007
*** FSA (2008-2012) Report on the insurance market and the work carried out, for the years 2008-2012
SOLVENCY CONTROL AN INSTRUMENT IN SUPERVISING THE ACTIVITY OF INSURERS

Adela Suzana COLȚA¹, Cristina Mihaela NAGY²

ABSTRACT
A company's solvency expresses and quantifies its ability to cover liabilities through its owned assets. Given the special importance that insurance is called to play in a modern economy, it is necessary to have a legal framework, as well as quality of the work undertaken by insurance companies which can determine that they are always solvable. In other words, insurance companies should be able to honor their obligations, at any time, under the insurance contracts concluded.

Solvency reflects the financial stability of insurance companies and their ability to meet the obligations assumed under insurance contracts concluded, therefore, it is one of the most important indicators used in the prudential supervision and control process.

This paper is intended to emphasize the solvency level of insurance companies in Romania.

KEY WORDS: insurance industry, solvency, Solvency II, solvency margin, indicators

JEL: G22

1. INTRODUCTION

The insurance industry is characterized by an inversion of the classic business: insurance companies collect premiums, representing remuneration for the services performed before paying compensations for damages, respectively to provide the service for which they are paid³.

For an insurance company to perform its functions, to be able to pay the compensations and amounts insured, it must have constantly paying ability, meaning it should be solvable⁴.

According to Merriam-Webster dictionary, solvency is "the ability to pay all legal debts"⁵. Maurice Greenberg, chair of the American group AIG believes that "an insurer's solvency continues to be a highly important criterion to consider when conducting a risk transfer [...] customers proving to be more interested in the financial security of an insurance company that the policy price"⁶.

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² PhD Lecturer, ”Tibiscus” University of Timisoara, Faculty of Economics, Romania
⁶ Tudoran Gregorian-Carmen – Eficiența și managementul asigurărilor de viață, Editura Junimea, Iași, 2006, p. 21
Solvency of companies is defined by some authors as the ability of companies to meet their commitments in the event of liquidation, which means the termination of their operations and the sale of their assets. Solvency expresses the degree to which social capital provides the coverage for medium and long term loans.

Solvency is one of the most important indicators used in the process of prudential supervision of insurance companies, as it reflects their financial stability, as well as their ability to meet the obligations assumed under the concluded insurance contracts. Generally, solvency reflects the manner in which social capital covers obligations to creditors and shareholders, being calculated as patrimonial solvency. The calculation formula for patrimonial solvency is:

$$SP = \frac{\text{Capital \_Social}}{Iml + \text{Capital \_Social}}$$

The insurer's solvency represents the ratio between the solvency margin available for the insurer and the minimum solvency margin.

The solvency regime dates back to the 70s of the last century, and in the first years of the 21st century was updated by two Directives of the European Union issued in 2002 (Project Solvency I). Though the Solvency I Project, solvency has been strengthened as a result of increasing the minimum subscribed capital limit and by establishing a safety fund. Also, by establishing some basic principles of the supervisory activity, a higher emphasis was placed on the measures to prevent the occurrence of financial difficulties.

At the insistence of the International Association of Supervisors of Insurance and the Council of International Accounting Standards, new solvency rules (Solvency II) have been developed. These new rules were entirely different from the ones existing in the Union, whose main characteristic is that the capital requirements for each insurer are to be established according to their own risk profile.

The mentioned project is known Solvency II, this new project provides insurance companies solvency limits and adequate methods regarding the entire risk management system that can be used by an insurance company.

The most important characteristic of Solvency II is that it is based on risk assessment, capital requirements are related to the risk profile of the insurer, so higher risks will lead to increased needs of capital. The Solvency II regime came into force on 01.01.2016.

Solvency II represents a set of European directives that fundamentally altered many aspects of the European legislation on insurance solvency. In developing the new solvency system, the first step was the definition of the requirements which he must answer, namely:

- to protect beneficiaries, providing supervisory institutions a buffer timeframe, necessary to identify and remedy the negative phenomena registered in a company;
- to provide compatibility, transparency and consistency, thereby creating an uniform action field;

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1 ***, CSA (Insurance Supervisory Commission) Report, 2009, pp. 31
3 Coană Florin Ion, Coană Rodica Viorica, Fodor Iudit - Marja de solvabilitate – condiție esențială pentru performanța societăților de asigurări, Revista Finanțe - Provocările viitorului, anul VII, nr. 7/2008, p. 93
to establish a set of solvency margin requirements in accordance with real risks.

Solvency II aims to harmonize the methods for calculating technical reserves and to obtain congruence regarding the International Financial Reporting Standards (IFRS). The Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) recommends "that the assessment of capital and debt in the insurance business to be based on the present value of expected cash flows (best estimates), along with an explicit risk margin". Solvency II is a new system for determining capital requirements, which is intended to harmonize regulations applicable to insurance companies in the European Union and which takes into account risk factors. This means that assets and liabilities of insurance companies will be presented in the balance sheet at values which will reflect market conditions.

One of the conditions that have to be met by a company to be authorized by the Insurance Supervisory Commission is that the company must draw up a feasibility study showing that it will have the statutory solvency margin.

The main stages in analysing solvency are the following:
- determining the solvency margin of the insurer (net assets);
- calculating the minimum solvency margin required;
- determining the solvency degree.

At European Union level was proposed an indicator for measuring the solvency of insurance companies, called solvency margin, valid for all member countries.

The notion of solvency margin has several definitions, which often differ substantially:

- represents the surplus of all the company's assets as against the solvency requirement;
- highlights the value by which an insurer's assets are greater than its obligations;
- represents the amount by which the value of assets exceeds the value of obligations and expresses the ability of companies to cover their obligations without resorting to equity, and in calculating an insurer's obligations are considered both clear obligations, as well as the ones likely to materialize in the future;
- represents the available solvency margin (net asset) and is compared with the minimum solvency margin, recommended by CSA (Insurance Supervisory Commission) norms, and to the available solvency margin corresponds the solvency margin of total assets free of any charges, excluding intangible assets.

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2 Bratîş Marian - Constituirea societăţii comerciale pe acţiuni, Editura Hamangiu, Bucureşti, 2008, p. 293
3 Bennett, Carol - Dicţionar de Asigurări, traducere din limba engleză Daniela Moroianu, Editura Trei, Bucureşti, 2002, p. 372
4 Dragotă Mihaela – Consideraţii privind calculul marjiei de solvabilitate la nivelul unei societăţi de asigurări, în lucrările colocviului financiar monetar, Finanţele şi dezvoltarea durabilă, Editura ASE, Bucureşti, 2004, p. 675
5 Cristea Mirela, Domnişoru Sorin, Vinătoru Sorin Sandu - Aprecierea solvabilităţii şi continuării companiilor de asigurări, Revista Audit Financiar, nr. 4/2009, p. 9
6 Coană Florin Ion, Coană Rodica Viorica - Analiza performanţelor societăţilor de asigurări, Editura Gutenberg Univers, Arad, 2005, p. 41
7 Cristea Mirela, Domnişoru Sorin, Vinătoru Sorin Sandu - Aprecierea solvabilităţii şi continuării companiilor de asigurări, Revista Audit Financiar, nr. 4/2009, p. 10
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is an instrument of supervising the activity of insurers and its level is established by law, and if an insurer does not provide that it has the minimum solvency margin required by law, legal actions can be triggered against him\(^1\);
\(\) it is an additional guarantee along with technical reserves for insurance companies to cope with risks assumed proportionally with the volume of insurances\(^2\).

Determining the minimum solvency margin is performed differently for the general insurance activity and for life insurances, after a calculation presented in the norms issued by CSA (Insurance Supervisory Commission) in this regard\(^3\).

2. DATA ANALYSIS AND RESEARCH RESULTS

Currently, the supervising authorities allow insurance companies to use general formulas for calculating capital requirements, which are easy to apply, but they do not provide an accurate picture of the financial position\(^4\).

We can talk about the solvency of an insurer if its assets are higher or at least equal to its liabilities that he may have. Therefore, whenever an insurer's assets are not suitable (as a structure) or cannot be used in time for honouring its obligations (debts) this means that we are talking about its insolvency.

<table>
<thead>
<tr>
<th>Year</th>
<th>Solvency margin available for general insurance activity (lei)</th>
<th>Solvency margin available for life insurance activity (lei)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>1.615.625.237</td>
<td>666.682.358</td>
</tr>
<tr>
<td>2008</td>
<td>1.856.450.935</td>
<td>944.393.619</td>
</tr>
<tr>
<td>2009</td>
<td>2.012.033.024</td>
<td>1.199.193.246</td>
</tr>
<tr>
<td>2010</td>
<td>2.125.511.889</td>
<td>1.219.431.465</td>
</tr>
<tr>
<td>2011</td>
<td>2.038.318.791</td>
<td>1.028.915.044</td>
</tr>
<tr>
<td>2012</td>
<td>1.939.918.788</td>
<td>1.062.053.390</td>
</tr>
<tr>
<td>2013</td>
<td>880.271.625</td>
<td>900.655.437</td>
</tr>
<tr>
<td>2014</td>
<td>730.386.075</td>
<td>1.110.781.256</td>
</tr>
</tbody>
</table>

Source: Data processed according to reports ISC and FSA during the period 2007-2014

The solvency margin available for general insurance activity conducted on the entire market increased in the first half of the analysed period. In 2007 was amounting 1.615.625.237,
and in 2010 amounted 2.125.511.889, so during the period 2007-2010 we have an increase of approximately 31.5%. This increase was higher in 2008 (15% compared with 2007), and in 2010 we registered an increase of 6%\(^1\) compared to 2009.

The first decrease of the solvency margins related to the general insurance activity was registered in 2011, this decrease continued until 2014, it started from 2.125.511.889 lei, in 2010 to 730.386.075 lei, in 2014. In 2011 the decrease was of 4% compared to 2010, the highest decrease was registered in 2013 compared to 2012, respectively of 55%, so we can state that for the period 2011-2014 we have a decrease of 65%.

Since, throughout the entire analyzed period, meet the solvency requirements, this means that they have the ability to cover their obligations assumed with the elements of the available solvency margin. The increase of the margin was mainly caused by the increase of amounts of capital available in the insurance market, which registered an ascending trend during 2007-2010, and the decrease was caused by outflows of companies from the market.

From table no. 1 it can be observed that the aggregate value of the available solvency margin, related to life insurance activity was 666.682.385 lei in 2007, and in 2008 the value of the margin increased by 42% (to the amount of 944.393.619 lei) compared with the previous year.

In 2009 the increase was of 27% compared to 2008, and in 2010 the increase was of only 2% compared with the previous year and there were no insolvent companies in the life insurance sector\(^2\). So we can state that during the period 2007-2010 we have an increase of approximately 83%.

Similarly as with the values of solvency margins related to general insurance activity, the ones for life insurance have registered a decrease starting with 2011. The aggregate value of the available solvency margin, related to the activity of life insurance was 1.219.431.465 lei in 2010, while in 2011 the margin's value decreased by 15% (to the amount of 1.028.915.044 lei) compared with the previous year. In 2012 it increased by 3% compared with 2011, in 2013 there was a decrease of 15% compared to 2012 and in 2014 increased by over 23% compared to 2013. These fluctuations have led to an increase of approximately 8% during the period 2011-2014.

### 3. CONCLUSIONS

For an insurance or insurance-reinsurance company, the insurance margin should provide protection against unexpected and unfavorable events, the size of the margin is correlated with the number of policies underwritten and with the accepted categories of risk.

The minimum solvency margin guarantees to the insured that the insurer has sufficient assets to pay for future damages, even if the insurer's future activities are uncertain.

The values recorded by solvency, but also the solvency margin are important from the perspective of three operators in the insurance market, respectively for insurers, for the insured and for the Insurance supervisory committee.

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The main causes for which insurers may face solvency problems are impairments registered in connection with the underwriting activity, investments, reinsurance and impairments related with the company's ability to obtain liquidity.

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ON THE IMPORTANCE OF ORGANIZATIONAL OBJECTIVE AWARENESS FOR THE FUTURE PERFORMANCE ASSESSMENT OF THE ENTERPRISE

Suzana DEMYEN
Ion LALA-POPA

ABSTRACT
The present paper aims at highlighting the importance that a correct and in time awareness of the objectives developed at organizational level can have in a future assessment of the performance for an enterprise. The first part of the paper presents from literature perspective a brief analysis of the concept of “performance”, while the second part tries to determine, through a case study, the level of awareness manifested by employees in all sectors, regarding the objectives formulated by the enterprises where they develop their individual activities.

KEY WORDS: objectives, organization, performance, enterprise, efficiency

JEL: L25

1.THEORETICAL BACKGROUND

Before speaking of performance management, about the determinants of performance or about motivation methods, also considering their analysis, it is necessary to address the performance in a conceptual point of view, both in organizational terms and as a model of behavior or attitude. The literature mentions, on the one hand, the "attitude" as a key factor in achieving performance. The term lies in the existence of the individual intent to assert the main key attributes and professional advantages, hence the desire to achieve positive results and highly valued as through the application of knowledge, skills and personal abilities, and to "capitalize" core competencies. On the other hand, other authors call productivity, creativity and loyalty as the main driving forces behind individual performance (Demyen, Lala Popa, 2015).

The concept of "performance" needs to be defined by many variables. We can refer first to the results, so what we get from certain activities, but at the same time we consider the concepts of effectiveness or efficiency, in terms of the need to perform a whole series of objectives, and on the other hand the idea of assessing the cost / result.

Performance management is a complex process, which consists not only in the collection of data in accordance with the attainment of a predetermined set of objectives, but can be regarded rather as a "system" through optimization to achieve the required efficiency.

The performance management is emerging through results management, but the system can be viewed and analyzed through several indicators, both qualitative and quantitative (efficiency, effectiveness, quality, productivity and safety). First developed in the public sector,
is a tool used since the 1980s, focusing on "the consequences of activities" (Jeong Yeon Kim, Hangbae Chang, 2013).

The term "performance" is used or discussed increasingly in recent years in various fields, in literature, being also considered a goal by all enterprises. According to the findings in the literature, "in any socioeconomic system, performance becomes, in the current period, a term of reference for both managers and performers, being a form of manifestation of objectives and results obtained. A performing organization can better exploit the opportunities offered by the environment, moves more easily over obstacles that it can be put to it, it satisfies both quantitatively and qualitatively certain segment of social need, gains competitive advantage on the specific market where is acting (Verboncu I., coord., 2013).


Economic and financial performance is defined as "a qualitatively higher level of economic and financial activity carried out by undertakings which are assessed using several indicators, such as turnover, return on capital, labor productivity, return on capital, gross profit and the net annual rate of renewal of fixed capital, effective use of resources etc." (Bistriceanu, 2001). Financial performance on the other hand, is the relationship between income and expenditure unit, as reported in the income statement. So, performance or nonperformance of an enterprise is reflected in the income statement and is given by the ratio between the income that the achievement will generate future cash flows and expenses that arise by using the resources of the period.

Still… can we achieve performance in a company without a proper management of risks and without a high degree of knowledge regarding the objectives drawn by the company?

Generally, when we speak about performance, we notice that most of the literary sources name it as a "a significant achievement in a field", thus the Explanatory Dictionary of the Romanian language mention the origin of the French word "performance" which means "a very good results obtained in sport, in a practical field of activity etc." or " the best result given by a machine or a tool".

In economic terms, the level of performance for a company "includes the ability to access resources, allocate resources and accomplish a best use, for the purpose of an optimal remuneration, in order to cover the risk assumed and to justify the interest, on the path of a further development" (Petcu, 2003). We must consider, thus, that the term „performance” becomes a more complex one, given that it consists, therefore, in an ensemble of efficiency and effectiveness with which resources are consumed (effort) and results are generated (effect)” (Petcu, 2003).

In order that an organization may demonstrate the performance in the activity it develops, it is necessary first of all to be both efficient and effective (Băileşteanu, 2010). Thus, the effectiveness is defined as "the extent to which action, activity achieved a definite purpose" (Băileşteanu, 2010), reaching the maximum level when the objectives are fully met, being able to speak, according to the level of achievement of objectives, about a partial effectiveness.

However, given that the resources are always limited, the level of accomplishment of the objectives proposed is dependent to these, being essential to know the cost of them. Economic efficiency is a complex concept, therefore it can be analyzed from several points of view, both economic and social, both at macroeconomic and microeconomic level, being mentioned in literature as a „modern way of activity evaluation and serves to substantiate organizational
decisions, so that the available resources are used in the most favorable way for the company” (Buglea, 2010).

On the other hand, the performance can be considered a great result, obtained in the field of management, economy or commerce, etc., involving the efficiency, effectiveness and competitiveness of companies and their procedural and structural behaviors (Verboncu and Zalman, 2005) or a tool that demonstrates its ability to progress, given the constant efforts (Albu and Albu, 2005).

In shaping a summary of all these ideas, however, we can deduce the following relationship:

\[
\text{Performance} = \text{Effectiveness} + \text{efficiency}
\]

Discussing the economic efficiency, we can define it as "the extent to which the effect proposed was achieved" (Băileşteanu, 2010), noting however that limiting its definition as a ratio between the results obtained and the effort submitted is not sufficient, being necessary to take into account the element of time, but also both the nature of the effects and the types of resources used.

Given that a modern enterprise is growing emphasis on human resources, this represents one of the most prominent categories used, its role being higher, as it is being "consumed" within each activity initiated within the enterprise. It becomes necessary to first know the average annual number of employees, but also its structure, consisting of a record on the level of qualifications, level of seniority, gender etc., each of these categories being identified by an average of employees.

2. THE IMPORTANCE OF OBJECTIVES FOR A CORRECT PERFORMANCE ASSESSMENT

In case of any business, in every field of activity, correctly identifying the mission, vision and objectives of the business may become one of the most important managerial aspects, as long as the whole strategy of the enterprise as well as the future results depend on how well we understand the purpose of our existence, as a whole. According to John Naisbitt, “strategic planning itself is worthless unless there is first a startegic vision”. A “clear vision, mission statement, objectives and business description are important points of departure” (http://www.virtueventures.com/files/mdbl-chapter2.pdf), showing us exactly what do we want to achieve, from at least two main points of view, namely the financial sustainability and the social impact.

This way, the main objectives proposed to be achieved, in terms of performance, become even “tangible milestones”.

Though, even if, when researching the websites of companies, most of these mention all three aspects, we further notice that even if these exist in theory and are very well formulated, most of the employees are not familiar with the ideas promoted as targets to be achieved in terms of vision and objectives.

We refer to vision as a complex concept, through which a company shapes the future direction of action, embracing both challenges and opportunities, while the mission describes mainly the purpose of existence for the company and the goals desired to be achieved. The objectives of a business, on the other hand, should be considered a direction to be followed in the
attempt to improve the activities developed, being essential to be designed in a way that may assure the continuity and sustainability of the overall existence of the enterprise, by enhancing the level of turnover, profit, also market share and success (Masters, 2011).

Literature (Almasri et al, 2013) state that nowadays, small business have a major benefit over larger companies “by attaching manager to the mission and purpose of their organization and enable them to see what they’re doing is contributing to that purpose in a meaningful way” (Almasri, Alsaraireh, Bader, 2013).

3. RESULTS AND CONCLUSIONS

Between September 2015 and October 2015 we conducted a research in the Caras Severin county, which aimed at identifying the perception that employees have on the issue of the performance, level of familiarity with the objectives of the enterprise and also risk management.

The research was conducted on a representative sample of 100 employees, who develop their activities in all fields, not only at microenterprises, but in small and medium sized enterprises, also. In determining the sample, the calculations were based on the available data about the overall population and also on the estimations performed using the following formula, with a degree of error of ± 5%:

First, we conducted a study regarding the employee perception of the level of familiarity with the objectives at enterprise level. The conclusions can be summarized as follows: most employees (49.67%) are familiar with the main objectives of the enterprise, which allows them to carry out their activities in accordance with their general objectives across the organization. 44.5% of the individuals interviewed declare an average level of knowledge regarding objectives and performance standards, which may reflect a gap in terms of a production delay or noncompliance between work and performance expected by management. This may imply a more severe need for a risk analysis.

Respondents’ perception on the degree of familiarity with the objectives and standards of performance of the company, also with the level of risk management, is illustrated by the category of SMEs. We noticed that there are relatively few cases where performance standards are known to a small extent by employees, whether referring to micro, small and medium enterprises mention. The percentages related to a medium level of familiarity, ie a high level, are close.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>( \bar{x} = \frac{\sum_{i=1}^{m} (x_i * n_i)}{\sum_{i=1}^{m} n_i} )</th>
<th>( \sigma^2 = \frac{\sum (x_i-\bar{x})^2 * n_i}{\sum n_i} )</th>
<th>( \sigma = \sqrt{\sigma^2} )</th>
<th>( \nu = \frac{\sigma}{\bar{x}} * 100 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>2.44</td>
<td>0.36</td>
<td>0.60</td>
<td>24.59</td>
</tr>
</tbody>
</table>

source: computation made by authors

The indicators that can be found in the table above help us to determine whether the sample selected was representative. Based on the calculation of the weighted arithmetic average, standard deviation, dispersion and the coefficient of variation, according to the results obtained
we can confirm that the sample was representative, the value of 24.59% for the coefficient of variation showing a high uniformity and reduced scattering.

The analysis of responses by area of work, and indicates the following conclusions:

- For all industries, there is a high level of employee familiarity with the objectives and standards of performance of the company where they work. The percentage of those who declare a very low level of knowledge of these issues is low in all cases, except construction and trade fields, where 9.46% and 7.93% of respondents identify the first choice of answer. On the opposite side are tourism and agriculture, where we notice a rate of 0%, corresponding to a lack of familiarity with expected performance.

- In all other cases, the subjects declared at a major level, at least an average knowledge of objectives.

- Higher levels of familiarity with the objectives and performance standards of the company can be identified in the case of employees in micro-enterprises (80%) in tourism, also in the case of small businesses (75%), especially for the employees of small businesses in the field of agriculture - 71.43%.

<table>
<thead>
<tr>
<th></th>
<th>A Low level of knowledge</th>
<th>B Medium level of knowledge</th>
<th>C High level of knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agriculture</strong></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Microenterprises</td>
<td>0%</td>
<td>57.14%</td>
<td>42.86%</td>
</tr>
<tr>
<td>Small enterprises</td>
<td>0%</td>
<td>28.57%</td>
<td>71.43%</td>
</tr>
<tr>
<td>Medium sized enterprises</td>
<td>0%</td>
<td>83.33%</td>
<td>16.67%</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td>2.52%</td>
<td>45.28%</td>
<td>52.20%</td>
</tr>
<tr>
<td>Microenterprises</td>
<td>1.89%</td>
<td>41.51%</td>
<td>56.60%</td>
</tr>
<tr>
<td>Small enterprises</td>
<td>1.96%</td>
<td>49.02%</td>
<td>49.02%</td>
</tr>
<tr>
<td>Medium sized enterprises</td>
<td>3.64%</td>
<td>45.45%</td>
<td>50.91%</td>
</tr>
<tr>
<td><strong>Commerce</strong></td>
<td>7.93%</td>
<td>50.61%</td>
<td>41.46%</td>
</tr>
<tr>
<td>Microenterprises</td>
<td>5.36%</td>
<td>69.64%</td>
<td>25%</td>
</tr>
<tr>
<td>Small enterprises</td>
<td>11.32%</td>
<td>41.51%</td>
<td>47.17%</td>
</tr>
<tr>
<td>Medium sized enterprises</td>
<td>7.27%</td>
<td>40%</td>
<td>52.73%</td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td>6.47%</td>
<td>36.47%</td>
<td>57.06%</td>
</tr>
<tr>
<td>Microenterprises</td>
<td>5.26%</td>
<td>40.35%</td>
<td>54.39%</td>
</tr>
<tr>
<td>Small enterprises</td>
<td>7.27%</td>
<td>30.91%</td>
<td>61.82%</td>
</tr>
<tr>
<td>Medium sized enterprises</td>
<td>6.90%</td>
<td>43.10%</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Tourism</strong></td>
<td>0%</td>
<td>30.77%</td>
<td>69.23%</td>
</tr>
<tr>
<td>Microenterprises</td>
<td>0%</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>Small enterprises</td>
<td>0%</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Medium sized enterprises</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Constructions</strong></td>
<td>9.46%</td>
<td>43.24%</td>
<td>47.30%</td>
</tr>
<tr>
<td>Microenterprises</td>
<td>64%</td>
<td>32%</td>
<td>4%</td>
</tr>
<tr>
<td>Small enterprises</td>
<td>29.17%</td>
<td>54.17%</td>
<td>16.66%</td>
</tr>
<tr>
<td>Medium sized enterprises</td>
<td>48%</td>
<td>44%</td>
<td>8%</td>
</tr>
</tbody>
</table>

source: computation made by authors

According to the objectives identified and the level of familiarity of employees to this aspect, we can recommend the establishment of an organizational structure for allocating risk management responsibilities, as well as the development of processes and also risk policies, for a
better control. Both organizational processes and the organizational culture represent factors that may influence the culture of an enterprise and the future evolution in terms of both financial and social aspects.

![Figure 1 Performance analysis](source: interpretation made by authors)

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STUDY REGARDING THE BANKRUPTCY RISK FOR AN INDUSTRIAL ENTERPRISE

Suzana DEMYEN¹
Jeanina CIUREA²

ABSTRACT

Due to the turbulent environment, in order to face the inherent challenges and the conditions imposed on the market, it is necessary for an enterprise to be creditworthy, therefore to be able to meet its obligations due at a time. Any failure which occurs in developing its activities, can also lead to the bankruptcy of the company. There are a number of criteria governing the identification of firms in difficulty: insolvency, indebtedness or the existence of facts liable to jeopardize the continuity of the business. The first part of the paper comprises an approach from the theoretical perspective of the concept of risk of bankruptcy, while the second seeks to illustrate the perspective of a real example, also the calculation or determination of this type of risk.

KEY WORDS: risk, bankruptcy, enterprise, results

JEL: D81, G32

1. THE CONCEPT OF RISK. THEORETICAL APPROACH

"Many are looking frantically the certainty and the elimination of risks without realizing that the future cannot be sure, it cannot be known in advance and that in fact risks have to be faced, not eliminated" (Băileşteanu, 1998).

According to literature, the "risk measures the variability of the results of the enterprise" (Rusu, 2006), is a phenomenon that occurs "due to the lack of knowledge regarding future actions or events", but in order to be rational in economic terms, it does not mean eliminating all risk but the adaptation to these” (Băileşteanu, 1998).

Mainly, the risk represents a measure of uncertainty implied by an investment. In other words "the risk represents the possibility for a future action to generate losses that will affect the patrimonial interests, the activity and the results of an economic agent" (Buglea, 2010).

The activity of an enterprise is subject to risk at any time, “the prerequisite for the smooth functioning of the business risk management being their correct identification” (Turcu, Feraru, Ceocea, 2014). Generally, the risk represents the probability for an undesirable event to occur. Depending on its position on the market, but also on the economic and financial situation or even the economic environment in which the activity it is developed, a company can support in an easier or a harder manner the risks that occur (Lala Popa, Miculeac, 2015). Basically, no economical activity is free of risks, even if the intensity can be different, depending on several aspects.

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In practice, the most common forms of risk that can be mentioned are the following (Lala Popa, Miculeac, 2013): the country risk, the commercial risk, the currency risk, the operational risk, the financial risk, the bankruptcy risk. The identification of the risk is reflected in an "iterative" process (Rusu, 2006), the correct identification of the type of risk being essential from the perspective of a systematic approach, at which should participate not only the team members of the project, but also other categories of users of the economic and financial information of the enterprise.

This approach of the concept of risk involves a development from two points of view. Thus:
1. one approach involves focusing on the unwanted events that may harm or determine loss, an approach called also the perspective regarding the pure risk.
2. an approach regarding obtaining the information necessary to make a correct decision.

Consistent with the forms that a risk may take, the issue of analysis can be structured as follows:
- the economic risk analysis (exploitation)
- the financial risk analysis
- the analysis of bankruptcy risk.

“Small and medium sized enterprises are the predominant type of business in all OECD economies and typically account for two thirds of all employment” (Altman, Sabato, Wilson). At the same time, the failure of these companies take place often, some of the main reasons being the lack of capitalization and planning. The development of a viable activity, in order to safeguard the future of the company is an essential issue that involves effort and also permanent attention for the evolution of the internal and external environment, specific for the industry. Bankruptcy is the last stage in the economic existence of an enterprise (Lala Popa, Miculeac, 2013). In literature, the term failure is often considered the equivalent of bankruptcy. The bankruptcy risk is defined as the possibility of occurrence of the failure to honor the obligations of the company, born from previous commitments or contracted in current operations. Measuring the bankruptcy risk is considered to be the most important step that must be taken into account for a future analysis, so that a potential major risk may be identified in time.

"The risk of bankruptcy (insolvency) expresses the possibility of occurrence of the failure to honor all obligations, as consequence to the completion with uncovered losses of the previous years and which have exhausted the full equity" (Holt, 2009).

"The identification of risks seeks not only the exposure to risk of both property rights and human resources, but also the potential hazards that generate these exposures" (Rusu, 2006). This is accomplished in two well defined stages:
- the perception of risks;
- the awareness of the level of impact and the risk itself.

2. THE ANALYSIS OF BANKRUPTCY RISK THROUGH STATISTICAL METHODS

"The assessment of risk regarding the launching and maintenance of a business on a competitive market involves the use of several statistical methods, including some short-term methods, of which we can mention the scoring method or credit scoring ". The goal of this method is to determine for each firm an indicator called "scoring", in order to estimate the
bankruptcy level of the enterprise. Among the most popular models we include: The Altman model, The Conan-Holder model, The Central Bank Balances of France.

Bankruptcy risk analysis using statistical methods can be accomplished through foreign statistical models or Romanian statistical models. Next, we will review the most important of them:

1. **foreign statistical models**

<table>
<thead>
<tr>
<th>Model</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Altman</strong></td>
<td>[ Z = 1,2X_1 + 1,4X_2 + 3,3X_3 + 0,6X_4 + 0,999X_5 ]</td>
</tr>
<tr>
<td></td>
<td>( x_1 ) = working capital / total assets = fond rulment / activ total</td>
</tr>
<tr>
<td></td>
<td>( x_2 ) = reinvested profit / total assets</td>
</tr>
<tr>
<td></td>
<td>( x_3 ) = gross result of the activity / total assets</td>
</tr>
<tr>
<td></td>
<td>( x_4 ) = equity / total debts</td>
</tr>
<tr>
<td></td>
<td>( x_5 ) = net turnover / total assets</td>
</tr>
<tr>
<td><strong>Levels</strong></td>
<td></td>
</tr>
<tr>
<td>I: creditworthy companies ( Z &gt; 3 ) or 2,7</td>
<td></td>
</tr>
<tr>
<td>II: companies with temporary financial difficulties, that can be fixed if there is applied a correct strategy, according to situation ( 1,8 &lt; Z &lt; 3 ) sau 2,7</td>
<td></td>
</tr>
<tr>
<td>III: bankrupt firms ( Z &lt; 1,8 )</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conan-Holder</strong></td>
<td>[ Z = 16X_1 + 22X_2 - 87X_3 - 10X_4 + 24X_5 ]</td>
</tr>
<tr>
<td></td>
<td>( x_1 ) = current assets - stocks / current liabilities</td>
</tr>
<tr>
<td></td>
<td>( x_2 ) = permanent capital / total liabilities</td>
</tr>
<tr>
<td></td>
<td>( x_3 ) = financial expenses / turnover</td>
</tr>
<tr>
<td></td>
<td>( x_4 ) = personnel expenses / value added</td>
</tr>
<tr>
<td></td>
<td>( x_5 ) = the result of exploitation / value added</td>
</tr>
<tr>
<td><strong>Levels</strong></td>
<td></td>
</tr>
<tr>
<td>I: creditworthy companies ( Z &gt; 9 )</td>
<td></td>
</tr>
<tr>
<td>II: companies with temporary financial difficulties, that can be fixed if there is applied a correct strategy, according to situation ( 4 &lt; Z &lt; 9 )</td>
<td></td>
</tr>
<tr>
<td>III: bankrupt firms ( Z &lt; 4 )</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Central Bank Balances of France</strong></td>
<td>[ Z = -1,255X_1 + 2,003X_2 - 0,824X_3 + 5,221X_4 - 0,689X_5 - 1,164X_6 + 0,706X_7 + 1,408X_8 -85,544 ]</td>
</tr>
<tr>
<td></td>
<td>( x_1 ) = financial expenses / the result of exploitation</td>
</tr>
<tr>
<td></td>
<td>( x_2 ) = permanent capital / total assets</td>
</tr>
<tr>
<td></td>
<td>( x_3 ) = the result of exploitation / total debt</td>
</tr>
<tr>
<td></td>
<td>( x_4 ) = the result of exploitation / turnover</td>
</tr>
<tr>
<td></td>
<td>( x_5 ) = the average balance of payables / inventories</td>
</tr>
<tr>
<td></td>
<td>( x_6 ) = ( \Delta ) value added / value added year 0</td>
</tr>
<tr>
<td></td>
<td>( x_7 ) = average balance of receivables / turnover * 360</td>
</tr>
<tr>
<td></td>
<td>( x_8 ) = ( \Delta ) current assets / value added</td>
</tr>
<tr>
<td><strong>Levels</strong></td>
<td></td>
</tr>
<tr>
<td>I: companies with an appropriate financial situation ( Z &gt; 0,125 )</td>
<td></td>
</tr>
<tr>
<td>II: companies with an uncertain financial situation ( - 0,25 &lt; Z &lt; 0,125 )</td>
<td></td>
</tr>
<tr>
<td>III: companies in financial difficulty ( Z &lt; - 0,25 )</td>
<td></td>
</tr>
</tbody>
</table>

**Taffler Model**
Function \[ Z = c_0 + c_1X_1 + c_2X_2 + c_3X_3 + c_4X_4 \]

- \( X_1 \) represents the current assets return rate and is calculated as a ratio of the gross result and the current assets (53%)
- \( X_2 \) represents the general liquidity ratio and is calculated as a ratio between the current assets and current liabilities (13%)
- \( X_3 \) represents the current financial dependency ratio and is calculated as a ratio of current liabilities to total assets (18%)
- \( X_4 \) represents the period of time when the company can finance the production activity using its assets, without cashing invoices (16%)

**Robertson Model**

Function \[ Z = 3.0X_1 + 3.0X_2 + 0.6X_3 + 0.3X_4 + 0.6X_5 \]

- \( X_1 \) = (Net turnover - total assets) / Net turnover
- \( X_2 \) = gross result of the exercise / total assets
- \( X_3 \) = (Current Assets - Total debts) / Total debts
- \( X_4 \) = (Equity - Loans) / Total Debts
- \( X_5 \) = (Liquid Assets - overdrafts) / Loans

2. **Romanian statistical models**

**The „Anghel” Model**

Function \[ A = 5.667 + 6.371R_1 + 5.393R_2 - 5.1427R_3 - 0.00205R_4 \]

- \( R_1 \) = net profit / total income
- \( R_2 \) = cash flow / total assets
- \( R_3 \) = debt / total assets
- \( R_4 \) = debt / net turnover

Levels
- \( A < 0 \) the risk is imminent
- \( 0 < A < 2.05 \) the situation is uncertain
- \( A > 2.05 \) the financial situation is good

**The „Băileşteanu” Model**

Function \[ B = 0.444G_1 + 0.909G_2 + 0.052G_3 + 0.0333G_4 - 1.414 \]

- \( G_1 \) = current assets / current liabilities
- \( G_2 \) = net profit + depreciation / reimbursement rate in the medium and long term loan + interest
- \( G_3 \) = turnover / clients
- \( G_4 \) = profit / cost

Levels
- \( B < 0.5 \) imminent bankruptcy
- \( 0.5 < B < 1.1 \) high level of risk
- \( 1.1 < B < 2 \) low level of risk
- \( B > 2 \) almost non-existent risk

**The „Ivoniciu” Model**

Function \[ I = 0.333R_1 + 5.555R_2 + 0.0333R_3 + 0.71429R_4 + 1.333R_5 + 4R_6 \]

- \( R_1 \) = total revenue collected and collectible / total assets (less the expenses in advance)
- \( R_2 \) = ability of self-financing / total revenues collected and collectible
- \( R_3 \) = total revenue collected and collectible / receivables corrected
3. CASE STUDY. THE ANALYSIS OF BANKRUPTCY RISK FOR A COMPANY IN THE INDUSTRIAL FIELD

In compiling this case study, we used real data, taken from the balance sheets of a company with industrial activity, which we will hereinafter generically name The Company. The data were taken from the site of the Bucharest Stock Exchange, where the Company is listed.

As identification data, we can summarize the following: the company analysed has engaged in industrial activity, gaining a long tradition in this area. The headquarters is in Resita, fabricating over time a wide variety of products, some gaining prestige at national or international level, in the domain of metallurgical industry and energy.

In order to analyze the risk of bankruptcy, there were used the following data for the years 2014 and 2015, necessary to calculate the variables for the two equations, corresponding to the two statistical models Altman and Conan Holder:

Tabel 1

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fond de rulment</td>
<td>-398,577,342</td>
<td>-602,746,876</td>
</tr>
<tr>
<td>Activ total</td>
<td>462,814,340</td>
<td>267,219,537</td>
</tr>
<tr>
<td>Active imobilizate</td>
<td>194,783,724</td>
<td>186,478,200</td>
</tr>
<tr>
<td>Active circulante</td>
<td>268,030,616</td>
<td>80,741,337</td>
</tr>
<tr>
<td>Stocuri</td>
<td>8,824,545</td>
<td>24,551,126</td>
</tr>
<tr>
<td>Rezerve</td>
<td>18,035,685</td>
<td>18,061,026</td>
</tr>
<tr>
<td>Valoarea adăugată</td>
<td>42,959,947</td>
<td>22,429,146</td>
</tr>
<tr>
<td>Excedentul brut din exploatare</td>
<td>11,784,254</td>
<td>-8,475,741</td>
</tr>
<tr>
<td>Datorii totale</td>
<td>664,699,908</td>
<td>681,994,003</td>
</tr>
<tr>
<td>Capital permanent</td>
<td>-453,495,934</td>
<td>-658,973,718</td>
</tr>
<tr>
<td>Cheltuieli financiare</td>
<td>7,527,205</td>
<td>3,536,838</td>
</tr>
<tr>
<td>Cheltuieli cu personalul</td>
<td>29,326,102</td>
<td>28,786,550</td>
</tr>
<tr>
<td>Cifra de afaceri</td>
<td>31,525,387</td>
<td>34,812,887</td>
</tr>
</tbody>
</table>

source: the balance sheets of the company for the years 2014, 2015

The computing methods are announced under the following two tables, corresponding to the years 2014 and 2015.
Tabel 2

Results for the year 2014

<table>
<thead>
<tr>
<th></th>
<th>ALTMAN</th>
<th>CONAN-HOLDER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 0.9X_5 ]</td>
<td>[ Z = 0.24R_1 + 0.22R_2 + 0.16R_3 + 0.87R_4 + 0.1R_5 ]</td>
</tr>
<tr>
<td>X_1</td>
<td>Working capital / total assets</td>
<td>R_1 Gross operating surplus / total debts</td>
</tr>
<tr>
<td></td>
<td>-0.8612</td>
<td>0.0177</td>
</tr>
<tr>
<td>X_2</td>
<td>Reserve / total assets</td>
<td>R_2 Permanent capital/total debts</td>
</tr>
<tr>
<td></td>
<td>1.8036</td>
<td>-0.9799</td>
</tr>
<tr>
<td>X_3</td>
<td>Gross operating surplus / total assets</td>
<td>R_3 Current assets without socks/AT</td>
</tr>
<tr>
<td></td>
<td>0.0255</td>
<td>0.5601</td>
</tr>
<tr>
<td>X_4</td>
<td>Own funds/total debts</td>
<td>R_4 Financial expenses / turnover</td>
</tr>
<tr>
<td></td>
<td>-0.6823</td>
<td>0.2388</td>
</tr>
<tr>
<td>X_5</td>
<td>turnover / total assets</td>
<td>R_5 Personnel expenses / Value added</td>
</tr>
<tr>
<td></td>
<td>0.0681</td>
<td>0.6826</td>
</tr>
</tbody>
</table>

Condition
Z \leq 1.8 \rightarrow bankruptcy

\[ Z = 1.2*(-0.8612) + 1.4*1.8036 + 3.3*0.0255 + 0.6*(-0.6823) + 1*0.0681 = -1.03344 + 2.52504 + 0.08415 - 0.40938 + 0.0681 = 1.23447 \]

Condition
Z < -0.05 \rightarrow bankruptcy

\[ Z = 0.24 * 0.0177 + 0.22*(-0.9799) + 0.16*0.5601 - 0.87*0.2388 - 0.10*0.6826 = 0.004248 -0.215578 + 0.089616 - 0.207756 - 0.06826 = -0.3595 \]

source: computation made by authors

Considering the boundaries of literature, depending on their score, companies can rank levels, as follows:

- In the case of the function Z - Altman, a value greater than 3 indicates a situation of solvency, while bankrupt companies get a result less than 1.8. Z-score calculation based on the data analyzed in the company's balance sheet from the present case study leads to a value of 1.23447, which makes us conclude that in the year 2014, the company went through a difficult period, facing a high risk of bankruptcy.

- The function Z calculated by the method Conan Holder does not give us a different picture, and this time it can be achieved a precise theoretical delimitation of three possible situations, such as:
  - a level represented by solvable companies with a Z score > 9
  - an intermediate level represented by companies facing temporary financial difficulties, but which that can be fixed by applying proper management strategies, with the values of the function Z in the range (4, 9)
  - respectively, a level appropriate for bankrupt companies with a Z score lower than 4.

In the case analyzed by us, we calculated a negative Z score, -0.3595, which leads us to conclude a categorically state of bankruptcy of the company.
Tabel 3

Results for the year 2015

<table>
<thead>
<tr>
<th>ALTMAN</th>
<th>CONAN-HOLDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>$Z = 1,2X_1 + 1,4X_2 + 3,3X_3 + 0,6X_4 + 0,9X_5$</td>
<td>$Z = 0,24R_1 + 0,22R_2 + 0,16R_3 + 0,87R_4 + 0,1R_5$</td>
</tr>
<tr>
<td>$X_1$ Working capital / total assets</td>
<td>$R_1$ Gross operating surplus / total debts</td>
</tr>
<tr>
<td>-2,2556</td>
<td>-0,0124</td>
</tr>
<tr>
<td>$X_2$ Reserve / total assets</td>
<td>$R_2$ Permanent capital / total debts</td>
</tr>
<tr>
<td>0,0676</td>
<td>-2,4660</td>
</tr>
<tr>
<td>$X_3$ Gross operating surplus / total assets</td>
<td>$R_3$ Current assets without socks / AT</td>
</tr>
<tr>
<td>-0,0317</td>
<td>0,2103</td>
</tr>
<tr>
<td>$X_4$ Own funds / total debts</td>
<td>$R_4$ Financial expenses / turnover</td>
</tr>
<tr>
<td>-0,9662</td>
<td>0,1016</td>
</tr>
<tr>
<td>$X_5$ turnover / total assets</td>
<td>$R_5$ Personnel expenses / Value added</td>
</tr>
<tr>
<td>0,1303</td>
<td>1,2834</td>
</tr>
</tbody>
</table>

Condition

$Z \leq 1,8$ - bankruptcy

$Z = 1,2*(-2,2556) + 1,4*0,0676 + 3,3*(-0,0317) + 0,6*(-0,9662) + 1*0,1303 = -2,7067 + 0,09464 - 0,10461 - 0,57972 + 0,1303 = -3,1661$

Condition

$Z < -0,05$ - bankruptcy

$Z = 0,24 * (-0,0124) + 0,22*(-2,4660) + 0,16*0,2103 - 0,87*0,1016 - 0,10*1,2834 = -0,002976 - 0,54252 + 0,033648 - 0,088392 - 0,12834 = -0,72858$

source: computation made by authors

The data corresponding for the year 2015 does not give us a better perspective on risk, so that according to the table above, by the calculations made, we conclude the following:

- The Score calculated by the Altman method is negative, -3.1661 and indicates a high risk of bankruptcy, hovering far below the minimum level of 1.8. Therefore the company faces a period of decline, categorically made worse compared to the previous year.
- The above conclusion is supported by the score calculation through the method Conan Holder, which strengthens our claim that the company is bankrupt. The score is calculated this time - 0.72858, well below the minimum threshold of four.

CONCLUSIONS

Bankruptcy cases are different. Therefore we can speak of an underperforming management, which seems to be the basis of more than 50% of all bankruptcies. The main managerial errors can be (Yazdanfar, Nilsson, 2008):
- a wrong financial consultancy;
- the lack of communication with employees;
- the cost of control loss;
- an inadequate marketing policy;
- production overcapacity etc.

Internal malfunctions that can occur are: unskilled workforce, the loss of important projects, image degradation, fraud;

External factors may be: competition, lifecycle of the enterprise; it is known that all products, services and even businesses have a limited life; economic recession, disasters etc.
The performance of a company is directly related to risk, given that the results are conditioned by several factors external by nature, which influence not only the competitiveness but also the viability of an organization. "Between Risk and bankruptcy is is found a direct link in the sense that as an activity involves a greater risk, the possibility of bankruptcy is higher" (Băileșteanu, 1998), but the negative approaches, however, are no longer topical. This phenomenon must be looked at objectively, as a factor of progress rather than an element of reducing performance, which, properly managed, can contribute to the preparation of accurate future plans.

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THE DECREASE OF CULTURAL PERFORMANCE - THE CASE OF EU METROPOLITAN REGION NUTS 3 424 TIMIS

Vasile DOGARU

ABSTRACT

The most economic dynamics of EU regions between 2000 and 2010, as Timis NUTS 3424 (RN3424T), seems to them provide a secure future. The article has two objectives: to observe relative decrease for development beyond 2010 and a weak innovative process for region RN3424T. The analysis reveals a surprising aspect: the overall performance is reduced and the relative consumption increases after 2000 for resources and energy; b. the innovation fostered through achievements intellectual has a low level. Timisoara, as maineconomic space of RN3424T, is ranked on place 250 of 274 EU cities. Innovation is necessary prioritary in regions lagging behind economically as RN3424T. Some confusion between metropolitan and urban areas could manipulate the data and some metrics. The election as EU cultural capital of city Timisoara raises an issue: it is possible to support scientific values in technological and socio-economic sectors by culture? The culture is here defined as manifestation of human achievement intellectual regarded collectively for innovative process in urban and rural areas. Lack of integrated solutions in renewable capture in city Timisoara is another issue, not found in the new General Urban Plan. The analytical differentiation between development-evolution for Timisoara can be logically noticed by innovative cultural approach.

KEY WORDS: development and evolution, culture, innovation, economic convergence, resource saving, Timisoara metropolitan region NUTS 3

JEL: F15, Z10, O31, O21, Q56

1. INTRODUCTION

The high economic dynamics of some EU regions seems to them provide a secure future. In the period 2000-2010 the metropolitan region Timis NUTS 3424 (RN3424T) was in EU on the first place as GDP growth rate. Recently Timisoara was the winner of cultural capital contest for 2021. For the period 2010-13 the GDP rate and the innovative process (2008-2012) for Timisoara metropolitan region was steady state and respectively decreasing. Under these circumstances for the next period the balance between development and culture is a challenge for Timisoara which can be viewed as a passing from knowledge to the understanding (Nicolescu, 2008).

The metrics for development is focused on two classifications of European spatial areas: by NUTS regions and by settlements: cities, towns and suburbs and rural areas. Some EU Strategy, as Heating and Cooling Strategy (EC, 2016)), use the region classification instead of settlement classifications, without the right explanations. This kind of overlapping of two

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classifications was met also in the recent discussions to build the metropolitan area Timisoara-Arad.

Along with a new problem of scientific activity and cultural act arise in Romania reversal classifications and different point of views: multiple strategies, visions, country projects, projects about strategies etc. For most tenacious and smart scientist it is difficult to penetrate the meanings of these official documents, projects or simple paper and pencil (Georgescu-Roegen, 1971, 1979, 1982). In addition they contain superficial analysis. Sometimes it's not related to periods although they are officially approved (recent spatial plan the strategy of Timis county). These documents /projects are seen as cultural tools for communities. Through discussions could generate may trigger a real war intellectual. These tools are based on various dates, periods and directions and different objectives regarding to the same real (Nicolescu, 2008) processes.

In fact we have a participation of non-structured expertise in building the (unique) strategy for the region, in explaining the evolution based on unique regional vision and/or on processes projection. This action integrates seamlessly based on the principles of compressibility and comprehensibility (Georgescu-Roegen, 1971) the technological, economic, social and cultural processes. In analytical plan requires a transdisciplinary approach (Nicolescu, 1996a, 1996b).

The role of universities lies in creating strategies and regions of a country. The universities and research institutes have the task set by the EU to support (smart) specialization through its own innovation. Prerequisite is the existence of a vision for each region (SDFG, 2011). For countries that do not have structural stability like Romania is required priority to have the unique strategy and vision. For developed countries evolution processes can occur by itself based on free markets. For the European cities is open in parallel the second contest for evolution-development, as for innovative cities. The lack of extended approach for cultural capital concept could be a price to higher for the EU developing regions for efficient resources use. Otherwise, the alloted fund can be wasted. Moreover, the culture is defined as "arts and other manifestations of human intellectual achievement regarded collectively" (Oxford Dictionary, https://en.oxforddictionaries.com/definition/culture). The concept could be seen as tool for the Whole principle (Georgescu-Roegen, 1971) and for transdisciplinarity (Nicolescu, 1996b) for the all sciences, culture and other antropomorphic fields.

The lack of a uniform approach to regional development in the whole country is visible in all national (public) strategies and simple paper and pencil documents in Romania. The requirement is known in Economics as the principle of the Whole. Few national strategies (legally approved) discusses the development of NUTS 3 regions (eg Strategy about competitiveness 2014-2020).

Timisoara is among the NUTS 2 regions of the EU which has a social economic vision of regional level (Vison 2050). Another visons can be found in some NUTS 2 regions as Flandre (SDFG, 2011). The Romanian government decided recently to design a national vision for short periods (2017-2020). This is a contradiction in terms due to a short period. Recently, it was proposed a Country Plan (www.precidency.ro) for tracing some guidelines, possible for a unique strategy for Romania. This plan seems to be very likely beyond paper and pencil exercise already.

Our paper has the aim to design some requirements for evolution of Region Timis and Timisoara. The balance between evolution-development and cultural process is a tool to join the multiple realities of sciences and the real processes.
2. METHODOLOGY

In this research we use the transdisciplinary method (Nicolescu, 2008), combined with Roegenian model (Georgescu-Roegen, 1971). The model is compound by basic calculations and simple dialectical explanations, complementary to a complete and accurate measurements. We use the following scheme consisting by three features:

a. the use of six socio-economic principles (Dogaru, 2012a) to overcome the concept of segmented reality by different social sciences. In human activities the principle of cooperation is basically. In the methodological approach the principles of the systemic approach and of the Whole (Georgescu-Roegen, 1971) are central.

b. the use of culture as a tool to unify realities of social sciences and to move the explanations to the real (process) for understanding (Nicolescu, 2008). The informations are moving from knowledge at understanding.

c. assuming a reasonable thinking (Georgescu-Roegen, 1971) to the individual, based on observation of real processes, not by multiple segmented realities noticed in various sciences. The solutions of good choice, for example, is based on minimizing effort and maximizing income – salary income, profit or other economic (monetary) values – based on comparative advantage principle.

The coherence lack to join two levels of science realities and real can be solved using the principle of reasonableness (Georgescu-Roegen, 1971). So, an imperfect analytical mind can not achieve a perfect model (i.e. perfect market), but not even one rational; only at most the reasonable one. Therefore the strategies union may be a solution that leads us through transition to real of a lot of realities found in the various sciences.

The culture is open to universality, so that the efforts to join all levels of reality, in the sense of Nicolescu (2008) can achieve a cohesion in human development efforts. The definition of culture as "arts and manifestations of human intellectual achievement” justifies the approach of real process by accepting multiple realities, based on the complementarity principle of Niels Bohr. The culture could be considered in the fact as human instrument, according to the method of Nicolescu. The culture can be a bridge for real processes because, for example, it has a simpler coding of messages. The culture could to reach more quickly the level of understanding.

In this research we consider culture as an instrument. We will not discuss here the limits of culture.

In essence the sciences observe reality having separate different scientific grammars. Trying to consider separately the result of scientific researches (the Object) to the Subject-researcher is considered a failure (Georgescu-Roegen, 1971). In this case we realize accumulation of knowledge without understanding. The change in the period 2000-2020 at every 7 years the EU objective is an example.

Some measurements are made using the data and the classifications of regions and settlements. The regions are classified as metropolitan, intermediate and thinly-populated areas. We will use the data about the metropolitan areas instead of urban areas due to two reasons: a. lacking of data about urban area for Timisoara. A justification is based on Whole principle – the part Timisoara is included in region Timis 3 424; b. the second, due to availability of few funds for developing regions during EU programing period. The results could be better if the approach is for the whole region, not only for the city Timisoara. As a possible result the discussion about the future metropolitan-urban areas Timisoara-Arad could be a solution for Region Vest (to see Workshop for this subject, http://www.ermas2016.uvt.ro/programe.php).
3. RESEARCH

In analytical plan we propose to measure the integrated level of three successive EU objectives in the period 2000-2020. In transdisciplinary analytical plan the attempt is to join their measurement. It can be done simultaneously value added, resource saving and level of innovation.

In strictly analytical plan we will accept the culture as an instrument of transition between realities (of sciences and arts) and real process. The culture will include all human scientific achievements together with arts, including spiritual ones. We refer here to the achievements that require (more) cooperation, an wider acceptance of other individuals and cultural matrices in other regions. The matrices for each of the separate evolution is accepted, without interference sudden, including of massive population movements (to see the Brexit case and Sirian people migration).

In strengthening the position of EU regions can be an important first step the argumentation using (reasonable) of culture as a tool in social economic exchanges beyond the arts. The lack proof of rationality is periodically changed of objectives in the EU. Switching to target "the most competitive economy", to the convergence one shows a weakness in understanding. Smart specialisation objective also has cracks. The EU target for the 2014-2020 period has no calculation tool (Dogaru, 2016). In addition, the specialization is not measured by value added, separate from trade and out of explicit specialization.

The use of collective intellectual achievements can be done by measuring the added value growth. We notice the large gap of GDP growth between the two period for Timisoara metropolitan region (figure 1).

Note. for Brussel, 2003-2010, accessed on 08.10.2016, Eurostat, our calculus for graph figures.

**Figure 1**

The hierarchy of GDP growth rate for most dynamics EU metropolitan capital and for the six Romanian metropolitan regions, 2000-2010 and 2010-2013
The simple regressional relation between GDP per inhabitant and yearly growth of region show us the captation of relation by 32.84% (R2) and the slope by -1.57.

The second metrics based on the large cultural bridge between the arts-sciences and the real process is counting of figures for innovative processes. Simultaneously with the contest of European cultural capital, the European Union is organising the contest for European capital of innovation. In 2016, Amsterdam was declared the winner of the award, based on „holistic vision of innovation related to four areas of urban life: governance, economics, social inclusion, and quality of life”.

From 298 EU cities the figures for Patent applications to the EPO was recorded for 258 in 2003, 278 in 2008 and 283 in 2012 (Eurostat, 2016, series met_pat_eptot). The 298 metropolitan regions recorded a trend of patent as a result of the existence of clusters of firms located around large (multi)national companies. The engineering or technology sectors are two examples. A high ratios of patent applications per million inhabitants was recorded for metropolitan regions specialised in the automotive industry, such as München (17th place in 2012), Derby (17th place in 2012), and Stuttgart (17th place in 2012), and also for high-technology sectors in Eindhoven (17th place in 2012) and Rennes (17th place in 2012).

The patent applications to the EPO per million inhabitants for Timisoara was decreased between 2008 and 2018 with 0.59, following the same trend as GDP. The place in the serie was maintained in 2008 and 2012 (0.88, the last twelve percentile). The score of patent applications to the EPO per million inhabitants, metropolitan region in Romania is shown in the figure 2.

![Figure 2](image)

The score of patent applications to the EPO per million inhabitants, eight metropolitan regions in Romania, 2003, 2008 and 2012.

A normative level for Timisoara could be the median level of EU metropolitan regions by 141 Patents-EPO/million of inhabitants. This is the place 149 in serie, compared to nowaday 250 place kept by Timisoara. The gaining of hundred places is a good target for Timisoara in the next years.

The third metrics for for joining based on u arts and understanding the arts-sciences and the real proces is based on resource productivity. To achieve the statute of cultural capital including innovative characteristics Timisoara has this basic targets for resource productivity,
next to the GDP per inhabitant, established by Timis Council Strategy, according to the law 215/2001.

Table 1
Evolution of GDP and DMC per inhabitant, on aggregate levels of EU-28 and for region NUTS 3 424 Timiș, 2013 and 2050

<table>
<thead>
<tr>
<th>Region</th>
<th>Year</th>
<th>GDP/inh euro/inh</th>
<th>Resource productivity euro/ - kg DMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>UE28</td>
<td>2013</td>
<td>26,588</td>
<td>1.76</td>
</tr>
<tr>
<td></td>
<td>2050</td>
<td>68,587</td>
<td>3.2</td>
</tr>
<tr>
<td>Romania</td>
<td>2013</td>
<td>7,214</td>
<td>0.21</td>
</tr>
<tr>
<td></td>
<td>2050</td>
<td>27,565</td>
<td>2.1</td>
</tr>
<tr>
<td>Region Vest</td>
<td>2013</td>
<td>7,800</td>
<td>0.25</td>
</tr>
<tr>
<td></td>
<td>2050</td>
<td>34,993</td>
<td>2.5</td>
</tr>
<tr>
<td>Region NUTS 3 424 Timis, from which</td>
<td>2013</td>
<td>9,600</td>
<td>0.26</td>
</tr>
<tr>
<td></td>
<td>2050</td>
<td>62,413</td>
<td>3.2</td>
</tr>
<tr>
<td>Timisoara</td>
<td>2013</td>
<td>11,500</td>
<td>0.31</td>
</tr>
<tr>
<td></td>
<td>2050</td>
<td>66,500</td>
<td>3.51</td>
</tr>
</tbody>
</table>

Source: Eurostat, 2016; Strategy NUTS 3 Timis (research contract 45/2014); calculation made by author for 2050 and for NUTS 2 and 3 levels; DMC – domestic material consumption. GDP - gross domestic product.
For 2050 the figures are modeled.

For saving the resources (Dogaru, 2015b) in Timisoara the General Urbanistic Plan became a tool. According to General Urbanistic Plan (GUP), found in the stage of approval, the land surfaces for every street in Timisoara for captation of renewable energies is not located on the maps of GUP. The measures included in the Plan for Action for Sustainable Energy (PAED) require between 10-30% artificial land for ground source heating pumps; also more half roof surface of buildings for solar termic and photovoltaic pannels.

4. DISCUSSIONS

The analytical differentiation between development and evolution for Timisoara and Timis region can be logically noticed by innovative cultural approach.

The many strategies and other similar documents as paper and pencil raise a big question. If we add up all the targets in the strategy, the necessary funds would be over 100 times larger than the existing ones (Georgescu-Roegen, 1971). This aspect of exaggeration and lack of correlation is found in developing countries: in fact the manipulation by knowledge that can generate intellectual disputes without the possibility of reaching the understanding (Nicolescu, 2008).

Region NUTS 3 Timis and thus Timisoara achieved a GDP decline after 2010 and after 2008 for the innovation processes. A detailed analysis is needed especially in the new context of cultural capital. One explanation for this decline is the lack of continuity in innovation and its presence only as a phenomenon (by chance).
The winning of cultural capital for 2021 could be revived. Priority to support other intellectual achievements, are also included in the definition of culture through innovative processes as basic intellectual achievement in the EU today. So it can ensure a return to development and evolution. To move to the evolution required a continuous process of innovation. In this case the funds can be used more efficiently for the region development.

A proof of this necessity is that, in parallel, other developed cities participate in the innovation contest. We have so two EU world for development. A combination of classical cultural valences to Timisoara (related to arts) with other facets of intellectual can support a integration, proposed according to Nicholas Georgescu-Roegen and Basarab Nicolescu. It becomes an opportunity in the evolution of the region.

To design coherently the socio-economic evolution of Timisoara, region Timis and Romania we suggest Manoilescu generalised scheme (Dogaru 2000, 2005, 2006; Brolin, 2006) for the metrics of GDP/per inhabitant. We notice the stop of CA calculus to count value added for the entire trade exchange (to see IPTS Seville working documents), and not separately for the cooperation by specialisation of EU. The VA generated by comparative advantage (CA) is a measure of cooperation between human being or EU regions. The overlap of transfer of value added (VA) over the comparative advantage phenomenon is a mistake, perhaps one big mistake for European Union. It is comparable with the understanding of culture concept only for the arts.

The work is a signal for joining of the classical culture (arts) with the science and the spiritual level. The three domains can better explain the real (Basarab, 2008) processes. About the spiritual level we have not discussed here.

The completion of the Country Project proposed by the presidency institution can be implemented by a law. Such status may provide coordination of all existing strategies today by merging them into a single strategy. The strategies NUTS 3 may be annexes of this unique strategy. Two consequences can be fatal in the absence of legal validations that have continuity in collective actions: the multitude of existing strategies will ensure a divergence of views so that funds will be allocated ineffective, possible those for cultural capital in 2021. The consequence is imminent: productive activities and small-scale services will be maintained and will continue destructuring existing economic social system and of subsystems consisting of industrial, agricultural, service, including loss of connections between sub-sectors. The role of culture will be undermined.

The innovative processes ought to be integrated in this Country Project. In US, by example the innovative processes are stimulated continously. The big firms manage the innovative proceses also for small firms in the same or complementary areas.

5. CONCLUSIONS

The integration of various plans and strategies for the region Timis and Timisoara into national strategy is a cultural challenge, probably the biggest in the intellectual area. A cultural debate within communities of experts and their systematic work can generate a solution for an unique strategy for the regions, and further for Romania. For Timisoara, Timis county and other regions, the use of funds alloted for the cultural events to stimulate all human intellectual achievement appears as the main direction for the evolution of the standard of living.

1. The recent winner for cultural capital in 2021 Timisoara ought to design a evolution based on a qualitative leap. The culture is necessary for understanding of all processes and
activities of whole region. In other cases we will have a weak evolution. The young concept of development is sometime wrong used compared to evolution (Florian, 1973).

Timisoara and Timis region have to keep into account the EU best practices. As cultural capital could to evolve more quickly by innovative processes in socio-economic areas. The decrease of GDP pace in last years is a signal. The lack of innovation over a median level (141 Patents-EPO/inh) will stop in the next years before to take off.

2. A cultural city without a vision on long term to design the trend can not has a viable evolution. The Vision 2050 Timis is a part of Strategy 2014-2020, aproved by county decision and is referring also to Timisoara. The increase of productivity of resources by twelve times is a target which can be solved by innovation. As basic achievement, the innovations are today the core for every cultural process in Europe.

3. The methods of Georgescu-Roegen regarding use the resources and of Basarab Nicolescu about the transdisciplinarity approach could be easy used to design new targets for Region 3 424 and for Timisoara for the next years.

4. The confusion between urban areas and metropolitan areas/region could be solved by more data. Any middle European city located in a developing country as Romania ought to keep into account the main directions for a better development of the firms, people and of the whole region. The cases of cities Barcelona and Amsterdam are relevant. The too many strategies and plans in Romania instead of a unique strategy of regions could to waste the few resources which can be achieved today and in the next five years. The culture was and remain on the time arrow a deposit for large achievements. Timisoara has many innovative priorities in some technological areas (light, tram, micro hydro, PC). The captation of renewable sources in Timisoara (Dogaru, 2015a, 2015b) remains a main direction next to the increase of resource productivity.

REFERENCES


THE ACCOUNTING SYSTEMS’ DIVERSITY AND ITS CAUSES

Daniela GEORGESCU

ABSTRACT
Subscribing to the urge of the English philosopher Francis Bacon: “Vere scire est per causas scire,” in the last 30 years of the 20th century, the research’s orientation in the field of accounting turned toward identifying the causes that generated the differences between accounting systems. Most of the authors in specialty literature consider that the most significant causes that generate the accounting discrepancies are the legal and the tax systems, the preferred sources of funding and others.

From my point of view, analyzing the specialty literature and the evolution of the global economy, it can be easily observed the importance of the accounting information due to the role played by it in assuring the proper functioning of the enterprise’s activity; in other words, in the structure, control and forecasts regarding it (D. Cosma, 1998).

Nowadays, a professional accountant confronts challenges that have changed the system of values of this profession. It is no longer enough that an accountant has knowledge regarding the national accounting laws. To have his skills recognized, the accountant has to respect the professional rules, the international financial reporting standards, the ethics’ and quality’s standards.

KEY WORDS: Financial statements; financial reporting; accounting systems; globalization.

JEL: M41.

1. INTRODUCTION

To realize these objectives, it is necessary the existence of a well-organized accounting system, which uses principles, theories, laws, and accounting techniques that provide the needed accounting information to the users in order for them to take the proper decision.

Each national accounting system presents significant differences towards another country’s system, and this thing does not happen because of a national desire of personalization, but of a series of influencing factors that manifest differently from a country to another (economic, political, cultural, or social factors). They contribute to making the information necessity of the various users’ categories be different.

The evolution of the globalization phenomenon put a great pressure over those influence factors and, indirectly, over the national accounting systems. As I previously stated, each country has its own set of accounting rules which govern the financial reporting of the enterprises that operate on its territory.

This fact leads to a remarkable diversity regarding the drawing of the financial statements by the enterprises of each country. Usually, this diversity can be found in every aspect of the financial reporting, including the structure and type of the financial statements, the number of the elements composing them, or the methods used for evaluating the elements contained by the financial reporting.

Many years ago, the accounting was considered a technique that has principles and fixed rules that can be applied universally, whatever time and space (L. Campbell, 1990).
It was the starting point of the accountants in England, who considered that the main reason for which the accounting system of another country differs from their own is that the professional accountants from over there were less enlightened regarding the accounting domain. However, in the modern age, this theory has been countered by the specialists who thought that the accounting is a science and it was created by the society to collect, process, and communicate information. So, the financial statements are seen as a binder between the enterprise that draws them and the users who need the information.

In my opinion, the accounting system of a country is the product of a complex process during which the rules and accounting practices develop as a result of the interaction between those who elaborate the financial statements and their users. Each national financial reporting system was shaped by the medium in which it takes place; in other words, by the economy and society in which it functions.

The accounting legislation is mostly the result of the institutional sector, represented by the political, legal, and tax systems, which ensure the development of the rules, also considering the accounting practice. Therefore, it was proved that, for each new accounting system implemented, it is necessary to function for a while in parallel with the old system. That is because the accounting practice can confirm or disaffirm its viability.

The institutional sector is the society’s and culture’s image. A society with strong moral values and a significant culture will generate a well-organized institutional sector. In the specialty literature, culture means a set of values, ideals, and common beliefs that are shared by the residents of a country, if we refer to the national culture, or by the representatives of a group of interest, if it is about the accounting culture.

In the conditions of the economic development at a global level, the multinational enterprises confronted the problem of reporting information in the financial statements according to the different accounting systems of the countries involved. This thing disadvantages the companies which, in the moment of the consolidation of the financial-accounting information, at a central level, confront with major difficulties and the necessity of realizing restatements of the financial statements as they are presented in the accounting set of rules, used by the enterprise’s country of origin.

Due to the desire of eliminating these differences between the accounting systems, there were attempts of knowing the factors that influence the financial reporting at a global level and modeling them in order to obtain a set of accounting rules that ensures a uniform reporting of the information.

Identifying these factors of influence was the concern of the biggest centers of research in accounting. So, in their paper, “Comparative international accounting,” Nobes and Parker (1981) considered that the elements which influence the financial reporting in the different countries of the world are: the legal system, the tax system, the way it is ensured the enterprises’ financing, the culture, the accounting profession, along with the inflation and the random, accidental events. Other authors, such as F. Choi, C. Frost, and G. Meek (2001) add to these factors: the development level of the economy and education, or the import-export system of the accounting between different countries, found in some influence areas.

In my opinion, the influencing elements of the accounting reporting systems can be united in three main categories:

- The state’s institutional bodies, which have an influence over the way of financial reporting with the help of the political, legal, and tax systems, applied in the world’s countries;
– The financial system, by which the enterprises operate and finance their development;
– The accounting profession, because most of the times, organizing the relevant legislation
  is based on the advising of the professional accountants.

2. THE POLITICAL SYSTEM

Although, at first sight, it may seem paradoxical, the political system is a significant
factor of influence of the financial statements. The best example is revealed by the history of
Germany. In the period between the end of the great economic crisis and the end of the World
War II, Germany confronted the imposition of a unitary accounting system, by the totalitarian-
fascist system, for all the German enterprises (Roberts, Weetman, Gordon, 2001).

However, analyzing the behavior of many other states of the world regarding the
financial statements, I can conclude that it varies considerably from a country to another. For
example, in France, the government had an active and sustained implication in the structure and
content of the financial reporting, while in countries, such as Great Britain or the United States of
America, it manifests a moderate involvement. Germany is a special case; although is a part of
the continental system, along with France, the historical considerations made the German
government involve less in the financial reporting than in France, but more than in the USA or
Great Britain.

3. THE LEGISLATIVE SYSTEM

All the countries, whatever their political system is, found their fundamental principles of
financial reporting anchored in the laws of the state. It is, therefore, inevitable that the legislative
system does not leave its mark over the type of financial reporting of the respective country.

For example, in Germany, the accounting rules constitute an extensive branch of the
companies law, while in Italy, the commercial code contains regulations regarding the
accounting. In the countries that belong to the continental system, many of the accounting
regulations can be found in the accounting plan imposed by the governments of the respective
state.

In contrast, other countries apply a version of the English legal system, characterized by a
great liberty that the enterprises’ administrators can manifest in the elaboration and presentation
of the financial statements. Therefore, they present a true image of the enterprise’s activity, in
spite of the imposing of a general, precise, and rigid accounting plan.

Both in the countries based on a customary law and in the states with a roman law, the
basic rules of the financial reporting are established by the legislative body. It is very clear that
the nature of the accounting regulations of a country is affected by the legislative system.
Doupkin and Slater consider that the legislative system, no matters its form, represents a major
factor in the differences that appear between the national accounting systems.

4. THE TAX SYSTEM

In the specialty literature, more specialists analyzed the tax systems and grouped them by
many criteria. However, some of the aspects are relevant for the financial reporting.

For example, it is easy enough to split the European countries between countries that use
the classic tax systems and the ones that use the imputed tax systems, although this does not
affect the financial reporting. It is more relevant the measure in which the tax regulations influence the evaluation in accounting. In some way, this is regarded in a negative way because it appears the problem of the deferred tax, which is the cause of the differences in time between the tax and the accounting treatments.

In the United States of America, the Great Britain, and the Netherlands, for example, the problem of the deferred taxes generated many controversies and a large quantity of documentation on the subject.

In countries such as France, Italy or Germany, these problems did not exist as long as the tax regulations could be found in the accounting rules. In some states, the enterprises use tax regulations in elaborating the financial statements. These countries have as the basic rule the fact that the tax to be paid is calculated according to the reported amounts in the financial statements.

In many of the world’s countries, the influence of fiscality is very emphasized. So, many of the regulations that govern the activity of financial reporting of the enterprises carry the mark of the tax authorities. This thing characterizes states such as France, Germany or Japan, where the fiscality exercises a higher influence over the individual enterprises than over the groups of enterprises.

5. CONCLUSIONS

In conclusion, it can be affirmed that the institutional factors, especially the legal and the financial systems, are the main causes of the differences that register between the national accounting systems. If we were to analyze the weight of the factors’ influence, we could say that the last decade tipped the balance in favor of the financial system, the key of constituting and developing some successful businesses.

In the conditions of globalization, the legislative system gained a new dimension. It can adapt permanently to the economic changes that take place at a global level. However, it loses some of its influence along with decreasing the importance of the national borders.

REFERENCES


MARKETING RESEARCH REGARDING THE CONSUMERS’ ATTITUDE TO THE NON-FOOD PRODUCTS OFFERED BY THE SUPERMARKETS IN RESITA

Liliana GHERGHINA

ABSTRACT

By the paper entitled Marketing Research Regarding the Consumers’ Attitude to the Non-Food Products Offered by the Supermarkets in Reșița we proposed ourselves to highlight the importance of the non-food products, offered by the supermarkets in Reșița, for the citizens. The achieved marketing research is based on the occasional inquiry survey as method of research, using as instrument the designed questionnaire. In the first stage of the research we have elaborated the purpose, objectives, hypotheses, we have estimated the value of information choosing the information sources, establishing the ways to gather and synthetize them, we have scheduled the time of the research and we have chosen a sample method of share. In the second stage of the research we have realised the analysis and interpretation of information ensuring the measuring of the nominal scale and the interval scale using as scaling method the semantic difference. After the analysis we have observed that the highest demand from the consumers part in the supermarkets in Reșița is for the hygienic products, detergents, household appliances and less for the other products. Although the supermarkets have a diversified range of quality non-food products and the staff’s behaviour is satisfying, however recently due to the fact that the employees’ salaries and the pensions did not increase in relation to the prices, we observed that the average monthly value regarding the acquirement of non-food products in the supermarkets in Reșița is rather low and the level of the prices practised is considered high.

KEY WORDS: research, marketing, consumers, non-food products, supermarket

JEL: M3, M3

1. INTRODUCTION

We can mention that the definition of the marketing research as in the case of the marketing concept has recorded numerous and diverse formulations. The importance of research in the process of decision adoption in marketing is found in numerous definitions elaborated in the recent decades. The marketing research can be regarded as a specific marketing activity of investigating the studied phenomena by means of which we collect, process, analyse and interpret information having in view the elaboration of the most healthy marketing strategies which should contribute to the development of the organisation. The Romanian specialists in the field of marketing research propose more definitions, the most relevant being given by Cătoiu I., namely: the marketing research represents the formal activity by means of which, with the help of the concepts, methods and scientific techniques of investigation we achieve systematically the specification, measurement, gathering, analysis and objective interpretation of marketing

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information destined to the management of an economic entity, for understanding the environment in which it functions, the identification of opportunities, the evaluation of marketing action alternatives and their effects” (Balaure Virgil (coord.), 2000, p. 118). Parasuraman A. states that “the marketing research is a set of techniques and principles for the gathering, recording, analysis and systematic interpretation of data which could help the decision makers involved in the field of marketing goods, services or ideas” (Parasuraman A., 1991, p. 5).

The marketing research ensure the necessary information for its functioning, meaning: on their bases we know the market opportunities and problems that the organisations face, they are indispensable in the process of making decisions, offer information about the consumers behaviour and about the marketing environment of organisations. The marketing research has a special importance because it represents the base for the elaboration of the marketing strategy. Thus “we can speak about the assertion of strategy as an essential component of management both in the theoretical and practical plan” (Nicolescu O., 1996, p. 33.). Although the elaboration of the development strategy “represents a complex process which is the object of management, the strategy can be considered a characteristic element of the marketing policy” (Florescu C. (coord.), 1992, p. 275.). Even if “the most part of decisions are focused on the firm level” (Olteanu V., 2000), in the case of products, the decisions lead to the obtaining of efficiency and quality, the whole activity being coordinated by the decision factors. The selective research survey type is a frequently applied method in the field of the marketing researches. “The inquiry based on survey is a method achieved having in view the understanding of the characteristics and/ or opinions of a given population interrogating a limited number of its members, a sample” (Negruţ C. Dobre C., Venczel M, 1995, p. 152). Costencu M. states that “in order to design and achieve a survey, we must have in view the following aspects: the questionnaire, the sampling framework, the representative sample, the interview operator, the respondent, the survey unit and the research unit” (Costencu M., 2003, p. 6). We can say that the surveys are inquiries with a highly descriptive character, achieved in a relatively short time, as a rule at the order of a beneficiary being centred on the opinion aspect, subjective of reality.

The specific activities of the sampling process are: the definition of the population which represent the object of research; establishing the ways to choose the sample units, establishing the sample size, choosing the effective units of the sample and the development of the activity on field. The problems of the sampling represent “a distinct phase of the research and it supposes: establishing the population which represents the object of research, the identification of the framework population or the sampling base from which it should choose the sample units (in the case of the probability methods of sampling), establishing the sampling unit (natural person, family, household, firm) determining the size of the sample thus it is representative of the framework population had in view” (Catănă Gh. Alexandru, 2003, p. 231). So, the sample represents the number of individuals selected from the total population with the aim of investigation and the sampling represents the procedures which lead to the achievement of the sample with less money in a short time. The questionnaire is an extremely important instrument for any marketing research which is based on a survey and the conceiving activity of the questionnaire is of maximal importance for the quality of the research developed based on a survey inquiry. So we can say that the questionnaire is an investigating instrument designed on a set of written questions which are addressed to the investigated persons by direct administration by the inquiry operators or by the self-administration, the answers being writtenly recorded, ensuring thus, the necessary information for the achievement of objectives in the marketing research.
In the marketing researches, the administration of the questionnaire by on-field activity is very important. It has in view the way in which the interview operators should proceed in order to gather the necessary information with the minimum of errors. The quality of the activity of gathering data is determinative for the analysis quality and the data interpretation. A maximum attention is necessary in the selection, preparation and instruction of operators on field. In the design of a marketing research, a special importance is presented by the choice of the ways to measure and scale the investigated phenomena.

2. THE MARKETING RESEARCH REGARDING THE CONSUMERS’ ATTITUDE OF NON-FOOD PRODUCTS OFFERED BY THE SUPERMARKETS IN REȘIȚA

2.1. The presentation of the supermarkets in Reșița

*S.C. Kaufland Romania S.C.S.* has one of the secondary headquarters in the Caraș-Severin county, the town Reșița, No. 21 Muncii Avenue, Postal Code 320184, telephone -0372096501, e-mail office@kaufland.ro, site www.kaufland.ro. Kaufland Online, having the fiscal identification code: 15991149, recorded with the Registration No. at the Commerce Registry: J40/17052/2003. The activity type developed by the firm is, according to CAEN retail trade in non-specialised shops, selling predominantly food products, drinks and tobacco. S.C. Kaufland Romania S.C.S. in Reșița is led by a supermarket manager and it is organised on the following departments: production, research-development, marketing, finance and staff. The marketing department achieves the marketing planning revision of sales, stocks inventory, price policy and physical distribution. Also in the marketing department, the coordination of sales is achieved. The timetable of the supermarket is from 7\text{30} to 22\text{00} from Monday until Saturday and on Sunday from 7\text{30} to 20\text{00}. S.C. Kaufland Romania S.C.S. from Reșița is structured on many departments, it has several pay-desks and there is an information office at the entrance.

*S.C. Carrefour Romania S.A.* has one of the secondary headquarters in Caraș-Severin county, the town Reșița, No. 1, 1st December 1918 Square, the commercial Complex Nera, telephone: 11588780, registered record No.in the Commerce Registry: J40/7766/2007. The type of activity developed according to the CAEN classification is: retail trade in non-specialised shops selling predominantly food products, drinks and tobacco. S.C.Carrefour Romania S.A. in Reșița is led by a manager and it has as subordinates: the administrator, accountant, shop chief, the department chiefs and shop assistants. The timetable of the supermarket is from Monday until Saturday from 7\text{30} to 23\text{00}, and on Sunday from 7\text{30} to 22\text{00}. S.C.Carrefour Romania S.A. in Reșița has an information office at the entrance and it is structured in many departments and it has several pay-desks.

*S.C. Billa Romania S.R.L.* has one of the secondary headquarters in Caraș-Severin county, the town Reșița, No. 5-7, Republicii Avenue, post code 320147, telephone-0374/201795, site www.billa.ro, having the fiscal identification code 9657315, registered record No.in the Commerce Registry: J40/6146/1997. The type of activity developed according to the CAEN classification is: retail trade in non-specialised shops selling predominantly food products, drinks and tobacco. S.C. Billa Romania S.R.L. in Reșița is led by a manager and it has as subordinates: the administrator, accountant, shop chief, the department chiefs and shop assistants. The timetable of the supermarket is from Monday until Saturday from 7\text{00} to 22\text{00} and on Sunday from 8\text{00} to 22\text{00}. S.C. Billa Romania S.R.L. in Reșița is organised in the same way as
the other supermarkets in Reșița. Thus, at the entrance on the left of the shop there is the information office and the pay-desks.

_S.C.Profi Rom Food S.R.L._ has one of the secondary headquarters in Caraș-Severin county, the town Reșița, No. 2, telephone-0723804346, fax-0372875650, site www.profi.ro, having the fiscal identification code 11607939, registred record No.in the Commerce Registry: J35/239/1999. The type of activity developed according to the CAEN classification is: retail trade in non-specialised shops selling predominantly food products, drinks and tobacco. S.C.Profi Rom Food S.R.L. in Reșița is led by a manager and it has as subordinates: the administator, accountant, shop chief, the department chiefs and shop assistants. The timetable of the supermarket is from Monday until Sunday from 7:00 to 22:00. S.C.Profi Rom Food S.R.L. in Reșița is organised in the same way as the other supermarkets in Reșița. Thus, at the entrance on the left of the shop there is the information office and the pay-desks.

In the supermarkets presented above the departments are arranged according to the products offered for sale namely: vegetables and fruit, refreshments, alcoholic drinks, bread, dairy products, cold meats, tins, cereals, frozen products, sweets, textiles, household appliances, cosmetics, detergents, dishes, linen, clothes etc.

### 2.2. The elaboration of the marketing research methodology regarding the non-food products offered by the supermarkets in Reșița

By the present marketing research we aim at studying the consumer’s attitude of non-food products in the supermarkets in Reșița by obtaining the information directly from the consumers.

_In the first stage of the research_ we have elaborated the research hypothesis and we have previously estimated the values of information obtained by research. Due to the fact that the income of the Romanian citizens have decreased very much in the recent years and with them has also decreased the acquisition of non-food products offered by the supermarkets in Reșița. On this line we have chosen as theme _the marketing research regarding the consumers’ attitude of non-food products offered by the supermarkets in Reșița_. The main aim of the marketing research is to understand if the citizens give any importance to the non-food products offered by the supermarkets in Reșița. _Specific objectives:_ what kind of non-food products are mainly bought, the determination of the average value of the monthly consumption for such products, the identification of the level of the prices practised by supermarkets, the importance of selection criteria regarding the products acquisition, the satisfaction degree towards the employed staff and the preference to buy from a certain supermarket from the analysed ones. The hypotheses of research were elaborated on the grounds of the answers given by the subjects who answered the questionnaire. Thus, we can say that the citizens of Reșița want non-food products of high quality offered by the supermarkets in Reșița. Likewise, we consider that the level of prices used by the supermarkets in Reșița are not high nor low, and the sercices of the staff are satisfying. The information obtained from research are information collected by _quantitative direct studies_ achieved by _an occasional inquiry of survey type_ based on the questionnaire which contains a set of questions of identifying the subjects, introduction, open and closed questions, about or connected to the non-food products offered by the supermarkets in Reșița. As a method of communication with the subjects, our survey is based on _direct personal inquiry_ with the subjects (face to face), which offers us as _advantage_ the possibility to convince the subjects to participate in an interview and to answer the questions which would be without answer.
otherwise, thus ensuring a high rate of the subjects’ participation at the development of the inquiry. We can say that the information (answers) obtained from the subjects are qualitative if the interview operator does not influence the subject’s answers.

In the second phase of the research we will choose the information sources, we will proceed at selecting the way of gathering and systematizing the research information. In this marketing research, the information are obtained from natural persons, meaning individual inquiries, the people being chosen on the basis of the sample structure from the total number of subjects from Reșița’s population. We have chosen as method of sampling the share method, we have determined the size of the pilot sample and we have established the number of subjects to be questioned in order to obtain the necessary information. Establishing the researched population was achieved according to the purpose and objectives of our research, ensuring thus the representativity of subjects. In table 1 below, based on the statistic information we have calculated the balance of each selection criteria, respectively: gender, age, job and monthly average income. The choice of the sampling method was achieved according to the following factors: the term of the population’ sampling, the costs of the research, the identification of the units in the survey base. Having in view the aspects mentioned above, we consider as optimal to choose an empiric sampling method which is based on a rational choice of individuals from the researched population. In our case, being the case of natural persons, was considered optimal as sampling method the share method which supposes the constitution of a reduced layout of the researched population, after the characteristics which will serve at establishing the quota namely the gender criterion: M and F; the criterion age: 14-34 years, 35-54 years and 55 and over 55 years; the jobs criterion: student, employee, unemployed and retired person; the criterion average monthly income achieved by the family members: between 800-1500 and over 1500 lei. The elaboration of the survey plan: for this, we take into consideration the structure of the mother-population, the size of the sample and the number of operators on the field. The determination of the pilot sample size \( np = 2 \times (\text{gender}) \times 3 \times (\text{age}) \times 4 \times (\text{jobs}) \times 2 \times (\text{income}) = 48 \text{ subjects} \). Due to the fact that there are no statistical data with average monthly income of the family members, the distribution of subjects according to the criterion of average monthly income will be achieved according to the answer rate in the application of the questionnaire, according to the criteria: gender, age and jobs.

<table>
<thead>
<tr>
<th>The selection criterion of subjects</th>
<th>The number of people[pers.]</th>
<th>Ponderea persoanelor în total [pers.]</th>
<th>QUOTA on criteria of gender and age [pers.]</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Criterion GENDER</td>
<td>63152</td>
<td>100</td>
<td>48 subjects</td>
</tr>
<tr>
<td>Male</td>
<td>29910</td>
<td>47.36</td>
<td>23</td>
</tr>
<tr>
<td>Female</td>
<td>33242</td>
<td>52.64</td>
<td>25</td>
</tr>
<tr>
<td>II. Criterion AGE</td>
<td>63152</td>
<td>100</td>
<td>48 subjects</td>
</tr>
<tr>
<td>15-34 years</td>
<td>18526</td>
<td>29.34</td>
<td>14</td>
</tr>
<tr>
<td>Male</td>
<td>9298</td>
<td>50.19</td>
<td>7</td>
</tr>
<tr>
<td>Female</td>
<td>9228</td>
<td>49.81</td>
<td>7</td>
</tr>
<tr>
<td>35-54 years</td>
<td>23404</td>
<td>37.06</td>
<td>18</td>
</tr>
</tbody>
</table>
The calculation of the basic structure of the quota sample according to the criterion of gender, age and jobs

<table>
<thead>
<tr>
<th>Selection criterion of subjects</th>
<th>Subjects gender and age quota</th>
<th>Levels of the jobs criterion</th>
<th>Subjects jobs quota</th>
</tr>
</thead>
<tbody>
<tr>
<td>II. Criterion AGE and GENDER</td>
<td>48</td>
<td></td>
<td>48</td>
</tr>
<tr>
<td>15-34 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>14/4 = 3,50</td>
<td>student</td>
<td>3 p (1M+2F)</td>
</tr>
<tr>
<td></td>
<td>7/4 = 1,75</td>
<td>employee</td>
<td>4 p (2M+2F)</td>
</tr>
<tr>
<td>Female</td>
<td>7/4 = 1,75</td>
<td>unemployed</td>
<td>3 p (2M+1F)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pensioner</td>
<td>4 p (2M+2F)</td>
</tr>
<tr>
<td>35-54 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>18/4 = 4,50</td>
<td>student</td>
<td>5 p (2M+3F)</td>
</tr>
<tr>
<td></td>
<td>9/4 = 2,25</td>
<td>employee</td>
<td>4 p (2M+2F)</td>
</tr>
<tr>
<td>Female</td>
<td>9/4 = 2,25</td>
<td>unemployed</td>
<td>5 p (2M+3F)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pensioner</td>
<td>4 p (2M+2F)</td>
</tr>
<tr>
<td>55 and over 55 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>16/4 = 4</td>
<td>student</td>
<td>4 p (2M+2F)</td>
</tr>
<tr>
<td></td>
<td>7/4 = 1,75</td>
<td>employee</td>
<td>4 p (2M+2F)</td>
</tr>
<tr>
<td>Female</td>
<td>9/4 = 2,25</td>
<td>unemployed</td>
<td>4 p (2M+2F)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pensioner</td>
<td>4 p (2M+2F)</td>
</tr>
</tbody>
</table>

Source: Achieved by the author
2.3. THE ANALYSIS, INTERPRETATION OF RESULTS AND THE CONCLUSIONS OF THE MARKETING RESEARCH

The analysis and interpretation of research information was achieved on the whole size of the pilot sample according to the answers given by the respondents on types of questions and these ones were centralised according to the selection criteria: gender, age, jobs and the average monthly income. The indicators were calculated based on the centralized information.

Q5. Which of the following non-food products presented below would you primarily buy from the supermarkets in Reșița? (A5.1.) household appliances; (A5.2.) hygiene products; (A5.3.) detergents; (A5.4.) dishes; (A5.5.) clothes

After the processing of information we observed that from the total of 48 respondents those who mainly buy non-food products from the supermarkets in Reșița are:

According to the gender criterion:
- men – 14,58% (7 subjects) hygiene products, 12,50% (6 subjects) detergents, 10,42% (5 subjects) household appliances, 6,25% (3 subjects) dishes and 4,17% (2 subjects) clothes;
- women – 14,58% (7 subjects) household appliances and detergents, 10,42% (5 subjects) hygiene products, 8,33% (4 subjects) clothes and 4,17% (2 subjects) dishes;

According to the age criterion:
- the people aged between 15 and 34 years – 10,42% (5 subjects) hygiene products, 8,33% (4 subjects) detergents, 4,17% (2 subjects) household appliances and dishes 2,08% (1 subject) clothes;
- the people aged between 35 and 54 years – 14,58% (7 subjects) hygiene products, 8,33% (4 subjects) detergents, 6,25% (3 subjects) household appliances and 4,17% (2 subjects) dishes and clothes;
- the people aged between 55 and over 55 years – 12,50% (6 subjects) hygiene products, 8,33% (4 subjects) household appliances, 6,25% (3 subjects) detergents, 4,17% (2 subjects) dishes and 2,08% (1 subject) clothes;

According to the criterion jobs:
- students – 12,50% (6 subjects) hygiene products, 4,17% (2 subjects) detergents and clothes, 2,08% (1 subject) household appliances and dishes;
- employees – 8,33% (4 subjects ) hygiene products and detergents, 4,17% (2 subjects) household appliances, 2,08% (1 subject) dishes and clothes;
- unemployed – 10,42% (5 subjects) hygiene products, 4,17% (2 subjects) household appliances, detergents and dishes, 2,08% (1 subject) clothes;
- pensioners – 8,33% (4 subjects) detergents, 6,25% (3 subjects) hygiene products, 4,17% (2 subjects) household appliances and dishes, and 2,08% (1 subject) clothes;

According to the criterion average monthly income:
- people with an average monthly income between 800 lei – 1,500 lei mainly buy hygiene products – 25% (12 subjects of 48), followed by detergents –16,67% (8 subjects) and household appliances –14,58% (7 subjects), 8,33% (4 subjects) clothes and 6,25% (3 subjects) dishes ;
- the people with the average monthly income over peste 1,500 lei mainly buy hygiene products –10,42% (5 subjects), followed by detergents – 6,25% (3 subjects) and household appliances, linen and clothes – 4,17% (2 subjects).

After the analysis and interpretation of results we can conclude that the people from all the age groups and income mainly buy from the supermarkets in Reșița, in the order of
importance: hygiene products, detergents, household appliances, dishes and clothes. However, on the first two places in the preference order, women mainly buy household appliances and detergents and men hygiene products and detergents. We observe that the dishes and clothes are rarely bought.

**Q6. The average monthly value regarding the buying of non-food products in the supermarkets in Reșița is:** Under 100 leu (1); Between 101–200 leu (2); Over 200 leu (3).

*Obtained score*= \((1*15) + (2*22) + (3*11))/48 = (15 + 44 + 33)/48 = 92 / 48 = 1.9167

So the average monthly value regarding the acquisition of non-food products in the supermarkets in Reșița is between 101-200 leu, a proof being the score obtained of 1.9167, as well as the balance of 45.83% (22 subjects).

**Q7. Do you consider that the level of the prices used by the supermarkets in Reșița are:** Very low (5), Low (4), Neither low nor high (3), Mari High (2), Very high (1).

*The score obtained* = \((5*3) + (4*12) + (3*18) + (2*10) + (1*5))/48 = (15 + 48 + 54 + 20 + 5)/48 = 142 / 48 = 2.9583

After the calculated score we observe that the citizens consider the level of the practiced prices of the supermarkets in Reșița as being high with a tendency towards neither high nor low, the value of the score being 2.9583 and the balance being 37.50% (18 subjects).

**Q8. Which is the importance of the criteria which stay at the base of the decision to buy non-food products offered by the supermarkets in Reșița?**

Very good (5), Good (4), Neither good nor bad (3), Poor (2), Very poor (1).

1) The score for the promotional prices practiced = \((5*11) + (4*12) + (3*5) + (2*8) + (1*2))/48 = 3.46
2) The score for a diversified range of non-food products = \((5*15) + (4*13) + (3*11) + (2*6) + (1*3))/48 = 3.65
3) The score of the products quality offered for sale = \((5*13) + (4*15) + (3*12) + (2*7) + (1*1))/48 = 3.67
4) The score for the explanations received for the products characteristics = \((5*8) + (4*14) + (3*16) + (2*5) + (1*5))/48 = 3.31

As we observe all the scores calculated are over the value of the scale 3 – not good nor poor with a tendency towards the scale 4-good, which proves that the main criteria which are the base of the decision to buy non-food products offered by the supermarkets in Reșița, in the order of importance are:

- the quality of the products offered for sale having a score of 3.67, and the highest balance is the value of the scale not good- nor poor of 31.25% (15 subjects);
- the diversified range of non-food products having a score of 3.65 and the highest balance is the value of the scale very good of 31.25% (15 subjects);
- the promotional prices having a score of 3.46, and the highest balance is the scale value good of 31.25% (15 subjects out of 48);
- Explanations received for the characteristics of the products having a score of 3.31 and the highest balance is the scale value not good-nor poor of 33.33% (16 subjects).
Q9. State the degree of satisfaction regarding the behavior of the staff employed in the supermarkets in Reșița? (A9.1.) Very satisfied; (A9.2.) Satisfied; (A9.3.) Acceptable; (A9.4.) Dissatisfied

After processing the information regarding the behavior of the staff employed in the supermarkets in Reșița we observe the satisfaction degree of the citizens as follows:

According to the criterion of gender:
- men – 20,83% (10 subjects) satisfied, 14,58% (7 subjects) acceptable, 8,33% (4 subjects) very satisfied, and 4,17% (2 subjects) dissatisfied;
- women – 22,92% (11 subjects) satisfied, 16,67% (8 subjects) acceptable, 6,25% (4 subjects) very satisfied and dissatisfied;

According to the criterion of age:
- between 15-34 years – 14,58% (7 subjects) satisfied, 8,33% (4 subjects) acceptable, 4,17% (2 subjects) very satisfied and 2,08% (1 subject) dissatisfied;
- between 35-54 years – 18,75% (9 subjects) satisfied, 8,33% (4 subjects) acceptable, 6,25% (3 subjects) very satisfied and 4,17% (2 subjects) dissatisfied;
- 55 and over 55 years – 12,50% (6 subjects) satisfied, 10,42% (5 subjects) acceptable, 6,25% (3 subjects) very satisfied and 4,17% (2 subjects) dissatisfied;

According to the criterion of jobs:
- students – 8,33% (4 subjects) satisfied and acceptable, 6,25% (3 subjects) very satisfied and 2,08% (1 subject) dissatisfied;
- employees – 10,42% (5 subjects) satisfied, 6,25% (3 subjects) acceptable, 4,17% (2 subjects) dissatisfied and very satisfied;
- unemployed – 10,42% (5 subjects) acceptable, 8,33% (4 subjects) satisfied, 4,17% dissatisfied and 2,08% (1 subject) very satisfied;
- pensioners – 12,50% (56 subjects) satisfied, 6,25% (3 subjects) dissatisfied, 4,17% acceptable (2 subjects) and 2,08% (1 subject) very satisfied;

According to the criterion of the average monthly income:
- between 800 lei – 1,500 lei – 27,08% (13 subjects) satisfied, 18,75% (9 subjects) acceptable, 16,67% (8 subjects) very satisfied and 8,33% (4 subjects) dissatisfied;
- over 1,500 lei – 12,50% (6 subjects) satisfied, 8,33% (4 subjects) acceptable and 4,17% (2 subjects) dissatisfied and very satisfied.

Processing the information we can conclude that most consumers are satisfied of the staff’s behaviour employed in the supermarkets in Reșița, a proof being the results obtained. The employed women aged between 35-54 and an average monthly income of 800 lei up to 1500 lei are the most satisfied about the employees’ behaviour in the supermarket. Likewise, the unemployed men aged between 55 and over 55 years with an average monthly income of 800 lei up to 1500 lei consider only acceptable the behaviour of the employees in the supermarket.

Q10. From which supermarket in Reșița do you buy more often non-food products?

After the processing of information we observed that from the total of 48 respondents those who buy more often non-food products from the supermarkets in Reșița prefer:

According to the criterion of gender:
- men – 16,67% (8 subjects) S.C. Kaufland România S.C.S., 14,58% (7 subjects) S.C. Carrefour România S.A.,
10,42% (5 subjects) S.C. Billa România S.R.L., and 6,25% (3 subjects) S.C. Profi Rom Food S.R.L.;
- women – 14,58% (7 subjects) S.C. Kaufland România S.C.S. and S.C. Billa România S.R.L.,
12,50% (6 subjects) S.C. Carrefour România S.A., and 10,42% (5 subjects) S.C. Profi Rom Food S.R.L.

According to the criterion of age:
- the people aged between 15 and 34 years buy often non-food products from S.C. Kaufland România S.C.S. – 12,50% (6 subjects), 8,33% (4 subjects) from S.C. Carrefour România S.A.,
6,25% (3 subjects) from S.C. Profi Rom Food S.R.L., and 2,08% (1 subject) from S.C. Billa România S.R.L.;
- the people aged 55 and over 55 years prefer S.C. Profi Rom Food S.R.L. – 12,50% (6 subjects),
10,42% (5 subjects) prefer S.C. Kaufland România S.C.S., 6,25% (3 subjects) prefer S.C. Billa România S.R.L., and 4,17% (2 subjects) prefer S.C. Carrefour România S.A.

According to the criterion of jobs:
- the students buy more often non-food products from S.C. Carrefour România S.A. – 10,42% (5 subiecţi),
S.C. Kaufland România S.C.S. – 8,33% (4 subjects), S.C. Profi Rom Food S.R.L. – 4,17% (2 subjects) and S.C. Billa România S.R.L. – 2,08% (1 subject);
- employees prefer to buy non-food products from S.C. Kaufland România S.C.S. – 10,42% (5 subjects),
- the unemployed mainly buy non-food products from S.C. Carrefour România S.A. – 8,33% (4 subiecţi),
- pensioners mainly buy non-food products from S.C. Carrefour România S.A. and S.C. Profi
Rom Food S.R.L. – 8,33% (4 subjects), S.C. Kaufland România S.C.S. – 6,25% (3 subiecţi), S.C.
Billa România S.R.L. – 2,08% (1 subject).

According to the criterion of the average monthly income:
- the people with the average monthly income over 1.500 lei prefer to buy from S.C. Kaufland România S.C.S. – 12,50% (6 subjects), S.C. Carrefour România S.A. – 8,33% (4 subjects), S.C. Profi Rom Food S.R.L. – 6,25% (3 subjects) and S.C. Billa România S.R.L. – 2,08% (1 subject).

After the analysis and interpretation of results we can conclude that the men employed with the age between 35 and 54 buy more often non-food products from the supermarkets S.C. Kaufland România S.C.S. and S.C. Carrefour România S.A., and the pensioner women, aged between 55 and over 55 years having a monthly average income of 800 lei up to 1500 lei buy
more often non-food products from the supermarkets S.C. Profi Rom Food S.R.L. and S.C. Billa România S.R.L.

3. CONCLUSIONS

The marketing research achieved aims at the evaluation of the consumers’ attitudes towards the non-food products offered by the supermarkets in Reșița. In the first part of the marketing research we have achieved the analysis of the quantitative study, taking into account the purpose, objectives and the hypotheses of the research. Likewise, we have estimated the information values obtained by research, we have chosen the sources of information, we have established the methods of gathering and sistematization of the information and we achieved the programing in time of the research. In order to evaluate the non-food products consumers attitude we have used an applicative method of exploratory type based on the information obtained directly from subjects (on field) by which we tried to find answers to some real problems. We have used as method for the obtaining of information, the direct research under the form of occasional inquiry survey based on questionnaire. Because the size of the pilot sample was of only 48 subjects and the time for the administration of the questionnaire was between 7 and 13 minutes, the information gathered directly from the subjects were centralised on the computer using a program that we created. It was considered as optimal to choose an empiric sampling method respectively the quota method because this method is based on the rational choice of people in the researched population, in our case being natural persons. In the second part of the marketing research we have achieved the analysis and interpretation of the marketing research information. Thus, the measurement of the phenomena studied was achieved with the help of the following scales and scaling methods: the nominal scale and the interval scale using as scaling method the semantic difference.

Having in view that the marketing research has as specific objectives the priority to buy non-food products, the influence of the consumers’ income, the prices used by the supermarkets, the selection criteria at the acquisition of products, if the staff employed offers services that please the consumers and the importance of the acquisition in a certain supermarket, we have left from the policy of the global product this being considered as the most important component of the marketing mix in commercial services. After the analysis and interpretation of information we can conclude that people from all the age and income groups buy mainly in the supermarkets in Reșița, in order of importance hygiene products, detergents, household appliances, dishes and clothes. Although on the first two places in the preferance order, women buy mainly household appliances and detergents and men hygiene products and detergents. We observe that dishes and clothes are less bought. The citizens consider the prices level used by the supermarkets in Reșița are high with a tendency towards neither high, nor low, a proof being the average monthly value of 101–200 lei allotted to the acquirement of non-food products in the supermarkets in Reșița. Likewise the citizens consider that the main criteria which stay at the base of the decision to acquire non-food products in the supermarkets in Reșița in the order of their importance are the quality of the products offered for sale, the diversified range of non-food products, the promotional prices used, the explanations received for the products characteristics. Although the behaviour of the employed staff please the women and the men consider it acceptable, the non-food products are mainly acquired in the order of importance from S.C. Kaufland România S.C.S., S.C. Carrefour România S.A., S.C. Profi Rom Food S.R.L. and S.C. Billa România S.R.L.
The results of this marketing research will constitute the basis for future thorough research in this field or for some comparisons with other research in the field of commercial services.

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CO-PRODUCTION IN THE SERVICITY APPROACH, ON THE GROUNDS OF KNOWLEDGE ECONOMY

Alexandru JIVAN

ABSTRACT

The paper proposes an original approach concerning value creation, on the grounds of the knowledge economy principles and from a point of view that criticizes the common calculated productivity as being inappropriate for capturing the actually defining elements of profound production process. It is a purely theoretical debate, with no aim for empirical studies at this stage of the research. It starts with presenting the pillars of the knowledge economy that are most relevant to our topic and the genuine liberal grounds as they work in nowadays economy, also presenting several elements of the co-production theory, most significant for the servicity approach, opposite to the common productivity view. Comparisons of such conceptual grounds are made with the ordinary way of considering value creation and with the usual manner of measuring productivity, trying to capture the genuine role of economic activities. The links between the economic dimension and the human and social areas are underlined. Generalisations are made, in a Pareto optimal view. Proposals for reviewing the common usages are resulting, and main completions are proposed for capturing complex value creation. Conclusions are emerging as offers for original ways of calculating productivity, as attempts for assessing servicity.

KEY WORDS: productivity; knowledge economy; value creation; co-production.

JEL: D24, D31, D49

1. INTRODUCTION

Co-production being a most actual topic in economic life and in theoretical analysis, the aim of the paper is enlarging the horizon of approaching production and productivity, approaching co-production from the original view point of servicity.

The main background we start from is unusual, because of the original theoretical conception we adopt: it is not about some most recent literature, but about the very grounds of liberalism.

In that what concerns the co-production specific background, certain more recent references – as useful for our debate – are made in the section focused on this relatively manner of conceiving production in the economy dominated by services and from the point of view of the generalized service approach (Jivan, 1993) or under the service dominant logic (Vargo&Lusch).

The paper intends to point out certain aspects of the topic that are not usually taken into consideration in the main literature, literature which is researching mainly from the point of view of the business (marketing studies are the most productive in this field; we include here also the Northern School, that is pointing out just the customer, in creating value; see infra the section focused especially on co-production, and especially Grönroos, C., 2008, and 2011).

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We intend to do it from the point of view given by certain features of the genuine liberal grounds, as we know them (and the core of liberalism as well) from Physiocrats and Classics (see, from instance, Heilbroner, 1994). They are defined and interpreted as compared with how they work in nowadays economy.

After underlying the central defining features of Knowledge Economy, as the point of start of grounding our ideas debate, the genuine liberal grounds are reviewed, in the light of the service logic. The co-production theory is referred to (in the section focused particularly on co-production), in certain main features: just the elements useful for our core ideas are pointed out. Namely, it is about the elements concerning the servicity approach and the generalized service approach on economic activities (as seen in the section concerning servicity). A discussion on corrective indicators of productivity follows, bringing certain unusual (new original contributively) elements in the productivity common debate: mainly the idea of value (or servicity) “transfers” in the formulas that should be taken into account for better capturing the economic phenomena.

Conclusive remarks are made in the last section, concerning settings to be made in the economic analysis instruments and in the economic politics, in the purpose of being responsive to the knowledge society requirements.

2. GENUINE LIBERAL GROUNDS, IN THE LIGHT OF THE SERVICE DOMINANT LOGIC

The dominant view concerning production is analytically bounded in the form of the "producer theory": the Classical approach on economic life (in the materialist terms of production, focused on the manufacturing) is maintained even after switching to the focus on the market (realized by the Neoclassics). But it was developed separately (apart from the “producer theory”) a “consumer theory”: it is like economic reality is acting as a producer-consumer binomial one. Such an approach (separation) is simplistic, causing partial analysis. Generalizing neoclassical approach declared any activity validated by the market as being "productive". But the old separation “productive-unproductive” is kept in the market assessment itself; namely, a series of creative activities of major importance for humanity, for human culture, for society as a whole – remain less rewarded, somehow marginalized, or even ignored: they have less or no "market value". The creators concerned are ignored, meaning that "rewording" for the plusses they generated to the systemic level go to some others. This is the matter of “transfers” we speak about in the section concerning servicity. Competition is based on economic strength, not on intellectual and investing quality. That is because of law and mercantile principles reasons. This is the way the today's world is built, even from when it started to industrialize, rather than on some intellectual or creative merits. Then, John Kay, creator of "flying shuttle", Hargreaves, creator spinning machine, Crompton, who built a machine that solves the problem of the spinning yarn quality, Cartwright, who created and perfected the first world mechanical weaving machine, etc., died all poor (Vasile, 1987, p. 78 and next).

In the genuine liberalist approach, economic activities are meant to bring a really effective contribution (general value), for the whole system. The individualistic gain can be very advantageous in terms of specific (particular), but it can be rather destructive than constructive for the environment (Manoilescu, 1986). We also observed that, in the complex conditions of the economic realities, “certain productivities and certain profits represent destructions for [...] the components of the social system that cannot participate in « negotiations » on the market, for
instance the next generations [...], for the components that have no protection or that cannot impose themselves in the economic confrontations, because of their financial and trade power (it is the case of Mother Nature and its divers threatened ecologic systems” (Jivan, 2014; in this respect, see also the section concerning servicity). Any "production" or activity outside agriculture, only changes, transforms, moves, etc. of existing assets; "The merchants [...] can not [...] increase their savings, but only at the expense of nations with which they trade" (Quesnay, 1766). Thus, the Physiocrat thought distinguishes purely productive activities (which are creating value) from the other activities, which are not quite actually creative of value. (In the economic literature there is a whole debate concerning the quality of being productive or not.)

In our opinion, the essence of the delimitations made by the genuine Physiocrat liberalism consists precisely in according importance, for any market analysis, to the complex role of each activity, concomitantly with following the individual interest. The principles of economic functionality (the "invisible hand" logic) should not be understood from the angle Bernard Mandeville did (Heilbroner, 1994). In the servicity approach, delimitating certain activities as "sterile" should not be interpreted neither in the meaning of Classics ("unproductive"), nor should it be ignored (left to market decision arbitrary) as Neoclassics did: it underlines the requirement of beneficial (not destructive) operating, as a central condition that economic functioning must accomplish, in the genuine liberalism.

3. WE SHOULD COME BACK TO THE GENUINE LIBERALIST GROUNDS. THE OPPORTUNITY OFFERED BY THE SERVICE ECONOMY AND COPRODUCTION

Knowledge society represents, by itself, an enlargement for the economic approach of reality, mainly by obliging the analysts to put the intellectual elements (resources, principles and results) back on the first place, as they were in the Hellenistic conception concerning human (superior) activities and society as a whole (Heilbroner, 1994); even if the development of the economic lines of approaching our society stressed rather on quantitative dimensions of life.

Industrialization pointed out the race for bigger and bigger productions and consumptions, and thus, such core of our human state was, some may say, almost forgotten. But in the last decades’ renewed approaches, even economics must reconsider the central role of human intellectual essences. Today the world is called with the name of “knowledge” (society); therefore, with respect for its name, the intellectual power should not remain much weak than the economic one; even if, to compete, it must be transformed in an economic power too...

Co-production is also, by itself an enlargement of the economic horizon, brought to the economic science by the actual economy. The field of co-production research is large and very interesting. In this paper we approach just the principle of the generalized co-production – in the economic system taken as a whole (and the whole society here included: in the knowledge based economy, social, natural and other not-strictly economic dimensions of the actual economic life should not be anymore let on a second place, or even ignored, bringing us a growing social and national polarization, and an irreversible destruction of Mother Nature). Here we want to point out just the generalized service (Jivan, 1993).

Co-production is a process that already characterizes all the economic life and contributes to improving the performance of the enterprising entity, but of its beneficiaries too. If we add the relationship with its suppliers – where the enterprising entity is in position of beneficiary –, such new advantages can also be seen, for all both suppliers and clients.
Therefore, by generalized co-production we understand the market system itself, where any economic entity has a role in producing the whole surplus of value. But the common view is not focused mainly on the competitiveness that can bring success to the individual entity, in (and by) the market mechanisms – this being the usual (dominant) approach in business studies, as well as in economics: but here, we point out rather a non-orthodox approach, stressing the unitary character of the world (Mother Nature and next generations here included), on diverse dimensions (in time, space etc., as developed in Jivan, 2014), i.e. the servicity approach (see next section concerning servicity).

Such an approach was developed starting with the services phenomenon that obliged economic sciences to take into account the service approach as capital (central, dominant, or generalized over the whole modern and post-modern economic life). It can respond to the purpose of taking into account the complexity of the economic reality. Thus, a more appropriate approach became possible with the service economy, when the issues of the generalized service approach (Jivan 1993) or of the service dominant logic (SDL, Vargo & Lusch 2004), and also the issue of co-production with the consumer were opened (see, for instance, Ramírez, 1999).

It must be underlined that, beside intellect-intensity, the main specificity of the new economy – that we keep in mind for this paper – is the fact that the general results (outcomes) of the economic actions are becoming more important if compared with the immediate results (outputs) (Djellal and Gallouj, 2008, p. 9): this observation come to stress, in fact, the already mentioned growing complexity of the world we live in. Such outcomes make more difficult all the productivity calculations.

The concept of co-production – here considering all the forms it can take (which we will not describe in this paper) – is not confined to the service sector, but is appropriate for all the goods and services markets, which contribute to building the companies’ performance, but also the benefits of their customers. In this approach, the relationship itself, of the economy with Mother Nature, can be improved. "If we generalize the idea of co-production, the customer being a component of the environment of the entrepreneur, than the latter (the social and natural environment) will no longer be perceived as a resource to be exploited, but as a «co-producer»" (Jivan, 2014). The globalization process amplifies more again the horizon of the requested concern, as a whole unitary system.

In this light, as opposed to individualistic approach – which proved destructive to nature and generator of discrepancies in the social environment – we should adopt the complex analysis proposed by the servicity approach.

The purpose of co-production is a marketing goal. But in addition to the provider, the customer is also becoming more entrepreneurial in maximizing his/ her benefit, and more interested in the overall benefit obtained by co-production. Unfortunately, the important development of marketing and, generally, of business research induced by the service tendencies were not accompanied by a similar development in general economics. In despite of the general spirit of service proved by the entire economy (even in its most material productive activities), economics related to service economy is still held to a marginal status, in the mainstream economics.

Fortunately, however, by the theory of co-production, value creation was revised, from the point of view of ways and forms, and also from the point of view of the very meaning of it, seen by theories dominated by productivity and growth consistent with the consumption society. The relation between supply and demand, on one hand, and the various forms of cooperation-
connecting, on the other hand, must be put on the grounds of the requirements of the genuine liberalism and on those of knowledge-society.

A discussion concerning corrective indicators of productivity can therefore result – as drafted in the next section.

4. ELEMENTS OF THE SERVICITY APPROACH

According to the mainstream economics (orthodox), where the theory of producer and the theory of consumer are separately concerned, the economic activity is usually analyzed by the production function: involving economic factors and participants, by law and economic criterions of distinction. The productivity of an economic entity is usually calculated as a ratio: the numerator is the quantity of output multiplied by the selling price; the denominator is the quantity of factor (input) multiplied with its buying price.

Such simple calculations can prove inadequate for a lot of activities mostly in the immaterial field; and such field takes a growing part of the actual economy. Even the most material productions prove growing rather their qualitative dimensions than the old quantitative ones; quantities were dominant in the period of industrialization; today even the consumption society (nowadays replaced by knowledge society – as we like to believe) is demanding rather the same qualitative and service dominant.

In fact, the discussion is often generalized on the topic of value, which is the stake of the whole economic activity, as well as it is the phenomenon (or “substance”) to be captured in the most of the economic indicators, starting with the indicator of productivity. For instance, Ravald and Grönroos (1996) are interested in how and what perceive the customer as a value. The quoted paper moves the point discussion on the customer (in fact, this is an important trend in the theory of the customer as value creator, well developed by the Northern School, which has in Christian Grönroos one of its most creative and persistent promoters). The authors are introducing certain indicators which are ratios putting the perceived benefits as numerator, and having the perceived “sacrifice” as denominator. Even if the marketing point of view is a specific one, and focusing particularly on the customer as a value creator is even more a very specific approach, the manner of dealing with value in these indicators is very alike with the generally valid productivity indicator: such indicators are built as productivity formulas, i.e. on productivity’s principle that we shown at the beginning of present section.

As expected, the stakes (and the “alternatives for creating value”) are described, in the quoted paper, as “increasing the benefits” and “reducing the sacrifice”. But what we consider most important – and of most general validity – in the quoted paper, despite its very particular point of view (“customer value creator”, within marketing theory), is the next issue (which is also the main reason for quoting this paper in our debate): the authors introduce in the formulas they draft a factor that is unusual for orthodox productivity formulas, i.e. the relationship; this is the offering from a relationship marketing perspective. They speak about “the value of a relationship”, about “relationship benefit”, and “relationship sacrifice”.

Such an approach is consistent with taking into account not only the usual competition, but, fruitfully, also the co-production and, generally, the cooperative approach; and the whole serving kind attitude as well, adequate for all the relations in the economy and in human society, everywhere humans intervene. Such an approach corresponds to the approaches of the relationships between and within all entities, natural persons and corporate bodies, as the conception of the European Union’s rules is.
In the context of our paper, our point concerning such relationship is that the “external” concern of all economic entities, i.e. not only individually for private interests, but also for the customers, suppliers, for the entire system we are living in (Mother Nature here included), is the most beneficial: only such widened horizon relationships bring genuine value creation (in the whole co-productive system).

We consider that, from the point of view of understanding the economic reality, only a comprehensive systemic approach is consistent with the presumption of the “invisible hand” that classical economics considers bringing the better (see the section concerning the genuine liberalism, where the issue was mentioned). We consider that the focus exclusively on the individual interest is the biggest problem of the productivity estimations: such usual estimations ignore all the rest, loosing the most of the reality to be captured. For the case of business studies it may be normal; but in that what concerns the economics, truncating means wrongness.

The coproduction of the supplier with his/her customer should be extended to the generalized coproduction represented by the general concept of service (Jivan, 1993). The co-production between diverse entities (enterprises, nations) should be considered. The approach of efficiency should be in a Pareto generalized optics; such generalization is in diverse dimensions (Jivan, 2014).

For the problem of inadequate productivity indicator to capture the productive-creative achievements, we exemplify mainly Jivan, 1993, 2000, 2014); this very debate was the ground of rising the servicity approach. Namely, the central idea is to criticize measuring productivity based on economic entity’s income: these receipts express the ability of the actors to appropriate values, and not strictly their quality to create value (Jivan, 2014). It is the logical principle by which the switching – from indicators such as GDP ("product") or gross national "product", to indicators called "income" (Gross Domestic Income or gross national "income") – was achieved after.

The servicity approach takes into account the “transfer” of certain values, from Mother Nature, or from certain economic entities, to other economic entities, by the market mechanism (during the negotiations, for instance). Let’s remember the Physiocrat conception we quoted in the section concerning genuine liberalism. Those last entities record such “transfers” together with their own value creations, as being their “production” (“revenues”, or income). Such transfers can be seen like coming from different sources. For instance, they come from the customers (to the economic entity), by selling at bigger prices. Or they may come (to the economic entity) from its suppliers, by buying at lower prices. Therefore we assume that, in extremis, they can be calculated by multiplying the physical output sold by the firm, with the difference between the selling price and the lowest price, of such output, on the market; and, respectively, by multiplying the physical input, with the difference between the maximal price, on the market, of such inputs, and the buying prices got through negotiation, by the analyzed organization. The calculated transfers we spoke about are from other economic entities; we can analogically estimate the transfers made by the economic entity to other ones.

Taking into account the ratio of the calculated productivity (and the “transfers” we theoretically assumed previously), it is obvious that, in the market competition, all economic entities try to negotiate the biggest possible prices for selling their output, and, respectively, the lowest prices for their inputs. But we can also calculate a more correct indicator of productivity, e.g. if we let out the gains obtained, by the analyzed activity or organization, through the ability of negotiating prices that are most advantageous from its private specific point of view. By such an approach we can obtain the pure contribution of the entity: i.e. just the value it created, by
itself (generated by its quality of creating value), but not the values appropriated from its environment (occasioned by its market skills of appropriating).

In such an approach – concerning the customers and the suppliers of the analyzed economic entity –, the servicity (Jivan, 1993 and 2000) could be estimated also as a ratio, but in opposition with the calculated productivity: the numerator can be the quantity of output multiplied by the lowest selling price on the market; and the denominator can be the quantity of factor (input) multiplied with the biggest possible buying price resulted from the market negotiation.

5. CONCLUSIONS

From the debate in the foregoing pages, conclusions on tackling economic policies result, in order to comply with substantive requirements of grounding the knowledge economy.

As already seen, we are inspired by the point of view of the genuine liberalism (please see the quotation from Quesnay).

We assume that, in the conditions of the new economy, the perception (understanding) of the genuine producing activity could be consistent with the theoretical contribution brought by service economy. In nowadays, the co-production makes the issue also more complex. The individualist competition should be rather replaced with co-operation, in the purpose of improving value co-production. In economics, the theory of the producer should be combined with the theory of the consumer, the economic agent being normally in both positions. The conceptual horizon of economics must be extended, in our opinion, from the usual “producer” to the whole social-human and planetary system.

Large companies finance their own business researches. But science has the task of a systemic approach, interested only in knowing more and more complex, as comprehensive as possible. The neutral general economic research must preserve the neutrality that defines science. It must have regard to all the entities in the economy, from the point of view of both entrepreneurs and consumers, and of the nature and of the future generations as well. Really scientific research focuses on the truly comprehensive, sustainable development. In the general-human development, the economy is just one dimension, and is justified only insofar as is support for the quality of life.

We subscribe to the stress put by Suciu (2000) on the necessity of substantial reorientation of education and instruction, thus as it can promote the ICT, but also a permanent updating and improvement of educational system, in the purpose of good correspondence with all the technical and scientific advances. In the purpose of focusing the formative efforts on the directions required by the knowledge society, we also underline that the role of education is much more comprehensive than only such problems and requests. We think that the focus on preparing people for the market, in the main purpose of covering the market demand for labour, brought us to a state where the understanding is often limited (narrow): ethics and complex spirituality are often ignored and remain undeveloped. Human development is more important than the economic one: the last one is just a tool for the first one, for creating the conditions of a good life; but it is not a goal in itself. The stress on general education of people is too much ignored. We must not forget our human spirit of formation: the fundamental part of formation involves conceptuality, interdisciplinary knowledge, creative capacity, humanism ... It comes first; and the practical and applicative skills should be just developments of the fundamental formation.
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CHANGES IN ECONOMIC EFFECTIVENESS OF MEDICAL ORGANIZATIONS THROUGH EMOTIONAL AND SOCIAL COMPETENCE (E&SC) DEVELOPMENT OF DOCTORS

Irina KOSTADINOVA¹
Nikolai EVGENIEV²

ABSTRACT

The complex world of health care system needs transformation/reformation as every patent incl. politicians would say. Putting patients’ needs into focus does not undermine the doctor’s role in the system, on the contrary. Improving their effectiveness (economic, medical and social) becomes vital and a key factor for the successful transformation. The purpose of this paper is to show the influence of E&SC on doctors’ results. To achieve this goal several empirical researches have been conducted in two hospitals in Bulgaria. The main issues are to specify the connection (correlation) between doctors’ results and the outcome of the medical organizations and to stress the doctor’s role in the success or failure of any transformation. The doctor’s profile as well as the methodological instruments applied for assessment on influence of emotional and social intelligence upon the medical practice are presented as well.

KEY WORDS: economic effectiveness, professional, emotional and social competence model

JEL: M 51, M53, M54

1. INTRODUCTION

In Bulgaria several reforms in the system of healthcare management have been made during the last two decades. All of them aiming at a change of existing state-centralized administrative model. The introduction of health insurance scheme of financing, the commercial status of medical institutions, free choice of patients (in regards to their treatment). This market for health services and competition change the old model of management in healthcare.

According to Georgi Ivanov and colleagues the aim of all these reforms – the realization of higher effectiveness of the health care system has not yet been achieved (Ivanov (2012)). One of the main reasons for this is that still the state and municipalities appoint management of the medical organizations (Petrova, Zl.and K. Chamov (2008) Shipkovenska, E and L. Ivanov (2011). The objective of the study is the presentation of a comparative analysis of economic effectiveness of two hospitals in Bulgaria, which is part of a larger long developed work of emotional and social competence (E&SC) influence on the results of doctor practice. The main goal of the health care system and in particular the doctor practice, is to provide health care services improving the quality of life, the main purpose of this paper is to show the influence of E&SC on doctors’ results.

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The object of the study is the management of medical practice, so that at a later stage we could form a system of indicators by which to study the influence of emotional and social intelligence on the effectiveness of medical activity. The tasks are as follows:

- systematization of indicators for comparative analysis of the study results, assessing the impact of E&SI on improving the physicians professional competence in terms of the organizational goals of the hospitals;
- conducting a comparative social experiment with a base and control group of hospitals to demonstrate the methodological applicability for training of the integrated competence model, taking into consideration the EI&SI impact on improving the results of doctor practice and the correlation with the hospital organizational goals.

2. SYSTEMATIZATION OF INDICATORS TO BE CARRIED OUT FOR COMPARATIVE ANALYSIS OF THE STUDY RESULTS

2.1. Defining different types of effectiveness

Several studies have explored the reasons for the success or failure of doctors who cannot make a decisive step in their professional development, because of fragmented missing elements of emotional and social competence. This problem concerns not only the employees and managers from medium level, but also the strategic management of the medical organization, as it can have a direct effect on their performance in all three aspects (economic, medical and social). In the following text is summarized what is understood by the term effectiveness in the medical organizations.

**Economic effectiveness**

The good health of the population takes an important place in the social values of the modern society. Different kinds of diseases have always accompanied the mankind. Numerous researches have been done through the years on the issue of effectiveness in health care sector. (Ivanov, (2012), Vrachovski and Ninov (2010), Morrison and Bennett (2013)) Generally speaking, effectiveness is the results of operation of the systems. According to Vrachovski (2010) main factors that determine economic losses, and hence economic effectiveness as a result of increased morbidity with temporary disability are:

1) The dynamics and structure of morbidity;
2) Frequency, severity and average length of time disability;
3) Production losses caused as a result of temporary absence from work;
4) Reflects the effect of the illness on the number, structure and distribution of the population;
5) Costs that are made for the prevention of disease;
6) Costs incurred for the treatment and recovery of patients.

**Social effectiveness** of health care stems from the fact that the development of social economic relations affects the results of medical organizations in more than one way. Some researches used the term as a synonym of social justice. In health care systems after the mead 60-s of the 20th century the term has been mostly used to demonstrate the development of social economic relations (increased life expectancy, rising population, increasing sanitary culture)

Medical effectiveness is another major type of effectiveness that is looking into the health care system. Often it conflicts and completely contradicts with economic effectiveness. It is clear that the treatment or medicine/activity which is effective from medical point of view and justified, at the end may turn out economically inefficient.

Doubtlessly this is the biggest problem facing any health system - how to achieve the necessary balance between economic and medical effectiveness.

The medical effectiveness is largely determined by the ability of the system to use the latest medical innovations in the field. It aims to establish the benefits of medical care, as measured by restoring or improving the health of individuals (Shipkovenska (2011)).

All these three types of effectiveness influence the results of the medical organizations. Methods of assessing the effectiveness that are still not very often used Bulgarian medical organizations are as follows:

- cost minimization analysis - CMA
- cost effectiveness analysis CEA
- cost utility analysis – CUA
- cost benefit analysis - CBA

Instead of conclusion, it can be said that the various types of analyzes are used as tools to collect the necessary information and seek more efficient management of the system. They all have positive and negative aspects in their daily implementation. Their main idea is based on thorough analysis to seek opportunities to enhance the medical, social and economic effectiveness of the health care system, which further could lead to some changes in the financing of the system by creating a sustainable model. The use of any of these approaches or a combination of them will be a good opportunity to assess the state of medical organizations and an indicator of their performance at individual (medical staff) and organizational level.

### 2.2. Problems assessing economic effectiveness

The difficulty of assessing economic effectiveness is mainly due to the fact that there is no common indicator system which can hence comparative analyses of the medical organizations in Bulgaria. During the research we formulated the problems that needed to be solved:

- Definition of key indicators that are monitored for calculation of economic effectiveness. It met with considerable difficulty as the health care business is too complex and diverse. Indicators that are chosen must give the most accurate and comprehensive characterization of the economic aspects of health work.
- Calculation of individual indicators and determining their quantitative characteristics. Here the problems are limited to the selection of mathematical and statistical tools to study the cost-effectiveness of health care.
- Summarizing the results of previous studies and economic analysis of each indicator. Here we found some trends that show permanent changes that can develop into patterns. Such a trend could be, for example, the increase in health costs. We should always look for the reasons and factors for it.
As a result we systemized certain criteria and indicators that allowed us to compare the results of the two hospitals (In Table 1 is shown only one)

<table>
<thead>
<tr>
<th>Criteria and indicators for organizational change</th>
<th>Economic</th>
<th>Social</th>
<th>Medical</th>
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<tr>
<td>1. Workloads of medical doctors</td>
<td>1.1. According to norm of time $H_i = t / H_w$</td>
<td>1.2. Total savings from the resources/money/ for social insurance</td>
<td>1.3. Savings from medicines that will not be incorporated in the treatment process</td>
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<td></td>
<td>where $H_w$ – norm of Workloads; $t$ - duration of the working hours of doctors.</td>
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<td></td>
<td>1.1(a). According to norm of workloads $H_w = t / H_t$</td>
<td>Change in the price of clinical pathways</td>
<td>Skills for conducting manipulations:</td>
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<td></td>
<td>where $H_t$ – norm of time $t$-duration of the working hours of medical staff</td>
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<td>Scale from 1 to 5:</td>
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<td>a) unsufficient (1);</td>
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<td>b) has serious lacks in the work (2);</td>
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<td>c) doesn’t have serious lacks in the work (3);</td>
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<tr>
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<td></td>
<td></td>
<td>d) very skilled in the work (4); g) excellent in the work (5).</td>
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<td>Source of information:</td>
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<tr>
<td>Reports of the medical organizations</td>
<td>National Health Insurance Fund (NHIF)</td>
<td>1. Assessment card of the medical doctor</td>
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<td></td>
<td>2. Survey</td>
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As a result of the research done in the two hospitals we could conclude:

1. The main conclusion that can be drawn from the surveyed job descriptions is that these are some well detailed documents that ensure the good work in both hospitals and allow precise evaluation of results. They can be found on many of the key indicators for assessing E&SC, albeit unnamed specific terms of the methodology of the survey.

2. Reports to various institutions and balance sheets shows that DDPPDS - Ruse is one of the few hospitals in the country that managed to achieve positive economic results, which speaks for the quality of the management and medical staff. The management of CPPDS-Pleven also succeeded in achieving excellent results, according to the goals of the Hospital "Dr. George
Stransky.” Unfortunately, these efforts have not been adequately assessed by the remuneration the specialists receive for their excellent work.

3. Common performance indicators and performance appraisal assessments of their activities can be concluded that both hospitals fail to meet certain medical standards and optimize the process as it has no direct relationship to the quality of the services they provide. Do not underestimate the fact that these doctors do not have a necessary personalized competent professional protection to the Ministry of Health, in order to provide them with higher remuneration the management implements regular clinical trails for pharmaceutical companies.

4. Finally, the analysis carried out on key indicators, job descriptions and appraisal evaluations can say that in Bulgaria there are large differences in pay for the same or similar medical work and this is due to various factors. It has been shown, based on the analysis that there is no link between the amount of wages, health outcomes and quality of the medical services. This result corresponds to the Ivanov’ view presented in 2.1. that there is no link between the qualities of individual doctors and the size of their salaries. Another factor on which the management of hospitals can not influence is the ownership of medical organizations. On the other hand, they can match purely subjectively the process of determining the amount of wages by acting through the price of contracted clinical paths - the paths running from one hospital with a higher price, the more funds are allocated from the revenue received wages. In most hospitals the amount of staff remuneration is determined by revenue for the hospital structure, not by the quantity and quality of labor input. And where the efforts are put to administratively and purely artificially to make adjustments and unnecessary (pro forma) to perform activities not related to recovery of the patient's health. In long term all parties involved don’t benefit from such actions, neither management of the hospitals nor doctors, much less patients and their relatives. The only benefit is for the accounts of successive "reformers" of the health care system.

3. AN ALGORITHM OF SOCIAL EXPERIMENT FOR ESTABLISHING A PROCESS LEADING TO A POSITIVE ORGANIZATIONAL CHANGE

Once assessing the complexity of doctor’s work in a constantly changing environment it’s clear that alternative ways for improving their results should be looked after. For this purpose a social experiment for establishing a process leading to a positive organizational change in the two hospitals in Ruse and Pleven has been conducted. I was very important to show the benefits of applying E&S competence on their current job at the hospital. At the same time it was made clear for them, that through developing their E&SC they can better assess the future opportunities open in front of them and the organization in which they work.
They must clearly see the benefits of applying E&S competence on their current job at the hospital. It is interesting to note that there wasn’t a strong resistant from the management of the hospitals as it was expected. On the contrary the majority of the medical staff have shown a great desire to be a part of the experiment. Their cooperation was the main factor for the successful ending of the experiment.
4. ECONOMIC CHANGES IN DDPPDS “Dimitar Gramatikov”- Ruse

Performing the different steps in the algorithm (Fig.1) presented above several results have been obtained. Assessment of E&SC development can be found in the appraisal card used as another instrument by the hospital management.

The professional competence of the doctors viewed in terms of the theory (Golman (2010) Kornacki and Caruso, D. (2007)) of E&S intelligence allowed us to implement in practice a comprehensive doctor’s profile based on the key competencies needed.

The overall results confirm that the combination of professional, emotional and social competence creates a profile of highly trained and active professionals in the two hospitals. Hence it can raise the quality of health care service, which in turn has a direct impact on achieving organizational goals in all three aspects (medical, economic and social).

![Change in economic indicators](image)

**Figure 2** – Change of economic indicators in DDPPDS”Dimitar Gramatikov”- Ruse (1)

![Change in the economic indicators](image)

**Figure 3** – Change of economic indicators in DDPPDS”Dimitar Gramatikov”- Ruse (2)
As it could be seen from the Fig. 2 and 3 there are not considerable changes in the main economic indicators chosen for this empirical research. This does not contradict with the theory on the contrary confirms the assumption that it will take a longer period (2-3 years) to see direct changes in that aspect. On the other hand the results in connection with social indicators confirm the theory that through developing E&SC of doctors we could improve their results in all aspects (economic, medical and social) and that fact ultimately leads to a positive organizational change.

5. CONCLUSIONS

As final words, it can be summarized that the current health care system structure is defined by economic, medical and social characteristics. As a conclusion, we can say that the effectiveness of medical work is not determinative of the level of health in the countries surveyed. And many accusations that are leveled against senior medical staff are largely unfounded. According to data and reports from the World Health Organization (WHO) all stakeholder responsible to provide quality health services have a limited impact on public health and formed only from 8 to 10% of the health status indicators of the population. (WHO, “The Role of Health Promotion in Tackling Inequalities in Health. Policy Recommendations”, Brussels, 2001). According to one of the leading Bulgarian doctors and successful managers Shterev all medical interventions affect not more than 10% of the health outcomes of patients. (Щерев, А., „Митове в българското здравеопазване“, Здравен мениджмънт (7), бр.2, 2007, с.11-17) The main factors that determine the health status of the population are: economic level of development, environment, education, social assistance, etc. And here an important role could be played emotional and social intelligence of doctors to change individual perception of patient attitudes of the general public about their role as a leading factor in the health status of the population.

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*** „Dlzahnostna karakteristika na lekar, pnevmologiya i ftiziatriya Klinikata po pnevmologiya i ftiziatriya e razpolozhena na teritoriata na ”UMBAL – D-r Georgi Straksi” EAD, Kod po NKPD: 2212 7065

*** „Dlzahnostna karakteristika na nachalnik na parvo otdelenie na klinika po pnevmologiya i ftiziatriya, Kod po NKPD:1342 7010


*** „Otchet za deynostta na UMBAL - d-r Georgi Straksi” EAD – Pleven za 2014 god.

*** Otchet za deynostta na UMBAL - d-r Georgi Straksi” EAD – Pleven za 2015 god.

1 DDPPDS,District Dispensary for Pneumo-Phtysiatric Diseases with Stacionary – Ruse PLTD (The hospital where our research is conducted and CPPDS-Pleven
1 The organization is a monopolist in Bulgaria
1 This info is from a previous work of the author: It can be said that E&SI determines the potential of individuals to learn while E&S competence show how much of this potential can be realized through training and improvement of these four elements in the transformation of intelligence into new competencies for work.

According to some researchers(Goleman; 2010; Ciarrochi J. & J. D. Mayer 2007) the key point in applying E&SI theory is to achieve a balance between logic and emotion in building an integrated model of competence. The process of gaining new knowledge, skills, personality traits and motivation should be performed by a specific tool that is suitable everywhere, but on the other hand, it can leave room for maneuvering in its use in specific medical occupations or other professional activities. As a result, doctors should not only acquire new knowledge, abilities and skills through training, but they need to show a desire and will to apply what they have learned in their professional life in specific situations requiring these new competencies.

The aim of the training is to make trainees more aware of the emotions role in improving their motivation, self-knowledge, acquiring new skills, realizing what the level of their emotional capacity is, and how they can achieve personal and professional change.

Based on the integrated model of competence presented, it can be concluded that the development of emotional and social competence is a complex process in which the key factor for success is how to motivate and evoke a wish for personal traits improvement of the participants. A way to overcome this challenge is highlighting the "portability" and “universality” of E&S competence. Its development can help doctors’ professional activities, as well as their individual personal growth. Strong positive prognostic factor is when the trainees taking part in this learning process succeed in implementing E&SI in their careers and in their personal lives after its completion.
INFLUENCE OF ATTITUDE IN THE PROCESS OF NEW PRODUCT ADOPTION. CASE STUDY: ROMANIAN CONSUMER’S CONTEXT

Gianina Alina LALA

ABSTRACT
We are living in a consumerist society in continuous progress. The world around us is evolving at considerable speed and is undergoing a technologisation with which it is difficult to keep the pace. Consequently, the consumer society supposes an increasingly high circulation of new products on the market, at a higher and higher speed, and with shorter and shorter life span. This means that each of us use more and more products, for shorter and shorter periods, at a higher and higher frequency. The process of new products adoption is a complex phenomenon of present interest, as the product purchase activity is carried out during our entire life, which influences our way of thinking, our mood, as well as the way we spend our time. This paper is focused on presenting the way in which a consumer’s attitude toward a product influences him or her to adopt the respective product. The first section of the paper comprises a description of the main definition of the attitude concept, and the second contains a detailed description of attitude forms, presenting the attitude components and characteristics; the third section contains the research methodology, whereas the final section refers to the conclusions of the research and future directions of action.

KEY WORDS: consumer, decision making, adoption, attitudes

JEL Classification: M30, M31, M39

1. INTRODUCTION

Each day we have the opportunity to express our attitude as consumers, and we all have a multitude of attitudes towards products, services, advertisements and outlets. We may be asked if we like a product or not (for instance a mobile phone), whether we like a service or not (for instance the Internet provided by a certain phone company), and the same about a certain store (for example Lidl), a certain company (e.g. eMAG) or the theme of an ad (Dedeman - “Dedicated to your plans”). People have diverse attitudes regarding religion, politics, clothes, music, food, etc. The attitude is given by the relatively consistent assessments of a person, his or her sentiments and preferences for an object or an idea (Kotler and Keller, 2005).

Attitudes are hard to change. A person’s attitudes fall within a pattern, and in this situation the change of an attitude may impose difficult adjustments of many other attitudes. Thus, a company should rather attempt to adapt its products to the existing consumers’ attitudes than to try to change them. Obviously, there are exceptions proving that the important expenditure made for attitude change brings about its due reward (Ghorban, 2012). The purpose of this research is to determine the influence of attitudes in the process of a new product adapting by Romanian consumers.

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2. DEFINITION OF ATTITUDE

Our lives are influenced by attitudes and affected the way we judge or react to others, to objects and events. The word “attitude” is easily used in daily conversations, but few are really capable to define it. However, for this term there is no exact definition which is generally agreed by social psychologists. Consequently, Academy members and researchers have different definitions for this term.

The Oxford dictionary the word attitude is defined as ”a way of thinking or feeling exactly”. This definition seems simple and understandable, but attitudes related thoughts and feelings a person can not easily be seen as not part of the physical and do not have easy access to the way of thinking of a person. Attitude is therefore a hypothetical feature, which is why the researchers defined the term differently (OED, the online version).

Attitudes are an extremely important part of both the psychology and consumer behavior. In the conception of Allport (1935, p. 156), ”attitude referring to the preparation of individuals regarding experiences and their influences in adopting objects”, while Ajzen I. (2005, p. 59), professor of social psychology, attitude characterized as ”a disposition by which one reacts favourably or unfavourably toward an object, a person, an institution or an event”. Instead, Fill (2006, p. 62) gives the following definition ”attitudes are learned from past experiences and exhibit a connection between thought and behaviour”. Attitudes are distinguished, therefore, preferably also in a state produced by a reaction to certain stimuli, the reaction is comparable to the experiences of the past. Moreover, Blackwell et al. (2006) believe that attitudes are what consumers like it or not, and product purchase decisions by consumers often rely on their attitudes (Schwepker and Cornwell, 1991; Irland, 1993).

Because attitudes play a crucial role in all human behavioral patterns, Dobre (2005, p. 59) believes that ”attitude is the result of the assessment made by the consumer on the ability of a product, a brand or a store to purchase it meets the requirements and consumer demands expressed by various evaluation criteria”.

Although there are contradictions about the exact definition of the term and nature, while there seems to be a general misunderstanding of the fact that attitudes are sustainable systems that influence a person to respond in a certain way. Attitude is a predetermined behavior and a way to respond and react to objects, concepts, situations, behaviors and reactions are those created with previous experience (Palani and Sohrab, 2013).

According to Ghorbani (2012, p. 244), the attitude can be defined as ”long-term assessment of persons, things, advertisements or anything else”. In fact, the attitude is a gradual evaluation of a particular thing, which is performed more or less objectively and permanently by the consumer (Motahari et al., 2015). The attitude of an individual to an object it depends on the knowledge acquired from various sources such as family, social environment, cultural background (Hamid, 2014).

In literature, theory of action reasons (developed by Fishbein and Ajzen, 1975) reminds us that the attitude is closely related to behavior. According to this theory, attitudes and subjective norms are the most powerful determinants of human behavior (Shamim and Butt, 2013).
3. FORMING ATTITUDES

How formed attitudes is a question that many people do not think too much. No one is born with an attitude, but as we move forward in life, attitudes are starting to form. They can arise, for example, under the influence of an advertisement of a product / brand or influence the behavior of a friend.

In terms psychogenic, the presence attitudes was found around the age of two to three years and is expressed by the reaction selectivity with respect to persons and objects from the environment (Brătucu, 2007). Initially, attitudes are characterized by mobility situation, with no separation between gestures, behavior and mental disposition, between internal and external component (Brătucu, 2007).

In the formation of attitudes one takes into account many external and internal factors which mould and create attitudes toward an object. Thus, the main modality of shaping attitudes toward the products and services is represented by the observation of one’s own behaviour, in other words, from direct experience. This can be achieved through various promotional activities such as product testing, free samples, discounts (Solomon, 2004, p. 227). For example, a consumer can buy a new product without having an attitude linked to it, but it is only available for purchase (for example, the last box of aspirin from a gas station). Consumers can also test new brands of certain categories of products that are not necessarily very interested. As it expected if the products thank you, it can form a favorable attitude toward products (Schiffman, Kanuk, 2004, p. 265).

Another extremely important factor in the formation of attitudes is represented by family and reference groups. Attitudes are closely related to personal and social experience that an individual has acquired at birth and during the entire life: family, in kindergarten, in school, at work, etc. The first influences are exerted on the child's family. The earliest they influence, the form faster and deeper impress upon positive or negative attitudes towards certain people, objects, situations, events. According to Brătucu and Dima (2002) the formation of attitudes is a complex process comprising two series of factors: individual factors (age, gender, intelligence, emotional stability and instability, connative dispositions) and social factors (family, school, social, cultural and political organisations, economic conditions).

In addition to direct experience and the influence of family and reference groups, the third important factor in shaping attitudes is the mass media (newspapers, magazines, television, internet).

In turn, consumer personality seems to be as important in shaping attitudes. Traits such as aggression, submission, authority attitude can influence a consumer to a product or brand. For example, dogmatic consumers seem to have a negative attitude towards new products, while consumers innovative seem to have a positive attitude towards everything that is new on the market (Plăiaș, 1997, p. 58).

Regarding the level of attachment to an attitude, Palani and Sohrab (2013) concluded that it is linked to the level of involvement of the consumer, as follows:

- flexibility: contains the lowest degree of involvement. The attitude is formed that involves receiving rewards or avoiding punishment. Specifically, an individual forms his attitude that is accepted by others to make them their pleasure and not be judged. It is a superficial attitude and behavior can change when someone is no longer monitored and when other options are available;
identification: involves inducing the consumer to adopt the same attitudes as another person or group. Advertising that defines the social consequences of choosing a product over another is based on consumers tend to mimic the behavior of those they admire. (Solomon et al., 1999, p. 127);

internalization: are at the highest degree of involvement. These attitudes are hard to change because they are very important for that person, as part of its system of values. For example, many consumers had a positive attitude to Coca-Cola, and when we tried switching to formula New Coke, they had a negative reaction (Solomon et al., 1999, p. 127).

The attitudes of individuals can be measured using surveys and modified through marketing programs. Marketing programs and promotional tactics should aim at addressing cognitive and emotional components of consumer attitudes (Hamid, 2014).

4. THE COMPONENTS OF ATTITUDES

In the literature (Plăiaș, 1997; Schiffman, Kanuk, 2004; Dobre, 2005; Solomon, 2009) attitude is a multidimensional variable consists of three components: cognitive, affective and conative. These components are known as the ABC model of attitude (Solomon, 2009).

The cognitive component (learning) reflects the opening and knowledge of a person in relation with a product or its qualities. These take the form of beliefs that the consumer has of the object (product, service, brand store) and which may be correct, incorrect, positive or negative. However, changing the cognitive component is an effective means of change in the attitudes of consumers as they once modified, feelings and behavior will change in turn. There are many marketing strategies aimed at changing attitudes cognitive component (Hawkins et al., 2003; Dobre, 2005; Băbuț, 2014):

• changing beliefs: it is to change consumer beliefs about the performance of the product (brand) for one or more attributes. For example, consumers beliefs can be changed by resorting to strategies to extend the product range of products (Dobre, 2005);

• importance of the attribute change: refers to a product's characteristics that are considered by some consumers more or less important. Thus, for evaluating a product or brand are considered more marketing actions such as personal selling and advertising campaigns;

• adding new beliefs: requires consideration of a new beliefs that refers to a characteristic of the product or brand that has never been used before;

• changing perceptions about the ideal product: it involves changing consumer expectations about the ideal product attributes. A concrete example would be convincing consumers to adopt products that are "friendly" environment (recyclable packaging, environmentally friendly manufacturing process).

Consumer attitudes change slightly when the product or service is not associated with a value, and buying is not subject to influence reference groups, family, tradition (Dobre, 2005).

The affective component (feeling) refers to sentiments or feelings of a person toward a product, either good or bad, pleasant or unpleasant. Feelings, impressions, moods and emotions to a product are part of this component. While the cognitive component of attitude is considered to be multidimensional, that is the object attributes perceived by the consumer, affective
component is one-dimensional, reflecting the direct evaluation and overall object (the extent to which the consumer likes or dislikes) [Solomon, 2004 pp. 227; Băbuţ 2014, p. 102]. Resorting to various instruments such as classical conditioning, emotions triggered by the advertisement and consumer repeated exposure to advertising messages, marketers have the ability to change consumer behavior through emotional component (Hawkins et al., 2003, p. 396-397; Băbuţ 2014, p. 103).

The behavioural or connative component (doing) refers to the trends or intentions of a person to act in a certain manner. In the conception of Prutianu and collaborators (2002), this component expresses the tendency to act in terms of the attitude object, usually measured by intention to buy it or not.

These components of attitudes (cognitive, affective and conative) tend to be consistent, that a change in one of three components themselves will bring changes in the other two components. Therefore, specialists in advertising can directly influence consumer purchase intent by providing information, pictures, music or other stimuli that influence a belief or sentiment related items (Băbuţ, 2014).

5. CHARACTERISTICS OF ATTITUDES

Attitudes are the result of psychological processes and therefore are not directly observable, but what they profess to be deducted from consumers or by observing their behavior (Dobre, 2005, p. 59).

Attitudes have a number of features (Plăiaş, 1997, p. 82; Schiffman, Kanuk, 2004, p. 253; Dobre, 2005, p. 67; Băbuţ 2014, p. 97-100), namely:

1) Attitudes are a learned predisposition:
   This means that relevant purchasing behavior attitudes are formed as a result of direct experience with the product, the required information from others and experience with the media. For example, the favorable attitude of a consumer product to a McDonald's may be the result of them liked that product or advertising messages have liked achieved this mark. Furthermore, attitudes are not synonymous with buying behavior and consumption, even if it can form as a result thereof. As a predisposition, attitudes have quality motivational, ie they can "target" consumers to a particular product or to "remove" it.

2) The attitudes are consistent with the behavior it reflects:
   Attitudes are not necessarily permanent; they may change over time. Consistency attitudes resulting from behavior that individuals adopt it; namely, they must match the attitudes they have. Therefore, if a consumer said he loves beer brand Timişoreana, it is likely that he would buy and consume beer Timişoreana.

3) Attitudes formed because of situations:
   The situations are events or circumstances upon a time, influence the relationships between attitudes and behavior. A situation may cause consumers to behave in a manner apparently inconsistent with their attitudes. Thus, if a consumer buys every time another mark of a product for everyday use, this does not mean that it has a negative attitude or is dissatisfied with the election earlier, but this behavior can be influenced by a specific circumstance in which it is. For example, if a consumer prefers Persil detergent, buy a different brand of detergent, this
does not mean that it is dissatisfied with favorite detergent, Persil. Its behavior can be imposed by the need to save money, so buying a cheaper brand of detergent. Therefore, individuals may have different attitudes towards a specific behavior, each corresponding to a specific situation. Thus, marketers must know how consumer behavior varies from one situation to another.

4) **Attitudes vary in intensity and favorability:**
   
   Even if attitudes were defined in a variety of ways, most see attitudes as a general assessment. These can be measured using a scale with values that can be ordered from "very positive" to "very negative". The intensity of an attitude is extremely important in terms of consumer behavior, which is why attitudes have achieved distinction in this regard. For example, a consumer who has a favorable attitude toward the brand will be, most likely, a customer of it instead a consumer who has an attitude unfavorable to a brand will be more prone to give up at that mark in favor of another.

5) **Trust in attitudes that are expressed:**
   
   The degree of confidence with which attitudes are expressed attitude determines both the ability to anticipate buying decision will be taken, and the likelihood that such conduct to be changed. When consumer attitude expresses a high degree of confidence, the probability that he would behave under his attitude is higher than when the attitude expresses a less reliable. Moreover, consumers are different in terms of their fidelity to the attitude.

6) **Attitudes are dynamic:**
   
   Attitudes are dynamic rather than static. This means that many attitudes will change over time. The dynamic nature of attitudes is largely responsible for the changes in the lifestyle of consumers. Knowledge attitudes trend could provide a basis for forecasting potential demand for the product and purchasing behavior.

7) **Attitudes are formed in relation to an object:**
   
   It can be a product, a product category, brand, service, manufacturer or service provider, an event, a communication medium or an advertisement. Moreover, the distinction between attitude towards an object that refers to the evaluation of a product or brand based on certain performance criteria and attitude to behavior aimed at a particular object. For example, a consumer may have a positive attitude towards cars Mercedes (attitude towards the object) but a negative attitude towards the possibility of buying such a car (attitude toward behavior). Thus, it is unlikely that individual to purchase a Mercedes car.

6. **RESEARCH METHODOLOGY**

   This study tries to determine the influence attitudes in the process of adopting a new product by Romanian consumers. The instrument used for data collection was questionnaire, which allows analyzing and explaining the causal relationships between variables. Questions that have been used in the questionnaire were mostly measurement scale questions (*Likert Scale*) in five steps. If this research main constructs and items considered for attitude factor are shown in the following table.
Table 1
Constructs of attitude

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Rapid adoption of new product</em></td>
<td><em>I have a great curiosity for all new products appearing on the market;</em></td>
</tr>
<tr>
<td></td>
<td><em>I tend to buy all new products appearing on the market;</em></td>
</tr>
<tr>
<td></td>
<td><em>The product features a new innovation, the faster it will be adopted.</em></td>
</tr>
<tr>
<td><em>Delaying the adoption of a new product</em></td>
<td><em>I tend to delay the adoption of new products, as they may soon become outdated;</em></td>
</tr>
<tr>
<td></td>
<td><em>Most new products are too sophisticated and therefore I tend to delay their adoption;</em></td>
</tr>
<tr>
<td></td>
<td><em>I tend to seek information about a new product perseverance;</em></td>
</tr>
<tr>
<td></td>
<td><em>I tend to buy a new product in a manner carefully calculated;</em></td>
</tr>
<tr>
<td></td>
<td><em>I will not buy a new product until it is familiar.</em></td>
</tr>
<tr>
<td><em>Refusing to adopt a new product</em></td>
<td><em>I used to avoid information about the features of a new product;</em></td>
</tr>
<tr>
<td></td>
<td><em>For the most part they are indifferent to any new product information;</em></td>
</tr>
<tr>
<td></td>
<td><em>I usually avoid purchasing a new product.</em></td>
</tr>
</tbody>
</table>

(Source: the author)

The questionnaire used in this research was applied through both interviewers and online by distribution of the questionnaire link to potential respondents. For the online version was resorted to sending the questionnaire via email, placing it on the social network Facebook and chat app "WhatsApp", thus inviting people present to complete. A second application of the questionnaire varied, via the interviewers, involved questioning persons on the street, to those at shopping in the shops and supermarkets, as well as students from the University "Eftimie Murgu" Resita. All data collected were processed using statistical analysis of the data (the Statistical Package for Social Sciences, SPSS). These analyzes included: descriptive analysis, bivariate analysis and correlation tests.

7. RESULTS OF RESEARCH

The first two questions in the questionnaire referred to the impact a favourable or unfavourable attitude toward a certain new product has on consumers’ decision to adopt it. The relative and absolute frequencies of answers are presented in Table 2.
Table 2

<table>
<thead>
<tr>
<th></th>
<th>Favourable attitude</th>
<th>Unfavourable attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Total disagreement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagreement</td>
<td>6</td>
<td>2.5</td>
</tr>
<tr>
<td>Valid</td>
<td>30</td>
<td>12.5</td>
</tr>
<tr>
<td>Agreement</td>
<td>136</td>
<td>56.7</td>
</tr>
<tr>
<td>Total agreement</td>
<td>58</td>
<td>24.2</td>
</tr>
<tr>
<td>Total</td>
<td>235</td>
<td>97.9</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>2.1</td>
</tr>
<tr>
<td>Total</td>
<td>240</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(Source: the author)

As we may remark by comparing the percents for each answer variant, attitudes, either favourable or unfavourable, have a significant impact on the decision to adopt a new product. Thus, 24.2%, and 21.7% respectively of the respondents totally agree that positive or negative attitudes influence their decision to adopt the product, and 56.7%, and 45.4% respectively partially agree with these statements. The number of those who do not consider that a positive or negative attitude would influence their behaviour toward a new product is much lower, the relative frequencies of answers being below 10%. From the data of the table above, we may remark also that the favourable attitudes seem to have a greater impact than the unfavourable ones, the percents for agreement being higher, and the percents for disagreement are lower in the case of positive attitudes compared to the negative ones.

We continued by analysing the attitude of respondents toward the adoption of new products. From the literature review we identified three potential attitudes a person might have in the process of a new product adoption: rapid product adoption, delayed product adoption or refusal of adoption. The attitudes of respondents related to the adoption of a new product were measured with the help of the three factors identified. Each of these factors was in its turn measured through several items. Thus, a first stage in the assessment of the respondents toward the adoption of new products consisted in calculating the mean values for each of the three factors and their recording in the new variables (ADOPTION_REFUSAL, RAPID_ADOPTION, DELAYED_ADOPTION), and then we realised a global score of the variable ATTITUDES by summing up the values of the three factors.

For the evaluation of the respondents’ attitude toward the adoption of new products, we continue by calculating the mean of scores for each of the three new variables, the results being shown in the  table below.

Table 3

Mean scores of attitudes toward the adoption of a new product

<table>
<thead>
<tr>
<th></th>
<th>rapid_adoption</th>
<th>delayed_adoption</th>
<th>adoption_refusal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.2303</td>
<td>3.1465</td>
<td>2.0075</td>
</tr>
<tr>
<td>N</td>
<td>220</td>
<td>217</td>
<td>221</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.80743</td>
<td>.67775</td>
<td>.75775</td>
</tr>
</tbody>
</table>

(Source: the author)
The highest mean score was obtained by the rapid adoption variable (3.23), whereas the delayed adoption had a mean score of 3.15, and the adoption refusal a score of 2.01. These results show that the persons included in the simple have a positive attitude in relation with the new products, being open to rapidly adopt the innovative products. As for the reluctance toward new products, it exists, but does not have a definitive role in determining the consumer behavior, the mean score obtained by the adoption refusal variable being much lower than in the case of the other two variables.

Then we verified the correlation between the behavioral variable Knowledge and socio-demographic variables. For this purpose we used Kendall’s Tau-b correlation coefficient, which identified the power and direction of association between two variables. Kendall’s Tau-b correlation coefficient is a non-parametric test, used when the variables considered are not continuous variables, being considered an alternative to Pearson’s coefficient (Lund & Lund, 2013).

As we may remark in the table below, there are statistically significant correlations among some socio-demographic variables and the behavioral variable Attitude. These correlations will be discussed in detail below.

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Correlation coeff.</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Correlation coeff.</td>
<td>Adoption</td>
<td>Adoption</td>
<td>Adoption</td>
<td>Attitude</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sig. (2-tailed)</td>
<td>-.146*</td>
<td>-.041</td>
<td>-.055</td>
<td>-.128*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
<td>221</td>
<td>220</td>
<td>217</td>
<td>202</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>Correlation coeff.</td>
<td>-.069</td>
<td>-.092</td>
<td>-.086</td>
<td>-.134*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.202</td>
<td>.083</td>
<td>.106</td>
<td>.012</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
<td>221</td>
<td>220</td>
<td>217</td>
<td>202</td>
</tr>
<tr>
<td>Education</td>
<td>Correlation coeff.</td>
<td>-.095</td>
<td>-.101</td>
<td>-.032</td>
<td>-.114*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.088</td>
<td>.066</td>
<td>.553</td>
<td>.037</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
<td>221</td>
<td>220</td>
<td>217</td>
<td>202</td>
</tr>
<tr>
<td>Occupation</td>
<td>Correlation coeff.</td>
<td>-.040</td>
<td>-.053</td>
<td>-.059</td>
<td>-.101</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.455</td>
<td>.315</td>
<td>.266</td>
<td>.055</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
<td>221</td>
<td>220</td>
<td>217</td>
<td>202</td>
</tr>
<tr>
<td>Income</td>
<td>Correlation coeff.</td>
<td>-.095</td>
<td>.075</td>
<td>.003</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.072</td>
<td>.150</td>
<td>.956</td>
<td>.998</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
<td>221</td>
<td>220</td>
<td>217</td>
<td>202</td>
</tr>
</tbody>
</table>

(Source: the author)

The results of the correlation analysis showed that there is a connection between attitudes and participants’ gender, age and education. Kendall’s Tau-b coefficient in relation with the gender variable was -0.128 (p=0.028<0.05), which indicates a negative relation of low intensity,
statistically significant. This means that women have a more negative attitude toward new products compared to men, being more reluctant to purchase new products. Thus, contrary to expectations, in the case of the analysed sample men have a more positive attitude toward the purchase of new products compared to women.

As regards the correlation between attitudes and age, the Tau-b coefficient had the value $-0.134$ ($p=0.012<0.05$), suggesting a negative and statistically significant relation of low intensity. This value shows that as respondents’ age increases, we witness a more negative general attitude toward the adoption of new products.

Practically, the persons are more reluctant to the new products as they grow older, aspect rather obvious keeping in mind that several prior studies proved in diverse contexts that young people are much more open to new product adoption (Cui et al., 2009).

Education is the third demographic variable which has a significant role in influencing respondents’ attitude related to new products. Thus, the value of the Tau-b coefficient of $-0.114$ ($p=0.037<0.05$) suggests a negative relation, of low intensity and statistically significant. In other words, the higher the education level, the more negative the respondents' attitude toward new products. This correlation may be explained by the fact that a higher educational level involves a higher education of persons in their purchases of new products and the need for a longer period for studying the potential advantages of such products, the reluctance generating a more negative attitude toward new products.

At the same time, the persons with less education could be inclined to have a more impulsive attitude when it comes to new products, which they would automatically perceive as being better, without a thorough analysis of pros and cons, hence the more positive attitude of this group of persons.

In order to identify the existence of significant differences between the main values of different groups of respondents, two statistic analyses were conducted: the T test for independent samples in the case of dichotomised variables, and ANOVA in the case of variables with more than two categories.

Thus, through these analyses we aimed at finding out if the answers of diverse socio-demographic categories of respondents significantly differ from each other. A first analysis using the T test attempted to observe the existence of significant difference of answers between women and men, in the case of behavioural variable Knowledge.

The results are presented in the tables below.

<table>
<thead>
<tr>
<th>Table 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Statistics</td>
</tr>
<tr>
<td>Criterion</td>
</tr>
<tr>
<td><strong>Attitudes</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

(Source: the author)
Table 6
Independent Samples Test

<table>
<thead>
<tr>
<th></th>
<th>t-test for Equality of Means</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
<td>Df</td>
<td>Sig. (2-tailed)</td>
<td>Mean Difference</td>
<td>Std. Error Difference</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>2.181</td>
<td>200</td>
<td>.030</td>
<td>.44481</td>
<td>.20396</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>2.111</td>
<td>142.34</td>
<td>.037</td>
<td>.44481</td>
<td>.21069</td>
</tr>
</tbody>
</table>

(Source: the author)

As we may remark from these results, the T test identified a significant difference of mean values obtained in the cases of the variable Attitude (p=0.030<0.05), between the group of female respondents and male respondents. The mean values for the two groups, according to the table of group statistics, are 8.63 in the case of men, and 8.19 in the case of women, result confirming the discoveries of the correlation test conducted before: women on the whole have a more negative attitude toward new products than men.

Then, we analysed the behavioural variable Attitudes in relation with the socio-demographic variable Age by means of an ANOVA analysis, the results being presented in the table below.

Table 7
ANOVA

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>attitudes</td>
<td>Between Groups</td>
<td>13.394</td>
<td>4</td>
<td>3.349</td>
<td>1.690</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>390.390</td>
<td>197</td>
<td>1.982</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>403.784</td>
<td>201</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: the author)

In the case of the socio-demographic variable Education we used the T test for the identification of the differences between the means of diverse groups, because some of these groups had a very low number of respondents (under 10), affecting thus the validity of results. For the realisation of the T test, the sample of respondents was divided into two categories: persons without higher education (graduates of middle school, high school, post-secondary school, and vocational school) and persons with higher education (graduate and post-graduate). The results are detailed in the table below.
According to the results obtained, the variable Education has an impact very close to the limits of statistic significance (p=0.052) on the variable Attitude. According to descriptive statistics by groups, the respondents with higher education had a mean value of answers 0.4 times lower than those without higher educations (8.19, and 8.59 respectively). These values confirm the fact that the attitudes toward new products are the more negative as the educational level increases. We can appreciate thus that in the case of the analysed sample the persons with higher education have a more reluctant attitude toward new products, being less inclined to purchase them immediately.

8. CONCLUSIONS, LIMITS AND FUTURE DIRECTIONS OF RESEARCH

The present paper aimed at offering a perspective on the manner in which attitudes influence consumers in making the purchasing decision. The attitudes are essential for the research of consumers’ conduct, and marketing often searches modalities of determining and modifying the attitudes related to products, brands and services.

Based on the review of literature we identified three potential attitudes toward the adoption of a new product, which were measured through three factors: adoption refusal, rapid adoption and delayed adoption. Following the analysis of the results obtained, it resulted that the answers of the analysed sample tend to have a favourable attitude toward the adoption of new products, the majority being aware of the fact that the attitude toward the new products influence their purchasing decision.

Regarding the differences existing between diverse categories of questioned consumers, contrary to expectations, the results of statistic analysis showed that men have an attitude more favourable about the adoption of new products than women. Furthermore, we remarked the existence of a direct and negative connection between the participants’ age and education and the general attitude thereof toward the adoption of new products. Thus the consumers’ attitude toward the adoption of new products becomes more and more negative as their age and educational level increase. In other words the persons with a higher educational level and older
respondents will be more reluctant to new products than the persons who are younger and less educated.

Limits on the research are mainly due to financial and time restrictions, nevertheless they can easily become constructive and properly transformed in future research. Thus, the table below presents the main limits of the study conducted and possible future research directions in the field.

**Table 9**  
Limits and future research directions

<table>
<thead>
<tr>
<th>LIMITS</th>
<th>FUTURE DIRECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Small size of the sample used in the research and its non-representative character.</td>
<td>• Investigation of larger samples, representative on the regional or national level.</td>
</tr>
<tr>
<td>• Use of a non-probabilistic sampling method.</td>
<td>• Performance of surveys using probabilistic sampling techniques.</td>
</tr>
<tr>
<td>• Generalist approach of the theme and of the empirical study which analyses the factors of a new product adoption.</td>
<td>• Particularisation of the research by certain domains or categories of products, in the analysis of the factors of the process of new product adoption, for the identification of specific particular aspects.</td>
</tr>
<tr>
<td>• Short period of research performance.</td>
<td>• Elaboration of panel surveys, meant to periodically investigate the process of new products adoption in dynamic domains, with fast changes, such as the technological field.</td>
</tr>
</tbody>
</table>

(Source: the author)

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THE IMPORTANCE OF KNOWLEDGE IN THE CONSUMER’S DECISION MAKING PROCESS

Gianina Alina LALA

ABSTRACT
Studying the consumer knowledge has become a permanent concern of researchers and holds a pilot position as it is one of the buildings that have been constantly defined and applied since its introduction in the area of discovering the consumers’ behavior. This paper focuses on studying the importance of knowledge in consumers’ decision-making process. It is structured as follows: the first part includes a review of literature on the definition of knowledge, in the second part it describes the content of knowledge, the third part is dedicated to the research methodology and research results, while at the end of the paper presents the conclusions of the conducted study.

KEY WORDS: decision making process, knowledge, consumer, information

JEL: M 30, M 31, M 39

1. INTRODUCTION

Understanding how consumers organize within their memory the information about a brand or product has become an important topic in the context of studying how to prepare the way of purchasing decisions (Howard și Sheth, 1969; Nedungadi, Chattopadhyay și Muthukrishnan, 2001). This interest is because, frequently, it was demonstrated that the way information is organized in memory affects knowledge used in making purchasing decisions (Wyer și Srull, 1989; Nedungadi, 1990). Influencing consumer knowledge is a common goal of marketing activity. Introducing a major innovation in the market will normally require, efforts to "educate" consumers about the new offer. Even if the new product is simply another brand in a category set will often be necessary to influence consumer knowledge about existing brand and how it differs from what a competing (Plăiaș, 2010).

2. DEFINING THE CONCEPT OF KNOWLEDGE

The term “knowledge” is highly used; there are many definitions of it in different contexts. This concept is reflected by a multitude of terms that refer to an example or process within the scope of knowledge: skill, competence, capacity, conviction, discovery, estimation, evidence, experience, explanation, hint, idea, intelligence, interpretation, intuition, invention, talent, observation, opinion, effectiveness, respect, tradition, understanding, wisdom (Leana, 1985; Weick, 1995; Grant, 1996; Alba și Hutchinson, 2000; Stankosky și Vandergriff, 2010). Thus it is not surprising that, until now, none of the definitions of knowledge managed to encompass all these terms. However, it is doubtful that such a comprehensive definition could be

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operational and would correspond to all disciplines that use this concept or that it could form the basis of future studies (Grant, 1996).

According to Grover and Davenport (2001, p. 253) "knowledge process acting on information held by consumers to generate new information which gives, in turn, means more opportunities for older or organizational needs us".

Moreover, there are researchers who have concluded that we must reconsider the way in which people have the chance to understand the information in the same way, that they "should have the same background knowledge" (Ogunseye et al., 2011; Vuori and Okkonen, 2012). At a general level, "knowledge can be defined as information stored in memory". The subset of the total information relevant to the consumer market manifestation is called customer intimacy (Plăiaș, 2010, p. 46).

Consumer knowledge can be defined as "a subset of all stored information that is relevant to the purchase and consumption of products" (Di Virgilio and Di Pietro 2014, p. 254). Standard consumer knowledge representation structure a network of interrelated concepts without restriction. Possible types of associations include the characteristics of the target concept, similar products, attitudes and other assessments summary, associations related to the purchasing process, including information about the store and price and previous memories from advertising or from the accounts of others (Keller, 1993; Lefkoff-Hagius și Mason, 1993; Wright și Lynch, 1995; Lawson, 1998).

### 3. CONTENT OF KNOWLEDGE

In terms of content knowledge, the psychologist Anderson (1983) suggested that there are two basic types of knowledge:

a) **declarative knowledge**: involving subjective facts that are known. This type of knowledge is divided into two categories: (1) episodic involving information that is limited by time, being used to answer the question "When did you buy last?" and (2) semantic containing generalized knowledge that figures understanding individual world.

b) **procedural knowledge**: that is to understand how these facts can be used. These facts are subjective in the sense that they do not need to correspond to objective reality. Over time, marketers have found that it is useful to examine consumer's knowledge within three general areas (Plăiaș, 2010):

1. **Product knowledge**: is a conglomerate of several types of information and may include:
   - awareness of the product category and brand in the product category;
   - product terminology;
   - product attributes or characteristics;
   - beliefs about the product category in general and about specific brands.

2. **Knowledge about buying**: contain different amounts of information held by the consumer, the starting point in the search of products. Basic dimensions of knowledge involves purchasing decisions on information related to the place of purchase and time of purchase.

3. **Knowledge of usage**: includes available information in memory about how a product can be used and what needs to be known to actually use the product. This type of knowledge are important for consumers for several reasons. First, consumers are less likely to buy a product when they have sufficient knowledge about how to use. A similar situation, the purchase is emerging where consumers have incomplete information about the various ways or situations
where a product can be used. A major challenge in selecting new uses is the fact that the new use may reduce the attractiveness of the product to consumers. Even if knowledge does not prevent misuse of the product purchase, this may, ultimately, have a negative effect on customer satisfaction. A product misused can not meet consumer expectations, causing customers a sense of dissatisfaction.

Acquisition and use of consistent knowledge by consumer is not a simple task. It is a multidimensional process that, according to Alba and Hutchinson (2000), is rarely complete or without error. In addition, the different elements of this process can exercise separately or together, varied and sometimes conflicting influences on the process, and so complicated decision-making. The impact of consumer knowledge is fundamental for decision making.

In terms of consumer behavior, consumer investment in knowledge should, according to Bonner (1992), Shim and Dubey (1995) contribute to:

- better management of resources and more rational selections that have a direct impact on their state well;
- more efficient interactions to achieve the best shopping;
- better informed decision making processes;
- contentment and a higher standard of living.

Shim and Dubey (1995) made a distinction between consumer knowledge and skills though its terms were empirically correlated and have been used alternately or simultaneously. According to this distinction, consumer knowledge relates more to the stored information relating to the product and consumer skills relate to consumer behaviors that supposedly is learned and can be changed after consumer experiences.

According to McEachern and Warnaby (2008), knowledge can be divided into the following categories:

- knowledge of the system: which refers to the way it works systems or processes;
- knowledge of action: referring to behavior choices;
- effective knowledge: knowledge which refers to potential benefits or certain behaviors.

Development of knowledge consumer shows us that a "theory of the consumer" does not yet exist and efforts of scientists ranging from a goal very ambitious to develop a comprehensive theory to a goal less aspiring to develop theories (Teas and Palan, 1997; Summers, 2001). So, inevitably, many other aspects of consumer behavior have been neglected. One of these issues is precisely study on the behavior of the group. Only a few prospects (Bagozzi, 2000 Briley and Wyer, 2002; Cummings, 2004) emphasize the role of the group of consumers. These insights suggest that, while the "knowledge" are owned individually, collectively integration is absolutely necessary. This integration occurs, usually in groups. Numerous studies have demonstrated the benefits groups that communicate and engage in information exchanges (Keller, 1993; Gruenfeld et al., 1996). In this case, the consumer knowledge can be applied to groups of two or more people who share the same goal: making decisions to purchase products. The ultimate goal of the group may meet a need related to the purchase of goods and services. When the information is owned by more and more members, they can give each other pointers to help the assimilation of knowledge and decision-making (West, Garrod and Carletti, 1997; Bagozzi, 2000).
4. RESEARCH METHODOLOGY

This study attempts to determine the importance of knowledge in the process of adopting a new product by Romanian consumers. The instrument used for data collection was questionnaire, which allows analyzing and explaining the causal relationships between variables. Questions that have been used in the questionnaire were mostly measurement scale questions (Likert Scale) in five steps. If this research main constructs and items considered for knowledge factor are shown in the following table.

<table>
<thead>
<tr>
<th>CONSTRUCTS</th>
<th>ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge held by the consumer to adopt a product</td>
<td>Information on how to use the product; Relevant information about the product; The benefits offered by the product; Commercial information about the product; Information related to product price.</td>
</tr>
<tr>
<td>Knowledge of product</td>
<td>Products feature a new technology are most easily adopted; Take into account the characteristics of the product when deciding to adopt; Product brand is an important factor in the purchase; The appearance and functions of the product may affect its adoption.</td>
</tr>
<tr>
<td>Knowledge of use</td>
<td>How much the product is easy to use, the faster it is adopted; Incomplete information on how or where a product can be used makes me not adopt the product;</td>
</tr>
<tr>
<td>Knowledge purchase</td>
<td>Placing the product on the market can affect its adoption; Buy products only in the promotion; Some products are purchased only in certain periods of the year (eg during holidays).</td>
</tr>
</tbody>
</table>

(Source: the author)

When they decide to adopt a new product or service, people often build their arguments in favor of their action, but they also justify their contrary view. Such arguments may occur shortly, or longer before the proper action. The highlighted element in literature about the adoption of new products / services (Rogers, 2003; Morwitz et al. 2007; Van Ittersum și Feinberg, 2010) is how knowledge can influence the way the individual understands what he\she wins or loses when deciding to adopt a new product.

The questionnaire used in this research was applied through both interviewers and online by distribution of the questionnaire link to potential respondents. For the online version was resorted to sending the questionnaire via email, placing it on the social network Facebook and
chat app "WhatsApp", thus inviting people present to complete. A second application of the questionnaire varied, via the interviewers, involved questioning persons on the street, to those at shopping in the shops and supermarkets, as well as students from the University "Eftimie Murgu" Resita. All data collected were processed using statistical analysis of the data (the Statistical Package for Social Sciences, SPSS). These analyzes included: descriptive analysis, bivariate analysis and correlation tests.

5. RESULTS OF RESEARCH

From the analysis of literature it resulted that the most important aspects consumers must know are related to the manner of using the product, its characteristics, the benefits offered, the price of the product and the commercial information about the product. Table 2 presents in detail the results of the descriptive analysis of the answers provided by the persons from the sample to the questions regarding the knowledge they considered important when they adopt a new product.

Table 2

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>Std. Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use-related information</td>
<td>232</td>
<td>4.31</td>
<td>4.00</td>
<td>.779</td>
<td>.606</td>
</tr>
<tr>
<td>Product information</td>
<td>232</td>
<td>4.35</td>
<td>4.00</td>
<td>.769</td>
<td>.592</td>
</tr>
<tr>
<td>Benefits information</td>
<td>231</td>
<td>4.60</td>
<td>5.00</td>
<td>.657</td>
<td>.432</td>
</tr>
<tr>
<td>Commercial information</td>
<td>224</td>
<td>3.64</td>
<td>4.00</td>
<td>.951</td>
<td>.905</td>
</tr>
<tr>
<td>Price information</td>
<td>226</td>
<td>4.07</td>
<td>4.00</td>
<td>.892</td>
<td>.795</td>
</tr>
</tbody>
</table>

(Source: the author)

As we may remark from the data in the table above, in the respondents’ opinion the most important knowledge needed to be possessed are those related to the benefits, general information about the product and about its use, these aspects obtaining the highest mean scores (4.60, 4.35, and 4.31 respectively). Then, the price of the product is also considered important, with a mean score of 4.07, whereas the commercial information is considered to be the least necessary when consumers adopt a new product (mean score of 3.64). Furthermore, most respondents totally agree with the importance of benefits, of information about the product and use in the choice of a new product, and partially agree when it comes to the importance of price and commercial information (the most frequent answer was 5 in the first three cases, and 4 in the last two). As regards the dispersion of answers, their variance from the mean score was the lowest in the case of the question about benefits (0.432) and the highest in the case of commercial information (0.905). In other words, the respondents had more convergent opinions in relation with the benefits than in relation with the commercial information.

In this section of the questionnaire, the respondents were also asked to give their opinion regarding the manner in which the level of product knowledge and awareness influences their attitude toward the adoption of the product. The relative frequency of answers to this question is presented in Figure 1. According to the data from the graph below, 34% of the interviewed subjects totally agree, whereas 52% partially agree with the statement that the level of
knowledge influences their attitude about the adoption of a new product. Only 5% of the respondents declared they (totally or partially) disagree with this assertion, while 7% declared to be indifferent, and 2% could not provide any answer.

![Pie chart showing distribution of respondents depending on the criterion “Influence of knowledge on attitude.”](image)

**Figure 1.** Distribution of respondents depending on the criterion “Influence of knowledge on attitude”

*Legend:*
Knowledge influences attitude
- **total agreement**
- **agreement**
- **indifferent**
- **disagreement**
- **total disagreement**
- **cannot appreciate**

We continued by checking the correlation between the behavioural variable Knowledge and the socio-demographic variables. For this purpose we used Kendall’s Tau-b correlation coefficient which identifies the power and direction of association between two variables. Kendall’s Tau-b correlation coefficient is a non-parametric test, used when the variables considered are not all continuous variables, and it is considered an alternative to Pearson’s coefficient (Lund & Lund, 2013). As we can remark in the table below, there are correlations significant from the statistic point of view between some socio-demographic variables and the behavioural variable Knowledge. These correlations shall be discussed in detail below.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Correlation coefficient</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td><strong>.124</strong></td>
<td>.035</td>
<td>219</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td><strong>.079</strong></td>
<td>.140</td>
<td></td>
</tr>
</tbody>
</table>
Thus, the variable Knowledge is correlated with gender, education and income of respondents. The value of the Tau-b association coefficient between knowledge and gender of respondents is 0.124 ($p=0.035<0.05$), which suggests a positive connection, of weak intensity between the two variables. This means that women tend to have wider knowledge in the purchasing process than men (in the SPSS data base the male gender was encoded by 1 and the female by 2). As for incomes, they are positively and significantly correlated from the statistic point of view with knowledge ($p=0.002<0.005$), the value of the Tau-b coefficient being 0.160. This value shows a connection of weak intensity and suggests that the level of knowledge increases along with the increase of incomes or, in other words, consumers with higher incomes are more educated as regards the purchasing process. The value of the correlation coefficient between knowledge and education is 0.119 ($p=0.032<0.05$), which proves the existence of a relation of weak intensity and statistically significant. This means that the level of respondents’ knowledge increase along with their educational level.

For the identification of the existence of significant differences between the mean values of different groups of respondents we used two types of statistic analyses: the T test for independent samples in the case of dichotomised variables, and ANOVA in the case of variables with more than two categories. Thus, by means of these analyses we inquired if the answers of diverse socio-demographic categories of respondents significantly differ from one another. A first analysis using the T test attempted to grasp the existence of significant differences of answers between women and men, in the case of the behavioural variable Knowledge. The results are presented in the tables below.

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Male</td>
<td>84</td>
<td>4.1024</td>
<td>.56696</td>
<td>.06186</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>135</td>
<td>4.2504</td>
<td>.56501</td>
<td>.04863</td>
</tr>
</tbody>
</table>

(Source: the author)
In the case of the variable Knowledge (p=0.061>0.05), we may remark that their level is higher in the case of female subjects (mean value 4.25) than in the case of male respondents (mean value 4.10). Although the difference is not statistically significant, it shows a trend that needs to be taken into account in future studies, but also on the practical level, in the business environment, where companies will have to stress more the promotion of new products among women. We proceeded then to the analysis of the behavioural variable Knowledge in relation with the socio-demographic variable Age by means of an ANOVA analysis, the results being presented in the table below.

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>t-test for Equality of Means</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances assumed</td>
<td>T: -1.882, Df: 217, Sig.: .061</td>
<td>-.14799</td>
<td>.07862</td>
<td>-0.30295 to 0.00697</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>T: -1.881, Df: 175.71, Sig.: .062</td>
<td>-.14799</td>
<td>.07869</td>
<td>-0.30328 to 0.00730</td>
</tr>
</tbody>
</table>

In order to identify the groups of occupations between which there are differences regarding knowledge we conducted a post-hoc analysis. The results of the Tukey test showed that the group of retired respondents exhibited significant differences of knowledge compared to other categories of occupations: school pupils and students, students (p=0.002<0.005), independent (p=0.002<0.005), occupations with middle school education (p=0.032<0.05), occupations with higher education (p=0.001<0.005) and other occupations (p<0.001). The mean differences of responses ranged between 0.949 and 1.249, the level of knowledge being lower in the case of pensioners than among the other categories of occupations (according to the data from the tables below).
Table 7
Multiple Comparisons

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(I) Occupation</th>
<th>(J) Occupation</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>knowledge</td>
<td>pupil, student</td>
<td>-1.00316*</td>
<td>.25233</td>
<td>.002</td>
<td>-1.7757, -.2306</td>
<td></td>
</tr>
<tr>
<td></td>
<td>independent</td>
<td>-1.11500*</td>
<td>.28002</td>
<td>.002</td>
<td>-1.9723, -.2577</td>
<td></td>
</tr>
<tr>
<td></td>
<td>middle school occupations</td>
<td>-.94909*</td>
<td>.29478</td>
<td>.032</td>
<td>-1.8516, -.0466</td>
<td></td>
</tr>
<tr>
<td></td>
<td>higher education occupations</td>
<td>-1.09250*</td>
<td>.25194</td>
<td>.001</td>
<td>-1.8638, -.3212</td>
<td></td>
</tr>
<tr>
<td></td>
<td>home maker, without occupation</td>
<td>-1.14000</td>
<td>.45726</td>
<td>.204</td>
<td>-2.5400, .2600</td>
<td></td>
</tr>
<tr>
<td></td>
<td>worker</td>
<td>-.74000</td>
<td>.31157</td>
<td>.259</td>
<td>-1.6939, .2139</td>
<td></td>
</tr>
<tr>
<td></td>
<td>others</td>
<td>-1.24952*</td>
<td>.27196</td>
<td>.000</td>
<td>-2.0822, -.4169</td>
<td></td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.

Table 8
Descriptive

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>knowledge</td>
<td>76</td>
<td>4.1632</td>
<td>.43293</td>
<td>.04966</td>
</tr>
<tr>
<td>pupil, student</td>
<td>16</td>
<td>4.2750</td>
<td>.45534</td>
<td>.11383</td>
</tr>
<tr>
<td>independent</td>
<td>11</td>
<td>4.1091</td>
<td>.44149</td>
<td>.13311</td>
</tr>
<tr>
<td>middle school occupations</td>
<td>80</td>
<td>4.2525</td>
<td>.54818</td>
<td>.06129</td>
</tr>
<tr>
<td>higher education occupations</td>
<td>2</td>
<td>4.3000</td>
<td>.42426</td>
<td>.30000</td>
</tr>
<tr>
<td>home maker, without occupation</td>
<td>5</td>
<td>3.1600</td>
<td>1.74011</td>
<td>.77820</td>
</tr>
<tr>
<td>worker</td>
<td>8</td>
<td>3.9000</td>
<td>.53452</td>
<td>.18898</td>
</tr>
<tr>
<td>others</td>
<td>21</td>
<td>4.4095</td>
<td>.54213</td>
<td>.11830</td>
</tr>
<tr>
<td>Total</td>
<td>219</td>
<td>4.1936</td>
<td>.56904</td>
<td>.03845</td>
</tr>
</tbody>
</table>

(Source: the author)

These results are somehow obvious, being party due to the age difference between pensioners and other categories of occupations. Thus, as pensioners are generally of old age (over 60), the rest of the persons employed, as well as school pupils and students, are evidently younger and at the same time more concerned with the novelties in diverse domains. Hence the
higher level of knowledge about the products and purchasing process of these categories of persons. According to the results, we may appreciate that the lowest level of knowledge of pensioners’ occupational category is mainly due to age and less to the domain of activity, as there are no significant differences among other categories of occupations.

6. CONCLUSIONS, LIMITS AND FUTURE DIRECTIONS OF RESEARCH

This paper aimed to provide insight into the importance of knowledge in the consumer decision making process. After analyzing the results, we noticed a number of important issues in the context of the discussed topic. Among the main information that consumers have on new products introduced onto the market, the most important for the process of decision are considered to be information about product benefits, general information about the product and information on its use. In contrast, the least important were deemed price information and business information. Thus, it seems that for the survey's population knowledge about product is more important when making purchasing decision, while knowledge of usage of the product, business information (e.g. place of purchase and time of purchase) and those usages representing the product, have a limited role in the acquisition process.

Limits on the research are mainly due to financial and time restrictions, nevertheless they can easily become constructive and properly transformed in future research. Thus, the table below presents the main limits of the study conducted and possible future research directions in the field.

Table 9
Limits and future research directions

<table>
<thead>
<tr>
<th>LIMITS</th>
<th>FUTURE DIRECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Small size of the sample used in the research and its non-representative character.</td>
<td>• Investigation of larger samples, representative on the regional or national level.</td>
</tr>
<tr>
<td>• Use of a non-probabilistic sampling method.</td>
<td>• Performance of surveys using probabilistic sampling techniques</td>
</tr>
<tr>
<td>• Generalist approach of the theme and of the empirical study which analyses the factors of a new product adoption.</td>
<td>• Particularisation of the research by certain domains or categories of products, in the analysis of the factors of the process of new product adoption, for the identification of specific particular aspects.</td>
</tr>
<tr>
<td>• Short period of research performance.</td>
<td>• Elaboration of panel surveys, meant to periodically investigate the process of new products adoption in dynamic domains, with fast changes, such as the technological field.</td>
</tr>
</tbody>
</table>

(Source: the author)
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THE SOCIALLY RESPONSIBLE PUBLIC PROCUREMENT – THE OBJECTIVE OF THE “EUROPE 2020” STRATEGY

Cristiana Daniela LAZĂR

ABSTRACT
This paper presents the issues related to the importance of an economy achieved without any social discrimination, seen from the perspective of the Europe 2020 strategy - for a smart, sustainable growth, favorable to the inclusion.

We have paid particular attention to the socially responsible public procurement - as a subset of the national economy, trying to decrease the marginalization of certain categories of population, so that social exclusion and disadvantage not be emphasized.

KEY WORDS: disadvantage, ethnic groups, social exclusion, social inclusion, the European Union.

JEL: M41 – Accounting, H57 – Windfall, Q56 – Durability.

1. INTRODUCTION

In 1957, on March 25, the representatives of Germany, the Netherlands, Luxembourg, Belgium, France, Belgium and Italy have met in Rome and signed the Treaty establishing The European Economic Community (EEC). By this Treaty, countries set important economic goals, leading to economic and social development of Europe, such as: a better link between European peoples, cooperation to improve the living conditions, economic and social progress at both the nation and the European level, remove the barriers that come from culture and economy of different countries and which divide Europe, economic union by reducing economic disparities between regions and the development of less favoured areas.

In The Treaty of Rome, the principles that should govern a uniform market without the fundamental differences were actually drafted and consisted of: the free movement of persons, the free movement of capital, the freedom to provide services, the free movement of goods.

All of these objectives have gained consistency by implementing common or at least compatible at european level policies in strategic priority areas, such as agriculture, industry, trade or customs policy. The practice of common policies in the areas listed above is the way to achieve a strong and united Europe.


Following the objectives of the European Economic Community and the principles concretely expressed in the Treaty of Rome, later, on February 7th 1992, The Treaty of Maastricht is advancing the idea of “the single market” and “the single European currency”, followed by the Social Protocol annexed to this Treaty and Green Card (2011). Thus, this Treaty is a fundamental way of establishing the European Union, by creating economic and monetary
Analele Universității “Eftimie Murgu” Reșița. Fascicola II. Studii Economice

union by extending European concepts in new areas such as public procurement. Moreover, in 2007, The Treaty of Lisbon replaces by the concept of the European Economic Community with The European Union.

The following year, in 2008, the well-known economic and financial crisis started and that obviously affected the European economy. As a result of this crisis and in response to counter its effects,” Europe 2020 Strategy “was adopted, which is a plan for a smart and sustainable growth, favorable to the inclusion between 2010-2020, to a world in a constant change. This strategy includes: a higher percentage of employment in the category of population aged between 20 and 64, the emphasis on scientific research and development, the education, especially by reducing the school dropout, environmental protection, with its basic component -the green economy, the fight against social exclusion and poverty; (The Balance Sheet of Europe 2020 Strategy for a smart, sustainable growth and favorable to inclusion, Brussels (2014)).

The European way of defense against the crisis was to develop practical mechanisms to mitigate risks, to stop the downturn, to alleviate the economic fragility in the Member States, especially in the countries that have recently joined the European Union.

Social solidarity is an important component of the European policies, manifested by actions to eradicate social exclusion. Social exclusion is a complex phenomenon with multiple dimensions and results in social inequality generating what specialists call, "the underclass" (subclass).

In 1974 René-Lenoir who was in charge with social affairs in the French Government led by Jacques Chirac, published a paper (Les Exclus), which included the categories of marginalized, excluded and people with mental or physical disability. Social exclusion is not synonymous with poverty, but poverty is a one of its predominant factors, having an important role in the social division. Using the term of “social exclusion "was a characteristic of the 90s, followed by notions like “insertion” or “integration” (Ghita (2010)). Later, in the 2000s, the concept used is that of “social inclusion”, being introduced after the meeting of the European Council in Lisbon 2000. With the introduction of this concept, Europe is starting to provide Member States with a common framework in order to eradicate poverty and exclusion. In this respect, 2010 has been declared the European Year for Combating Poverty and Social Exclusion, while in our country it is celebrated on February 19th of the same year. The Romanian plan to combat social exclusion includes actions such as: organizing events on issues of poverty and exclusion, information campaigns, studies and research for drawing the conclusions, mechanisms for monitoring activity (Ghita (2010)).

With the acceptance into the European Union, all the new states such as Romania, have committed to transpose into their national legislation, the objectives of the Europe 2020 Strategy, but for this, an effort that requires common coordination across Europe is needed and also a monetary national / European effort.

Europe 2020 programme promotes the idea of competitive economy based on knowledge, innovation and the fight against poverty and social exclusion. This requires high levels of employment, productivity and social cohesion, attempting junction of concepts such as “green” economy based on eco-friendly variants that protect the environment through new and innovative concepts; employment extended to all social and ethnic categories.

Incidentally, one of the initiatives of the Europe 2020 Strategy for smart, sustainable and inclusive growth, the fight against exclusion, is The European Platform against poverty and social exclusion, launched in 2010. This platform aims to involve EU member states in combating the scourge of poverty through a better use of EU funds in order to support the social
inclusion of young people, the unemployed, women or people with disabilities. One of the areas of action identified by the European Commission in order to combat this scourge, is capitalizing on the social economy, by working in partnership with those companies that use labor as one of the categories of persons listed above.

As a result of the effort of the uniform economic development of Europe, there are some directives that refer to public procurement in the European Union, including the 2014/24 Directive/EU of the European Parliament and of the Council on public procurement and repealing the Directive 2004/18/EC (Ioif).

One of the reasons to the emergence of this new European public procurement act, is Europe's drive to establish equality in terms of social and professional integration or reintegration of disabled and disadvantaged people, such as the unemployed, members of minority or other disadvantaged groups socially marginalized. In this context, the European Union draws the attention of its Member States that they should pay more attention to enterprises, workshops that works with employees in one of the categories mentioned above, thus respecting one of the basic principles of public procurement, namely the non-discrimination (Directive 2014/24 / EU (36)).

By purchasing wisely, public authority can make a contribution to social inclusion, using their purchasing power by choosing products and services that lead to positive social outcomes such as: youth employment; promoting jobs for unemployed people or people with disabilities; balance between women and men in the labor market; supporting social inclusion of ethnic groups; promoting of decent work, in conditions of security, human freedom; promoting “ethical trade” through the specifications and the conditions of contract; promoting of SMEs.

Socially responsible public procurement is the connection between the economy and the action upon the negative social aspects, to counteract their effects. It is the one that can expand markets for goods and services or create others by generating new jobs. The public procurement socially responsible is that one which can support innovation and a healthy competitive environment, it may stimulate the purchases of technology to make possible the employment for people with disabilities. By this type of purchase, better jobs in terms of quality are produced, equal opportunities and non-discrimination are promoted, the ratio between quality and price is supported - through innovation, given due importance of Small and Medium Enterprises (SMEs). Through this acquisition, jobs higher in terms of quality are produced, equal opportunities and non-discrimination are promoted ratio between quality and price supported - through innovation, given due importance of Small and Medium-Sized Enterprises (SMEs). To achieve a socially responsible public procurement, the public authority must have a strategy of making it possible and which must take into consideration: setting goals that are to be achieved through this type of purchase, cost analysis of better alternatives from the social point of view, the analysis of the capacity of the contracting authority to implement socially responsible realization of purchase (The socially responsible Procurement, p. 16). But the socially responsible purchase does not rule out the principles of public procurement or obtaining the optimal quality/price ratio for public authority, taking into account that the best quality / price ratio does not imply acceptance of the lowest price instead of quality.

There are many examples that measures for social inclusion have been taken at European level. Thus, in France of 2003-2007 there were launched strategies and plans whose purpose was the setting of measures that could have a social impact on French society and which also provided ways in which public procurement can contribute to “the social” chapter. Another example is represented by a series of policies imposed in England concerning equal opportunities between women and men (Equality Act), which was published in this regard in 2007 and a code
of practice relating to the obligation of public authorities to take into account policy of equality between women and men as a branch of anti-discrimination policy (The socially responsible procurement - A guide of social aspects to be taken into account in the public procurement procedures” October, 2010). The concept of social function company was introduced by law, also in Belgium. In Italy the employment of people from disadvantaged groups was boosted by granting exemptions from taxes for companies where a certain percentage of total employees represent the group of persons with disabilities (Experiences of social economy - Manual of procedures and models of good practice in social economy, 2012). Guides have also been developed to help companies whose policy is based on respect for people with disabilities by creating jobs for them. Such a guide is the one called „Disability in Sustainability Reporting “, (Breniuc (2015)).

In our country, a new Law of Social Economy was voted on June 30th, 2015 (Law no. 219/2015), which defines the social economy and other concepts related to its scope. Major objectives are defined here, principles of an entity of the social economy, a social company for integration. In 3rd section of this law, art. 17, paragraph 1 refers to the connection between the contracting authority operating under the terms of GEO 34/2006 (Public Procurement Act) and the social enterprise, but this link is not very detailed and not very helpful at the legislative level with the junction between the two types of entities: public authority and social enterprises.

Another international concept for supporting the social economy is the social responsibility of companies (Corporate Social Responsibility, CSR). Within this concept there were developed standards / models defining a responsible behavior and some practices of socially responsible business for companies so that they could improve their work willingly and contribute to the environmental protection and certain categories of disadvantaged persons.

Another problem that exists and persists at European level is the ethnic discrimination, manifested especially on some sections of the population such as the Roma ethnic group. According to the European Union survey held in 2008 in Slovakia, The Czech Republic, Greece, Hungary, Poland, Bulgaria and Romania, it was found that an average of one in two Roma respondents was discriminated against, while in Romania the percentage of Roma with paid employment is only 17% (EU-MIDIS, pp. 4, 14) some employers even refusing to hire Roma from xenophobic beliefs. The results of this survey have indicated a generally high level discrimination. Therefore the European Commission has called on EU countries to present strategies that aim at social inclusion. Thus in Europe was taken into discussion a review of the budget allocated to an inclusive economy, this also proved that, at European level, the importance of decreasing the social exclusion was well understood by creating various support funds such as: The European Regional Development Fund, The European Social Fund or The European Agricultural Fund.

As a response to the European invitation to the member countries to present strategies for social inclusion, Romania adopted by Resolution no. 383/2015, The National Strategy on social inclusion and poverty reduction for the period 2015-2020. This strategy will operate on two broad lines: reduce poverty and promote social inclusion - through regional policies and policies aimed at disadvantaged people. The same Resolution approved The Strategic Action Plan for the period 2015-2020. In the Romanian strategy regarding the inclusion, our country intends to align to European standards of social protection, following some objectives as: satisfying the basic needs of all citizens (health, education, social services, etc.); providing equal opportunities to all citizens; respecting dignity; accepting and respecting the differences among the members of society.
2. THE IMPACT OF THE RESPONSIBLE PROCUREMENT UPON THE PUBLIC PROCUREMENT

Following the studies and reports by country in Europe, it has been found that the state institutions are the major consumers of budget. In this context, the idea that public authorities should seek partners, contractors from the ranks of small and medium-sized enterprises that support social inclusion must be encouraged, since the mechanism of carrying out public procurement is one of the most effective instruments to transpose into practice, to achieve the European principles of standardization of the economy and fighting against social exclusion.

The signatory governments participating in the European Social Charter, revised in Strasbourg on the 3rd of May 1996 (ratified in Romania by Law no. 74/3rd of May, 1999), agreed and recognized in paragraph 15 of the first part that “ Disabled persons have the right to autonomy, social integration and participation in the community life ” and article 15 of the same act refers to measures to be taken in relation to persons with disabilities: providing education, access to employment, integration and participation in social life.

With respect to our country as well as in other countries in Eastern Europe, there is not initiated a general and real movement, to support the impact, not insignificant, that promoting contractual partnerships with social enterprises would have on the national economy.

A major role in promoting action with partners working with protected personnel is incumbent upon the State. The State is the one that should guide the legislative and practical level of the buying behavior of public authorities towards the eco-friendly and socially responsible procurement, through: creating of notable facilities for public authorities that purchase wisely, promoting environmentally friendly procurement or those socially responsible, promoting the legislative facilities to support boosting SMEs which create ecological or social value, through their actions.

Public procurement can support social, paving the way for social responsibility, meaning that under the new procurement system which will come into force from April 18th, 2016, the attribution of the contract will no longer depend only on price, the public authorities will be able to reserve the tendering procedures for companies promoting social integration of disadvantaged people.

Health, being a strategic area, the state is the one that should build a functional gear, in which the interaction of the key players (contracting authorities, bidders-protected units) have two results: supporting the activity of the protected business units and a higher quality of the health service. The building of this gear, a methodology of work, could be achieved by formation of multidisciplinary teams of specialists at ministerial level that should connect theory with practice. Thus, for example, in the field of socially responsible procurement, in the Ministry of Health, such a team should include experts-practitioners (even of the territory) in the field of law, economics, informatics and even representatives of bidders (protected units). If the objective of such a team is socially responsible procurement, then this team should devise a project to be practically implemented from all points of view. Obviously if we continue the example, within such a team there should be experts from different subdomains: commercial law, contractual law, economists, financial experts in budgetary accounting, experts in procurement, experts in supply, experts in soft, representatives of the SEAP (System electronic Procurement), etc. The result of the collaboration of this team should be represented by practical, viable solutions, up to the level of a draft law, of a work methodology for sanitary units in the territory. Such a functional work methodology, would result in spending money from the Ministry of Health efficiently, regardless
of their origin: budget, European funds, but also social protection-through contracts with the protected units.

Currently, the Ministry of Health has ongoing a Swiss-Romanian Cooperation Programme with the theme “Healthcare reform”. Several countries that have recently joined the European Union are supported by this programme. The overall objective of this programme is to provide financial support until 2019, to reduce social and economic disparities. The principles that guide its deployment are: equal opportunities and rights and social inclusion, environmental sustainability, engaging and mobilizing all actors involved and, of course, the decentralization, the improvement of the quality of health services.

The draft Health Pact in Romania 2015-2020, provides a series of directions for the health improvement, including the increasing of public spending on health to 5% of GDP by 2020. This means, ultimately, the allocation of higher funds for the purchase of specific products and services of health. According to this pact, one of the aims is to increase the efficiency in the organization and functioning of the medical services, under the principle “money follows the patient”, by the organization of medical services being understood the streamlining of the public procurement. Under the assumption of an increase in funds for health, through an efficient public procurement, these funds will be directed both towards the "green" purchase, environmentally friendly and the social inclusion-through contracts with partners whose work is conducted with employees from other disadvantaged categories.

Another issue of social inclusion is equal opportunities. Article 20 of the European Social Charter refers to equality without discrimination based on gender in relation to: access to employment, training, pay, promotion. In our country there is legislation in the field (Law no. 202/25th of March 2002, republished and updated, etc.), which although it is not very detailed, yet extends equal rights provided by the Constitution and acts to eliminate indirect or direct discrimination. In some areas, discrimination against women, for example, do not manifests too obvious, given the nature of specific occupations that belong to it. One such area is the healthcare, where more than half of the staff is represented by female staff, especially at health units and hospitals. However, because of low wages, the qualified medical staff represented by women migrates in a large proportion to other locations in Europe. This migration resulted in a shortage of staff, both among doctors and nurses, obviously affecting the quality of the medical act. Moreover, the health system is still perceived as ineffective, dysfunctional and corrupt. The fact is, that a study of the Agency for Governmental Policy, showed that the healthcare field, alongside the social or culture, would work better, being led by women (Dobrescu E. M., Albeanu D. S. (2008)).

3. CONCLUSIONS

The compliance with policies of the “EUROPE 2020” STRATEGY, for a smart, sustainable economic growth and favorable to inclusion, is a condition sine qua non for the harmonization of the European economy, these policies shall be bound by all of the member countries of the European Union.

Social responsibility is one of the objectives of the European strategy and one of the engines to ensure the prosperity of the national economy. It has two dimensions: the social responsibility of companies to include socially people from ethnic minorities, disabled people, etc., the responsibility of the contracting authorities to carry out wisely the procurement and the conclusion of partnerships with protected units.
To implement the idea of responsible public procurement, the Romanian state has an important role both in disseminating the concept and in guiding the public procurement towards supporting this type of acquisition.

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THE „GREEN ” ECONOMY- AN OBJECTIVE OF „ EUROPE 2020” STRATEGY, A PRIORITY FOR THE PUBLIC AUTHORITIES

Cristiana Daniela LAZĂR

ABSTRACT
This paper presents issues related to the importance of the ecological economy in the light of the Europe 2020 Strategy for smart-growth and sustainable ecological inclusion.

We have paid particular attention to a public purchase-as a subassembly of the national economy, to reduce the effects of pollution, in order not to have affected the environment in which future generations will live and work.

KEY WORDS : sustainable development, ecological economics, public ecological procurement, public authority, strategy.

JEL: M41

1. THE LEGISLATIVE FRAMEWORK CONCERNING THE OCCURRENCE OF “THE ECOLOGICAL ECONOMY”

On the occasion of the Conference on the Environment in Stockholm, in 1972, it was recognized for the first time that at the global level, the activities of man adversely affect the environment. Thus a new concept was born, the concept of sustainable development, which refers to the current development without endangering the ability of future generations to meet their own needs. Sustainable development encompasses many spheres of human activity: the economy- as its own stability and growth, the society- as standard of living, equity and social dialogue, ecology- as the avoidance of pollution and protection of resources (what is sustainable development). In this global context, in 1992, amid increasing the global population, the American researcher William Rees defined the concept of "ecological footprint". This notion was expressed as a calculation formula whereby the entire surface of the Earth is divided by the number of inhabitants, resulting in the area needed for a single individual/organization to provide the necessary resources and to clean the waste of his whole existence. The unit of measure for the ecological footprint is a global hectare, measuring essentially the influence upon the ecosystem.

The European Union’s policy of environmental protection lies in Article 191 (Title XX — The Environment, ex-Article 174 from the Treaty of the European Community), Article 192 (ex Article 175 TEC) and Article 194 on energy.

Sustainable development has become an European objective with its inclusion in 1997 in the Treaty of Maastricht, and later, in 2006 – when Sustainable Development Strategy of the European Union has been reviewed, the following priority axes are assessed: climate and energy changes, preservation of natural resources, sustainable production and consumption,

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social inclusion, sustainable transport, global poverty, public health (What is sustainable development).

A protected environment policy is addressed in 2009 in the Treaty of Lisbon, where the importance is given to the Charter of Fundamental Rights of the European Union. In the article 37 of this Charter, it is stipulated that the European policy “should provide a high level of environmental protection and the improvement of its quality, which is ensured in accordance with the principle of sustainable development”. (Stănescu R. (2012)).

In response to the economic crisis which started in 2008, the ”EUROPE 2020” STRATEGY was adopted at the European level and it represented a plan for smart, sustainable growth, and favorable to the inclusion in the period 2010-2020, for a rapidly changing world.

This strategy includes: a higher percentage of employment in the category of the population aged between 20 to 64 years, the emphasis on scientific research and development, the education, especially by reducing the school dropout, the fight against social exclusion and poverty, the environmental protection (The balance sheet of the Europe 2020 Strategy for smart and sustainable growth, favorable to inclusion, too, Brussels (2014)).

Coming in response to Europe's financial and economic crisis, through this strategy, some mechanisms were developed at European level in order to mitigate the risk of stopping the economic downturn, to find solutions, to damp the economical fragility among the Member States, especially in the countries that have recently joined the European Union.

With the acceptance into the European Union, all the new states, as well as Romania, have undertaken to transpose into their national law the objectives of the Europe 2020 Strategy. But in order to achieve this, effort that requires a common coordination across the European Union is needed, as well as a national monetary effort. Europe 2020 Program promotes the idea of competitive, environmentally friendly economy, based on science and innovation, characterized by high levels of employment, productivity and social cohesion, an oriented economy to effective resource consumption (Iosif A.).

Thus, at European level, the concept of “green” economy is born, an economy based on ecological variants to protect the environment with the help of research and innovation.

A major role in practice of this concept is the public procurement, as this through its ongoing mechanism is one of the most effective tools to put into practice the ecological economy. This is supported by the fact that both at European level and at the level of our country, public authorities are big consumers of the budget, and this can lead to a major orientation towards eco-friendly products / services, by specific requirements in the specifications.

In terms of respect for the environment, it has come to this basic component in the highest gear of the ecological economy, namely “the green” public procurement, „also referred to as eco-purchasing, organic procurement or “clean” procurement. In this regard there are recommendations, at European level, for ecological purchase embodied in the guidance material type „Green Procurement Guidelines”. This guide is not binding, but its existence is well founded (p. 2), because public authorities are the major consumers in Europe, and through the acquisitions of products and services that comply with environmental standards, it can bring a value to the areas where such purchases are charged.

Thus, public authorities through their buying power, can become an important element for directing to the desired direction of many components of the national economy, namely the European environmental objectives.
If the procurement of public institutions were based along with other requirements and ecological criteria so that the tenderers could be able to keep themselves on the market, they would be obliged to invest in innovation and eco-technology, thus the concept of sustainable development would be defended - that means to satisfy the current needs without harming the environment in which future generations will live.

Obviously, the research and the innovation involve the emergence of new jobs, thus ensuring the convergence to another important European goal: employment. In other words, the tenderer (the manufacturer) will have to invest in research, innovation and development in order to obtain an organic product to promote it/keep it on the market, thus being able to influence the transformation of a (national) society of consumption in a society that produces.

On the other hand, in terms of public authorities “the green” acquisition would help to saving money because the institution, during the life of the contract, would not have additional costs for greening and moreover an ecological procurement policy does not imply structural changes from its side.

Moreover, in 2014/24 / EU Directive, by emphasizing the concept of “green” economy, The European Commission recognizes the important role of public procurement in support of green products and services in order to achieve the environmental goals set in the Europe 2020 Strategy. The 18th Article, the 2nd paragraph of this Directive, provided that appropriate action are being taken by EU Member States regarding the environmental, social and labor field by economic operators when achieving their contracts. In annex X of the same Directive shall be provided with a list of international conventions that must be observed in relation to the environment, labor and social protection, including the Stockholm Convention on persistent organic pollutants (signed by Romania on 23rd May 2001), the Vienna Convention on protecting the ozone layer, the Montreal Protocol on substances that deplete the ozone layer etc.

The approach to environmental protection at European level and beyond, from the legislative point of view, has generally had two dimensions: horizontal legislation - represented by legislative acts to regulate the procedures and to provide mechanisms and methods for improving the environmental decisions; vertical legislation - develops sectors and specific areas, the policies of environmental protection and health (Stănescu (2012)).

2. THE PRINCIPLES AND THE OBJECTIVES OF ENVIRONMENTAL PROTECTION

A priority for Europe, the preservation of the environment is governed by a number of objectives and principles that have shaped modern concepts of safeguarding the environment in which future generations will live.

European policy pursues the following main objectives: preserving, protecting and improving the quality of the environment, rational use of resources, promotion of national policies as regards the environment, health protection.

Based on these objectives some general principles of environmental protection were outlined, which occurred due to the trend of European standardization, finding the universality of these problems. So, logically, we consider to be valued “the polluter-pays” principle. This principle is meant to make responsible those who pollute, to discourage non-compliance with the relevant legislation and not least to spur the ecology through one of its resultant - the ecological purchase.
Considering the fact that it is easier to prevent a non-ecological situation than to mend the consequences (sometimes with very high expenses), we appreciate that the eco-friendly purchase can be seen as an integral part of another principle of action regarding the environment, namely the principle of preventive action - in terms of the quality of the final result.

“The green” acquisition could also be included among the precautions to take to avoid risks arising from the environmental level, according to the principle of cautiousness. Even if there is not a clear evidence of the manifestation of an environmental risk, or studies showing the impending of its manifestation in the field of public health in the era of high technology, consumers of natural resources should consider the possible consequences of manufacturing a finished product. Some examples for that purpose are the oil industry and the plastics industry. (Stănescu R. (2012)).

By respecting these principles, the contracting authorities from one country can contribute to the respect for the environment, can limit the negative consequences of pollution on public health and at the same time can contribute to budgetary savings.

3. THE IMPACT OF THE ECOLOGICAL PROCUREMENT ON THE ECONOMY AND HEALTH

The ecological procurement will have an impact on the economy, on the health status by reducing the pollutants and increasing confidence in the public authority that practice green purchase. This is the argument that urges us to say that the first field where we should practice the ecological purchasing is sanitary. Health is certain that not all the products may be ecological requirements (specific sanitary materials-for example), but there is quite a wide range of auxiliary products that could be subject to an ecological procurement. It is about those products which support the main activity of the system, that of getting health, such as articles of stationery, computers and office equipment, renewable energy, etc., which are generating pretty large expenses to the health unit level. Thus, the ecological procurement represents an extremely careful choice of products and services purchased, so as not to affect future generations, thus ensuring sustainable development by saving natural resources and creating the conditions for healthy living and working.

In order to achieve goals for the environment it was created the European project “Buy Smart” whose objective is the development of efficient procurement segment and offering free aid related to green procurement, through guidance, training modules, legislative information, etc. This project has 18 partners from 15 European countries. For Romania, the project leader is the Institute for Energy Research and Modernization-ICEMENERG. The project addresses to public authorities and not only, providing those interested, a national platform that will provide help and elements of know-how regarding this type of purchase. (http://www.achizitiiiverzi.ro).

To create an integrated framework in order to develop organic markets in Romania, the project ECOEMERGE has been developed, which was meant to improve the link between production systems (through eco-innovation) and consumption of organic products/services. This project had two parts: the EcoTehnoNet component and the Green Purchase component. The first of these took into consideration the evaluation of the actions of the Romanian market, bringing out: to define the criteria for eco-innovative organizations and environmental technologies, regional workshops in eco-innovation. The second component acted for: training in the field of eco-labeling, organizing regional thematic workshops with manufacturers, retailers and the scientific community, the media campaign to promote the consumption of environmentally friendly
products and services, etc. The most important aspect of this project is that there have been concrete steps in defining the technical and ecological specifications, because obviously the specification-as basic element of procurement-is the one that allows bidders to prepare reliable and accurate offers (http://www.achizitiiecologice.ro).

The public ecological procurement should take into consideration the following stages: finding the most suitable products/services/works for the contracting authority, proper identification of needs, the drawing up of specific technical requirements, establish clear selection and reference criteria.

The areas where ecological purchase can be applicable are: the purchase of energy efficient buildings and computers, recyclable paper, office wooden equipment to meet environmental norms, electric cars, organic food, electricity produced from renewable energy sources, etc. The decision of a public institution to make an ecological purchase, should not require under normal circumstances, no structural change, but a very good strategic plan, environmental knowledge and familiarity with organic products from the procurement staff. While preparing such purchases, a special consideration should be given to its preparation phase, through a meticulous analysis of needs, because an ecological procurement may refer not only to the organic product itself, but also to the fact that the contracting authority may simply buy less, thus contributing to the maintenance of a clean environment. The clarity of the requirements of the contracting authority upon it is also important. Thus, choosing a green title for the contract, for example, will convey the message about performance and will help tenderers to easily identify the requirements. With respect to the environmental conditions, the purchase should be based on the performance of the product/service, the contracting authority no longer had to stipulate details in the specification about the features that should have them under contract. Regarding the contract, the public authority shall define it freely as long as it does not distort fair competition between the EU businesses and does not hinder free competition. The selection criteria, namely those of exclusion, technical and financial need to be very clear (Public Procurement Guide, page 4, 5, 9, 12, 14, 15).

Unfortunately, Romania has not developed a specific legislation, standards or effective methodologies to support national eco-procurement. In 2009-2010, the Ministry of Environment and the National Agency of Civil Servants developed a collaborative project to increase awareness of the impact of the ecological purchases, which addressed to public authorities, too. Thus, there were born some useful projects, such as The Old Car Program and The Green House Program. Alongside legislative failure, there are other obstacles, such as the fact that on the Romanian market there is a lack of organic products to serve distinctive areas such as that of health, for example. Although some sites with ecological profile begin to exist in Romania, they are addressed more to the general public, to the population and not to a particular domain, or some contracting authorities with a specific profile. Therefore, even assuming that a public institution would enter ecological requirements in the specifications, we have sincere doubts that the Romanian platform procurement (SEAP- the electronic procurement system) you might find enough bidders that can comply with this type of requirement, in order to generate a healthy and competitive environment. A solution would be that the European companies that have as their object organic products to participate in public procurement, but so far, Romania is not an attractive country for them. The absence from the market of several bidders for ecological products/services, could be classified as a procurement risk One reason for the scarcity of organic products may be the fact that the Romanian society is not yet geared towards obtaining of organic products, and the financial strength of the Romanian producers cannot sustain
innovation or research projects for this type of products. A solution for the Romanian manufacturing companies could be accessing European funds for development, given that the development strategy until 2020, research and innovation are being supported as one of the five major objectives of the European Union. But in Romania, the discouragement would occur due to the still existing bureaucracy in the institutions that manage the funds, which may be another cause of the disinterest expressed by economic operators to develop ecological products.

For the reasons mentioned above, we consider that the first step in an orientation towards ecology, could be the development and the implementation of a practical study to consider observing the operation of the public ecological procurement in Romania. The outline of such a pilot program could be: the choice of several general reference products, in order to establish the procurement; the choice of several types of public institutions participating in the project, then the project co-opting them; the selection of tenderers to provide the environmentally friendly products concerned; he study for a fiscal year of the economic effects arising from the use of those organic products in order to save.

If positive results are obtained in terms of economy, the project could be even extended at national and legislative level, through the obligation of purchase environmentally friendly reference-products in the project, for the types of public institution corresponding to those from the pilot program. But such a project involves the deployment of human and material resources. Therefore, this project should be considered by a group of professionals of various specializations within the same ministry and to be carried out in the territory, in different areas of the country.

4. CONCLUSIONS

Protecting the environment is for the European Union a direction which is given much attention, in order to achieve the sustainability stipulated in its strategies.

Considering the above, it could be asserted that the investment in ecology, is a major component in maintaining a clean, non-polluting economy, both at the macroeconomic and microeconomic level.

As a recent member of the European Union, Romania can be an attractive environment for the European entrepreneurs in terms of investment in research and innovation, our country having sufficient human resources to do so.

Romania’s main concern should be the implementation of the Europe 2020 Strategy, with its basic directions: the social inclusion, the sustainable development and the environmental protection. The ecological procurement must be the subject of a well-founded legislation, together with the working methodologies, so as to boost innovation and create new jobs.

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ROLE AND IMPORTANCE OF PROFESSIONAL ACCOUNTANTS IN ORGANISING MANAGERIAL ACCOUNTING

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ABSTRACT

This paper focuses on the issue of managerial accounting, on elements that stay at the very bases of the process through which the professional accounts use their knowledge gained over the years, in this field, to provide necessary information to establish an appropriate methodology for calculating the price / cost.

This paper presents an overview of national and international approaches to the concept of managerial accounting, methods/ways to determine and classify the managerial accounting practices encountered in the specific literature, topic discussed, in Romania, more theoretical and less practical, especially in micro or small entities.

This topic discussed in an earlier own research has come to the forefront since the public procurement law was published. There were introduced, as novelties, criteria for the award of public contracts by spelling the sub-criteria "value for money" and "lowest cost". So, we believe that the role of professional accountants grow into an entity, both when it is the bidder or in case of contracting authorities.

KEYWORDS: managerial accounting, professional accounts, costs, accountant’s perception.

JEL: M21; M41

1. MANAGERIAL ACCOUNTING ORGANIZATION - THEORETICAL AND PRACTICAL APPROACH

When it comes to addressing managerial accounting from a theoretical and practical approach we want to underline legislature perception of theorists, but especially professional accountants’ opinion on this topic. The organization of accounting, in general, is not an end in itself, accounts can be defined as an information system that aims quantification, processing and communicating financial information about an economic entity. In this context we are of the same opinion that raw data regarding economic activities is an input into the accounting system and the processed information useful for decision makers, is the output (Needles, Anderson, Caldwell, 2001).

Donald Trump claimed that "managing your brand means controlling your future" and if we were to translate this assertion into the context of our paper, we could affirm that irrespective of the position filled, whether one is the manager of an economic entity or a mere employee, in order to be successful one has to manage well one's activity, and on the level of the economic entity, it means possessing the information for the decision-making system by which the activity of the respective entity is managed.

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In Romanian literature it is said that managerial accounting includes both general elements relating to financial accounting and specific elements of management accounting, so managerial accounting represents the part of management that deals with the identification, presentation and interpretation of information used to formulate strategies used in decision making, in optimizing the use of resources, in informing of employees to protect assets, in planning and control activities, in information of members or other external users (Briciu, S., Căpușneanu, S., 2011). At the beginning of ‘90 managerial accounting was reconsidered, we witnessed a separation of the two components of the accounting system (financial and managerial accounting) (Pete, Şt., Cardoș I.R., 2011).

The administration accounting is adaptable to the needs of the economic entity and takes over its information from the financial accounting. (Ebbeken K., Possler L., Ristea M., 2000)

Keeping in mind that the economic entities must carry on their activity in the context of a competition environment, the managerial exercise on all levels is extremely complex, as the decision-making act supposes numerous pieces of information which must be elaborated, supplied, interpreted and rigorously controlled, activities within the scope of administration accounting, as such, as the latter has imposed itself more and more poignantly as a field of theoretical and practical preoccupations and manifests a remarkable interest from the point of view of the managerial policy in the field. (Man M., 2003) By applying the methods and procedure specific to administration accounting, it has to ensure the obtaining of rapid information, to exercise a full control and to be useful to the decision-making factors. (Dumitru M., Calu D., 2008)

On the other hand the configuration and complexity of the functional and technical–organisational structure of economic entities, the variety of activities carried on and the constant implementation of advanced technologies are important factors imposing the affirmation of administration accounting as an essential component of the accountancy system. In this context of external and internals factors, entities are constrained to a usage of production means in the terms of the economic optimum, which minimises the consumptions and their efforts and maximises the revenues, and the effects of the process of allotment and the use of resources. (Budugan D., Georgescu I., Berheci I., Beșianu L., 2007)

As you can see, the definition is given taking into consideration the objective of accounting, providing information in order to develop decision, accounting information - parts of the informational economic system. The most representative sources of economic data and information are (Ovidia, D., 2013):

1. The economic planning, which provides economic informational planning and business prognosis data, their share being of 28% of the total economic information;
2. The economic database which provides effective information data, representing 70% of the total economic information, distributed as follows: 46-50% information provided by accounting; 9-13% information provided by the economic-social statistics; 11% of the information provided by the active database;
3. Other sources represent the rest of the 2% percentage

Administration accounting has the role to supply both financial and non-financial information related to the internal administration of the company for its top management, aiming at securing an efficient and successful activity. Managerial accounting is an organism helping management on all levels and may be regarded as a plus value and a mechanism contributing to the continual improvement of the entity. Considering all the above, and looking at the definition of administration accounting, we may say that it provides the entity with concrete information about the changes existing in the individual departments thereof and the effect of these changes on the other
departments and on the entity as a whole. Kaplan claimed, back in 1984, that administration accounting must serve the strategic goals of an enterprise, the use of administration accounting and of all its instruments must be in sync with the goals and activities of the entity where it is applied as each entity is unique in its own way. (AbRahman, N. A., et al., 2016)

The main objectives of managerial accounting are costing, the outcome and profitability of manufactured products, works and services rendered, the forecast expenditure and revenue by drawing up an internal network of budgets, cost control and budgets through irregularities and supplying the necessary data to substantiate decisions on management entity, and the goal must be regarded on the collection, processing and reporting of data, namely to boost investigation and the discovery by signaling the relevant information and generating questions. (Cokins G., S. Căpuşeanu, Briciu S., 2012).

The recording of the operations related to the collection and distribution of expenditure by destinations and activities, sections, manufacture processes, cost centres, profit centres as well as the calculation of the cost of purchase, manufacture, processing of input goods, obtained, of works executed, of services provided, of production under execution, of immobilisations in course from the production units, commercial units, units of service provision, financial units and other domains of activity. (Cernuşca, L., Gomoi, B. C., 2009)

The authors Albu N. and Albu C. consider that administration accounting has as main goal to reflect all the operations of collection and distribution of expenditures by destinations, i.e. by products, works, services, orders, manufacture expenditures, activities, sections, etc., the disbursement of the output yielded and the calculation of the production cost of the output manufactured, works executed and services provided, including of the production in course of execution (Albu N. and Albu C., 2003).

Bernard Gumb, in his work ”Comptabilité de gestion” describes the benefits brought about by administration accounting for an economic entity, among which we may remind to possibility to:
- negotiate the process of the sold products knowing the history of their occurrence;
- compare diverse economic goods or services being aware of their profitableness;
- decide the opportunity to sign a manufacture contract;
- predict the economic-financial situation of the entity in the future;
- justify the evolution some assets along time of …etc. (Bernard Gumb, 2015)

Managerial accounting can be defined as a management - oriented accounting and its main focus is to improve the organization performance and profitability by providing relevant information for planning, controlling and decision making (Cardoș, I.R., Pete, Şt., and Cardoș, V.D., 2014). In the French literature, management accounting aims to identify the costs, the evaluation of certain elements of the balance sheet, as well as the calculation of the production cost which must be compared to the sales price in order to determine the efficiency of the developed activity, and on the other hand, the cost prediction in order to determine discrepancies from the actual costs (Călin et al., 2008). Hilton and Platt (2011) consider that management accounting, integral part of management process, is the process of identifying, measuring, analyzing, interpreting and communicating information in pursuit of organization’s goals. Organizing managerial accounting, aiming the cost calculation involves the following stages (Burlaud, A., Simon, C., 1993): preliminary study; data collection and processing and calculating and recording costs.
The normative regulations in our country integrate the management accounting objectives as follows (OMFP nr. 1826/2003): entry of operations regarding the cost collection and allocation by destinations, respectively activities, departments, production phases, cost centers, profit centers; and calculation of the costs of acquisition, production, of incoming goods processing, of executed works, of provided services, of production-in-progress, on-going assets, etc, from production, trade, service providing, financial units. The management accounting must ensure the production and the supply of information related to the efficient management of the enterprise patrimony, such as: information on the costs of goods, works, services, for legal persons engaged in production activities, service providing as well as on the cost of goods sold for legal persons engaged in trade activities; information underlying the budget and the control of operating activities; information necessary for the financial analysis in order to substantiate the management decisions regarding the internal activity; other information required for an efficient management.

In the latest legal regulations (Order no. 1802/2014) references are both to the management accounting in the context of internal control, where it provides that it shall aim to verify whether accounting, financial and management information reflect correctly the activity and situation of the entity, and in the chapter that mentions the functions contained in the chart of accounts mainly the accounts used within class 9 account management, where it provides the freedom of not using this accounts, words that determine the most professional accountants to use class 6 accounts for relying costs. The legislative provisions allow the accounting for the calculation of costs depending on the size of the economic entity and the complexity of the works executed, in two variants:

a) Autonomous administration accounting:
   a1) autonomous administration accounting with the use of class 9 accounts „Administration accounts”, from the general accounts plan;
   a2) autonomous organisation of administration accounting, without the use of accounts (the extra-accounting variant) by taking over the accounts from the financial accounting by cost places, which finally results in the calculation chart by object;

b) integrated administration accounting.

Regardless of the perspective from which we look at the concept of managerial accounting we can see that the improvement of managerial accounting and cost calculation, basic element of the accounting system, without which it cannot be enforced an efficient internal activity management, has as main vector improving methods of management accounting and of
This improvement cannot be achieved unless there is a professional accountants - engineers – managers collaboration.

2. THE ROLES AND IMPORTANCE OF PROFESSIONAL ACCOUNTANTS IN ORGANIZATION MANAGEMENT ACCOUNTING, IN THE PROFESSIONAL ACCOUNTANTS PERSPECTIVE. RESEARCH METHOD

We initiate a research theme entitled „Organization of managerial accounting: mandatory or optional?”, and in this paper, integral part of the research theme, we present the roles and importance of professional accountants in organizing management accounting, in the professional accountants perspective. The target group was constituted at the level of 17 counties, namely: Alba, Arad, Arges, Bacau, Bihor, Bistrita, Botosani, Braila, Caras-Severin, Covasna, Dolj, Galati, Hunedoara, Mehedinti, Olt, Timis, Valcea, from 532 economic entities classified in different categories. To capture topic of this paper, we have selected a series of questions from the questionnaire that was enviable at http://goo.gl/forms/KKQBtb2Tah, and the research results were centralized using the SPPS program.

Starting from the opinions expressed in the literature, and in order to grasp the aspects of the present paper’s topic, we decided to dwell on the following questions:

In the literature we identify the opinion according to which administration accounting plays a very important part in preparing and reaching the long-term financial goals of the entity, and the accountant, being an educated and experienced person used to the analysis and reporting of financial situations, he or she is the main observer of the impact the market produces on the competition environment, on the increase or decrease of prices and on costs (Căpuşneanu S., Briciu S., 2011); that is why we wanted to get from the practitioners the answer to the question: Which are the main activities carried on by the company specialised / expert in the field of administration accounting, providing the supply of information specific to administration accounting?;

Given that in previously conducted studies most specialists in the field of managerial accounting agreed that in order to fulfil the objectives of the managerial accounting one needs to use computer programmes. In order to facilitate the work of accountants, computer specialists created software based on accounting records and not on mathematical calculation sheets like the sheets of table costs disbursement, as they are strictly needed because of the huge quantity of data that must be processed with the help of computers. (Căpuşneanu S., Briciu S., 2011). In this context we introduced in the questionnaire the question: For the organisation of administration accounting do you use specialised computer software?;

According to the literature, among the factors contributing to the organisation of administration accounting they mention: profile and size of the entity, organisational structure of the entity, specific traits of the activity deployed, organisation of activity. As regards the profile and size of the entity, we may say that it influences the manner in which administration accounting is organised, as well as the calculation of costs and the circuit of documents. The organisational structure of the entity is represented by the activities of manufacture, service provision, conception and by the functional structure, all these forming the organisational and functional frame of administration accounting and of cost calculation. The organisational structure has two components: manufacture structure and functional structure, and it is the item which makes the space distinction of costs by responsibility centres. The third factor identified is the specificity of the activity carried on, and we may say that this is the element triggering the form of calculation, object of calculation, calculation unit, period and moment of calculation, number and type of documents. The last factor contributing to the organization of administration
accounting refers to the organisation of the manner of data collecting from the responsibility centres (Briciu S., 2006). In our opinion, the essential issues of cost calculation organisation, representing the main goal of administration accounting, are the following: accurate definition of the calculation object, establishment of the calculation unit, choice of allotment method of indirect costs, and choice of the calculation method. Considering all the above, we considered it necessity to identify the opinion of accountancy professionals regarding the difficulty of organising this type of accounting, by asking them: Please assess, from the point of view of organisational difficulties, how difficult the operation of administration accounting is?

In the comparative analyses conducted between the two concepts, financial and administration accounting, one of the differences identified was that in financial accounting one respects the generally accepted accounting principles, and thus the administration accounting supposes certain limitations as regards the number of accounting practices, whereas in the administration accounting there are no restrictions or mandatory rules, the only criterion being usefulness (Dumitru C. G. and Ioanăş C., 2005). In this context we considered it opportune to ask the following questions:

Are you aware of the normative acts regulating the organisation of the administration accounting?;

How accessible do you consider to be the legislative provisions in the field of administration accounting organisation?

Which is the degree of satisfaction of informational needs, considering the items of information comprised in the normative acts in the domain?;

As in our opinion the organisation of administration accounting is mandatory, as it supplies the entities the entire accounting information which is quantified, processed and transmitted to the top management for internal use, describing the internal patrimonial circuit of the entities, which is defined by resource-consuming activities and result-yielding activities. Administration accounting by cost calculation assures the recording of manufacture expenditure and calculation of costs so that the top management of the entity could control its internal activity, examine the internal conditions of exploitation, and in this respect the organisation of administration accounting and implicitly of cost calculation is left to the discretion of each economic agents and is organised depending on their specificity of activity and particularities of manufacturing process, on the one hand, and on the other hand the information needed by the decision making organisms, leaving space for interpretation in relation with the obligatory character of its organisation. In this context we intended to see the degree of satisfaction of informational needs of the accounting information main user (accounting professional), and asked them: How would you characterise, from the point of view of importance, the accounting information supplied by administration accounting?

The connection between financial accounting and administration accounting is highlighted also by the fact that all the expenditure by primary elements recorded in the debts of class 6 accounts „Expenditure”, are found broken down by calculation articles in the debts of class 9 accounts „Administration accounts”. (Budugan D., Georgescu I., Berheci I., Bețianu L., 2007). As regards this aspect, we believe that the correlation between administration and financial accounting is made through the following aspects:

- First of all through the interface between the expenditure recorded in the financial accounting and the costs determined by administration accounting: expenditures are the foundation of determining the costs of production, services or works executed;
then, the output obtained, recorded in financial accounting through class 3 „Accounts of stocks and production in course of execution”, is found in class 9 „Administration accounts”, and in accounts 902 „Internal disbursements related to output obtained”, 931 „Cost of output obtained” and 933 „Cost of output in course of execution”;

the price differences, afferent to the stocks recorded in financial accounting, are taken over in administration accounting into an account with the same name as that in financial accounting, price differences (903 „Internal disbursements related to price differences”). In view of identifying the opinion of accounting professionals in relation with teh accounting for the costs calculation, we asked them: How do you do teh collection of costs in the specialised bookkeeping accounts?

3. CONCLUSIONS

Following the synthesis of the results of research on the topic of this paper, we summarize the following conclusions:

- half of respondents held accounting management as part of managerial accounting, with its own resources (without a department that have exclusive powers in the organization of management accounting in 65.8% of cases), 36.3% had a specialized company (the same that deals also with financial accounting in 65.9% of cases) and only 13.8% have collaborated with experts in the field, which indicates low confidence in their academic or economic auditors;

- regarding the duties of the job / main activities held in specialized company / expert in accounting that ensure the provision of specific information for management accounting, it can be seen the lack of knowledge in the field, answers resumed to the organization and leadership of management accounting, identification and tracking of costs, identifying and implementing methods of calculation, calculation currency and not least highlight accounting;

- as it can be expected 95.7% of respondents use IT systems for accounting, for processing, storing accounting information, the mainly used being Saga, Erp, Ciel, Trendix;
Figure 3. Graphical representation – For the organisation of administration accounting, do you use a specialised software?

*Source:* Realised by authors from data processing

- 77.2% of respondents considers organization of management accounting as being very difficult or difficult, even if they know the relevant legal provisions, which denotes insufficient information contained therein for users (73.1% being considered insufficient) and difficulty in understanding of these provisions (73.2% considering them very difficult or difficult);

Figure 4. Graphical representation – Do you know normative acts regulating the organisation of administration accounting?

*Source:* Realised by authors from data processing

Figure 5. Graphical representation - Please assess, from the point of view of organisation difficulties, how difficult the organisation of administration accounting is?

*Source:* Realised by authors from data processing

Figure 6. Graphical representation - How accessible do you consider to be the legislative provisions in the field of administration accounting organisation?

*Source:* Realised by authors from data processing
even if 93.2% of respondents recognize particular importance of accounting information regarding the informational role of this circuit of managerial accounting it is viewed only in terms of business profitability, to reduce costs / losses, without being captured what could be obtained by organizing this circuit sheet;

- about the importance of the professional accountant, the majority believes that it has a central role in providing information to decision-making forum, this result being influenced by the fact that respondents were mostly accountants and auditors;

- when we asked this question, we had in mind the three variants: autonomous administration accounting with the use of class 9 accounts „Administration accounts”, from the general plan of accounts; 2. autonomous organisation of administration accounting, without using accounts (extra-accounting variant), by taking over teh accounts from financial accounting by cost places, which leads to the calculation chart by object, and 3. integrated administration accounting, the conclusion of the research being that the organisation of administration accounting is an integrated one, considering that 58.8% of the respondents affirmed that they perform the collection of information with the help of class 6 accounts Expenditure accounts;

Given the answers given by professional accountants we can say that they are accustomed to the strong legislated character of accounting (financial accounting), thus we consider the information contained in legislative provisions insufficient, proposing to the legislature better regulation of specific methods for management accounting.
Considering the role and importance of the professional accountant in organizing managerial accounting we may say, like other authors, that the professional accountant should be an active person, able to communicate and provide fast reliable accounting information, to coordinate and create the necessary climate for their specific managerial accounting activities, to accumulate multiple skills (accounting, IT, mathematical, statistical, etc.) to contribute to the training and behavior orientation of subordinate staff and to motivate them to obtain performances etc. (Briciu, S., Căpuşneanu, S., 2011).

As we have considered in other works, the organization of a second circuit of accounting is required, as well as financial accounting, knowing that, legislative provisions require its organization.

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TRICHOTOMY CONCEPTS FOR NONINVERTIBLE DISCRETE DYNAMICAL SYSTEMS IN BANACH SPACES

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ABSTRACT
The paper considers three general trichotomy concepts for noninvertible discrete dynamical systems in Banach spaces. Characterizations of these concepts are obtained from the point of view of the projections sequences. Some illustrative examples are given in order to prove that these concepts are distinct.

KEY WORDS: strong (a,b,c) - trichotomy, (a,b,c)- trichotomy, weak (a,b,c) – trichotomy, linear discrete – time systems.

JEL: C02 (MSC2010: 34D09, 39A06)

1. INTRODUCTION

The notion of trichotomy plays a central role in the qualitative theory of discrete - time dynamical systems, which has an impressive development. As a natural generalization of dichotomy, the concepts of trichotomy have been introduced by R.S. Sacker and G.R. Sell in [12] and S. Elaydi and O. Hajek in [4].

The case of discrete-time systems was considered by S. Elaydi and K. Janglajew in [5].

In the last decades a substantial part of trichotomy theory is to extend the methods used in dichotomy theory to the trichotomy case (see [1], [2], [3], [6], [7], [8], [9], [10], [11]).

This paper presents three general trichotomy concepts ((a,b,c) - trichotomy, strong (a,b,c) trichotomy and weak (a,b,c) – trichotomy) for noninvertible discrete linear systems. Connections between these concepts are given. These concepts contain as particular cases the uniform and nonuniform concepts of exponential or polynomial trichotomies.

2. PRELIMINARIES

Let $X$ be a Banach space and let $\mathcal{B}(X)$ be the space of all bounded linear operators on $X$. The norm on $X$ and on $\mathcal{B}(X)$ will be denoted by $\|\cdot\|$. We also denote by
- $I$ the identity operator on $X$;
- $\Delta$ the set of all pairs of natural numbers $(m, n)$ with $m \geq n$;
- $T = \Delta \times X$.

Let $(A_n)$ be a sequence in $\mathcal{B}(X)$.

We consider the linear discrete – time system

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\( (\mathcal{A}) \quad x_{n+1} = A_n x_n, \quad n \in \mathbb{N}. \)

Every solution \( x = (x_n) \) of the system \((\mathcal{A})\) is given by
\[
x_m = A(m, n) x_n \quad \text{for} \quad (m, n) \in \Delta,
\]
where \( A: \Delta \to \mathcal{B}(X) \) is defined by
\[
A(m, n) = \begin{cases} A_{m-1} \ldots A_n, & \text{if} \quad m > n \\ 1, & \text{if} \quad m = n \end{cases}
\]

**Remark 2.1.** We have that
\[
A(m, n)A(n, p) = A(m, p) \quad \text{for all} \quad (m, n) \text{ and } (n, p) \in \Delta.
\]

**Definition 2.1.** A sequence \((P_n)\) is called a projections sequence on \(X\), if \(P_n^2 = P_n\) for every \(n \in \mathbb{N}\).

A projections sequence \((P_n)\) with the property \(P_{n+1}A_n = A_{n+1}P_n\) for all \(n \in \mathbb{N}\), is called invariant for system \((\mathcal{A})\).

**Remark 2.2.** The projections sequence \((P_n)\) is invariant for \((\mathcal{A})\), if and only if
\[
A(m, n)P_n = P_m A(m, n) \quad \text{for all} \quad (m, n) \in \Delta.
\]

**Definition 2.2.** A projections sequence \((P_n)\) is called strongly invariant for the system \((\mathcal{A})\), if for every \((m, n) \in \Delta\) the restriction of \(A(m, n)\) on \(\text{Range } P_n\) is an isomorphism from \(\text{Range } P_n\) to \(\text{Range } P_m\).

**Remark 2.3.** If the projections sequence \((P_n)\) is strongly invariant for the system \((\mathcal{A})\), then exists \(B: \Delta \to \mathcal{B}(X)\) such that
\[
(b1) \quad A(m, n)B(m, n)P_m = P_m; \\
(b2) \quad B(m, n)A(m, n)P_n = P_n; \\
(b3) \quad B(m, n)P_m = P_nB(m, n)P_m;
\]
for all \((m, n) \in \Delta\).

**Definition 2.3.** Three projections sequences \((P_n^1), (P_n^2), (P_n^3)\) are called supplementary, if
\[
(s1) \quad P_n^1 + P_n^2 + P_n^3 = I \quad \text{for every} \quad n \in \mathbb{N}; \\
(s2) \quad P_i^j \cdot P_j^i = 0 \quad \text{for all} \quad i, j \in \{1, 2, 3\} \text{ with } i \neq j.
\]
If \(\mathcal{P} = \{(P_n^1), (P_n^2), (P_n^3)\}\) is a family of three supplementary projections sequences wich are invariant for \((\mathcal{A})\) then we say that the pair \((\mathcal{A}, \mathcal{P})\) is a trichotomic pair.

**Definition 2.4.** A family \(\mathcal{P} = \{(P_n^1), (P_n^2), (P_n^3)\}\) of three supplementary projections sequences is called compatible with the system \((\mathcal{A})\), if
\[
(c1) \quad (P_n^1) \text{ is invariant for } (\mathcal{A}); \\
(c2) \quad (P_n^2) \text{ and } (P_n^3) \text{ are strongly invariant for } (\mathcal{A}).
\]
If \((\mathcal{A}, \mathcal{P})\) is a trichotomic pair with the property that \(\mathcal{P}\) is compatible with \((\mathcal{A})\), then we will denote by \(B_j(m, n) = B(m, n)P_m^j\) for \((m, n) \in \Delta\) and \(j \in \{2, 3\}\) the operators given by Remark 2.3. corresponding to the projections sequences \((P_n^j)\) for \(j \in \{2, 3\}\).

3. \((a, b, c)\) – trichotomy
Let \((\mathcal{A}, \mathcal{P})\) be a trichotomic pair and let \(a = (a_n)\), \(b = (b_n)\) and \(c = (c_n)\) be three nondecreasing sequences of positive real numbers with \(a_n \geq 1\), \(b_n \geq 1\) and \(c_n \geq 1\) for all \(n \in \mathbb{N}\).

**Definition 3.1.** We say that the pair \((\mathcal{A}, \mathcal{P})\) is \((a,b,c) - \text{trichotomic}\) if there exists \(N \geq 1\) such that

1. \(a_m \| A_1 (m, n)x\| \leq N a_n b_n \| P_1^n x\|\);
2. \(a_m \| P_2^n x\| \leq N a_n b_m \| A_2 (m, n)x\|\);
3. \(c_n \| A_3 (m, n)x\| \leq N b_n c_m \| P_3^n x\|\);
4. \(c_n \| P_3^n x\| \leq N b_n c_n \| A_3 (m, n)x\|\);

for all \((m, n, x) \in T\).

In the particular case when the sequence \((b_n)\) is constant, we say that \((\mathcal{A}, \mathcal{P})\) is uniformly \((a, c) - \text{trichotomic}\).

**Remark 3.1.** As particular cases of \((a,b,c) - \text{trichotomy}\) we observe that

1. if \(a_n = e^{\alpha n}\) and \(c_n = e^{\beta n}\) with \(\alpha, \beta > 0\), then we recover the notion of nonuniform exponential trichotomy, and in particular when the sequence \((b_n)\) is constant we obtain the classical notion of uniform exponential trichotomy;
2. if \(a_n = (n + 1)^a\) and \(c_n = (n + 1)^b\) with \(\alpha, \beta > 0\), then we recover the notion of nonuniform polynomial trichotomy, and in particular when the sequence \((b_n)\) is constant we obtain the notion of uniform polynomial trichotomy.
3. if \(P_3^n = 0\) for every \(n \in \mathbb{N}\), then we recover the property of \((a, b) - \text{dichotomy}\), nonuniform exponential dichotomy (for \(a_n = e^{\alpha n}\) with \(\alpha > 0\), uniform exponential dichotomy (for \(a_n = e^{\alpha n}\) and \((b_n)\) constant), nonuniform polynomial dichotomy (for \(a_n = (n + 1)^a\) with \(\alpha > 0\)) and uniform polynomial dichotomy (when \(a_n = (n + 1)^a\) and \((b_n)\) constant).

A characterization of \((a,b,c) - \text{trichotomy}\) is given by

**Theorem 3.1.** Let \((\mathcal{A}, \mathcal{P})\) be a trichotomic pair with the property that \(\mathcal{P}\) is compatible with \(\mathcal{A}\).

Then the pair \((\mathcal{A}, \mathcal{P})\) is \((a,b,c) - \text{trichotomic}\) if and only if there exists a constant \(N \geq 1\) such that

1. \(a_m \| A_1 (m, n)x\| \leq N a_n b_n \| P_1^n x\|\);
2. \(a_m \| P_2^n x\| \leq N a_n b_m \| A_2 (m, n)x\|\);
3. \(c_n \| A_3 (m, n)x\| \leq N b_n c_m \| P_3^n x\|\);
4. \(c_n \| P_3^n x\| \leq N b_n c_n \| A_3 (m, n)x\|\);

for all \((m, n, x) \in T\).

**Proof.** It is sufficient to prove that \((t2) \iff (t2')\) and \((t4) \iff (t4').\)

For to prove that \((t2) \iff (t2')\) we observe that

\[
a_m \| B_2 (m, n)x\| = a_m \| P_2^n B_2 (m, n)P_2^n x\| \leq N a_n b_m \| A_2 (m, n)P_2^n x\| = N a_n b_m \| A (m, n)B (m, n)P_2^n x\| = N a_n b_m \| P_2^n x\|
\]

for all \((m, n, x) \in T\).

Similarly, for to prove the implication \((t2') \iff (t2)\) we observe that

\[
a_m \| P_3^n x\| = a_m \| B_2 (m, n)A_2 (m, n)P_3^n x\| \leq
\]

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\[ Na_n b_m \| P^2_m A_2(m,n) P^2_n x \| = Na_n b_m \| A_2(m,n) x \| \]

for all \((m,n,x) \in T\).

(\text{t4}) \iff (\text{t4}'). If we suppose that (t4) is satisfied then
\[ c_n \| B_3(m,n) x \| = c_n \| P^3_m B_3(m,n) P^3_n x \| \leq Nb_m c_m \| A_3(m,n) P^3_n x \| = Nb_m c_m \| A_3(m,n) x \| \]

for all \((m,n,x) \in T\) and hence the inequality (t4') holds.

(\text{t4}') \iff (\text{t4}). If (t4') holds then
\[ c_n \| P^2_n x \| = c_n \| B_3(m,n) A_3(m,n) P^3_n x \| \leq Nb_m c_m \| P^3_m A_3(m,n) P^3_n x \| = Nb_m c_m \| A_3(m,n) x \| \]

for all \((m,n,x) \in T\) and hence the inequality (t4) is verified.

4. **STRONG \((a,b,c)\) – trichotomy**

Let \((\mathcal{A}, \mathcal{P})\) be a trichotomic pair and let \(a = (a_n)\), \(b = (b_n)\) and \(c = (c_n)\) be three nondecreasing sequences of positive real numbers with \(a_n \geq 1\), \(b_n \geq 1\) and \(c_n \geq 1\) for all \(n \in \mathbb{N}\).

**Definition 4.1.** We say that the pair \((\mathcal{A}, \mathcal{P})\) is **strongly \((a,b,c)\) – trichotomic** if there exists \(N \geq 1\) such that

(\text{st1}) \( a_n \| A_1(m,n) x \| \leq Na_n b_n \| x \| ; \)
(\text{st2}) \( a_n \| x \| \leq Na_n b_m \| A_2(m,n) x \| ; \)
(\text{st3}) \( c_n \| A_3(m,n) x \| \leq Nb_n c_m \| x \| ; \)
(\text{st4}) \( c_n \| x \| \leq Nb_m c_m \| A_3(m,n) x \| ; \)

for all \((m,n,x) \in T\).

**Proposition 4.1.** If the pair \((\mathcal{A}, \mathcal{P})\) is strongly \((a,b,c)\) – trichotomic then it is also \((a,b,c)\) – trichotomic.

Proof. If \((\mathcal{A}, \mathcal{P})\) is strongly \((a,b,c)\) –trichotomic, then by substituting \(x\) by \(P^1_n x\) in (st1), \(x\) by \(P^2_n x\) in (st2), respectively \(x\) by \(P^3_n x\) in (st3) and (st4), then we obtain that (t1), (t2), (t3) and (t4) are satisfied and hence \((\mathcal{A}, \mathcal{P})\) is \((a,b,c)\) – trichotomic.

**Remark 4.1.** The converse of the implication from Proposition 4.1. is not generally true. (see Example 6.3.)

**Definition 4.2.** Let \(\mathcal{P} = \{ (P^1_n), (P^2_n), (P^3_n) \} \) be a family of three supplementary projections sequences and let \(b = (b_n)\) be a nondecreasing positive real numbers with \(b_n \geq 1\).

We say that \(\mathcal{P}\) is **\(b\) – bounded**, if there exist \(M \geq 1\) such that \(\| P^j_n \| \leq Mb_n\) for all \(n \in \mathbb{N}\) and all \(j \in \{1,2,3\}\).

**Proposition 4.2.** If the pair \((\mathcal{A}, \mathcal{P})\) is strongly \((a,b,c)\) – trichotomic, then \(\mathcal{P}\) is \(b\) – bounded.

Proof. If \((\mathcal{A}, \mathcal{P})\) is strongly \((a,b,c)\) – trichotomic then for \(m = n\) in the inequalities (st1) and (st3) we obtain

\[ \| P^1_n \| \leq Nb_n, \| P^2_n \| \leq Nb_n \text{ for all } n \in \mathbb{N}. \]

Then

\[ \| P^2_n \| \leq 1 + \| P^1_n \| + \| P^2_n \| \leq 3Nb_n \text{ for every } n \in \mathbb{N}. \]
Finally it results that $\mathcal{P}$ is b–bounded.

5. **WEAK** $(a,b,c)$ – trichotomy

Let $(\mathcal{A}, \mathcal{P})$ be a trichotomic pair and let $a = (a_n)$, $b = (b_n)$ and $c = (c_n)$ be three nondecreasing sequences of positive real numbers with $a_n \geq 1$, $b_n \geq 1$ and $c_n \geq 1$ for all $n \in \mathbb{N}$.

**Definition 5.1.** We say that the pair $(\mathcal{A}, \mathcal{P})$ is weakly $(a,b,c)$ – trichotomic if there exists $N \geq 1$ such that

$(wt1)\ a_m \|A_1(m,n)\| \leq Na_nb_m \|P^1_n\|;
(wt2)\ a_m \|P^2_n\| \leq Na_nb_m \|A_2(m,n)\|;
(wt3)\ c_n \|A_3(m,n)\| \leq Nb_nc_m \|P^3_n\|;
(wt4)\ c_n \|P^3_n\| \leq Nb_mc_n \|A_3(m,n)\|;

for all $(m,n,x) \in T$.

**Proposition 5.1.** If the pair $(\mathcal{A}, \mathcal{P})$ is $(a,b,c)$ – trichotomic then it is also weakly $(a,b,c)$ – trichotomic.

**Proof.** It follows from Definition 3.1. taking to supremum with respect to $\|x\| \leq 1$.

**Corollary 5.1.** If the pair $(\mathcal{A}, \mathcal{P})$ is strongly $(a,b,c)$ – trichotomic then it is also weakly $(a,b,c)$ – trichotomic.

**Proof.** It is a consequence of Proposition 4.1. and Proposition 5.1.

A characterization of weak $(a,b,c)$ – trichotomic is given by

**Theorem 5.1.** Let $(\mathcal{A}, \mathcal{P})$ be a trichotomic pair with the property that $\mathcal{P}$ is compatible with $\mathcal{A}$.

Then the pair $(\mathcal{A}, \mathcal{P})$ is weakly $(a,b,c)$ – trichotomic if and only if there exists a constant $N \geq 1$ such that

$(wt1')\ a_m \|A_1(m,n)\| \leq Na_nb_m \|P^1_n\|;
(wt2')\ a_m \|P^2_n\| \leq Na_nb_m \|A_2(m,n)\|;
(wt3')\ c_n \|A_3(m,n)\| \leq Nb_nc_m \|P^3_n\|;
(wt4')\ c_n \|P^3_n\| \leq Nb_mc_n \|A_3(m,n)\|;

for all $(m,n) \in \Delta$.

**Proof.** It is similar with the proof of Theorem 3.1.

6. **EXAMPLES**

Firstly, we present a pair $(\mathcal{A}, \mathcal{P})$ which is $(a,b,c)$ – trichotomic.

**Example 6.1.** Let $\mathcal{P} = \{(P^1_n), (P^2_n), (P^3_n)\}$ be family of three supplementary projections sequences with the following properties

(i) $P^2_mP^1_n = P^2_nP^1_m = 0$ and $P^2_mP^2_n = P^2_n$ for all $(m,n) \in \mathbb{N}^2$;
(ii) $\|P^2_mx\| \leq \|P^2_nx\|$ for every $(m,n,x) \in T$.

For an example of such family see Example 6.2.

Let $a = (a_n)$, $b = (b_n)$ and $c = (c_n)$ be three nondecreasing sequences of positive real numbers with $a_n \geq 1$, $b_n \geq 1$ and $c_n \geq 1$ for every $n \in \mathbb{N}$.
Consider the linear discrete – time system \((\mathcal{A})\) generated by sequence

\[
A_n = \frac{a_n}{a_{n+1}} p_n^1 + \frac{a_{n+1}}{a_n} p_{n+1}^2 + \frac{c_n}{c_{n+1}} p_n^3
\]

Then \((\mathcal{A}, \mathcal{P})\) is a trichotomic pair with

\[
A(m, n) = \frac{a_n}{a_m} p_n^1 + \frac{a_m}{a_n} p_m^2 + \frac{c_n}{c_m} p_n^3
\]

\[
A_1(m, n) = \frac{a_n}{a_m} p_n^1, \quad A_2(m, n) = \frac{a_m}{a_n} p_m^2, \quad A_3(m, n) = \frac{c_n}{c_m} p_n^3
\]

Moreover we have that

1. \(a_m \| A_1(m, n)x\| = a_n \|P_1^1 x\| \leq a_n b_n \|P_1^1 x\|\);
2. \(a_m \|P_1^2 x\| \leq a_m \|P_2^2 x\| = a_n \|A_2(m, n)x\| \leq a_n b_m \|A_2(m, n)x\|\);
3. \(c_n \|P_3^2 x\| \leq c_m \|A_3(m, n)x\| \leq b_m c_n \|A_3(m, n)x\|\);
4. \(c_n \|P_3^3 x\| \leq c_m \|A_3(m, n)x\| \leq b_m c_n \|A_3(m, n)x\|\);

for all \((m, n, x) \in T\).

This \((\mathcal{A}, \mathcal{P})\) is \((a,b,c)\) – trichotomic.

This example shows that for every \((a,b,c)\) there exists a trichotomic pair \((\mathcal{A}, \mathcal{P})\) which is \((a,b,c)\) – trichotomic.

An example of strong \((a,b,c)\) – trichotomic pair is presented in

**Example 6.2.** On \(X = \mathbb{R}^3\) endowed with the norm

\[
\|(x_1, x_2, x_3)\| = \max\{|x_1|, |x_2|, |x_3|\}
\]

we consider the family \(\mathcal{P} = \{(P_1^1, P_2^2, P_3^3)\}\) of three supplementary projections sequences defined by

\[
P_1^1(x_1, x_2, x_3) = (x_1 + x_2 b_n, 0, 0)
\]

\[
P_2^2(x_1, x_2, x_3) = (-x_2 b_n, x_2, 0)
\]

\[
P_3^3(x_1, x_2, x_3) = (0, 0, x_3)
\]

where \((b_n)\) is a nondecreasing real sequence with \(b_n \geq 1\).

It is easy to see that \(\mathcal{P}\) satisfies the properties (i) and (ii) from Example 6.1.

Moreover \(\mathcal{P}\) is \(b\) – bounded.

If we consider the system \((\mathcal{A})\) defined in previous example then \((\mathcal{A}, \mathcal{P})\) satisfies the inequalities (st1), (st2), (st3) and (st4), and hence \((\mathcal{A}, \mathcal{P})\) is strongly \((a,b,c)\) – trichotomic.

An example of \((a,b,c)\) – trichotomic pair which is not strongly \((a,b,c)\) – trichotomic is given in

**Example 6.3.** On \(X = \mathbb{R}^3\) endowed with the same norm as in the previous example we consider the family \(\mathcal{P} = \{(P_1^1, P_2^2, P_3^3)\}\) given by

\[
P_1^1(x_1, x_2, x_3) = (x_1 + x_2 e^{x_2}, 0, 0)
\]

\[
P_2^2(x_1, x_2, x_3) = (-x_2 e^{x_2}, x_2, 0)
\]

\[
P_3^3(x_1, x_2, x_3) = (0, 0, x_3)
\]

and the linear discrete – time system \((\mathcal{A})\) generated by sequence

\[
A_n = \frac{p_1}{e} + e p_2^2 + \frac{p_3}{e}
\]

For \(a_n = b_n = c_n = e^n\) we have that the pair \((\mathcal{A}, \mathcal{P})\) is \((a,b,c)\) – trichotomic and because \((P_2^2)\) is not \(b\) – bounded it follows that \((\mathcal{A}, \mathcal{P})\) is not strongly invariant.
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PROSPECTS REGARDING ENTREPRENEURIAL DEVELOPMENT FOR YOUNG PEOPLE IN THE AREA OF CARAS SEVERIN

Venera Cristina MANCIU

ABSTRACT

The present paper aims at illustrating the main prospects regarding entrepreneurial development in the area of Caras Severin, as perceived by young people. The main purpose was to study the tourism market in Caras Severin, the potential of which is very high, but mainly not exploited and it can be noticed a high underdevelopment of business in this field.

Keywords: entrepreneurship, development, tourism, young people

JEL: L26

1. INTRODUCTION

"Tourism offers are represented by touristical attractions (both natural and anthropogenic), that influence directly tourism consumption and the phenomenon as a whole" (Negruț, Vlad, 2015).

Given our countries touristic potential, we notice that in Romania there are several opportunities that can be exploited, under various forms of tourism.

By the National Tourism Development Master Plan for the period 2007-2026, Romania has established a complex set of objectives to be achieved until the end of this period. Starting with the year 2009, the National Tourism Research and Development Institute has also developed the National Strategy for Ecotourism Development in Romania, which defines the concept and the international experience regarding this concept and also the current situation of tourism in Romania. These documents provide guidelines regarding tourism development for our country.

Tourism development becomes vital for the general development of the Mountainous Banat, as well. The touristic potential of the region can thus also be harnessed through local festivals, among which we can enumerate the most important ones: the International Jazz Festival from Garana, the International Folklore Festival "Hercules", the event entitled "Celebration of fortress" in Caransebes, the "multicultural Resita" event with a cycle of manifestations named “Seven days - seven arts and "Resita in ten dimensions"; "Cultural and musical Oravita" with the following manifestations: the celebratory days dedicated to Mihai Eminescu (15 January) and George Enescu (November the 5th); the German Culture Decade of Mountainous Banat, a manifestation dedicated to the days of faith and culture in Banat, organized by the Diocese of Caransebes; the National Festival of short films from Resita and Otelu Rosu, the gastronomical Festival entitled "The Golden Cauldron" in Moldova Noua or the "Tata Oancea" Festival of poetry in local dialect organized in Bocsa.

"Due to the very varied natural and human potential, the forms of tourism that can be

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practiced in the county are diverse: Tourism traffic, Spa (health) tourism, Rest and recreation tourism, Speleological tourism, Scientific tourism, Agrotourism, Congress and meetings tourism, Religious and pilgrimage tourism, Cultural tourism, Educational tourism, Sports tourism” (Mazilu, 2011).

2. THE RESEARCH METHODOLOGY

The purpose of this article was to study the tourism market in Caras Severin as well as determining the attitude of the young people in Resita regarding the possibilities of developing businesses in the field of tourism in the area of Mountainous Banat. In order to achieve this, a research has been conducted in the month of March 2016, the main objective being to study the tourism market in Caras Severin, while the secondary objectives consisted in the following aspects:
1. identifying the main tourist routes;
2. identifying the most important tourist attractions in the county;
3. identifying the positive elements influencing tourism in Caras-Severin;
4. identifying the elements that have a negative impact upon tourism;
5. identifying the quality / price ratio of the touristic services offered in the county of Caras Severin.

The study consisted in conducting a direct research direct in the city of Resita, based on a representative sample of 72 individuals, built on the tree structure method, taking into account the following criteria: gender, age, profession.

As a form of research, it was used the individual and structured investigation, based on a questionnaire composed of 12 questions, of which 9 content - questions and 3 identification questions. Of the sample surveyed, 48.46% were males and 51.54% females, while the age groups studied were under 20 years; 20 - 29 years; 30 - 39 years; 40 – 49 years; 50 – 59 years; over 60 years.

The error was permissible to a limit of 5% and the results in which we manifest a particularly interest are the one corresponding to the age categories of under 20 and 20-29 years, because the subject of the present paper is the identification of entrepreneurial possibilities for young people.

3. RESULTS AND CONCLUSIONS

Following the application of the above mentioned questionnaire and after the tabulation of results, we can state the conclusions regarding:

1. The position of subjects on the sources of information concerning the knowledge on Caras-Severin County
   Most of the respondents, 35% (of which 57% men and 43% women) are familiar with the county of Caras-Severin mostly from the stories of friends and family. The second place as a source of information is held by the Internet, which is reminded by a percent of 31% of the individuals (of which 70% men and 30% women). As regards to the age criterion, the highest percentage in this case is represented in a ratio of 50% by people under 20 years. Therefore, the most significant percentage due to the occupation criterion on information from the Internet is represented by students (50%).
It is important to mention that most of the individuals who responded the questionnaire and can be included in the age category of 20-29 years old prefer to get the information from preferred travel agents or tourism fairs. This percent is lower in the case of students under 20 years.

2. The attitude subjects on the value of touristic potential in the county of Caras-Severin

A percentage of 96% (ie 94% of men and 97% of women) of the subjects surveyed believe that the tourist potential of Caras-Severin County is not valued enough. In terms of age, the lowest ratio is represented by the individuals over the age of 60, while the remaining criteria of age, especially the young people consider that the real touristic potential of the region is not valued enough.

Only 4% of the respondents (namely 6% of men and 3% women) surveyed believe that the touristical potential of the county of Caras-Severin County is valued at a sufficient level. The highest percentage of the individuals who granted this answer is represented by the people over the age of 60, while the young individuals, from the categories of age under 20 years and 20-29, manifest in a high percent a contrary opinion.

3. The attitude of respondents regarding the touristic attractions of Caras-Severin county

More than half of the respondents - 61% (ie 60% men and 62% women) believe that nature is one of the most important touristic attractions of Caras-Severin. According to the criterion of age, this answer is granted mostly by the individuals over 60 years – 71%, while the two categories on which we focus in the present study consider that the most important concern in terms of attractions are the traditions and culture that can be found in the county, more than 50% of respondents, belonging to the age categories under 29 years considering that there are several entrepreneurial opportunities that can be identified in this field and that various business that could be developed here may contribute to the overall wellbeing of the region.

4. The attitude of respondents regarding the prices applied in Caras-Severin compared to the quality of the services offered

A 68% (57% of male respondents and 76% of women respondents) of the subjects surveyed believe that the prices applied in this field are acceptable. As regards, based on the age criterion, the largest share of respondents who offer this response - 73% is represented by the subjects aged between 40-49 years. In return, most of the individuals aged under 20 or in the range of 20 – 29 consider that the prices are high and a fair ratio between prices applied and quality that is offered, cannot be easily found.

This may be considered as a good opportunity of developing new business, where between quality and the prices applied to be a better relationship.

5. The attitude of respondents regarding the most important touristic routes in Caras-Severin

Most subjects - 24% (31% of men and 16% of women) answered that the most important touristic route in the county is the one including Bigar waterfall. The second place is identified as the one corresponding to the Mount Semenic, while the Gorges of the Danube, the Semmering of Banat, the Lake of the Devil and the ruins from the county are considered less important.

6. Perception of respondents regarding the elements that manifest positive influence on the tourism in Caras Severin

The subjects questioned considered that the main elements that positively influence the
tourism in Caras Severin are the following:
- the beauty of the landscape – selected by a percent of 61% of individuals;
- specific customs and traditions – named by a percent of 19%;
- facilities for accommodation and food – 20%.

7. The attitude of subjects regarding the elements that negatively influence the tourism in Caras Severin

The subjects questioned considered that the main elements that negatively influence the tourism in Caras Severin are the following:
- infrastructure – 21% of respondents;
- pollution – 4% of respondents;
- the lack of facilities – 35% of respondents.

8. The attitude of subjects regarding the reasons for choosing Caras Severin as a touristic destination

The largest share of respondents - 53% (43% of men and 57% of women) had mentioned the beauty of the landscape as the main reason that would determine them to choose Caras Severin as a touristic destination. Secondly, there are mentioned the customs and traditions of the region, with a ratio of 19% (26% of men and 14% of women). Another decisive criteria is represented by the history of the region.

After answering the questions in the survey, the individuals also listed a series of proposals for improving the touristic area of Caras Severin. Considering the answers offered by the young people, who are included in the two categories – under 20 years and 20 – 29 years, we can enumerate the followings:
- The necessity of marking the tourist routes and sightseeing;
- The improvement of infrastructure;
- The promotion of touristic areas;
- Renovation and development of areas;
- Employing competent people in the right positions;
- Attracting European funds;
- Reducing pollution;
- Facilities for investments;
- Infrastructure for skiing and cycling;
- Activities with traditional specific;
- Upgrading the ski slopes;
- Maintenance of the Anina-Oravita Railway;
- Maintenance of touristic areas;
- Development of touristic information centers;
- Involvement of travel agencies in promoting the county;
- Upgrading the resort in Baile Herculane;

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POSSIBILITIES OF DEVELOPMENT FOR COMMERCIAL BUSINESSES IN RESITA - THE VISION OF YOUNG PEOPLE

Venera Cristina MANCIU

ABSTRACT

Businesses in the field of commerce have developed greatly in recent decades, being one of the most profitable sectors of activity. The purpose of this paper was to identify the opportunities of development for the field of trade, in Resita, from the perspective of young people, and also to determine the level of interest in opening a business in this area of activity in the future. The present paper thus presents a study carried out on the young people’s perception regarding the development of business opportunities in the field of trade in the city of Resita.

Keywords: business, trade, entrepreneurship, know-how

JEL M30

1. INTRODUCTION

The commercial activity has developed positively over the past few decades in all developed or developing countries. But companies need to adapt to specific environmental requirements, while optimizing the allocation of resources (Cărstea et al, 2008). Trade activity has experienced a number of significant changes in the context of a society in constant change, which raises a number of major challenges both for producers and consumers.

"Offering consumers an attractive location and a diversified range of products is increasingly important, although not sufficient, as today’s consumers have many options, which triggers stronger efforts of traders to attract them, preserve them and turn them into faithful customers” (Manciu, 2011).

Shaping a consumer society has led to the development of trade as a whole and as a result, it caused a gradual increase in terms of turnover, especially in the retail sector.

According to the National Institute of Statistics, the turnover in the field of retail trade in August 2016 compared to the same period in the previous year, increased by 12.6%, based on growth in the case of the following categories of products: non-food products, fuel, food and tobacco, respectively.

The official reports published at national level, indicate that "Romania is placed just above the average of countries in Central and Eastern Europe, in terms of economic development" (according to the reports published by the National Institute of Statistics).

2. THE RESEARCH METHODOLOGY

The purpose of this article was to study the possibilities of business development in the field of trade in Resita. To achieve this goal, we conducted a survey during the month of October 2016, to which have attended, as respondents who were questioned, students from the fields of

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Marketing or Business Administration, both from the bachelor level and from the master level.

The main objective was to study the attitudes of young students about the possibilities of initiation and development of business in the commercial sector. Secondary objectives, on the other hand, have examined the following aspects:

1. the analysis of the interest of respondents regarding the launching of their own business in the field of commerce
2. identifying the level of theoretical and practical knowledge held by respondents, needed for starting a business in the field of commerce
3. determining the perception of subjects on the minimal period of sustainability on the market in Resita, for a business established in the field of trade
4. the analysis of the level of determination of respondents for conducting commercial activities after graduation
5. studying the attitude of respondents on the level and usefulness of the knowledge acquired in the filed of entrepreneurship, during studies
6. the analysis of respondents’ opinion regarding the most profitable sector in the field of commercial business.

The study involved students from the following programs: Marketing, Economics of Commerce, Tourism and Services, Marketing and Business Communication, Business Administration in Tourism, Trade and Services.

The total number of respondents was 34, and the form of survey we used the questionnaire, consisting of a total of 10 content – questions and 3 questions of identification of the subject, respectively. The last ones aimed at identifying the gender, year of study or specialization. All respondents were part of an age group below 25 years, because the study aimed at determining the attitude of young people on the issue proposed.

3. RESULTS AND CONCLUSIONS

Following the application of the above mentioned questionnaire and after the tabulation of results, we can state the conclusions regarding:

1. the interest manifested by respondents regarding the opening of a personal business in the field of commercial activities

   From this point of view, the results obtained indicate that 71.4% of respondents are interested in opening a business in this sector, only 28.6% offering a negative answer from this point of view. A higher level of indecision can be seen in the case of students at undergraduate level, where almost half of respondents show less interest for this field of activity. A larger concern may be observed in the case of students at master level, where 91% of respondents declare interest in this future opportunity.

2. the knowledge of young people on the possibility that their initiatives to be supported financially through non-refundable funds, or with low interest rates, by the European Union or the Romanian Government

   A percentage of 57.1% of respondents consider that they have knowledge about the fact that the European Union or the Romanian Government supports the initiatives of young people to start their own business. A corresponding percentage to the positive answers from this point of view is higher for students at the master level, who, along previous years of studies, have already
formed a stronger basis on the possibilities of personal business financing and also demonstrate a higher level of involvement.

3. the level of theoretical and practical knowledge held by the respondent, needed for starting a business in the field of commerce

Starting a business in any field requires, besides an appropriate capital, also a range of specific knowledge for the area of activity which is desired to start an activity. The third question aimed at identifying the level of theoretical and practical knowledge held by the potential entrepreneurs in order to start a business in the field of trade. Thus, of the total respondents, 50% gave an affirmative answer, being confident that they would hold an optimum level of theoretical knowledge and practical skills required, while half (50%) declare themselves reluctant in this regard, considering that there are still gaps or points that need to be improved in the future. This trend is reflected both at the undergraduate and master level, among students, indicating some doubt or uncertainty for their own forces or their individual skills and knowledge.

4. the main sources of financial support and know how generation

When launching a business, the entrepreneur will definitely need financial support. The respondents declared that they would require it mainly from specialized institutions or consultancy companies in this specific field (62.8%), less from friends (11.5% of respondents) or parents (25.7%).

5. selecting the place for the business

In connection with the issue of the place where the business will be placed and operating, most respondents consider that they would select an urban area (48.5%), only a percentage of 22.8% however opting for Resita, 11.6% indicating another town in Romania or abroad, while cyberspace is preferred by 17.1% of respondents. The proportion of responses for total respondents is maintained when speaking in terms of educational level, the trends being similar in percentage terms.

6. the minimum period of sustainability on the market in Resita for a business developed in the field of commerce

37% of the respondents considered that a business launched in Resita has a chance to work more than 5 years, 37.1% predict a lifetime of between 1 and 3 years, while the rest of the respondents questioned are more reticent in this respect: 14.2% believe that the chances of a deal being sustainable on the market in Resita are small but still predicts a lifespan of at least three months from the establishment, while 11.4% of respondents indicated an average running time between 6 and 12 months.

7. the will of respondents of conducting activities in the field of commerce after graduation

After graduation, the majority of respondents stated that they would like to engage in commercial activities - 68.5%, while 31.5% and would redirect to different areas. The desire for continuity is more pronounced for students from the master level, where up to 90% wish to engage in commerce, while students at the undergraduate level opt in a smaller proportion - 65.22% for this field.
8. the type of activity preferred by respondents

Regarding the activities desired to be carried out by respondents in future, they consider in a proportion of 51.4% that would choose to launch a private business, in the desire to be independent from financially point of view, while a fairly large percentage - 34.4% is held by those who would opt to work in a private company. The desire to emigrate in order to find a job outside the country is found in the case of 11.4% of respondents, while 2.8% consider that they would like to work as juniors in public services. We notice differences in terms of educational level of respondents, so if those who are students at a master program would choose in the highest proportion starting a private business, the students at the bachelor's level state equally a desire to engage in a private firm. We note therefore more prone to gain initial experience in the field, by working for a private company.

9. the attitude of respondents regarding the level and usefulness of knowledge gained in the field of entrepreneurship, during studies

In terms of the level of knowledge acquired during their studies or the usefulness in the future, a large part of respondents (60.1%) believe that they have managed to acquire valuable information, but would be interested and willing to fill them in future through participation in entrepreneurial training programs. 25.7% of respondents believe that the knowledge acquired during studies is not sufficient, 14.2% stating that they gained solid knowledge, enough to start a business in this field.

10. the opinion of respondents regarding the most profitable sector in the field of commerce

The respondents consider, in a proportion of 25.7% that the most profitable sector of business is the food trade, an identical percentage being found in the case of IT and mobile products. Also profitable sectors are considered to be the fast-food outlets and coffee bar sites (17.1%) and also commerce with thematic products dedicated to women, men, children, elderly people, etc. The least profitable branches of commerce are identified as the non-food sector, namely the one of natural products.

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ABSTRACT
The reason for choosing this theme is constituted by the fact that the performance evaluation of the economic entity has an important role in making managerial decisions, helping in understanding both the benefits and the risks of planning the future performance of the economic entity. In order to offer a solution to the management, we must use a unique set of financial indicators as an answer to the complexity of the financial performance analysis of the economic entity.

It is very important for an economic entity to obtain high levels of performance, this thing being made possible by the attempt to elaborate a measurement system of the performance which offers the possibility to quantify the efficiency of the obtained results and to improve the process of making decisions.

KEY WORDS: annual financial standings, performance, profitability, indicators, balance.

JEL: M41

1. INTRODUCTION
Performance is considered as being „a state of competitiveness of an economic entity, reached by a level of effectiveness and efficiency which assures it a sustainable presence on the market”.

Perhaps the most comprising definition of performance claims that „performance is a state of the entity’s competitiveness, being an indicator of a potential of future outcomes which occur as a result of reaching the strategic goals, as performance is not a characterisation of a momentary situation, but always refers to the future” (Jianu (2007)).

Other authors consider that „to measure performance and to appreciate value and to know value means to translate performance ” (Albu et al. (2004)). An interesting classification of the performance measurements types of an economic entity is found in Parmenter in 2010 (Parmenter (2010)):

✓ the key results indicators which express what the economic entity has achieved in a certain perspective;
✓ the result indicators which express what the economic entity has achieved;
✓ the performance indicators which show what the economic entity should do;
✓ key performance indicators which succeed to offer information to the economic entity about what they should do in order to increase the performance of the economic entity.

It is very important for an economic entity to reach high levels of performance, and this is possible by the attempt to elaborate a system of performance measurement which can offer the possibility to quantify the efficiency of the results obtained and to improve of the decision-making process.
The assessment of an economic entity’s performance plays an important part in managerial decision making, helping to understand the benefits and risks of planning the economic entity’s future performance. In order to offer a solution to management, we need to use a unique set of financial indicators, as a response to the complexity of the analysis of economic entities’ financial performance.

Neely listed three functions of the measurement of the economic entity’s financial performance, namely (Neely (2007)):

- instrument of financial management, whose purpose is the efficient assurance and use of financial resources in order to effectively administer the financing function;
- major objective of the economic entity;
- mechanism of motivation and control inside the economic entity Thus the financial information attempts to provide an image of the economic entity so that economic activities can be managed.

The attention given to the performance evaluation has constituted a research subject during the time, numerous researchers trying to investigate which are the most usual measurement systems of performance.

All in all, we believe that the performance of economic entities represents an indicator of the competitiveness status, which includes, beside the financial results, those related to the growth or reduction of own capitals, which occurs as a result of reaching the strategic goals, referring to the future periods, and by whose reaching the entity assures a sustainable presence on the market.

2. THE ANALYSIS OF THE BALANCE SHEET FOR AN ECONOMIC ENTITY

General information on the profitability ratios

a) The financial profitability ratio ($R_f$)

- Total Capitals: 103,841 lei;
- Net profit: 165,908 lei.

It results the first indicator of high relevance, the financial profitability ratio ($R_f$): 

$$R_f = \frac{P_b}{K} = \frac{165,908}{103,841} = 1,5977$$

This ratio of 159,77% is very high and it shows that the whole capital can be reproduced/recreated totally by the gross profit and even we can add a half of the whole capital of economic entity. The value is atypical, usually the indicator is significantly subunitary; in the given conditions, it rather highlights the poor capitalization of the entity than its financial performance.

b) The economic profitability ratio ($R_e$)

Necessary information:
Total Assets: 155,114 lei (fără datorii curente);
Net economic result: 165,908 lei.

The economic profitability ratio ($R_e$):

$$R_e = \frac{R_{ec}}{T_a} = \frac{P_b}{T_a} = \frac{165,908}{155,144} = 1,0695$$

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In this relation:
\( R_e \): the economic result;
\( P_b \): the gross profit;
\( T_a \): total assets.

The economic profitability ratio shows the capacity of gross or net profit to cover the assets. In the present case, the net profit has the capacity to double the assets by the end of the period, rather highlighting their modest value due to the modest value of the capital.

c) The commercial profitability ratio \((R_e)\)

Necessary data:
- Gross profit \((P_b)\): 203.629 lei;
- Turnover \((C_a)\): 2.024.349 lei.

In calculating the commercial profitability ratio \((R_e)\) we use the total afferent profit of sales which in the present case is identical to the gross profit, the entity having signally a commercial profit (sellings). Likewise, for a clearer relevance of the indicator, for the denominator we will have the net turnover (without VAT).

\[
R_e = \frac{P_b}{C_a} = \frac{203.629}{2.024.349} = 0.10059 \quad (10.06%) 
\]

The indicator is of maximal relevance and it places the ratio at a level closer to the branch average (placed for many years at the level of 8%).

Deepening the analysis, the financial profitability ratio can be calculated as a relation between the net profit \((P_n)\) and the net turnover.

\[
R_e = \frac{P_n}{C_a} = \frac{165.908}{2.024.349} = 0.0819 \quad (8.2\%) 
\]

The commercial profitability ratio calculated based on the net values of the profit and the turnover record a value which is able to quiet any fears of the entity management related to the turnover. It is on an ascending trend and for the future it should preserve those values or even improve them and this would give confidence to the management and patronage for the future of the business. Surely the entity is above the branch average – even above the economy average and its ascendent is clear and unequivocal.

The commercial profitability ratio can be calculated also by reporting the results to the different forms and values of (total, proper, permanent etc) capitals but as we have seen the entity does not have significant levels of capitals so that these calculations are relevant from the economic and financial point of view.

d) The profitability ratio of the consumed resources \((R_{rc})\)

Necessary information:
- Gross profit: 203.629 lei;
- Total expenses: 2.322.374 lei.
The dedicated formula to the calculation of the profitability ratio of the consumed resources is:

\[ R_{rc} = \frac{P_b}{\sum q_i^v c_i} \]

in which:
- \( q^v \): sold production;
- \( c \): the complete unitary cost per product;
- \( i \): the index of the product.

In this case, for the denominator we will record the production costs as a sum of complete unitary costs on product; this supposes the existence of a detailed analytic accounting which will not result from the balance. Consequently, the denominator will be replaced with the indicator Total expenses found in the Annex “Information data” (F30) at line 283 from the extended balance sheet. The indicator calculated in this way is relevant expressing the capacity of gross profit (or net if the case) to cover the total expenses of the entity.

The calculated indicators are the following:
- based on the gross profit:
  \[ R_{rc} = \frac{203.629}{2.322.374} = 0.0876 \quad (8.76\%) \]
- based on the net profit:
  \[ R_{rc} = \frac{165.908}{2.322.374} = 0.0714 \quad (7.14\%) \]

The profitability ratio of the consumed resources is placed in the proximity of commercial profitability but it is lesser than this one, a fact which indicates a lower profitability of the production activity (confectionery-pastry) than those from commerce. In conclusion, we must pursue in detail the resources consumption from the production area (laboratory and other production points). There is also the possibility that the used prices to be too low.

e) **The financial profitability ratio of proper capitals**

Necessary information:
- Net profit \((P_n)\): 165.908 lei;
- Proper capitals \((K_p)\): 103.841 lei.

Calculation relation:

\[ R_{fcp} = \frac{P_n}{K_p} = \frac{165.908}{103.841} = 1.5977 \]

In the specific case of the analysed economic entity, the financial profitability ratio of proper capital is equal to the ratio of general financial profitability, of the whole capital because there are no public or private patrimonial elements which should entail on the proper capital:

\[ R_{fcp} = R_f \]
The conclusions referring to the financial profitability can be extrapolated also on the financial profitability of capitals and they mainly sum up in the stringent need to capitalize of the economic entity.

f) The analysis of financial profitability ratio of the permanent capital \( R_{f\text{per}} \)

Necessary information:

- Gross profit \( (P_p) \): 203.629 lei;
- Permanent capital \( (K_{per}) \): 155.114 lei.

The calculation relation is the following:

\[
R_{f\text{per}} = \frac{R_p}{K_{\text{per}}}
\]

In which: \( K_{\text{per}} = K_p + P_{rov} + D_{\text{il}} \) where:

- \( K_p \) = Proper Capital (F10, line 46 in the balance sheet);
- \( P_{rov} \) = Provisions (F10, line 17);
- \( D_{\text{il}} \) = long term debts (F10, line 16).

So, by the end of the year 2015, \( D_{\text{il}} = 51,273 \) lei, it results that:

\[
K_{\text{per}} = 103,841 \text{ lei} + 51,273 \text{ lei} = 155,114 \text{ lei}
\]

(provizioanele fiind nule the provisions being nule), and the calculated rate is:

\[
R_{f\text{per}} = \frac{203.629}{155.114} = 1.312 \quad (131.27\%)
\]

We can observe that the gross profit integrally covers the long-term capital remaining a reserve of one third from it, which leads to the conclusion that the profit answers to certain financing needs of capitals (inclusively) covering the debts on a longer term than one year.

In the analysis of the financial profitability of the long-term capital it is justified to take into calculation the gross profit, imposing also the social responsibility of the tax on profit because there are also social needs to cover, the long-term capital not resulting necessarily only from the entity’s efforts but also from the concerted effort of all its stake-holders.

g) The analysis of the profitability ratios on product \( (r_{pp}) \)

Necessary information:

- The unitary average selling price of the product \( (p_i) \);
- The complete unitary average cost of the product \( (c_i) \).

The calculation relation is the following:

\[
r_{pp} = \frac{p_i - c_i}{p_i} = 1 - \frac{c_i}{p_i}
\]

For the analysed entity, the calculation of these profitability ratios is a desideratum and it must constitute a major objective for the subsequent period. Its fulfilment supposes the evidence of expenses on each product and on each centre of production and profit.
h) The analysis of profitability ratios of the consumed resources on product \( r_{cp} \)

The necessary information is the same as in the case of the profitability analysis on product and the calculation relation is almost identical:

\[
r_{cp} = \frac{P_i - c_i}{c_i}
\]

For the entity, subject to analysis, the calculation of these rates is still impossible due to the fact that some data referring to the expenses on product are still missing.

The analysis of the accounting net assets \( (ANC) \)

The difference between the total assets \( (A_t) \) and the total contracted debts \( (D_t) \) give a first and main accounting evaluation of the entity on the date of the balance sheet ending.

The accounting net assets or the net situation of the patrimony measures the stockholders’ fortune meaning the assets non-entailed of debts and it is calculated as a difference between the total assets and the total debts.

\[
ANC = A_t - D_t
\]

Necessary information:
- Total assets: 155.114 lei (F10, line 15);
- Total debts: 51.273 lei (F10, line 16).

Because the total assets extracted from the balance sheet is given after the current debts have been figured out, the total debts which are to be operated in the above relation refer only to the debts which must be paid in a period longer than one year. With these observations, the accounting net assets become:

\[
ANC = 155.114 - 51.273 = 103.841 \text{ lei}
\]

The accounting net assets is positive and ascending as compared to the previous year (at the beginning of the balance year 2015, the accounting net assets was -62.068 lei), a fact which shows a healthy economic inventory even a spectacular one. It is a sign of superior fructification of the net assets and the natural increase of the stockholders’ capital.

Moreover, by calculating the index of the total assets and the index of total debt we will observe that both indexes are over-unitary; in this situation the existence of accounting positive net assets shows that the assets increased only on the basis of proper capitals not on the debts contracted by the entity which constitutes another remarkable positive fact.

The analysis of the working capital \( (FR) \)

The working capital represents the surplus of the permanent resources which can be “rolled up” for the refreshment/ reinvestment of stocks and receivables. It represents the expression of the financial balance on long term and their contribution to the achievement of the balance on short term.

There are many types of working capitals:

a) The working capital \( (FRB) \), designates all the elements of circulating funds susceptible to be renewed in an interval shorter than one year (to achieve at least a rotation); being an element with a high degree of uncertainty in determination (even
the word susceptible says everything), it is recommended to be avoided or very rarely used in the practical analysis of the economic-financial situation based on the balance.

b) The net working capital ($FRN$), also called the permanent working capital is an indicator of high importance from the point of view of practical, operational analysis, being a significant part if possible of the working capital which can be used for the financing of circulating assets. It is practically the excess of working capital in relation to the fixed assets.

$$FRN = K_{\text{per}} - A_{\text{in}},$$

in which:

$K_{\text{per}}$ : working capital;

$K_{\text{per}} = K_p + D_l$;

$A_{\text{in}}$ : net fixed assets .

Thus:

$$K_{\text{per}} = 103.841 + 51.273 = 155.114 \text{ lei}$$

$$FRN = 155.114 - 97.235 = 57.879 \text{ lei}$$

c) The proper working capital ($FRP$) expresses the excess of proper capital to the non-current assets.

$$FRP = K_p - A_{\text{in}}$$

$$FRP = 103.841 - 97.235 = 6.606 \text{ lei}$$

The fact that the permanent working capital as well as the proper trading capital are positive it is a positive fact for the entity, highlighting a **balanced even performing inventory**.

d) The foreign working capital ($FRS$) represents the term debts and is calculated with the relation:

$$FRS = FRN - FRP,$$

which is equivalent to the relation:

$$FRS = K_{\text{per}} - K_p$$

In the given situation, $FRS = 155.114 - 103.841 = 51.273 \text{ lei}$

The analysis of the necessary working capital ($NFR$)

Essentially the necessary working capital appears in the analysis because of two causes: the **existence of stocks and the payment delays**. Both causes are objective and necessary, so they are impossible to avoid.

The first cause is justified by the fact that from the moment of buying the raw material (materials) for the vendible products and until their selling as finite products, the organisation is required to block a part of their financial resources (capital) in **stocks**, which are in different phases of the cycle of exploitation, the result being an unknown term in the framework of the financing cycle.

The second cause comes from natural features of the market economy in which the postponement for the payment of different categories of stakeholders from the up and down the production cycle, especially the suppliers and clients is a frequent practice. The entity does not engage rapidly (ideally it would be to be engaged instantly) for the recuperation of the liquidities, resulting the second unknown of the financing cycle.
To sum up, we can say that the exploitation cycle provokes a blocking of capital, by the stocks created during the production period as well as the payment given to clients.

In order to compensate these unknown terms of the exploitation cycle, the entity can take two types of measures:
- credits given by the suppliers;
- A flexible credit line, at a sure bank whose level of fluctuation should be well and constantly observed.

By definition, the necessary trading capital \((NFR)\) represents the sums which the entity must spend for the development of the production process with the exception of the sums allotted for the financing of non-current assets.

In other words, \(NFR\) represents the part of cyclic assets uncovered by the cyclic resources (liabilities) and which must be financed from the permanent resources or the circulating assets (with liquidities lower than one year) which must be financed from the permanent sums (with exigibility higher than one year).

Calculation relations:
\[
\begin{align*}
NFR &= A_c - P_c \\
NFR &= A_{cir} - D_p - P_{cir} - C_t - S_{ccc} \\
NFR &= S_t + C_r - D_{nef}
\end{align*}
\]

In these relations, the significance of indicators is:
- \(A_c\): active ciclice cycling assets/ current assets;
- \(P_c\): cyclic liabilities;
- \(A_{cir}\): current assets;
- \(D_p\): availabilities and investments
- \(P_{cir}\): current liabilities;
- \(C_t\): treasury credits;
- \(S_{ccc}\): credit balance of the current account
- \(S_t\): stocks;
- \(C_r\): receivables;
- \(D_{nef}\): Non-financial debts

In the balance analysis the most easy to apply is the last relation and the necessary information is:
\[
\begin{align*}
S_t &= 73.177 \quad \text{(F10, line 5)}; \\
C_r &= 14.338 \quad \text{(F10, line 6)}; \\
D_{nef} &= 343.785 \quad \text{(F10, line 13)}.
\end{align*}
\]

It results that:
\[
NFR = 73.177 + 14.338 - 343.786 = -262.270 \text{ lei}
\]

The entity is in the situation \(NFR < 0\) and the current assets are lesser than the current liabilities. It results that an excess of temporary (cyclic) sources in relation to the cyclic assets (temporary needs).

The situation is favourable:
- there is a favourable report between the suppliers and clients;
- there is an accelerated rotation of the stock.

With all these, for the entities with the necessary negative working capital, if there was an excess of availabilities mainly due to the increase of the turnover, it is natural and normal that this increase should not surpass 5% from the economic asset. This is not a strict rule, but it is a warning signal and this must be “set”: the resources increased too rapidly in relation to the needs and the entity must be very careful regarding their administration.
A relevant conclusion regarding the value of the necessary working capital is obtained by its relation to the turnover, the optimal relation being under 15% (10% – 15%).

\[
\frac{NFR}{C_a} < 0,15 ; \quad \text{or} \quad \frac{NFR}{C_a} < 100 \times 15\%
\]

In our case:

\[
\frac{NFR}{C_a} = \frac{262.270}{2.024.349} = 0,1295 \quad (\approx 13\%)
\]

The condition is fulfilled so the necessary working capital, by its value, leads to the conclusion that the economic activity is well administered.

The analysis of the financial balance (treasury)

The analysis of treasury \((T)\) represents the analysis of the financial balance on short term; with this purpose we do a comparison between a relatively constant measure (the working capital), with a measure generally fluctuating (the necessary working capital).

Essentially, if at a certain moment (mainly by the end of the accounting exercise), the working capital is superior to the need of working capital, then there is an excess of financing which is found under the form of net treasuries (money availabilities, positive balance of the current account, other bank accounts or cash).

There are two ways to determine the treasury/balance:

a) as difference between the working capital and the necessary working capital:

\[ T = FR - NFR, \]

b) as a difference between the treasury of assets and treasury of liabilities:

\[ T = T_{activ} - T_{pasiv}, \]

in which:

\( T_{activ} \): the treasury of assets, containing money availabilities from accounts and cash and short term investments;

\( T_{pasiv} \): Liability treasury containing current credits and the credit balance of the bank.

In the case of the analysed entity, we obtain using the first method:

\[ T = FR - NFR = 57.879 - (-262.270) = 310.149 \text{ lei} \]

This sum represents the net treasury (the value calculated of the net or permanent trading capital was taken into calculation).

The fact that the net treasury is positive signifies a positive fact and for the economic activity respectively the fact that the financial exercise 2015 was ended with money excess which is concretely illustrated by the net profit of 165.908 lei from the liabilities balance and also by other money storages.

From the balance sheet clearly results a treasury surplus which could/can be placed efficiently and safely on the (monetary or financial) market or it can trigger an investment process. This surplus gives confidence for the initiation of movable investments (for example, a terrace in free air, which should counteract the negative economic effect of the new law which regulates smoking).
In conclusion, **on short term, the entity is in financial balance.**

The analysis of the long term balance supposes the calculation of some flows in treasury which exceeds in data and objectives the present paper.

The fact that the treasury is positive and on short term the entity is in balance should not be regarded as something which protects the entity of worries in the future. **A positive treasury does not always mean the exclusive signal of a favourable situation.** The purpose of the entity is not the ownership of a treasury but the training of resources in efficient activities. On short term, the positive treasury means that the financial balance was achieved; but on long term, the abundance of stable resources does not mean but their inefficient use with negative effects in the redemption of loans, the payment of interests and the remuneration of capital and work.

In this situation we must avoid (because it is not necessary) the acquirements from the bank market of some loans on long term, with high interests in order to cover the current needs. These can be very well covered from the current resources. The long term loan must be contracted for investments which should inclusively lead to the diversification of the activities which bring income, knowing the fact that incomes from different sources (a diversified turnover) are the main protection against crisis.

### 3. CONCLUSIONS

After analysing the specialised literature but also the national legislation in the field, we can conclude that measuring the performance for an economic entity is very important. Thus, by its most important two components of financial situations, respectively the balance sheet and the profit and loss account, an economic entity can appreciate the economic and financial performances by the calculation of some indicators which show us its financial stability and its financial autonomy, the debt level, its capacity to gather liquidities and to honour its debts towards third parties. On the other side, the annual financial situations help us to determine the profitability of the economic entity at three levels, respectively the economic level, the financial level and the commercial level.

Regarding the case study achieved in this paper, we have stopped on the analysis of the economic entity based on the balance sheet and after determining the most important indicators we reached the following conclusions:

1. the entity is placed in the proximity of profitability ratios on the branch and on the national economy, recording values a little superior to these ones;
2. with a positive working capital and a necessary negative working capital, the entity is balanced from the financial point of view;
3. there are risks in the exploitation area because the exploitation lever has high values which will lead to extremely unfavourable consequences if, from diverse reasons, the turnover will decrease;
4. in order to diminish the risks in the exploitation area it is necessary to strictly observe the expenses by:
   - the accounting evidence on profit centres
   - Responsibility and motivation of the staff
5. being decapitalised, the entity will face many difficulties in contracting some credits
6. the entity does not need “exploitation” credits because it functions normally and covers the needs from its income; the eventual credits can be contracted only by investments and retooling in order to face the competition.
7. in order to eliminate the risk of exploitation it is imposed to increase the commercial margin (but with high carefulness)

8. The entity should not be afraid of bankruptcy because the risk is lower than 10%.

REFERENCES


***Law 82/1991, Law of Accounting, with the ulterior alterations and completions, updated in 2016;

***Order of the Minister of Public Finances no. 1802/2014 for the approval of the Accounting regulations regarding the individual annual financial situations and the consolidated annual financial situations, updated in 2016.
THE ANALYSIS OF ECONOMIC ENTITIES' PERFORMANCES BASED ON THE ACCOUNTING INFORMATION INCLUDED IN THE PROFIT AND LOSS ACCOUNT

Andreea Mihaela MARIN

ABSTRACT
The success of an activity and the quality of the management process depends essentially on the gathering and processing of information, the way in which their dissemination takes place and the efficiency of actions which are undergone based on this information.

The indicators used in the analysis of performances based on the profit and loss account offer information regarding the profitability of economic entities on different levels. These can be determined by the (operational, financial, exceptional) activity characteristics but also by the monetary characteristics (by this indicator defining the quality of income elements to be retrievable, and that of expenses to be payable) or the participation of certain stakeholders in the distribution of financial results.

KEY WORDS: performance, indicators, profit and loss account, accounting information.

JEL: M41

1. INTRODUCTION

In order to ensure making efficient decisions, it is necessary to achieve a functioning informational system and at the level of the economic entity, the financial-accounting decisions have as base the economic-financial analysis which is achieved by the accounting-financial department by the reflection in the main documents elaborated: the accounting balance sheet, the profit and loss account as an integrant part of the annual financial situations (Vâlceanu et. al. (2005)).

The main source of data for the evaluation of an economic entity results is constituted by the profit and loss account. This statement is supported by “based on the information reflected in the profit and loss account, we achieve a relevant analysis of the entity’s performance, a variety of indicators are calculated, either at a certain moment in time, then it follows their interpretation by comparisons, either in time and correlated with certain statistical procedures” (Ştefănescu (2005)).

Thus, the first category of indicators that we can determine on the basis of data from the profit and loss account are the intermediate inventory balance, their image being seen as “the balance of potential money accumulations, destined to fulfil a certain function of remuneration of the production factors and to finance a future activity.” (Olaru).

The main role of the profit and loss account, as periodical financial report, is to illustrate the main economic performance of the entity: profit. This represents the reason to be not only for the entity but also for the market economy – enlarging the class of meanings and reasons for the

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ontological area, we could say that profit is a category which reveals in the good and wide sense the man’s interest, so it stays at the bases of the reason to be of the humanity.

The standardisers (meaning the creators of economic-judicial norms, in this case) have reached the conclusion that this financial report is useful to be presented in shortened form.

The specialised literature (Cotleţ et. al. (2010)) shows that: “the economic, financial, judicial and cultural characteristics of each European country made the standardisers and entities to choose the model which best correspond to the informational solicitations of the users. In France it was proved that the standardisers recommended and the entities draw up in most cases a profit and loss account in tabulated form. Thus, it is also permitted to use the profit account for the drawing up of intermediate inventory balance and valuing the information cleared of such balances and opening the financial reporting of firms towards the calculation of some economic units. The financial reports were regarded only from the procedural point of view and from the need of controlling the public administration and not only as information instruments of facilitating the financial analysis and assisting the economic decisions making.”

The French model was also adopted in our country but only after a British counselling, which the French have taken into consideration for the improvement of their already established model. Thus, the big entities (which can easily be recognised by the phrase "big tax-payers") draw up present and publish a profit and loss account with expenses structured according to the functions, while the small entities and medium benefit from and use a model in which the expenses are structured according to their nature. Subsequently, the standardisers have agreed regarding the structure of expenses according to their nature in the case of all economic agents and the structure according to the functions should be given at the level of an explanatory note.

In all cases, the entities which apply financial international norms must present: either the profit and loss account after the net benefit of the year or explanatory notes and the size of the dividends on share proposed in the name of the financial year to which the reports refer to.

Almost all the small and medium entities in our country present the profit and loss account in shortened form after the net benefit of the financial year under the form of the standardised form F20.

2. THE ANALYSIS OF THE PROFIT AND LOSS ACCOUNT

The profit and loss account is a component part of the financial situations of any economic entity which synthesizes at the highest level the whole activity developed during the financial year permitting immediate comparisons at least with the indicators achieved during the previous year (Spătaru (2004)). Being the first accounting document which reflects the entity’s performance and representing a distinct structure of financial situations, the profit and loss account presents a processing and systematization of all income and expenses recorded during the current financial year. The profit and loss account is the financial situation which measures the success and performance of a firm’s activity referring to the given period. The profit and loss account of an economic entity in shortened form is (F20). In the data basis the main indicators necessary for the analysis are presented in an especially conceived table (table no. 1)
Table 1
Analysis of the profit and loss account

<table>
<thead>
<tr>
<th>crt. No.</th>
<th>Indicator</th>
<th>Symbol</th>
<th>Line no.</th>
<th>Financial exercise</th>
<th>Absolute Difference</th>
<th>Index</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td>2014</td>
<td>2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Net turnover</td>
<td>C_a</td>
<td>01</td>
<td>384.075</td>
<td>2.024.349</td>
<td>1.640.274</td>
<td>5.271</td>
</tr>
<tr>
<td>2</td>
<td>Other income</td>
<td>A_v</td>
<td>02</td>
<td>1.163</td>
<td>501.654</td>
<td>500.491</td>
<td>431.345</td>
</tr>
<tr>
<td>3</td>
<td>Total income (line.1+line.2)</td>
<td>V_t</td>
<td>03</td>
<td>385.238</td>
<td>2.526.003</td>
<td>2.140.765</td>
<td>6.56</td>
</tr>
<tr>
<td>4</td>
<td>Income structure</td>
<td>Y_v</td>
<td>04</td>
<td>0.99698</td>
<td>0.80140</td>
<td>0.76621</td>
<td>0.8038</td>
</tr>
<tr>
<td>5.1</td>
<td>Balance of turnover</td>
<td>Y_ca</td>
<td>05</td>
<td>0.00302</td>
<td>0.19860</td>
<td>0.23379</td>
<td>65.7839</td>
</tr>
<tr>
<td>5.2</td>
<td>Income balance</td>
<td>Y_av</td>
<td>06</td>
<td>0.2711</td>
<td>0.1934</td>
<td>0.1748</td>
<td>0.7133</td>
</tr>
<tr>
<td>6</td>
<td>Cost of raw materials</td>
<td>C_m</td>
<td>07</td>
<td>217.795</td>
<td>715.502</td>
<td>497.707</td>
<td>3,285</td>
</tr>
<tr>
<td>7</td>
<td>Staff expenses</td>
<td>C_p</td>
<td>08</td>
<td>121.331</td>
<td>449.134</td>
<td>327.803</td>
<td>3,702</td>
</tr>
<tr>
<td>8</td>
<td>Value adjustment</td>
<td>C_av</td>
<td>09</td>
<td>6.203</td>
<td>18.045</td>
<td>11.842</td>
<td>2,909</td>
</tr>
<tr>
<td>9</td>
<td>Other expenses</td>
<td>C_a</td>
<td>10</td>
<td>102.177</td>
<td>1.139.693</td>
<td>1.037.516</td>
<td>11,154</td>
</tr>
<tr>
<td>10</td>
<td>Expenses structure</td>
<td>Y_c</td>
<td>11</td>
<td>447.506</td>
<td>2.322.374</td>
<td>1.874.868</td>
<td>5,190</td>
</tr>
<tr>
<td>10.1</td>
<td>Balance of raw materials cost</td>
<td>Y_mp</td>
<td>12</td>
<td>0.4867</td>
<td>0.3081</td>
<td>0.2655</td>
<td>0.6330</td>
</tr>
<tr>
<td>10.2</td>
<td>Balance of the staff expenses</td>
<td>Y_cm</td>
<td>13</td>
<td>0.2711</td>
<td>0.1934</td>
<td>0.1748</td>
<td>0.7133</td>
</tr>
<tr>
<td>10.3</td>
<td>Balance of the value adjustments</td>
<td>Y_av</td>
<td>14</td>
<td>0.0139</td>
<td>0.0078</td>
<td>0.0063</td>
<td>0.5606</td>
</tr>
<tr>
<td>10.4</td>
<td>Balance of other expenses</td>
<td>Y_ac</td>
<td>15</td>
<td>0.2283</td>
<td>0.4907</td>
<td>0.5534</td>
<td>2,1493</td>
</tr>
<tr>
<td>11</td>
<td>Gross profit(line 3-line9)</td>
<td>P_b</td>
<td>16</td>
<td>-62.268</td>
<td>203.629</td>
<td>265.897</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Tax on profit</td>
<td>I_p</td>
<td>17</td>
<td></td>
<td>37.721</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Profit or net loss line 8 or line 9</td>
<td>P_n</td>
<td>18</td>
<td>-62.268</td>
<td>165.908</td>
<td>228.536</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Average number of employees</td>
<td>N_s</td>
<td>19</td>
<td>F30, 24</td>
<td>17</td>
<td>29</td>
<td>12</td>
</tr>
<tr>
<td>15</td>
<td>work performance line 1-line 14</td>
<td>W</td>
<td>20</td>
<td>22592.647</td>
<td>69805.138</td>
<td>47212.491</td>
<td>3,0897</td>
</tr>
</tbody>
</table>

(Source: achieved by the author, my own calculations)

Based on the obtained results, using Excel, thus organised to permit the analysis of the profit and loss account, it results a series of very interesting conclusions, referring to an atypical
dynamics of a small and medium entity in a period of economic calmness, proper for development.

Thus, the turnover of the analysed economic entity records a spectacular evolution, 5.27 times (527%), in net values (exclusively VAT), this increase meaning 1.640.274 lei (from 384.075 lei by the end of the financial year 2014, to 2.024.349 lei by the end of the year in 2015). This increase was mainly due to the following factors:

- the production diversification and the increase of the number of production units, which have become automatically profit centres; thus, during 2014 there were opened and organised three new centres (beer-house + pizza parlour, a restaurant and a confectionery) set up in one of Resita’s goodwill in the proximity of a supermarket (in a common yard with parking lots);

- almost naturally the number of employees increased spectacularly; the medium number of employees has increased with 12 people but the increase is more visible at the end of the period 2015 when the number of employees reached 40, outlining from this point of view a medium solid entity with an obvious potential of development;

- the results show a better organisation of the work, a superior administration of resources which show an advanced degree of maturity of the administrative act; even if there was a significant increase of the average number of employees, the dynamics of the employees number (the index of the average number of employees is 1,7058 while the index of work productivity calculated based on the turnover is 3,0898) which undoubtedly shows that work was better organised and led and the resources were better administered and engaged.

In order to measure the influence of the two factors on the dynamics of the net turnover we can apply an apparently simple but eloquent model:

\[ C_a = N_s \cdot \frac{C_a}{N_s} = N_s \cdot W; \quad \Delta C_a = C_{a1} - C_{a0}; \quad I_{C_a} = \frac{C_{a1}}{C_{a0}}; \]

where:

- \( C_{a1} \) : the net turnover by the end of the year 2015;
- \( C_{a0} \) : the net turnover by the end of the year 2014;
- \( \Delta C_a \) : absolute deviation (variation) of the net turnover;
- \( I_{C_a} \) : relative deviation of the net turnover;
- \( N_s \) : average number of employees;
- \( W \) : Average work productivity (lei/employee)

For more relevance we will explain the absolute variation and its influences.

\[ \Delta C_a = C_{a1} - C_{a0} = 2.024.349 - 384.075 = 1.640.274 \text{ lei} \]

This absolute sum of variation is caused by two influences:

a) The absolute change of the turnover due to the variation of the employees number:

\[ (\Delta C_a / N_s) \]
ΔC_a/N_s = (N_{s_i} - N_{s_o})W_o = (29-17) 22.592,64 = 271.111,68 lei

b) Absolute change of the net turnover due to the variation of average productivity on employee:

(ΔC_a/W)

ΔC_a/W = N_s_i(W_i - W_o) = 29 (69.805,14 – 22.595,84) = 1.369.170,62 lei

It results that the total increase of 1.640.274 lei of the net turnover, the predominant majority of around 1.369.171 lei (83,47%) was produced due to the increase of work productivity by engaging, organisation, mobilization and better administration of resources.

The income structure is a normal, healthy one by the end of 2015 around 80% of income coming from the merchandise sold and encashed, meaning from the turnover and the rest of 20% of other income which come to complete the turnover; this structure diversification is welcomed in the context in which by the end of the previous year they almost exclusively came from the turnover (99,69%). The income diversification is augured well for any entity especially in the context of economic crisis whose cyclic character is obvious and it advises to prudence.

Regarding the income structure there are some question signs and likewise we can come to some conclusions in the sense of improving the administration of resources and bringing the confluence point of the income curve and expenses towards the optimal value. For a better visibility and relevance of conclusions we will highlight the structure coefficients (balances) of different categories of total expenses in the following table:

<table>
<thead>
<tr>
<th>crt. No.</th>
<th>Indicator</th>
<th>Financial exercise</th>
<th>Absolute Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2014 %</td>
<td>2015 %</td>
</tr>
<tr>
<td>1.</td>
<td>Total expenses from which:</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>1.1.</td>
<td>Balance of raw materials</td>
<td>48,67</td>
<td>30,81</td>
</tr>
<tr>
<td>1.2.</td>
<td>Balance of the staff expenses</td>
<td>27,11</td>
<td>19,34</td>
</tr>
<tr>
<td>1.3.</td>
<td>Balance of the value adjustments</td>
<td>1,39</td>
<td>0,78</td>
</tr>
<tr>
<td>1.4.</td>
<td>Balance of other expenses</td>
<td>22,83</td>
<td>49,07</td>
</tr>
</tbody>
</table>

(Source: achieved by the author, my own calculations)

3. CONCLUSIONS

We can reach the following conclusions:

The balance of expenses with raw materials and consumables decreases from 48,67% in 2014, to 30,81% in 2015, this evolution covering around a quarter (26,55%) from the total increase of entity’s expenses from one year to another; In parallel highlighting this evolution, the expenses balance with the staff (staff expenses + afferent taxes and contributions) decreases the level to 27,11% by the end of the financial year 2014, at the level of 19,34% by then end of the year 2015, covering 17,48% from the total increase of the entity expenses;

These two structural decreases are produced in the context in which the global indicator (total expenses) records a consistent increase, visible at the level of the two sub-indicators apart;
they could not be produced but in compensation with the structural consistent and visible increase;

This structural compensation is done by the increase of other expenses from 22.83% by the end of the financial year 2014, to 49.07% by the end of the financial year 2015; even the absolute sum of the increase at this balance chapter seems spectacular in itself but in relative terms it is more eloquent the column “other expenses” recording an increase of over 11 times by the end of the financial year 2015 as compared to the previous year covering over half (55.34%) from the total increase of the entity expenses; From this point of view, the financial year 2015 is an atypical one, that we can assign “a refreshing year” in which the entity canalized a large part of the expenses on endowment, furniture and ambient elements which are meant to make practicable a series of activities which were to be developed in the new production spaces;

A strict inventory of the results of these expenses is necessary, a correct evaluation and an accounting highlighting as close as possible to the accounting value; some of these objects will have a real value different from the accounting one, which should be put in evidence, eventually by the achievement of a competent evaluation taking into account the realities and rigors of the market;

In the general context of discussions about the oddness and disparities of different forms of remunerable and remunerated capital during the production process we must highlight the fact that the balance of expenses with the staff is too low both in relation to the other forms of expenses and with the medium balance generally established on the economy branch; thus, a balance of 17.48% registered by the end of the financial year 2015 is far from the minimum 40%, which is the minimum accepted for an entity which respects itself and its employees.

REFERENCES

REGULATORY FRAMEWORK AND STOCK MARKET DEVELOPMENT. AN EMPIRICAL APPROACH ON 13 CEE COUNTRIES

Marius Cristian MILOŞ\textsuperscript{1} \\
Laura Raisa MILOŞ\textsuperscript{2}

ABSTRACT
The objective of the paper is to outline the importance of sound legislation that regulates the domestic stock markets, including Bucharest Stock Exchange. Currently, the Romanian stock market is in a process of development, and its strategy is to promote itself as one of the most important stock markets in the region. The national stock markets have a crucial influence on financing and growth in the whole world. The functional stock markets are those which ensure the premises of a sustainable and significant growth of an economy. The regulators have a very important role in ensuring these kind of markets. The objective of the regulation is to improve the results obtained on the stock market – economic indicators that point to the efficiency of the stock markets due to the legislative changes. The main contribution of the paper is to outline the main institutional, regulatory or macroeconomic determinants of stock market development, in order to spur economic growth. Based on a panel fixed effect model, with application on 13 Central and Eastern European economies, including the Romanian one, the results show the key variables that influence stock market development.

KEY WORDS: regulation, stock market, enforcement, development

JEL: K22, G10

1. INTRODUCTION

Currently, the Romanian stock market is in a development stage, aiming at becoming one of the most important stock market in the Central and Eastern European region. The dynamics of the market capitalization, from the very start until present time, has been a positive one, this indicator growing from 26 mill. lei in 1995 to 146 bill. lei at the end of 2015 (at approximately 22 \% in GDP). The main objective of the Bucharest Stock Exchange, supported also by the market participants, by The Financial Supervisory Authority (ASF) and the national government is the one of becoming an emergent market, according to the international classification. In order to achieve this, BSE must fulfill a number of quantitative and qualitative criteria. Some of them have already been accomplished. For the others, BSE has implemented a series of measures that will contribute to the reaching of this important objective.

The national stock markets have a crucial influence on financing and growth in the whole world. The functional stock markets are those which ensure the premises of a sustainable and significant growth of an economy. The regulators have a very important role in ensuring these kind of markets. The objective of the regulation is to improve the results obtained on the stock market – economic indicators that point to the efficiency of the stock markets due to the

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legislative changes. As a consequence of the globalization, in the last decades, the national stock markets have become more correlated. The globalization brought significant benefits to the economies, but in the same time, it has created new risks and challenges for the regulation and supervisory authorities.

2. SOME INDICATORS OF DEVELOPMENT OF THE BUCHAREST STOCK EXCHANGE

Being the third stock market in the region (after Poland and Czech Republic), Bucharest Stock Exchange has experienced a period of constant growth until the financial crisis made visible its effects in 2008, by a dramatic reduction of all stock market indicators. Since then, the stock market experienced a steadily growth of the market capitalization, exceeding for the first time in 2012 the level registered by this indicator before the crisis started and reaching 32 bill. Euro in 2015, its maximum historical level.

![Figure 1 - Key indicators of Bucharest Stock Exchange (2000-2015)](image)

Source: realized by authors, BSE statistics
3. REGULATION AND STOCK MARKET DEVELOPMENT – WHAT DOES THE THEORY STATE

A growing number of papers have oriented to the identification of those elements from legislation that generate stock market development. It has become common knowledge that there is a positive relation between the level of protection of the investors on a certain stock market and its development level, estimated through market liquidity, traded volume or market capitalization.

For a stock market, reputation is a key element, since the perception of the investors is easy to manipulate. A strong belief that insider traders are acting on their behalf on a national stock market will lead immediately to negative corrections of the stock market indicators. The investors will not allocate the same amount of money, which will bring negative consequences for the market liquidity if the market perception is that its functioning is influenced by illegitimate or unlawful acts of certain persons or entities.

However, no matter the size or level of development of the stock market, there would always exist attempts of market abuse, market manipulation or insider trading. What is important is the effort made by the national authorities in order to minimize these attempts and the enforcement of the legislation.

International empirical research show that a high level of investor protection is associated with:

- the level of development of the stock markets (La Porta et al., 1997);
- an increase of the number of listed firms (La Porta et al., 1997);
- an increase of the large firms, in terms of sales or assets (Claessens et al. 2002; La Porta et al., 2002);
- a higher dividend pay-out ratio (La Porta et al., 2000);
- a decrease of concentration of the shareholders (Claessens et al., 2000);
- the diminishing of the private benefits of the ones controlling the company (Zingales, 1994);
- a higher degree of correlation between opportunities on the stock markets and effective investments (Wurgler, 2000).

Other author have pointed their attention on the increase of corporate governance principles with positive implications on transparency and reporting relevant information for the stock market. On the other hand, a large body of research is focusing on the accounting disclosure and accounting regulation and its influence on the market value of the companies (Beaver (2002); Chang et al. (2008); Giner et al. (2002); Holthausenşi Watts (2001); Mora şi Vasquez (2004); Ohlson, (1995); Verrechia (2001)).

Fiscal regulation and stock market reaction due to the changes in the fiscal policy is also investigated at international level. The empirical research shows that there should exist fiscal incentives, at least until the domestic stock markets reach a certain level of development.

4. DETERMINANTS OF STOCK MARKET DEVELOPMENT IN THE LITERATURE

From the large number of theoretical and empirical papers that have approached the stock market development subject, we have selected the most often used determinants and the expected
sign in the literature. In the next chapter, we will empirically investigate which of them are in a significant way connected with the Central and Eastern European stock market development.

**Table 1 – Determinants of stock market development in the empirical literature**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measures</th>
<th>Expected sign in the literature</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MACROECONOMIC VARIABLES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit to private sector by banks (BK)</td>
<td>Size of bank-based financing</td>
<td>-/+</td>
</tr>
<tr>
<td>Gross savings (GS)</td>
<td>The extent of resources available for investment in capital</td>
<td>+</td>
</tr>
<tr>
<td>Fiscal freedom (FF)</td>
<td>Tax burden imposed by government</td>
<td>+</td>
</tr>
<tr>
<td>GDP/capita (GDP/capita)</td>
<td>Stage of economic development</td>
<td>+</td>
</tr>
<tr>
<td><strong>REGULATORY VARIABLES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investors protection index (IP)</td>
<td>Regulatory framework concerning the legal protection of the investors</td>
<td>+</td>
</tr>
<tr>
<td>Procedures to enforce a contract (PE)</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Time required to complete each procedure (TP)</td>
<td>Efficiency of the commercial court system</td>
<td>-</td>
</tr>
<tr>
<td>Cost required to complete each procedure (CP) (% of the claim)</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Property rights (PR)</td>
<td>The ability of individuals to accumulate private property, secured by clear laws that are enforced by the state</td>
<td>+</td>
</tr>
<tr>
<td><strong>OTHER VARIABLES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freedom from corruption (FC)</td>
<td>The level of public sector corruption</td>
<td>+</td>
</tr>
<tr>
<td>Pension funds’ investment (PF)</td>
<td>Market force of the private pension system</td>
<td>+</td>
</tr>
</tbody>
</table>

Source: realized by authors

5. EMPIRICAL APPROACH

From a methodological point of view, fixed effects, as well as random effects models were considered. The fixed effect model is more simple to conduct and is defined according to the following regression model:
We performed several unit root tests, such as: Levin, Lin & Chu, Breitung t-stat, Im, Pesaran and Shin W-Stat, ADF-Fisher Chi-Square, PP-Fisher Chi-square.

Table 2 – Econometric results

<table>
<thead>
<tr>
<th>Panel data regression</th>
<th>OLS</th>
<th>RE model</th>
<th>Corrected FE model White Cross-section standard errors and covariance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Property rights</strong></td>
<td>0.2215 (0.2904)</td>
<td>0.1239* (0.0951)</td>
<td>0.1227*** (0.0386)</td>
</tr>
<tr>
<td><strong>Freedom from corruption</strong></td>
<td>0.2001 (0.1739)</td>
<td>0.4181*** (0.1467)</td>
<td>0.4802** (0.2465)</td>
</tr>
<tr>
<td><strong>Investor protection</strong></td>
<td>0.7316 (5.0803)</td>
<td>0.9567 (1.6651)</td>
<td>1.1078 (0.8724)</td>
</tr>
<tr>
<td><strong>Bank financing</strong></td>
<td>0.1611* (0.090)</td>
<td>0.1090* (0.0610)</td>
<td>0.1029** (0.0436)</td>
</tr>
<tr>
<td><strong>Pension funds’ assets</strong></td>
<td>1.0782 (0.6358)*</td>
<td>0.6557*** (0.2254)</td>
<td>0.6580*** (0.1616)</td>
</tr>
<tr>
<td><strong>R^2</strong></td>
<td>0.1202</td>
<td>0.2368</td>
<td>0.9254</td>
</tr>
<tr>
<td><strong>DW stat</strong></td>
<td>0.21</td>
<td>1.87</td>
<td>2.18</td>
</tr>
</tbody>
</table>

Source: realized by authors
6. CONCLUSIONS AND FURTHER RESEARCH

The results show that from all the analyzed explanatory variables, only property rights, the bank-based financing and pension funds' investment variables are statistically correlated with stock market development. The main conclusions that can be drawn are the following:

- Regulatory and institutional variables, such as sound property rights or freedom from corruption are positively correlated with stock market development;
- Private pension funds, as sophisticated institutional investors might be used to spur further stock market growth;
- Bank-based financing is rather complementary, than a substitute to the stock market financing and contributes to the CEE stock market development.

Further research should take into account:

- A broader sample of countries;
- More robust/different econometric approach;
- More regulatory variables, especially ones that show the efficiency of the regulatory system, for example:
  - procedures to enforce a contract, time and cost of enforcement (Doing Business reports-World Bank);
  - judicial capacity (Law in transition - EBRD).

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INITIATIVE FOR LOCAL EMPLOYMENT – ILE

Mirela MINICĂ

ABSTRACT
The article highlights the concept of Local Initiative for Employment - ILE, highlighting the objectives and main actors involved in this public-private partnership.

Although legislation and administrative organization locally in Romania are not those required for the ILE, might as one way of solving immediate future unemployment to represent precisely these partnerships for employment.

KEY WORDS: Initiative for Local Employment – ILE, business, finance, training, local authorities, partnerships.

JEL: E23

1. INTRODUCTION

Since the 80s, O.C.D.E. countries, because of the extension of unemployment conception that the creation of new jobs is an exclusive task of governments, had to be changed.

Thus arose the term "local initiative for employment" – ILE, that defines the efforts of local authorities, institutions and businesses to control the evolution of unemployment, to reduce it and to revitalize local economies.

The success of this new approach to the problem of employment is the development of effective partnerships between stakeholders at local, regional and national public and private ones.

In many countries this trend has been supported by administrative and political decentralization initiatives, which have widened by increasing the responsibilities of local decision powers and the mobilization of local energies to create and foster new business opportunities.

The main objectives within the local employment initiatives labor aimed at creating new businesses, improving access to finance, organization of training and retraining, finding the best partners to maintain the initiative, the active involvement of central and local authorities, the local development agencies, educational and research institutions, chambers of commerce and industry and other partners (trade unions, neguvernementale, banks, private investors consultants). Establishing the optimum combination of each contribution must be based on realistic knowledge of the local situation, the available resources and objectives.

The emergence and expansion of unemployment worrying phenomenon raises special problems for governmental bodies. One solution to counter its influence is to provide by local public services and infrastructure in order to attract businesses and investments that create new jobs. Most often local governmental institutions, not supporting any public sector nor the private

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sector. Given that these solutions limited and proved inefficiency are increasingly requires the mobilization of all stakeholders in promoting economic and social development regional, so between local authorities, private companies, foundations, the business community to establish partnerships.

2. ILE OBJECTIVES

In OECD countries manifests itself increasingly decentralized administrative and political movement, which promotes an expansion of responsibilities of local actors, establishing centers of economic decision-making and policy implementation at the regional level. Government organizations related to employment have a role to coordinating national policies, while locally they mobilize other partners involved in the creation of new jobs, with greater flexibility and adaptability to local requirements.

Starting from these premises appeared term local initiatives for employment (Local Employment Initiatives - ILE).

In addition to the initiatives of creating new jobs, pursuing these partnerships and solving social problems and environmental protection with indirect effect on local economic and social climate.

Programs that try to resolve these problems take the form of various types of financial advice and assistance to support existing businesses and start new ones, strategies for stimulating entrepreneurship and establishment of scientific incubators for small business, individual or collective training and retraining.

Most ILE were developed in response to a variety of problems since the closure of large plants that throws the labor market a large number of people to some long-term problems regarding the economic decline in urban and in rural areas where traditional activities related to agriculture, mining, energy and forestry creates increasingly fewer jobs.

As seen easily these ILE occur in local areas affected by the recession and have as common characteristic lack of funds which imposes the need for intelligence and other sources of funding from national and international (such as the structural funds of the European Union).

The main objectives of any ILE are:

1. Create new business

SMEs are an important component of the market economy.

Example Netherlands is inconclusive because they account for roughly 40% of GDP, 45% of employment and 45% of all new jobs created.

Encourages these local initiatives by advising small spaces with low rents, financial aid, tax exemptions, entrepreneurship initiatives among groups deprived of tradition in this business (unemployed, youth, women). Perhaps many of these small businesses will remain at family level, but some of them will create cooperation and will contribute to increasing employment both local as well as positive impacts on local morals.

In addition to activities supporting these business initiatives, ILE have to support existing businesses and to expand and diversify determine their rehabilitation continues to constantly changing market environment, the opening of local offices of large companies.

2. Improving access to finance

Providing funding for these projects is the glue that these are translated into concrete actions, otherwise, very well grounded any plan remains only an achievement in terms of maximum theoretical without applicability.
In this regard local authorities must create a complex network of fundraising from different sources: budget allocations, grants for special programs from the government, public agencies, banks and financial institutions, international funds.

Constantly seeking to update the information on their variable rate grants, loans and subsidies, conditions and eligibility criteria, these local initiatives can play an active role in the action of obtaining investment funds.

Attracting capital available in the private sector by offering tax stimulants, by providing guarantees and investment coordination, contributing to the completion of centrally allocated funds for regional development.

Public / private partnerships develop credit instruments through balancing strategies by which public investments are used to attract money from the private sector through the provision of relatively low interest loans for investments that generate local jobs.

3. Training and retraining

Rapid technical change in conditions, how the workforce is prepared in terms of quality (training) is a prerequisite of sustainable economic development.

Through these partnerships between all community members are known realities of the moment and term trends and eliminates the risk that the structure of training courses to be an outdated one that trades for which they qualify or requalify both active population employed and the unemployed and young people be obsolete. This reduces the risk of waste of time and money by training in a profession that has no market demand, on the one hand and on the other incumbents and newly created are exempt from spending schooling and training, finding market labor available people ready.

All this is achieved by including in these local partnerships of local educational institutions, their teacher, through specially designed courses in the training centers for the unemployed or development agencies.

Establishing relationships real partnership between local governments and central (government), between the state and the private and voluntary organizations is a key issue for the functioning of ILE.

Given that partnerships are objective, flexible, based on common goals and involving clear responsibilities for each party involved, success theater was in creating jobs in developing municipal services and local social are more certain than if everyone act independently.

Without this kind of collaboration to achieve the intended purpose: sustainable territorial development funds there is a chance some wastage, duplication of activities and counterproductive competition.

5. Local authorities

ILE necessity of creating and supporting local authorities, resulting from civil society pressure that exerts on them because it believes that local authorities are partly responsible for local economic situation.

Therefore they will use political and administrative tools available, promoting job creation through public services, supporting local businesses, transport infrastructure, environmental protection measures, tax policy, direct or indirect financial assistance.

6. Other actors in ILE

The central authorities as a priority in any of their programs to reduce unemployment, especially because this is a major election issue. Although there is a transfer of responsibilities to regional branches, though they determine national policy in creating new jobs and maintaining existing ones, determine budget allocations and funds allocated to these activities.
In recent years, local authorities have deemed necessary the creation of local development agencies to carry out local or regional programs and enabling the achievement of closer ties with the private sector.

Education and research institutions have an important role in contributing to the work ILE youth training, retraining for the unemployed by initiating retraining or refresher courses in accordance with local requirements.

Create a climate of cooperation and advice provided to small entrepreneurs in starting up businesses, streamlining existing activities undertaken by qualified personnel and scientific experience, can have major contributions to the success of an ILE.

Chambers of Commerce and Industry
They should play an active role in promoting local businesses, support groups of entrepreneurs and traders to provide market information and its instruments at their disposal, to help mobilize finance.

Other partners who can play an important role in the action of generating new jobs is the unions, through specific actions can maintain or create jobs. NGOs, foundations created under the pressure of economic and social problems and are normal for any ILE partners.

Local firms, banks, investors and private consulting firms can play a supporting role and be a basic element in any partnership designed to create jobs.

The internal structure of each partnership is determined primarily on the specific area of priority objectives, the financial means and strategies adopted. Mobilize energies and local initiatives seems to be the most viable solution to bridging the worrying phenomenon of unemployment.

3. CONCLUSIONS

Romania, at this stage of transition to a market economy face this worrying problem and the degree to which it will be understood by central and local authorities that the solution comes only in an action system real partnership of all stakeholders, that union and not division consists of power that local autonomy is dirigisme but not creativity, it will depend on the success of reform that we intend to achieve.

In former communist countries, countries with democratic primary, hardly is under the process of achieving organizational structures in territorial public sector, private and nongovernmental that could serve as potential components of partnerships designed to facilitate the creation of jobs.

Another feature common to these countries, including Romania, is the lack of financial resources to underpin the start of this process and the difficulties faced in obtaining international financing.

The conditions that these regional development strategy must meet to be eligible, are very complex and severe, and in the context of an impossibility to sustain their economic conditions to supplement domestic funds are low.

These projects must have strong support, not only financial but also human. From this point of view the quality and structure of human resources, ways to drive the entire community, including industry, social organizations, interest groups, are important elements of this process.

One way of assessing the requirements and establishing a good planning strategy can be used as a tool through which conferences to mobilize all stakeholders and to establish a common basis for evaluation and strategy implementation.
Studying local initiatives of creating jobs, which have already had a real success (see strategies Yukou 2000 Canada, undertaking rural Victoria - Australia, Jura Arc - Switzerland, Dundalk Employment Partnerships Limited - Ireland, Friuli - Italy, park technology onlu - Finland Programme Ford / UAW Education, Development, Industry - USA) may create for us even an introduction to the issues ILE and might some of the solutions adopted to solve situations generating unemployment, to find similarities current and future problems of the Romanian economy in transition.

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PUBLIC DEBT FINANCING METHODS IN HUNGARY AND ROMANIA

Csaba NAGY

ABSTRACT
This study carried out an analysis of the main characteristics and the dynamics of public debt in Hungary and Romania, the approach, the structure and how public debt is funded. Although, in the immediate vicinity, the two economies are in different situations; their efforts to manage public debt give questionable results. The Hungarian state compared to similarly developed countries is highly indebted, which implies considerable risks and make unfolding fragile the economic recovery. Hungary's public debt is much higher than Romania's, being in the danger zone during lately. Over the past twenty years, the roles of the loans were taken over government bonds in Hungarian public debt. The financing of domestic public debt is one of the most important and perhaps most prominent in recent years, the pillars of the government debt management strategy has become both in Hungary and internationally. At the same time Romania has the fifth lowest debt among EU countries. Once the size of public debt, the econometric models shows that the critical threshold for Romania is between 40 and 45 percent of GDP. The current level of debt is below the critical threshold, but not far from it - so caution is required.

KEY WORDS: public debt, sustainability, debt ratio, public debt structure, financing

JEL: E60, H63, F34

1. INTRODUCTION

One of the key macroeconomic indicators is public debt, which has the dynamics of economic growth, interest rates and budget deficits simultaneously detect. Public debt indicates whether or not sustainable in the current economic trends in the long run. If the ratio of the GDP of a trend in government debt rises, it usually indicates that the trends are not sustainable, indebtedness track passes of the economy and the growth of the economy is partly financed by excessive borrowing. Results of recent empirical research led to many new research topics, econometric tools are used for more in-depth testing, a formalized model applications, the causal context of control.

The economic situation was only possible to assess the combined analysis of several indicators. These indicators are the most important indicators of public debt, as a number of important developments in the economic process - economic growth, interest rates, budget deficits - at the same time reflected. The evolution of public debt is also attributed a major role because it indicates whether or not sustainable in the current economic trends in the long run. If the ratio of economic performance (GDP) of government debt trend bounds to rise, it is the majority of cases indicate that the processes are not sustainable, indebtedness track passes of the economy, the growth of the economy is partly financed by excessive borrowing. In contrast, stable or declining debt/GDP ratio generally indicates the sustainability of the process, in accordance with the size of the budget deficit is the economic capability and real interest rates.

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If general government expenditure in a given year exceeds the income, it can finance the resulting deficit in the public debt securities issued or take a loan. Elements of debt issued to finance the deficit accumulated over the years the stock of public debt. There are interest payments after the existing debt of the State. A so-called primary balance after the debt-ridden country without the state interest payments balance will be in vain, because of the interest payments deficit develops. Through positive feedback, mutually reinforcing process of debt stock and debt service (interest payments) increase in the budget surplus allows the part to achieve the necessary level of primary balance in order to halt the growth of debt. This statement, of course refers to the nominal values, but you better understand the nature of the process of indebtedness.

However, the debt be thought of as the present value of future obligations of the state. This approach is important because it shows that the economic policy will be much room for maneuver in the future. Many times there is the State's commitments that do not appear in the official figures, but certainly appear are committed in the future. The 2008 launch of the international financial crisis after the indebtedness then set off in 2010 after euro crisis new approach was the national debt. The initial research advises on macroeconomic relationships, marriage may disclose conflicts of interest to the widest possible long-term empirical data in times of roses, simple statistics on the basis of the debt sought to examine the economic role on a new basis.

2. THE CONCEPT OF PUBLIC DEBT

Public debt is the consolidated gross debt stock of government debt at the period end, expressed at par value of government liabilities to the following categories: currency and deposits, securities other than shares, excluding financial derivatives and loans.

“Domestic public debt represents the total liabilities of the state, coming from loans contracted directly or guaranteed by the state to individuals or legal entities, in lei or foreign currency on the domestic market, including amounts received temporary Treasury sources” and “External public debt represents the total liabilities of the state, coming from loans from the foreign market, contracted directly or guaranteed by the state”. (Oprea F., et al., 2012). The share of domestic debt increased in most regions of the world.

Defining public debt sustainability and, therefore, fiscal policy is not easy to achieve given, on the one hand, their implications for macroeconomic and, on the other hand, the many meanings that they have acquired over time.

Summarizing concerns about public debt sustainability or fiscal policy can talk about ways to define the following: (1) stability; (2) inter temporal budget constraint; (3) solvency; (4) short-term sustainability; (5) long-term sustainability; (6) according to sustainability criteria set out in the Stability and Growth Pact (Câmpeanu E.M., 2007).

Public debt sustainability is particularly relevant to the European Union, but the world's leading economies of the great powers, because since 2008, some countries already exceeds 100 percent of GDP by the state's indebtedness. (The US is currently in excess of 100 per cent in Japan in recent years ran over 200 percent rate, in Europe in particular, threatening Greece situation where in excess of 150 per cent of the index value.) To make any policy steps carefully evaluate knows you need to know the factors which determine the temporal trajectory of the public debt. These factors will obviously limit the government's room for maneuver in taking optimal economic policy decisions.
The government can convert a proportion of GDP the level of debt the government through fiscal reforms, spending cuts, the regulation of money supply, exchange rate policy, stimulate economic growth, and the corresponding interest rate policy measures (and the appropriate timing of repayment). Also left open the question of how to debt financial instruments embodied that through the issuance of government securities and leveraged finance the costs of the government, which markets to get credit for what term and at what price.

In 2014, the ratio of public debt to GDP has increased compared to 2013 for 20 EU member states and declined for eight Member States.

The economics is not an exact rule as to what is the optimal measure of a nation's debt ratio for the economy. 60 percent rate set out in the Maastricht Treaty numerical product of a conventional arrangement, a kind of landmark. This is just the level of public debt, the requirement applies to a good, if a "satisfactory pace" approach level (Benczes, Kutasi, 2010) as a percentage of GDP.

The 60 percent rate in any case not the optimum. The IMF is critical for debt reduction for developing countries, 40 developed in relation to the 60 percent levels is critical.
According to the classical theory of sovereign debt enables the government spending needed to finance borrowing costs incurred to reschedule the date for the duration of the debt repayment. Question to be considered admissible under what circumstances the tax payment rescheduling. If future taxpayers may not be represented their interests in deciding on the design of the borrowing, the current taxpayers tend too much to support the state indebtedness. With this burden required to finance the expenditures pass on to the next generation. On the other hand, public expenditure carried out at a particular time can bring substantial benefits for future taxpayers.

The management of public debt trying to finance with minimum cost and acceptable risk, taking in the budget financing needs in the long term a uniform approach. Public debt sustainability is particularly relevant for each economy. The financing of domestic debt has become one of the most important and perhaps most prominent pillar of the government debt management strategy in recent years. This process was started by the fact that foreign investors react sensitive to different macroeconomic and financial shocks, thereby increasing the vulnerability of the economy and worsening the neutral phenomena.

3. STUDIES OF HUNGARIAN PUBLIC DEBT EVOLUTION

The Hungarian public debt in the European Union as a whole is average or slightly higher counts. Since the late nineties, until the middle of the millennium has been brought below the average of the old member countries of the debt, but before that was higher and still higher than the Community average domestic debt which is almost the average western half of the continent, outliers counted among the new member states.

The Hungarian public debt in the European Union as a whole is average or slightly higher counts. Since the late nineties, until the middle of the millennium has been brought below the average of the old member countries of the debt, but before that was higher and still higher than the Community average domestic debt. Which is almost the average western half of the continent, outliers counted among the new member states.

The main characteristics of the Hungarian public debt are:
• the government debt ratio in the high level,
• high interest charges
• high currency gold,
• high external debt,
• both, the forint and the foreign currency debts are low domestic property.

An assessment of the Hungarian data concluded that the debt trajectory was heavily influenced by fiscal policy. The fiscal policy is pro-cyclical behavior probably played an important role in the acceleration of debt dynamics, but the foreign debt component of the economy made it particularly vulnerable in times of external shocks (Novak, 2013).

As a practical debt management because they are able to do little to build the theoretical justification for the line have the literature, the Hungarian sovereign debt offside hands should be built on principles that are provided to allow for the predictability and flexibility in line with itself. These three principles of the government debt ratio and reducing the ratio of foreign currency, as well as the retail securities market development.

During the transition, at the end of 1990, the Hungarian government debt to GDP was 66.2 percent. According to official data, the share of foreign currency denominated obligations is insignificant, but the role has been significant even within this reality. The terms of the
obligations of the first phase are clearly the period between 1990 and 1995, then the debt ratio by more than 20 percentage points. After the announced fiscal adjustment in 1995, the debt ratio declined steadily for six years and in 2001 reached a low point of 52.2 percent. Simultaneously, a sharp increase in foreign currency debt ratio on the government accounts, which can be traced back to direct state funding, is torn from the Central Bank in accordance with EU standards, which have been replaced in the public debt.

With the coming of the new regime, it has changed the structure of public debt. While the share of loans in the middle of the nineties was over 65 per cent by 2007, it will gradually reduce their share to 10 percent. In parallel, the share of government bonds in the structure of public debt increased. During the period between 1999 and 2001 significantly reduced the size of the public debt to GDP, from 62.0 percent to 52.2 percent. Between 2007 and 2010, the government debt ratio has grown, reaching 80.2% at the end of 2010. Expectations set out in the Basic Law, the government debt to GDP rate should be below 50%. Currently, the public debt ratio is 76% in the EU and efforts are made to reduce it.

Over the past twenty years, the role of the loans taken over government bonds. Within the securities issued only increased the value of long-term government bonds, which means that the longer maturity to obtain sources of the Hungarian state.

Over the past decade, experience shows that fiscal policy in both easing and tightening in many cases, used tools that hampered monetary policy is anti-inflation fight. For fiscal easing grew directly through government consumption and investment in the macro demand, while transfers to the private sector and inflationary impact of tax cuts have been reported through the private consumption and investment.

Expectations for fiscal policy orientation, affect the sustainability of the exchange rate of the forint and government securities yields, as well as developments in the risk assessment. Overall, the fiscal policy is strongly influenced by the monetary policy maneuver and necessary condition for it to play a supporting role in monetary policy and develop a single, optimized for Hungarian economic policy mix.

An important theme of the strategic task is reducing government debt. The most relevant elements of the discourse of debt reduction schedule, but even more in a position to appear. The question focusing understandable and tolerable, partly because of the debt repayment details and cost of debt involve significant resources to the nation's economy, partly because of Hungary's state debt has reached a level at which its financing had - continuous downgrades due to an increase in risk as a consequence - more and more expensive. The rising cost manifests itself to be included in the debt financing of higher interest rates on loans requested and issued T-bills and government bond auctions, investors increasingly willing to buy extra yield expectations.

4. DINAMICS OF ROMANIAN PUBLIC DEBT

Romania borrowed in the 1970’s, however, Romania managed to bring the debt under control in 1980’s. Ceausescu’s regime declared foreign debt repayment as an economic and political priority and indeed, brought the debt almost to zero. The brutal scheme of repayments made living standards to the lowest in the region. Romania entered the 1990.s with a very small public debt, lower than the debts of any countries characterized here. During the last years however, the debt to GDP ratio has noticeably risen. The most of the debt ratio increase occurred after 1995: in 1992. In 1995 it stayed on a stable level of 15. 17% of GDP, while in 1996. 1997 it has risen by 16 percentage points. The main reason was Romania’s increased borrowing
abroad that resulted in the enlargement of external debt by 12.2 percentage points over the two years with a rise by 8.5 percentage points in 1997 alone. Nevertheless Romanian indebtedness is still is on a relatively low level. (Siwińska, 1999). Once the size of public debt, econometric models show that the critical level for Romania is 40 to 45 percent of GDP (above which increases the probability of recession at 50 percent). The current level of debt is below the critical threshold, but not far from it.

Romania ended 2015 with a total public debt equivalent to 38.4% of GDP, the fifth lowest debt among European Union countries, according to data published by Eurostat, the statistical office of the Union. Of the total public debt of Romania, 49.2% is held by foreigners (foreign debt), 47.6% of banks resident in Romania and 3.2% of companies.

![Fig. 2. The proportions of domestic and external public debt (1990-2011)](image)

Source: Oprea, F. Bilan, I. Stoica O., (2012), Public debt in Romania over the past two decades: did we have a coherent debt policy? Procedia - Social and Behavioral Sciences 58, pp.434 – 443

At EU levels, average debt is 85.2% of EU GDP. The euro area is heavily indebted - 90.7% of the GDP of countries using the single currency. Five countries have a public debt exceeding 100% of GDP. 17 EU countries exceeding the ceiling set in the Maastricht Treaty, with debt above 60% of GDP. Only five EU countries have a public debt below 40% of GDP.

The objectives of the Ministry of Finance in the government debt management for the period 2016-2018 are:

- Providing the necessary funding of central government and payment obligations, amid minimize costs in the medium and long term;
- Limiting financial risks associated with government debt portfolio;
- Develop internal market of government securities.

Ministry of Public Finance will pursue a flexible selection of sources of funding and timing of the issue, taking into account the expectations of the Macroeconomic and financial market developments.

Between 2016 and 2018, Romania will cover financing needs by issuing government securities launched on the domestic market by issuing Eurobonds on international capital markets and to some extent by external borrowings from official creditors (IFIs), under advantageous conditions for the Romanian state.

Developing the internal market of government securities is a strategic objective in the medium term this market and aims to increase efficiency, improve liquidity, and enhancing the transparency of the yield curve.
5. CONCLUSIONS AND RECOMMENDATIONS

Fiscal policy and public debt through multiple channels are closely related. Over the past decade, experience shows that fiscal policy in both easing and tightening in many cases, used tools that hampered monetary policy is anti-inflation fight. Expectations for fiscal policy orientation, affect the sustainability of the exchange rate and government securities yields, as well as developments in the risk assessment. A chronic lack of fiscal discipline requires setting up efficient fiscal rules. These rules of economic policy options narrowed the budget deficit, in terms of debt; spending or taxation changes in the long-term sustainability are incompatible.

Based on a climate of recovery in European sovereign debt crisis and a period of calm in financial markets, financing conditions in Romania have improved significantly. Economic performance good, especially in the fiscal sector, contributed to the improvement of the rating outlook to "positive" by Moody's in December 2015. Also in the month of March 2016 the rating agency JCRA has improved the rating of the country for Romania from BBB - BBB confirming prospects for sustainable economic growth, and the low level of public debt.

These developments have helped improve investor sentiment towards Romania, which led to reduced funding costs on the domestic market, while maintaining bonds Romanian in reference rates of the emerging markets (Barclays and JP Morgan), but also on foreign financial markets, to extend maturities and diversifying the investor base.

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INTERNATIONAL FINANCIAL REPORTING STANDARDS IN TODAY'S ROMANIAN ACCOUNTING

Csaba NAGY

ABSTRACT

In Romania, as in other emerging countries, the World Bank and the IMF have had a strong influence in the implementation of IFRS by promoting them as models to follow. At present Romania is a country with a dual accounting system (one for the financial statements of the quoted companies and another for the other companies). The level of economic development, the history, the culture, the legal system, educational systems and previous practices are factors that influenced the process of IFRS implementation. By making the application of IFRS compulsory in drawing the individual financial reports, starting with 2012, and since these standards may be applied voluntarily, an increase of the influence of the international referential will occur. The benefits of implementing IFRS in Romania are to ensure comparability and transparency of financial information growth internationally. Among the difficulties of implementing IFRS, the main difficulty is that which considers all the staff training. That the application of IFRS to be successful, some wishes are absolutely necessary: tax accounts to be disconnected and a high level of training among professional accountants in entities applying international reference.

KEY WORDS: IFRS, Convergence, accounting rules, accounting practices, financial statements.

JEL: M40, M41.

1. INTRODUCTION

Accounting differs from one country to another through its contents and application manners. The reason for the differences at an international level are: the cultural, the socio-political, the legal system, the funding sources, the economic system, the accounting-taxation relation, other external factors (history, religion, educational system), and the accounting profession. Between them, there are a series of inter-dependency relations. Also, the information provided by accounting influences the cultural values and, through them, all the other factors.

In the International Financial Reporting Standards the true and fair view is raised at the level of the supreme principle that should guide and govern the accounting activity and drawing the financial reports. Unlike them, in the European Directives, the true and fair view is the objective of accounting, meaning what should be obtained. For that the accounting rules and principles to lead to a true and fair view, it is necessary that this set of rules and principles to be well known, understood, and accepted by the users of the financial statements.

The different national accounting systems are not treating uniformly the issue of an information system, designed to create a true and fair picture. The extension of economic relations, international capital flows and accelerating the spread of multi - and transnational companies has necessitated a uniform accounting system appearance. The idea of adopting a

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common language for financial reporting in order to develop international comparability has become a reality due to globalization international financial markets. An important role in the adoption of one single language at international level, are played by International Financial Reporting Standards (Ristea, 2010).

In our country, over the last two decades, in the field of accounting there took place a series of transformations and changes, manifested in various stages of the reform in the field. It started (right after the 1990’s) by imitating the French accounting system and implicitly adopting the provisions of the European directives in accounting, continued with the harmonization with the European directives and with the International Accounting Standards in 2005. Later, in 2005 it reached full conformity with the European directives, as well as with the International Financial Reporting Standards for a series of entities (quoted trading companies that draw consolidated financial statements). Although from the name of the accounting norms applied at present (OMFP no. 3055/2009 for the approval of the accounting regulations compliant with the European directives) results that they comply with the European directives. By studying their contents we find numerous elements whose origin comes from IAS/IFRS.

Applying IFRS is an activity with a high level of complexity, which requires the existence of solid professional knowledge in the field, but also an understanding of the problems of an accounting (Mihai et al., 2011).

International Financial Reporting Standards (IFRS) have become the most used set of standards, about 120 countries around the world adopting them and implementing them in various stages, but equally certain is the fact that differences between national accounting systems are a major obstacle in the way of full implementations.

The trend to harmonize accounting regulations, both European directives and international norms, has led to difficulties in implementation. It is known an existing conflict between the continental model of our country and specific accounting Anglo-Saxon model specific IFRS referential. To resolve this situation, Order no. 94/2001 stated that "if between the European accounting directives and international rules there is a state of conflict during the implementation of the development program of the accounting system in Romania, entities have the possibility to opt for application of one of the two accounting treatments, so as to provide a true and fair presentation of the event found."

2. OBSTACLES AND DIFFICULTIES IN IMPLEMENTATION OF THE IFRS

The International Accounting Standards Board - IASB is, at present, the most influent and advanced international body in what concerns accounting normalization and harmonization, and it is concerned with drawing accounting norms that will be applied at a world scale.

IFRS require professional accountants a new language. Amendments to IFRS are significant. An example of this is the result accountant who has long been considered the main indicator for measuring the financial performance of an economic entity, and now, under IFRS, is replaced by another indicator: the overall result (Jianu, Jianu, 2008).

The IASB influence is growing nowadays: starting with 2005, IFRS are applied in the EU for the financial statements of quoted groups, as well as in countries such as Australia, Hong Kong, and South Africa. At present, over 100 countries imposed or allow the application of IFRS, and other countries decided to publish their financial statements in compliance with IFRS on the national stock markets, or speeded up the convergence of their national referential to that of IASB.
Applying IFRS is an activity with a high level of complexity, which requires the existence of solid professional knowledge in the field, but also an understanding of the problems of an accounting (Mihai et al., 2011).

IFRS is a set of high quality standards, but there are differences in the perception of information presented by regulations to protect investors and the legal system of each country (Lang et al., 2006, pp. 255-284). In countries with strong investor protection, IFRS does not dominate the local standards in terms of quality of information presented. In contrast, in countries with weak investor protection, as is the case in Romania, IFRS are perceived as superior.

The multitude and complexity of information to be processed and published IFRS resulted currently create advanced systems that help entities in the effective implementation of IFRS.

![Diagram](image)


Figure no. 1. Categories of participants at the application and adoption of IFRS

Specialized literature identified a series of evidence that suggests the difficulties or even the failure of this process of convergence towards the International Financial Reporting Standards: lack of political will, rooting in local culture and strong nationalism that prevents the creation of a harmonized frame, significant differences between countries and high costs for eliminating them, the strong influence exerted by the local traditions on the implementation of new concepts, the influence of taxation on the accounting system, the weak development of the national financial markets. Also, the implementation of IFRS is considered expensive, complex, and difficult. Other obstacles identified by specialists were: the complex nature of the standards, the lack of instructions for application, an uneven interpretation, permanent IFRS changes, poor knowledge of them, the need to change the mentality of the employees in the financial-accounting department.

3. EVOLUTION OF ROMANIAN ACCOUNTING IN THE PAST TWO DECADES

After 1990, the Romanian accounting has begun a process of reform of accounting practices. Since 1994, Romania has adopted an accounting system based on a French-inspired
formal dualism, a dualism material (economic assessment and tax assessment) and an informational pluralism but an obvious orientation towards service to the state. In 1999, the Ministry of Finance issued a regulation (Order 403/1993) aimed at harmonizing Romanian accounting firms with Directive IV of EEC and with International Financial Reporting Standards. Application of IFRS was designed by the Ministry of Finance, as a gradual process. Regulations 1999 contained provisions stipulating successive application of these and other categories of companies, so that by the end of the financial year of 2005 they applied to all businesses, except those considered small. In 2001, the Ministry of Finance Accounting Regulations 1999 replaced with a new one with the same name, but in an improved form, maintaining and retrieving conceptual and accounting framework IFRS rules. 2001 and the accounting regulations were applied in stages depending on the size company so that by 31 December 2005, all large businesses considered to be subject to the application of IFRS rules.

The financial statements of these companies were subject to statutory audits performed by auditors. Rules have been harmonized with EU directives and international accounting standards for specific areas such as banking, insurance in 2001 and financial intermediation companies in 2002.

Since 1 January 2003 defined on the one hand, an accounting system developed, governed by Order no. 94/2001, and on the other hand, a simplified accounting system, which is based on Order no. 306/2002 for the approval of simplified accounting regulations harmonized with European Directives. Simplified accounting regulations for entities of small and medium enterprises in Romania did not respect the wishes of: simplicity, understandability, flexibility, adaptation to the specific entity within their existing specific items large entities, such as specific procedures groups and consolidated accounts, financial instruments including elements derived using fair value assessment, information on segments etc.

Thus, if the entities listed on regulated markets in the European Union must prepare consolidated financial statements in accordance with International Financial Reporting Standards since 2005, Romania's first experiences with IFRS occurred immediately after 2000 rather as a process convergence. EU accession led to the issue OMPF 1121/2006, under which the companies whose securities are admitted to trading on a regulated market and who prepare consolidated financial statements are obliged since 2007 to apply IFRS financial (Petre şi Lazăr, 2012).

The application of IFRS in Romania had as main objective creation of an attractive business environment for investors. The decision of Romanian legislator to apply effectively and the entire international accounting standards by entities deemed high credit institutions, insurance companies, companies of national interest entities listed on the Stock Exchange, and by entities forming part - a group that already apply IFRS parent company, since 2005, was a good thing in the process of accounting convergence. This is because the effective implementation of IFRS is beneficial for everyone: for multinational entities because it lowers the costs of the financial statements using a single referential sheet; for other entities because they have less access to capital markets; for investors because IFRS accounting standards has credibility and provides comparable and relevant information for decision making; auditors, since they would only know about one accounting system. (Ristea et al., 2010)
4. INTERNATIONAL FINANCIAL REPORTING STANDARDS IN ROMANIAN ACCOUNTING

At present, Romanian accounting regulations had preserved, nine fundamental accounting principles: the principle of going concern, the principle of the permanence of methods, the principle of prudence, the principle of independence of the fiscal year, the principle of separate evaluation of the asset and liability elements, the principle of intangibility, the principle of non-compensation, the principle of prevalence of the economic over the legal, and the principle of the significance threshold – of which only seven are taken from the 4th Directive and two (the principle of prevalence of the economic over the legal, the principle of the significance threshold) are inspired from IAS/IFRS.

The Romanian accounting regulations are characterized by a mixture of elements taken from the European directives and from the General frame for drawing and presenting the financial statements drawn by IASB and from the International Financial Reporting Standards. It is hard to speak of a convergence of Romanian accounting with other norms ─ it does not contribute with anything to the norms imposed on it; it simply aligns, taking the suggested norms as such.

The decision to harmonize accounting standards IFRS in Romania has been a process of implementation of international accounting standards, previously started under the guidance of British experts and the pressures of international financial organizations, in order to create an attractive business environment for foreign investors; manner of application of IFRS to broad categories of entities to Romanian companies exposed to risks related to the great efforts of implementation, however, efforts adoption of IFRS did not affect negatively significant manner, the performance of companies (Ionașcu et al., 2006, pp. 542-559).

In numerous studies conducted by researchers worldwide are outlined benefits that would bring the adoption of a single set of accounting standard quality, the same study shows that a relatively small number of companies choose to implement these standards voluntarily. Romania has experienced in the last 10 years various strategies for implementing IFRS: the mandatory implementation for a large number of entities in the individual financial statements, the mandatory application, integrated in the consolidated accounts, or as a second set of financial statements for a limited number of entities.

In a study conducted in 2007 by Ionașcu, almost all companies have found that the adoption of IAS / IFRS leads to better communication on the capital market, offering much more relevant information to investors, and half agreed that the implementation opportunity arises accessing international financial markets. In another study conducted three years later, the same authors concluded that there is an argument statistic to argue that IFRS induced a financial communication better, which generated economic advantage of a lower cost of capital for Romanian companies listed. The investigations demonstrated that the benefits of adopting IFRS largely depend on the motivations underlying their application, but also the context in which they are applied locally (Ionașcu et al., 2011).

Implementation of IFRS involves costs. The cost of implementing IFRS in Romania is considered to be lower than in other countries as a result of a partial adoption of standards. Some researchers have noted that there are costs involved for investors to understand and interpret financial statements of foreign entities, and adopt uniform standards significantly reduce these costs and increase foreign investments in the capital markets (Ristea et al. 2010).
IFRS as extra costs and are implementing a complex set of standards, it is considered that are designed primarily for large entities. However, many countries have imposed application of IFRS and smaller entities, in order to improve the accounting system (www.iasplus.com).

Analyzing the opinions of Romanian specialists on the effects of adopting IFRS in Romania, we can draw the following conclusions:

- The decision of the normalizing organizations in what concerns the harmonization of Romanian accounting with the International Financial Reporting Standards was strongly conditioned by the pressures of the international financial institutions;

- The financial managers of the companies that adopted the IFRS believed that their application provides investors with more relevant information, but they did not consider that the benefits of their implementation are higher than the costs they generate;

- The switch to IFRS was rather seen as a change in the presentation of the financial statements than the implementation of accounting policies in agreement with the economic and financial realities of the entities;

- The process of IFRS implementation is far from being a success in Romania, since this country has a low level of conformity, which is resistant to changes.

- The obstacles identified for the harmonization process were: the important role played by taxation, the lack of professional training and resources, as well as the low influence of the users of the financial statements (others than the state) and of the auditors.

- In the opinion of the financial managers of quoted Romanian companies, the main lacks of international accounting norms are: their high volume and complexity, a much larger quantity of information whose publication they require, the difficulty in applying the concept of just value, the need to resort to the help of specialists for implementation;

- In what concerns the costs associated to the process of adopting the IFRS, the highest weight is that of the expenses generated by drawing two sets of financial statements, followed by those corresponding to obtaining specialized consultancy, training the staff, and modifying the information systems;

- The obstacles identified to applying the IFRS are the following: lack of training in the field of the accounting profession, the tight connection between accounting and taxation, the confusion created among investors and analysts by the double reporting, the high costs generated by the application of IAS/IFRS, the lack of active markets for establishing the just value.

The transition to IFRS has not been easy to achieve, the main features of this listing: call for estimates and judgment, as benchmarks in substantiating accounting solutions; IASB conceptual framework as the introduction of Romanian accounting framework; adopting concepts of international standards that do not come from the national practice, as well as deferred taxes; introduction of new accounting principles, as well as the principle of primacy over form and materiality principle; the existence of deviations from the principle of intangibility balance sheet accounting principle tradition in Romania; implementation of cost/benefit ratio in the process of obtaining financial information; using new measurement bases and fair value, present value, etc. This transition to IFRS has allowed the knowledge of professional accountants in Romania the advantages of using accounting valuation bases other than historical cost, fair value, present value (Ristea și Jianu, 2009).
CONCLUSIONS AND RECOMMENDATIONS

Currently, the community is animated by a strong desire of accounting normalization and alignment of accounting practices internationally, in order to increase comparability of the information disseminated by the financial statements. Current concerns of accounting circumscribe the desire to achieve a generally accepted accounting language, which reflects the application of uniform accounting principles and treatments as a foundation for building the financial statements.

By using International Financial Reporting Standards determines an improvement in the quality of the financial information (less result manipulation etc.), increases the degree of comparability of the financial statements, and eliminates political interests in the process of accounting normalization, unifying the accounting language and the development of the world’s economy.

The main motivation for adopting IFRS by Romanian companies, is the obligation imposed by the legal norms. The main consequences of adopting IFRS in Romania are: increased importance of the auditors’ role, facilitating the access on external financial markets, improving the comparability of the information in the financial statements published by the companies in various countries, increased costs with information processing and increased transparency of the accounting information.

The application of IFRS in Romania had as main objective the creation of an attractive business environment for investors. Decision legislator Romanian effective application and the entire international accounting standards by entities deemed high credit institutions, insurance companies, companies of national interest entities listed on the Stock Exchange, and by entities forming part—a group that already apply IFRS parent company since 2005, was a good thing in the process of accounting convergence. This is because the effective implementation of IFRS is beneficial for everyone: for multinational entities because it lowers the costs of the financial statements using a single referential sheet; for other entities because they have less access to capital markets; for investors because IFRS accounting standards has credibility and provides comparable and relevant information for decision making; auditors, since they would only know about one accounting system.

That the application of IFRS to be successful, some issue are absolutely necessary: tax accounts to be disconnected and a high level of training among professional accountants within entities applying international references.

In conclusion, diversity in processing and presenting the financial information will not disappear, as it comes from different accounting cultures, and the interpretation of international norms will be partially influenced by the previous practices of every state. Therefore, the level of economic development, the history, the culture, the legal and educational systems are factors that also influence the process of IFRS implementation.

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“TRANSFER” LINKS ANALYSED FROM THE POINT OF VIEW OF QUALITY OF LIFE CONNECTED WITH ECONOMIC GROWTH, IN THE CONTEXT OF THE EUROPA 2020

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Alexandru JIVAN\textsuperscript{2}

\textbf{ABSTRACT}

Paper aims at revealing main elements and features that define the “transfer” links resulted from the wealth on the dimensions of the quality of life. This paper proposes a study concerning the relations between countries in the productivity matter.

“Transfer” links resulted from the wealth, at the national level of Romania, are analysed, on the grounds of servicity approach and from the point of view of the dimensions of the quality of life. Theoretical conclusions concerning economic growth are extracted from certain empirical data, and analyses in the light of Europa 2020 objectives.

The analysis is based on the Physiocrat criteria of value creation and on this basis, is (re)interpreted the productive capacity and competitiveness at countries level.

As part of a larger study, the paper aims to formulate fundamental principles - useful for further research – concerning the concrete manner of redistributing, through market mechanisms, the surplus value created.

The paper examines the retrieval of such transfers value in certain dimensions of the quality of life, formulating the key assumptions and few main criteria required for adequate modelling (proposed for testing).

\textbf{KEY WORDS}: quality of life, service economy, productivity, intellect-intensive services

\textbf{JEL: I31, L80, O47, L89}

\section{1. INTRODUCTION}

The present article deals with a very actual topic for the economic theory and practice, both at national and international level. Modern economic theories reconsidered the role of productivity in economic growth, recognizing the leading role which it currently has in achieving economic and social progress and quality of life.

Paper starts from the issue of the role of servicity (contribution or provided service) transfers and productivity in improving the quality of life of citizens, aiming at revealing main elements that define the results of „transfer” links servicity-productivity on the dimensions of quality of life, in the light of Europa 2020 objectives.

Quality of life is a familiar concept which appears in a multitude of contexts. The quality of life paradigm has at its core the notion of quality of life which is an evaluative concept treated in research by using both objective and subjective indicators.

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During the past years, the quality of life paradigm entered a new development phase characterised by a better configuration and more efforts to overcome theoretical fragmentation, an enhanced development of methodology and a refinement of research methods, a crystallisation of research community and an increase of visibility in the public space. Lately, the interest that a part of the policy makers has in the topic of quality of life indicators was growing. (Mărginean and Precupetu (2001))

Three conceptual approaches about how to measure quality of life have retained the attention of the Stiglitz-Sen-Fitoussi Commission.
1. The first approach is based on the notion of subjective well-being, developed in close connection with psychological research. This approach is closely linked to the utilitarian tradition but has a broader appeal due to the strong presumption in many streams of ancient and modern culture that enabling people to be “happy” and “satisfied” with their life is a universal goal of human existence. (Smith, (1830))
2. The second approach is rooted in the notion of capabilities. The capability approach has been gradually developed by the economist and philosopher Sen (Sen, (2001)). The two core concepts of the capabilities approach are functionings and capability. Individuals should have the freedom to choose among elementary and more complex functionings.
   The foundations of the capability reflect a focus on human ends and on respecting the individual’s ability to pursue and realise the goals that he or she values. Another important concept of the capability approach is the idea of conversion factors. These are factors that govern the conversion of resources into capabilities. Conversion factors take account of human diversity.
3. The third approach, developed within the economics tradition, is based on the notion of fair allocations, or resources. The basic idea, which is common to welfare economics, is that of weighting the various non-monetary dimensions of quality of life (beyond the goods and services that are traded in markets) in a way that respects people’s preferences.

This approach requires choosing a particular reference point for each of the various nonmonetary dimensions, and obtaining information on people’s current situations and on their preferences with respect to these points. This approach avoids the pitfall of basing evaluations on an “average” willingness-to-pay that may disproportionately reflect the preferences of those who are better-off in society and focuses instead on equality among all its members.

The dimensions of quality of life from the report that Stiglitz-Sen-Fitoussi Commission are:
1. Material living conditions;
2. Health;
3. Education;
4. Personal activities including work;
5. Political voice and governance;
6. Social connections and relationships;
7. Environment (present and future conditions);
8. Security (economic and physical nature).

These dimensions of quality of life are important when we evaluate how the transfers’ value can influence the quality of life. (Stiglitz and collaborators, (2009)).

Intellectual activities are conception, coordination, organization, control-guiding-management of the economic activity in general and of various specific business with results either direct, relatively concrete, such as are guided scientific research and even education, or appear as embedded into the material product (as ‘dissolved’ into it, dispersed if we may say so);
marketing, engineering, consulting and such like bring the material-energetic mechanisms into operation. (Jivan (1998)) In theory, in the servicity approach, the contribution of an economic entity for covering human, natural, social needs (economic here included) is the plus of utility that, strictly, varies indirectly with the contribution of the economic entity for itself. (Jivan (1993)) As a rule, the performers of services are paid at a price lower than the value of the service performed to client, as well show it Malthus and Dupuit, if suitably generalizing and corroborating their ideas. (Jivan (2008)) O. Giarini makes it a point to show that the ever newer and costlier technologies incorporated into production (especially industrial) will always yield results. (Jivan (2011))

Quality of life is related to economy: two-way connection (depends on and influences) in space and time. (Jivan and Popa (2012), Popa (2012)) Economical property "transfers" goes from one country to another. Those "transfers" seemingly purely economic became transfers in quality of life. They are made by trade, specifically, by negotiation. Distribution is made from the entity generating more servicity, and the receiving entity will be recorded with higher calculated productivity. In the servicity approach, the contribution of an economic entity for covering human, natural, social needs (economic here included) is the plus of utility that, strictly, varies indirectly with the contribution of the economic entity for itself. The transfer means that the manifestation of servicity sand shape can be found in differences of the indicator of productivity calculated with incomes (revenues).

In June 2010 the European Council adopted the “Europe 2020 Strategy” put forward by the European Commission. It sets out a vision of Europe’s social market economy for the 21st century. It defines priorities, targets and actions (inter alia seven flagship initiative) to turn Europe into a smart, sustainable and inclusive economy delivering high levels of employment, productivity and social cohesion. Europe 2020 puts forward three mutually reinforcing priorities:
- Smart growth: developing an economy based on knowledge and innovation;
- Sustainable growth: promoting a more resources efficient, greener and more competitive economy;
- Inclusive growth: fostering a high employment economy delivering social and territorial cohesion.

To that end, the Commission proposes five measurable EU targets for 2020 that will steer the process and will be translated into national targets: for employment, for re-search and innovation, for climate change and energy, for education and for combating poverty.

They represent the direction that must be taken and enable to measuring the degree of advancement and achievement of the three priorities laid down in the strategy.

Europe is left with clear yet challenging choices. Either Europe face up collectively to the immediate challenge of the recovery and to long-term challenges – globalisation, pressure on resources, ageing, – to make up for the recent losses, regain competitiveness, boost productivity and put the EU on an upward path of prosperity ("sustainable recovery").

Or Europe continue at a slow and largely uncoordinated pace of reforms, and we risk ending up with a permanent loss in wealth, a sluggish growth rate ("sluggish recovery") possibly leading to high levels of unemployment and social distress, and a relative decline on the world scene ("lost decade"), as we can see in the three scenarios for Europe by 2020. (European Commission, Europe 2020, 2010)

Starting from the three scenarios for Europe by 2020 (figure 1), we question what impact can have the objectives of Europe 2020 and results of „transfer” links servicity-productivity on the dimensions of quality of life at local level.
2. RESULTS OF “TRANSFER” LINKS

The results of „transfer” links between servicity, productivity and quality of life can be seen in total wealth of a country. Finally, these transfers are found in the quality of life.

In a survey, the World Bank estimated the total wealth of 120 countries, including produced capital, natural resources, and the value of human skills and capabilities.

The researchers of the World Bank divided the total national wealth into three parts. The most important part includes the intangible capital component of total wealth, for example good education, efficient administration, and justice system.

The other two components are produced capital and natural resources. Produced capital includes buildings, infrastructure, and urban land. Natural resources include forest resources, agricultural land, and sub-soil assets, for example oil.

The survey indicates that the intangible capital component of total wealth is predominant, even in developing countries.

The table 1 shows the total wealth by type of country. Table 2 shows impact of the objectives of Europe 2020, table 3 presents impact of the results of „transfer” links servicity – productivity on the dimensions of quality of life and table 4 shows impact of the objectives of Europe 2020 and the results of „transfer” links servicity – productivity on the dimensions of quality of life.
Table 1
Total wealth - $ per capita and percentage shares-

<table>
<thead>
<tr>
<th>Income group</th>
<th>Natural capital</th>
<th>Produced capital</th>
<th>Intangible capital</th>
<th>Total wealth</th>
<th>Natural capital share</th>
<th>Produced capital share</th>
<th>Intangible capital share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-income countries</td>
<td>1925</td>
<td>1174</td>
<td>4434</td>
<td>7533</td>
<td>25%</td>
<td>16%</td>
<td>59%</td>
</tr>
<tr>
<td>Middle-income countries</td>
<td>3496</td>
<td>5347</td>
<td>18773</td>
<td>27616</td>
<td>13%</td>
<td>19%</td>
<td>68%</td>
</tr>
<tr>
<td>High-income OECD countries</td>
<td>9531</td>
<td>76193</td>
<td>353339</td>
<td>439063</td>
<td>2%</td>
<td>18%</td>
<td>80%</td>
</tr>
<tr>
<td>World</td>
<td>4011</td>
<td>16850</td>
<td>74998</td>
<td>95859</td>
<td>4%</td>
<td>18%</td>
<td>78%</td>
</tr>
<tr>
<td>Romania</td>
<td>4508</td>
<td>8495</td>
<td>16110</td>
<td>29113</td>
<td>15%</td>
<td>29%</td>
<td>56%</td>
</tr>
<tr>
<td>Difference World-Romania</td>
<td>-497</td>
<td>8355</td>
<td>58888</td>
<td>66746</td>
<td>-11%</td>
<td>-11%</td>
<td>22%</td>
</tr>
</tbody>
</table>


From table 1, we can see that for Romania in total wealth, the highest share has intangible capital - 56%, followed by capital items - 29% and then natural capital - 15%. It should be noted that the share capital in three categories in total wealth is different in Romania regarding world level.

From table 2 we can create the classification of the dimensions of quality of life based on the impact of objectives of Europe 2020, as follow:

1. Education;
2. Personal activities including work;
3. Material living conditions;
4. Environment (present and future conditions);
5. Social connections and relationships;
6. Health;
7. Security (economic and physical nature);
8. Political voice and governance.
Table 2

The impact of objectives of Europe 2020 on the dimensions of quality of life

<table>
<thead>
<tr>
<th>No.</th>
<th>Dimensions of quality of life</th>
<th>Overall objectives - Europe 2020</th>
<th>TOTAL 9 (X \times 10) and (Y \times 5)</th>
<th>Position for dimensions of quality of life</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Material living conditions</td>
<td>Y Y Y Y Y Y Y X + 7Y</td>
<td>45</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Health</td>
<td>Y Y Y - - Y Y Y 6Y</td>
<td>30</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Education</td>
<td>Y Y - Y X X X 3X + 4Y</td>
<td>50</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Personal activities including work</td>
<td>X - - Y Y X X X 4X + 2Y</td>
<td>50</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Political voice and governance</td>
<td>- - - - - Y Y 2Y</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Social connections and relationships</td>
<td>Y X Y - - Y Y X + 5Y</td>
<td>35</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Environment (present and future conditions)</td>
<td>- - X X X Y Y 3X + 3Y</td>
<td>45</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Security (economic and physical nature)</td>
<td>Y Y - - - Y Y 5Y</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1X + 5Y 2X + 3Y 1X + 3Y 1X + 3Y 2X + 5Y 2X + 6Y 2X + 6Y 12X + 34Y</td>
<td>290</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend: X - result with direct impact on the dimensions of quality of life
Y - result with indirect impact on the dimensions of quality of life

From table 3 we can create the classification of the dimensions of quality of life based on the impact of results of „transfer” links servicity – productivity, as follow:

1. Health
2. Education;
3. Material living conditions and
4. Personal activities including work;
5. Social connections and relationships;
6. Environment (present and future conditions);
7. Security (economic and physical nature);
8. Political voice and governance.
Table 3

The impact of the results of „transfer” links servicity-productivity on the dimensions of quality of life

<table>
<thead>
<tr>
<th>No. Crt.</th>
<th>Dimensions of quality of life</th>
<th>Level of country</th>
<th>TOTAL IF X=10 and Y=5</th>
<th>Position for dimensions of quality of life</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Natural capital</td>
<td>Produced capital</td>
<td>Intangible capital</td>
</tr>
<tr>
<td>1</td>
<td>Material living conditions</td>
<td>Y</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td>Health</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td>Education</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>Personal activities including work</td>
<td>Y</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>Political voice and governance</td>
<td>Y</td>
<td>Y</td>
<td>X</td>
</tr>
<tr>
<td>6</td>
<td>Social connections and relationships</td>
<td>X</td>
<td>Y</td>
<td>X</td>
</tr>
<tr>
<td>7</td>
<td>Environment (present and future conditions)</td>
<td>Y</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>8</td>
<td>Security (economic and physical nature)</td>
<td>Y</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>3X + 5Y</td>
<td>6X + 2Y</td>
<td>8X</td>
</tr>
</tbody>
</table>

Legend: X - result with direct impact on the dimensions of quality of life
        Y - result with indirect impact on the dimensions of quality of life

From table 4 we can create the classification of the dimensions of quality of life based on the impact of objectives of Europe 2020 and results of „transfer” links servicity – productivity, as follow:
1. Education;
2. Personal activities including work;
3. Material living conditions;
4. Environment (present and future conditions);
4. Health;
4. Social connections and relationships;
5. Security (economic and physical nature);
6. Political voice and governance.
Table 4

The impact of objectives of Europe 2020 and results of „transfer” links servicity – productivity on the dimensions of quality of life

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total Objectives</td>
<td>Natural capital</td>
<td>Produced capital</td>
<td>Intangible capital</td>
</tr>
<tr>
<td>1</td>
<td>Material living conditions</td>
<td>$X + 7Y$</td>
<td>$Y$</td>
<td>$X$</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Health</td>
<td>$6Y$</td>
<td>$X$</td>
<td>$X$</td>
<td>$3X$</td>
</tr>
<tr>
<td>3</td>
<td>Education</td>
<td>$3X + 4Y$</td>
<td>$X$</td>
<td>$X$</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Personal activities</td>
<td>$4X + 2Y$</td>
<td>$Y$</td>
<td>$X$</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Political voice and</td>
<td>$2Y$</td>
<td>$Y$</td>
<td>$X$</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Social connections and</td>
<td>$X + 5Y$</td>
<td>$X$</td>
<td>$X$</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Environment (present and</td>
<td>$3X + 3Y$</td>
<td>$Y$</td>
<td>$X$</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Security (economic and</td>
<td>$5Y$</td>
<td>$Y$</td>
<td>$X$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>future conditions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>$12X + 34Y$</td>
<td>$3X + 5Y$</td>
<td>$6X + 2Y$</td>
<td>$8X$</td>
</tr>
</tbody>
</table>

Legend: $X$ - result with direct impact on the dimensions of quality of life

$Y$ - result with indirect impact on the dimensions of quality of life

Table 5 helps us to better understand the impacts on the dimensions of quality of life, of the objectives of Europe 2020 and results of „transfer” links servicity-productivity by viewing the position occupied by each dimension.

One dimension of quality of life stands out in particular. Education is the number one position in all cases: in the case (i) of the objectives of Europe 2020, (ii) the results of „transfer” links servicity-productivity on dimensions of quality of life, and (iii) the cumulated impact of both objectives of Europe 2020 and results of „transfer” links.

Some dimensions of quality of life are more influenced by objectives of Europe 2020 (for example health, security (economic and physical nature), political voice and governance) and other dimensions are influenced by results of „transfer” links servicity – productivity (for example personal activities including work).

An element of surprise is that some dimensions of quality of life, at the level of the aggregate impact, are losing the position obtained at the level of the impact for each factor of influence (for example material living conditions and environment – present and future conditions).
Table 5

The position for dimensions of quality of life from the impact of objectives of Europe 2020 and impact of results of „transfer” links servicity-productivity on dimensions of quality of life

<table>
<thead>
<tr>
<th>No. Crt.</th>
<th>Dimensions of quality of life</th>
<th>Position for dimensions of quality of life</th>
<th>Overall objectives - Europe 2020</th>
<th>Results of „transfer” links servicity – productivity</th>
<th>Total Europe 2020+Results of „transfer” links servicity – productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Material living conditions</td>
<td></td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Health</td>
<td></td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Education</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Personal activities including work</td>
<td></td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Political voice and governance</td>
<td></td>
<td>6</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Social connections and relationships</td>
<td></td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Environment (present and future conditions)</td>
<td></td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>Security (economic and physical nature)</td>
<td></td>
<td>5</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

3. CONCLUSIONS

The key element of the quality of life of citizens is a country’s productivity. Small improvements in productivity sustained for an extended period can make a huge difference in the quality of life.

The classification of the dimensions of quality of life based on the impact of objectives of Europe 2020 Strategy and the results of „transfer” links servicity-productivity may change depending on the chosen objectives and degree of servicity or productivity being transferred.

Starting from the results presented, as a conclusion, we can say that the impact on the dimensions of quality of life may differ for each dimension of quality of life and for all dimensions of quality of life taken as a whole.

REFERENCES

REŞIŢA 245 - HOW CAN REŞIŢA BECOME AN ATTRACTIVE CITY?

Gheorghe POPOVICI

"A city becomes attractive if residents, visitors and investors feel the emotion and put it in words, thinking and action: It is a place where I would like to work, live and enjoy myself."

[ P.G. ]

ABSTRACT

Almost all urban areas in Caras-Severin have problems in this post-crisis period. The life and history of seven of the eight cities in the county have always been related to mining (Anina, Moldova Nouă and Oraviţa), iron and steel (Resita and Oţelu Roşu), machinery manufacturing (Resita, Caransebeş and Bocşa) and wood manufacturing (Caransebeş). Only Herculane was developed by tourism and services. After 1990, Caras-Severin lost the industry and now it searches for the resources and creativity able to revive its existence. After 20 years of searching, the town’s decline may be halted if it passes from the category of “acceptable” cities to that of “attractive” ones, both for its inhabitants and for investors and visitors.

We need a new approach to economic and social life in the county and the municipality of Resita. Resita can become a smart city if it meets the 8 fundamental requirements of a location development: there are investments in new industries and modern services, it has modern infrastructure including Internet services, there can be business start-ups, it has elements of attraction, and the labour force is educated and has a positive image. A good slogan provides a basis for further promotion of the image. It might start with a slogan aimed at stirring curiosity about Resita, such as:

"Resita - The city turned toward nature!"

Also, the “kinetic fountain” in downtown Resita, the creation of Constantin Lucaci can be a symbol of harmony between the beauty of places, the people of Banat with artistic talent and the knowledge to process metal.

KEYWORDS: smart city, attractive place, image-promoting slogan, symbol of the city.

1. PREMISES

Almost all urban localities in Caraş-Severin county have problems in the post-crisis period. The life and history of 7 out of the 8 cities in the county have had their destiny related to mining (Anina, Moldova Nouă and Oraviţa), metallurgy (Resita and Oţelu Roşu), machine-building (Resita, Caransebeş and Bocşa) and wood processing (Caransebeş). Only the Băile Herculane spa resort has developed grace to tourism and services.

Since 1990, Caraş-Severin has gradually lost its industry and now it lacks the resources and creativity to revive its activity. After 20 years of searching, the decline of the county cities may come to end and, if we pass from the phase of „acceptable” cities to that of „attractive” cities, both in the eyes of its own inhabitants, and for investors and visitors.

However, we need a new approach of economic and social life in the county and Resita municipality.

1 Professor PhD, University “Eftimie Murgu” of Resita, Faculty of Economic Sciences
2. THE ISSUES CONSIDERED

A town may be “attractive”, according to the way it meets the 8 fundamental requirements of a location development\(^1\), as shown in Table 1.1.

<table>
<thead>
<tr>
<th>ATTRACTIVE LOCATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is has a positive image</td>
<td>5. A new activity can start within a short delay</td>
</tr>
<tr>
<td>2. It has an appropriate infrastructure</td>
<td>6. The labour force is educated and ready for the change</td>
</tr>
<tr>
<td>3. It provides jobs</td>
<td>7. There is the opportunity of a flow of new inhabitants grace to life quality</td>
</tr>
<tr>
<td>4. It has attractive sights</td>
<td></td>
</tr>
</tbody>
</table>

Reşiţa can and must become an attractive town!

3. THE CORE OF THE PROBLEM

Few places have or can have it all: *personality, infrastructure, basic services and attractions*.

Moreover, this aspect cannot be autonomous; they must from a unitary whole.

Thus, a specialist in architecture and industrial history, in a city of the county may support the attraction of tourists and visitors. On the other hand, he also can chase away important economic agents, who are insensitive to the industrial aesthetics and nostalgic impressions. For instance, the surroundings of Reşiţa may very well be exquisite, if the municipality is overwhelmed by infrastructure and low purchasing power of the inhabitants.

No matter how many facilities have been granted to sustain economic activities, they are close to zero in value if the *infrastructure* is not updated and as long as the 110 km from the Timisoara airport to Reşiţa still take a time three to five times longer than usual.

I have been pleading for many years (since 1992) for the building of the *Timisoara-Reşiţa* highway, which can be compared to the start piece of a *puzzle* for the harmonious and even explosive development of the new county infrastructure by tearing down the time and space barriers between the two Banat cities that complete each other so well. In one moment the inhabitant or tourist arrives from plain to mountain, from hiking in the pure natural gorges of Caraş-Severin to the plane taking off from the “airport, Traian Vuia” of Timişoara to big cities in the world. We need optimisation between motor and/or railway transport and air transport, for the local and long-distance travels.

Furthermore, well-trained and friendly people, cheap labour force and interesting touristic sights might not help too much in attracting investors, if the ill-fame label of „dying city” is stuck on all localities.

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\(^1\) Kotler Ph., Marketing of places (Romanian translation), Teora Editions, Bucharest 2001
Location image design. An image is a full set of convictions, ideas and impression people have about a place. On the other hand, it is not mandatory that the images people make about a location also show their attitude toward it. Different people have different attitudes toward one and the same place. If for the inhabitants Reşiţa is a quiet place, for „outsiders” Reşiţa appears as „poorer and poorer”.

The people in charge with image formation have the instruments for implementing a new image of a city: 

- **Slogan.** It is a word formula catchy for the public expressing a unitary holistic vision on the place: Timişoara, the city of flowers; Reşiţa, the citadel of fire. This last slogan is no longer appropriate of our municipality. We need a gradual repositioning of the image of the town on diverse topics. The most effective of them are those versatile and flexible, but at the same time anchored in reality.

A good slogan assures a basis for the further promotion of image. We may start with a slogan meant to stir curiosity about Reşiţa, such as:

> “Reşiţa – the city turned toward nature!”

**Visual symbol.** Obviously, no matter how witty the message is, it must be confirmed by reality. To have success, the image of a place must be consolidated with a visual symbol meant to be engraved in the memory for a long time, like the most renowned visual symbols in the world: the Eiffel Tower (Paris), Big Ben (London), the Great Wall (China), the Pyramids (Egypt), the Statue of Liberty (USA).

For each city of Caraş—Severin county one may find a reference symbol. For instance for Reşiţa the capital of the county, the „Kinetic fountain” downtown, work of the sculptor Constantin Lucaci, may be a symbol of the harmony between the beauty of the place, the artistic talent of the inhabitants and the metal processing science (figure 1.1).

![Figure 1. Visual symbol](image-url)
Event. Events may influence public opinion to make people visit each town of the county. It is the case of the cultural manifestation entitled “The Days of Reşiţa” held in, 2016, meant to highlight both the Christian holiday of the „Saint Apostles Peter and Paul”, and the date of July 3rd, the date of birth of industrial Reşiţa, 245 years ago (on the 3rd of July 1771), 5 years before the foundation of the United States of America. Events should be thought in a unitary schedule throughout the year, and all over the Caraş-Severin county.

The target market may be identified from the following four potential markets:

- Inhabitants of the county cities and companies which have a business or intend to open a business in the area;
- Visitors for business and investments, to sell and buy or to attend a meeting or a business conference, held in each city;
- Travellers who come to visit relatives or friends, such as German ethnics who used to live in the Mountainous Banat and migrated to Germany;
- Tourists who visit the town or their surroundings.

That is why the activities of the local administration must be regarded from 3 (three) points of view:

1. the perspective of the citizen who wishes a „smart town” connected to IT technology;
2. the perspective of sustainable development of the city through „green industries”, innovative and pioneering enterprises;
3. the perspective of investment in a better living standard and an educated rather than cheap labour force.

From the perspective of the citizen a marketing attitude is needed. The marketing attitude refers to the way in which the representatives of the public administration put themselves „in the citizens’ shoes” and are or not content with public services. If the answer is „YES” – chances are that the citizens are content, and if „NOT”, the public service does not pass through the gauging „ring” between promise and proof and we cannot speak about an activity truly connected to technology: monitored public transport, citizens’ online access to public services, unconventional energy lighting (solar, hydro or wind-powered), public places with Internet access, a metropolitan private network of the Intranet and Extranet type and with „cloud computing” internet services.

From the perspective of the sustainable development of localities, we need a marketing orientation. The marketing orientation means today performing only activities meant to assure a sustainable long-term economic and social development of the locality. It is a reversal of the traditional orientation when one manages current activities of the community and then one searches for development perspectives. The sustainable development of the town of Reşiţa means to bring „green industries” to the municipality. In its 245-year history, the city of Reşiţa has always been a „road opener”: manufacture of steel, manufacture of steam locomotives, realisation of the hydro energetic units etc. Now it is the time to attract new industries such as:
industry of electric cars, industry of high-speed locomotives, industry of easily recyclable materials (wood, glass, paper etc.).

From the perspective of the investment in a better living standard one needs a **marketing thinking**. The **marketing thinking** means considering all activities and marketing programmes of the locations an investment and not an expense. Thus one may use in an efficient and effective manner all the MTIs (methods, techniques and instruments of marketing) in the administrative practice. Some marketing practises may surely be redesigned. Thus, the marketing of places must be considered rather a **process** than an additional department in the public administration.

Thus:

1. **Any location is a flower**
   
   It is well known that each person loves the place where he was born and raised. And along his entire life (no matter where the fate might take him) he permanently returns to the remembrances from other times and strives to contribute somehow to the prosperity of native places. The parents’ home, school and friends are „things” dear to the heart of everyone, and it is very painful, when the birth place gets physically, economically and spiritually degraded.

   From Reşiţa the youth has left and few are those who return to their native place, as the local economy is very poor, there are no jobs for qualified labour force, local budget does not allow authorities to ensure the basic facilities for a better life, which makes the situation even harder.

   The defeat of pessimism and revival of the town of Reşiţa is possible, but to do that we need first of all a capacity of the local administration to identify the very specificity of the locality or territory which may exhibit interest not only for locals, but also for „outsiders”.

   Special attention must be granted to natural and wild beauties around Reşiţa which may be characterised by epithets such as **“the most/the wildest, the oldest etc.”**: The Caraş Gorges – the wildest of Romania, Grebla – the oldest electric hydro power plant in Romania, Comarnic – the most beautiful natural cave of Romania, the Kinetic Fountain in the centre of Reşiţa – the most breathtaking sculpture - liquid symphony of stainless steel made by the modern Constantin Lucaci and so on and so forth.

   The more items characterised as „the most” on the national or international level we can find in Reşiţa and its surrounding, the better, which may represent an asset at the regional level also.

   After „the most” stage the second wave comes – all that may be characterised with the mere **“more”**, as a touristic sight unique in Romania, Europe or the world: The open air museum of locomotives, the first bridge in welded constructions of Romania, the Funicular Cableway – a suspended alley of promenade connecting two belvedere places of legend, the CSR furnace and the UCMR emblem, the translated Church downtown Reşiţa, the string of artificial lakes on the Bârzava river, the stadium „Mircea Chivu” on Doman Valley, the Museum of Mountain Banat, the promenade alley Triaj- South Reşiţa, Mount Semeic – the only mountain bearing the name of a flower, the climatic resorts Secu, Văliug-Crivaia and Trei Ape, touristic village Gărăna etc.

2. **The need for a marketing of places**

   Once identified all these distinct characteristics of the place (in marketing this represents the offer differentiation) we pass to the second stage – the search of possibility of valorisation thereof to the benefit of the community.
What only locals know and like will be highlighted to disseminate it among as many peoples as possible. Now the marketing returns to its “riverbed”, fulfilling its role of activity for attracting consumers who, spending money, contribute to the development of the territory.

In the case of the territory there are three large groups of customers: **permanent citizens, businessmen and tourists.** They all contribute to the development of the cities and villages by their work, by investments and by the consumption of products and services by the private and public sector, etc. The marketing mastery of local authorities consists in the clear determination of the segments desired, on the one hand, and of the segment less liked, on the other. Then we pass to the elaboration of attractive offers of the location, which would correspond precisely to the selected target segments.

**Permanent citizens** – they represent the first target group, that we talk about them when we say that „people are the saints of each place”. Today more and more territories are confronted to depopulation phenomena. And it is no secret that the developed countries facing demographic difficulties lead an active immigration policy, but make a severe selection of citizenship aspirants, according to studies, qualification, age, etc. We can only deplore the fact that in Romania the cities and villages lose their citizens as a result of indifference for their basic needs. Because, in the end, it is not the immediate conditions that bother the citizens who desert a certain locality, but the lack of a perspective of normal life for the future, for them and the future generations.

Who listens to their desires, what programmes were elaborated and, the most important, what changes for the better have taken place in the past years? If the community has difficulties in answering these questions, the citizens find it even more difficult to link their fate to the respective place for the future.

**Businessmen and investors** are even more „demanding” when it comes to the offers of the territories, for the very reason that they bring the money, and all territorial administrations complain about the lack thereof. Today we have already overcome the idea that cheap labour force will automatically impose „capitalist investors” who stand in a queue to start a business, including for obtaining the necessary documents and authorisations. Not even the access to land and real estate property and developed infrastructure is extraordinary - the territories are in competition, and this intensifies along with the elaboration which brings about an unprecedented mobility of people and resources.

Businessmen wish to have an environment similar to the milieu they have at home, no matter where they are. Today the cases are not rare when the decision to invest or not in a city depends on the so-called „trifles” such as the possibility of the children to study at a good school or a faculty in their mother’s tongue, the favourable ecological situation or even the presence of quiet recreational locations.

The absence of investors does not mean at all that we must automatically worship all. Sometimes we have to say „no” to those who have a negative image in their native country (dubious business or ecologically harmful) or those who do not meet some strategic requirements of development for the respective territories (reduction of unemployment, use of local resources, protection of natural reservations).

**Tourist and hikers**, the third target market, are an important source of incomes for business and local budget. Beside, they represent a connection bridge to the other groups of customers, people often decide to transfer their live or to invest in a locality only after having visited it as tourists. Plus, any tourist wishes first of all to get a good rest, not to solve problems (with the transport in Reșița, to Văliug and up Mount Semenic, with hotel Semenic, etc.). All in
all, tourists search for rare spots, and an astute marketer (marketing specialist) may render „rare and attractive” even apparently banal places.

3. **Branding of a place**

The term “brand” comes from Norwegian (*brandr*) where it means “to burn”, in other words “to mark the cattle with hot iron”. At the same time, it also has the significance of ownership over a quality item, and with this last significance it was adopted in English. The branding of a place refers to what should be done to have positive image synthesising the traits of a nation, a fame of the inhabitants of a country which reflects reality and is built, promoted and sold to the exterior to attract investors and bring more tourists.

Now, one intends to build a new brand of Romania. We need to build a brand on the concept „**Reşiţa - the city turned toward nature**”.

4. **CONCLUSIONS**

From the study conducted several conclusions could be drawn, useful and relevant for rendering Reşiţa an attractive city.

A first conclusion it that Reşiţa may become an attractive city if the basic requirements are met;

The second conclusion refers to **Reşiţa-smart city** by the adaptation of the local administration to the needs and desires of the inhabitants by implementing modern IT technologies;

Another conclusion is the need to know and promote the new image of the town of Reşiţa by: slogan, visual symbol and events comprised in an annual calendar which later on would be integrated into the cultural European project: „**Timişoara- European cultural capital of 2021**”.

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HARMONISATION AND NORMALISATION IN PUBLIC ACCOUNTANCY

Doina RADA

ABSTRACT

The organisation norms of Romanian accountancy applied to public institutions are elaborated in accordance with the International Public Sector Accounting Standards (IPSASs). Accounting normalisation and harmonisation intends that the information supplied by the „Financial situations” of the patrimonial entities should respond to the investment interest, by reflecting the differences related to economic performances and risks that may occur in the business environment. By Order no.1917/2005 for the approval of the Methodological Norms for the organisation and management of the bookkeeping of public institutions, the plan of accounts for public institutions and instructions of application thereof, used by the Ministry of Public Finances, one makes the normalisation of the public accounting and its alignment to the general accountancy.

KEY WORDS: rules, public accountancy, normalisation, public institutions, harmonisation

JEL: M41

1. INTRODUCTION

The evaluation of the world economy, undergoing an increasing irreversible globalisation process, imposed the creation of an informational system capable to permanently reflect the transactions and activities carried on both by the multinational companies and the national entities. Under these circumstances, diverse accountancy systems are redefining their conceptual frame to meet the new informational requirements.

The Romanian accounting system, we may say, is in the phase of a historic conciliation, where one must observe the fundamental principles of „faithful image” image.

The reforms adopted in the international and national plane imprint accountancy new orientations converging to three main directions, namely:

- Satisfaction of the need for information of multinational companies;
- Validation of the accounting information within the national accounting system;
- Creation of a system of unitary financial indicators on the international level, which should be monitored and recorded in all states.

2. PUBLIC INSTITUTIONS – ACCOUNTING HARMONISATION AND NORMALISATION.

The accounting harmonization and normalisation aims at enabling the information supplied by the “Financial situations” of patrimonial entities to answer the investment interest by
reflecting the differences related to economic performances and the risks which may occur in the business environment.

Accounting harmonisation on the global level is realised with the involvement of renowned international institutions and organisms: the Committee for International Accounting Standards, International Federation of Accounting Experts, International Commission of Stock Exchange Operations, etc.

The accounting harmonisation process aims at improving the national accountancy rules or norms, different from one country to the next, so that they become compatible. Due to harmonisation, the events and transactions will have the same interpretations, even if produced in different countries.

Accounting normalisation is the process which elaborates rules or norms for the orientation of the synthesis documents, defines the accounting models and terminology applicable, totally or partially, to a set of third parties, of companies or specialists of the accountancy profession. (Dorel Mateș (2003), p.17).

The public institution is organised as an entity with legal personality. It is a person of public law specially created to ensure the satisfaction of the general interest. Consequently, public institutions have their own patrimony, as well as budget, may conclude contracts in their own name and may be subjects of law in justice. (Anton Parlagi and Cristian Iftimoaie (2001).

The Accountancy Law no.82/1991 stipulates that the public institutions must highlight the patrimony and operations related to it in the accounting books of evidence.

3. PUBLIC ACCOUNTANCY AND GENERAL ACCOUNTANCY

Public accounting is the bookkeeping assuring the highlighting of all operations of cash-ins and payments related to public funds. It assesses the obligations of taxpayers, highlights the cash-ins of these obligations and determines the differences from the unpaid due receivables, as well as the liability of the budget administrators / budget administration officers in relation with the performance of the payment from public funds.

Vincent Raude and Jean Claude Pagat retain for public accountancy several definitions, the first usual, the second technical and the third administrative. Thus, the usual definition is formulated as follows: “the set of rules applicable to the administration of state revenues”; the technical one reads: „rules of public accounts presentation”, whereas the administrative one is focused on the public charges and defines it as follows: “The rules of public accountancy are at the same time rules of accounts presentation and rules of organisation of the public accountants’ services”. (Vincent Raude and Jean Claude Pagat (1991), pag. 3-6).

The insufficiency of these definitions consists in the fact that the usual one refers only to the state revenues and does not take into account a legal foundation; the technical one is too limited, while the administrative one does not refer to the budget administration officers. Eventually, the authors quoted above propose for the public accountancy the following definition which would express, in our opinion, its functions in the most accurate form, namely: “The rules of public accounting have as object the determination of the obligations and responsibilities of the public budget administration officers, of the public revenues administration officers and of public accountants. This definition grants the rules of public accounting a certain legal and technical frame and comprises the obligations and responsibilities, both of public accountants and of administration officers.
3.1. Organisation rules and norms

Although the accounting of the public sector is organised based on distinct account plans, with particularities, both as regards the structure of accounts, and their operation, at the basis of public accountancy lie rules and norms common with those of the general accounting, more precisely:

- The use of common patterns and templates of accountancy registers (books of evidence) and forms related to the financial and accounting activity;
- Templates of accounting balance sheets, as well as the general plan of accounts for the public institutions are set by the same organism, i.e. the Ministry of Public Finances; in this respect, there is unitary conception in the matter (plan of accounts, balance sheet and other specific forms);
- Its operation is mandatory to be made according to the same rules and methods, as follows:
  - The accounting is run in double party;
  - The chronological and systematic recording in the accounting of all the operations of cash-ins and payment simultaneously, in the debit of certain accounts and the credit of others;
  - The establishment of the total of the debtor and creditor amounts, as well as of the financial balance of each account;
  - The elaboration, at least monthly, of the verification balance, which reflect the equality between the total of the debtor and creditor amounts and the total of debtor and creditor balances of the accounts;
  - The presentation of the final execution monthly, quarterly, annually of the revenues and payments effected, as well as of the overplus or deficit, compared to the profit and loss account, in the case of financial bookkeeping.

3.2. Accounting principles

Like in the case of general (financial) accountancy, public accountancy must assure a faithful image related to the situation of the execution of the consolidated general budget, of the information necessary for the own needs of the public institutions, as well as related to their supply to the competent relevant organisms. In this respect, public accountancy must observe, in good faith, the unitary rules and norms, generally valid, of general accountancy, as well as its principles, namely:

- The principle of prudence, which does not allow the underassessment of revenues and over-assessment of expenditure, neither in the process of budgets elaboration, nor, especially, in the process of execution. This principle in public accounting must manifest itself especially when it comes to the accurate assessment and recording to the budgetary right owned by public institutions.
- The principle of permanence of methods, which imposes the continuity of rules and norms related to the manner of assuming revenues and criteria of establishing the
budgetary credits, assuring the compatibility in time of the information related to the structure of budgets;

- **The principle of continuity of activity**, which in the case of public accounting, determines its existence, as long as the public sector exists, and the latter will exist as long as state organisation survives. In his direction we may mention, possibly, the development of the public accounting attributions, along with the expansion of the public sector, whose public expenditure, increase in the last century almost five times, as well the ratio between them and the Gross Domestic Product;

- **The principle of independence of budgetary year** which determines the start of the budgetary execution on a certain date, its closure on another precise date and consequently of the non-admission that in this period revenues might be recorded and expenditure might be made belonging to other budgetary years. This principle could be named also of “adaptability of accountancy information to the system of budgetary year used”, “of administration” or “of the budgetary year”. In this respect, the public sector adopted the system according to which one keeps an annual evidence of the budgetary credits, of the cash payments and of the cash-ins to the state budget, social insurance budget and local budgets. This system implies the validity of the budgetary credits opened and distributed only during the respective budgetary year; furthermore, the cash payment may be performed only within the limit and the validly term of credits. In the revenue pars are valid only those cash-ins collected during the financial budgetary year, and those received after the 31st of December are highlighted on the following financial year;

- **The principle of non-compensation**, which in public accounting finds its widest expression by the fact that one may not make payments directly from cash-ins, all the revenues are recorded in the budget and for each expense made there is the obligation of an approval. Some exceptions from this rule, especially in the case of funds from extra-budgetary and special means, do not deny the general principle;

- **The principles of intangibility of the opening balance sheet** applies only partially in the situation of public accounting, as in the case of public funds, the revenues due to the current year, but cashed in the following year, are recorded, as revenue, in the year they were received. Moreover, the funds approved through annual budgets and not used in that year lose their validity at the end of the budgetary year. Only in the case of some budgets, as for instance those with extra-budget means and special funds which are entitled to report the balance of the execution from the prior year, we could speak about a certain intangibility of the opening balance sheet;

Furthermore, like in the case of patrimonial units, where the liability for the organisation and bookkeeping in accordance with the provisions of the law belongs to the administrator, and in the case of public institutions the liability from this point of view belongs to the budget administrators, (ministers, heads of central and local public institutions, etc.).

In relation with the aforementioned rules, the manner of operation of public accounting in Romania, the authors, Vincent Raude and Jean Claude Pagat, in their work “Cours sur les règles de la comptabilité publique” mention the following fundamental principle of French public accounting:

- the principle of distinction between opportunity and regularity;
- the principle of distinction between budget administrators and accountants;
- the principle of non-affectation of cash-ins and expenditure”.
To these three basic principles we might add:
- the principle of liability (for budget administrators and accountants);
- the principle of unity (unit of regulation, ability to manipulate accounts, Treasury unit)” (Vincent Raude and Jean Claude Pagat (1991), p. 15).
Beside the beauty of defining the principle of unity, we retain the principle, of distinction between regularity and opportunity which is not approached or discussed in our literature.

3.3. Reporting Financial Situations and Plan of Accounts

Some similarities and parallelisms between public and general (financial) accounting are also in relation with the Reporting Financial Situations. If in the case of economic entities the Reporting Financial Situations are made of balance sheet, profit and loss account, and as enclosure the administration report, in the case of public institutions they are made of: balance sheet, with the relevant adaptations, the execution account instead of the profit and loss account, and in enclosure an explanatory report. As for the balance sheet elaborated by the public institution, it is not subjected to the verification and certification of auditors or accounting exports. The execution account regarding the state budget, budget of social state insurance and local budgets needs to be approved by the same organism who approved the respective budgets.

Between the manner of organisation and management of public institutions accounting and financial accounting (until 2006) there were similarities, but also important differences, namely: the plan of accounts of the public institutions imposed accounts specific to these units, but there were some accounts, both as name and content, which were similar to the accounts from the general plan of accounts. For instance, the account „Cash register” from the public institutions plans of account and the account „Cash register” in the general plan of accounts.

We distinguish some similarities according to the content and function especially between the accounts in the general plan of accounts and the plan of public institutions, such as: class 2, 21 “Corporal immobilisations” from the general plan of accounts, with the accounts of class 0, 01 “Fixed means” from the plan of accounts for public initiatives; account 51 “Accounts in banks” from the general plan of account, with account 10, account 11 “Money means”, “Availability from special destination means” from the plan of accounts of budgetary institutions, class 6 “Expenditures of institutions” from the plan of accounts of public institutions, which by its debit or credit record the same economic phenomena, and their balances express the same content.

Starting with the year 2006, along with the adoption of Order 1917/2005 for the approval of the Methodological Norms related to the organisation and management of public institution accounting, the plan of accounts for public institutions and the instruction of application thereof, issued by the Ministry of Public Finances, one makes the normalisation of public accounting and its alignment to general accounting. The new system of accounting adapted by the public institutions is based on the commitments accounting.

The norms of organisation of Romanian accounting applied to public institutions are elaborated in accordance with the International Public Sector Accounting Standards (IPSASs). The International Public Sector Accounting Standards Board (IPSASB) elaborated 21 standards applying to the public sector:

- IPSAS 1 – Presentation of financial situations;
- IPSAS 2 – Situations of treasury flows;
- IPSAS 3 – Net overplus or deficit of the period, fundamental errors and modification of accounting policies;
- IPSAS 4 – Effects of exchange rates variation;
- IPSAS 5 – Costs of indebtedment;
- IPSAS 6 – Consolidated financial situation and accounting of controlled entities;
- IPSAS 7 – Accounting of investment in associated entities;
- IPSAS 8 – Financial reporting of interests in participation associations;
- IPSAS 9 – Revenues from exchange transactions;
- IPSAS 10 – Financial reporting in hyper inflationist economies;
- IPSAS 11 – Construction contracts;
- IPSAS 12 – Stocks;
- IPSAS 13 – Leasing contracts;
- IPSAS 14 – Events occurred after the reporting date;
- IPSAS 15 – Financial instruments: information to supply and presentation;
- IPSAS 16 – Real estate investments;
- IPSAS 17 – Corporal immobilisations;
- IPSAS 18 – Reporting by segments;
- IPSAS 19 – Provisions, contingent debts and contingent assets;
- IPSAS 20 – Information to supply related to legal shares;
- IPSAS 21 – Depreciation of assets generating other flows than treasury flows.

Although the plan of accounts of public institutions is common to all public institutions presented through the components of the general consolidated budget, between the accounts reflecting the financing system of public institutions, funded on the one hand, from the state budget, and from local budgets on the other hand, there are important differences, especially related to the highlighting of the condition of public resources by means of which they are financed, as well as of the conditions to meet as regards the ceiling up to which one may perform cash register payments.

Furthermore, there are essential differences between the manner of closing the expenditure accounts at the public institutions funded from budgetary funds and those financed from extra-budgetary means. If in the first case, the expenditure accounts are closed through the financing accounts, in the case of institutions funded from extra-budgetary means (self-financed) their closure is made by means of results accounts, through which, in fact, one also closes the revenues accounts, a system closer to that of financial accounting.

Before adopting the new accounting system, i.e. the year 2006, in the accounting of public institutions, compared to financial accounting of economic agents, the counter value of fixed funds and of inventor objects used to be recorded directly on expenditure on their purchase.

That is why the actual expenditure in the case of public institutions, in most cases, does not reflect accurately the effort of society in relation with the maintenance or operation of a certain socio-public indicator, such as school pupil, student, hospital bed, military man etc..

Along with the adoption of Order 1917/2005 for the approval of Methodological Norms regarding the organisation and management of public institutions accounting, the plan of accounts for public institutions and the application thereof, issued by the Minister of Public Finances, the public institutions record the wear and tear of fixed funds or inventory objects with the specification that the amortisation method used is the linear one.
Furthermore, due to the specificity related to the funding of public institutions with their accounting, beside the notions of actual expenditure – like in the case of economic agents - we encounter also the notion of cash register payment and net cash register payment, whose level is determined by the financing accounts, which may only accidentally coincide at the end of the budgetary year with the actual expenditure accounts.

At the same time, between the expenditure accounts mentioned in the plan of accounts of public institutions, on the one hand, and the expenditure accounts from the general plan of account and of the State Treasury, on the other hand, there are differences in the sense that the expenditure account from the accounting of the State Treasury reflect net cash register payment and not actual expenditure, whereas the expenditure accounts of economic ants and public institutions always reflect only the actual consumptions (salary payments, actual consumption of materials etc.).

4. CONCLUSIONS

Public accountancy, and first of all that of public institutions, is similar in many aspects with general accountancy, similarity determined especially by the rules and principles of accounting in general, but has also many and essential difference determined by the specificity of operation of the public institution accounts as regards the manner the highlight the condition of public revenues and expenditure performance, and especially their closure manner at the end of the financial-budgetary year.

Both general (financial) accounting and public accounting provide a faithful image related to the situation of the execution of the consolidated general budget, the information necessary for the needs of public institutions in se, and also as regards their supply to the competent organism, with prerogatives in the matter.

Order 1917/2005 related to the approval of Methodological Norms for the organisation and management of public institutions accounting, the plan of accounts for public institutions and instructions for the application thereof issued by the Minister of Public Fiancés, one makes the normalisation of public accounting and its alignment to general accounting.

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INFLUENCE OF LEARNING ON CONSUMER BEHAVIOUR

Milena TODOROVA¹
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ABSTRACT

The objective of this paper is to identify how learning influences consumer behaviour in tourism and particularly regarding the usage of animation services. Research is made on the German market and the research object include customers of a camping village complex. The conclusions define some consumer profiles and describe the ways in which learning influences the decision taking process and the behaviour of each of them. The research results can be a basis for marketing decisions of the company which customers are inquired and similar companies in tourism.

KEY WORDS: consumer behaviour, learning approach, cognitive, behavioral, decision making process, tourism, animation services.

JEL: M10, M31

1. INTRODUCTION

Consumer behavior is a complex phenomenon that combines final consumer wishes, perception, comprehension, preference and choices or in large scale all these components of consumer market studied in the light of marketing strategies and goals. Analysis of consumer behavior gives companies the opportunity to build a reliable and successful business strategy. One of the aspects of consumer behavior is consumer learning. It integrates precisely completed analysis of factors influencing consumer decision making process in the entire learning concept.

The objective of the present paper is to examine learning as a basic factor influencing consumer behavior. In regard with this goal the following tasks have been fulfilled:

- To define consumer learning including both behavioral and cognitive learning approaches as a part of the consumer behavior concept;
- To reveal the results of an inquiry research aiming to identify the influence of learning on the consumer choice of animators’ services offered in camping “Wulfen”, Germany;
- To make conclusions and suggestions regarding suitable marketing decisions and tools concerning animators’ services offered in “Wulfen”, Germany, so that knowing the consumer learning approach of different age groups to influence their behavior for increasing demand of this type of service.

Research object include customers of „Richey Freizeitanlagen“ , functioning in tourism field in Germany. Subject of the research include consumer learning approaches through which consumer decision process could be influenced.

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1. **EXPOSE**

1.1. **Consumer decision making process and influence of learning on it – theoretical aspects**

The individual behavior is sum of expectations, decisions and actions in regard with the choice, purchase and consumption of products. The process of this type of consumer decisions runs in five stages: realizing the problem, searching information, estimation of alternatives, decision to purchase and behavior following purchase (Stanton, Etzel & Walker (1991)).

There are four basic groups of factors that influence the process of making a decision for purchase: personal, socio-cultural, economic and marketing (Ferrel, O., Dibb, S., Simkin, L. and Pride, W., (2005)). Their examination give the marketers opportunity to take fast and adequate decisions concerning the selection of appropriate tools for making consumers choose particular goods or services. One of the components of the first group - the personal factors - is learning and particularly the ways in which consumers learn about products.

The common concept of consumer learning process include the following components (Fig. 1): signal, stimulus, reaction, confirmation (Ruskova (2012)).

![Common concept of consumer learning process](Source: Ruskova, 2012)

**Figure 1** – Common concept of consumer learning process

The two fundamental approaches of consumer learning in the concept of consumer behavior theoretically are behavioral and cognitive. The first one is a result of simple reflection of a particular stimulus influence on consumer’s reaction. The second approach shows the consumer decision making as a complex process including different problem solutions (Perner (2010)).

**2.2. Behavioral learning approaches**

Behavioral approach reveals learning process under the influence of outside environment and factors. The consumer is viewed as a “black box” on which different external factors and events have impact (Goranova (2002)). The sketch of the process applying this approach of learning is given on Figure 2.

![Process of learning through behavioral approach](Source: Stoycheva, 2009 and Goranova, 2002)

**Figure 2** - Process of learning through behavioral approach

The behavioral learning approach includes two basic theoretical lines – classical and instrumental (Perner, 2010)). The main differences between the two theories are: classical learning includes already reached reaction by another stimulus as the consumer choice of a
product does not depend on their actions, while at instrumental learning the choice of a product is a result of the consumers’ actions and their purposeful behavior and experience with this type of products (Solomon (2013)).

1.1.1. Cognitive learning approach

The cognitive approach examines consumers learning behavior more thoroughly. Consumer is a consciously thinking creature who searches for information concerning certain questions which answers could influence the decision making positively. This approach focuses on thinking as in the first stage the consumer defines the aim, after that examines alternatives for reaching it in the most effective way (Kotler & Armstrong (2012)). Under the impact of active and purposeful thinking activity the process passes through several stages: understanding, estimating, planning and deciding. (Fig. 3)

Understanding is the practical decoding of the signals received from the sender in different forms and codes (Ruskova (2012)).

Estimating includes the comparison of the separate aspects of the environment to their own behavior and expectations, needs and wants in order to classify and define which of the aspects is appropriate and which one does not satisfy the consumer (Markova (2007)).

Planning is a process of selecting and building a plan of problem solution according to the aims defined earlier.

Decision making or deciding is connected with comparing the alternative problem solutions and rejecting the ineffective ones as the best decision is chosen — the one that corresponds to all or most of the defined criteria.

![Process of learning by cognitive approach](Source: Ruskova, 2012)

Figure 3 - Process of learning by cognitive approach

1.2. Empirical study of learning as a factor influencing consumer behavior

1.2.1. Presenting the company which customers are object of research

The research has been conducted among customers of the German company „Richey Freizeitanlagen“, working in tourism and service. It is located on the isle Fehmarn, Germany — the territory of region Schleswig Hallstein. The company has been functioning for 15 years, managing a five-stars camping. The camping of closed type and permission for free stay is given only to the personnel and guests of the complex.

The camping has at its disposal over 260 square meters and quests can choose among several possibilities for stay: using own caravan and rented place, own caravan and bought place, rented caravan and rented place, rented caravan and bought place. Besides these possibilities, the camping offers small villas for rent in a separate area. The camping has three large restaurants, bistro, café and a night club, spa complex, golf playground, sports and horse riding area. A team of 8 animators takes care of the entertainment and the nice time of the quests,
which is responsible for the sports, children and evening program. The children program includes various animator services connected with games, crafts and science. The teenage program is concentrated on sports as tennis, table tennis, volleyball, football, golf and different team games. The evening animator program of Wulfen includes dance performances, musicals, comedy shows, theatre performances, professional musicians programs, movies, bingo, informative show programs, children shows and others. For the organization of one nice dance, comedy or musical show put efforts ten persons working part-time with the hotel. Separate teams of animators organize the golf courses and tournaments, riding, dog school, swimming courses, surf and diving too.

2.2.2 Brief description of research method

As the research has been made on the German market the inquiry is adapted to the German way of life and administrative order as well asocial classifications.

The research method is inquiry as the questionnaire consists of five groups of questions. The first group covers the social status of the respondent in order to form the common idea of the camping customers that helps the researchers to define the separate consumer profiles. The questions in the second group aim to identify the information sources that consumers use to learn about the camping and factors that have strongest impact on their decision to use the services it offers. The third group of questions concern the frequency and intensiveness of using the different animator services of the camping. Next group questions is connected with their preference of particular services determined by concrete communication channels as a factor defining the consumer choice in the behavioral learning approach. The last group examines the camping customers’ demographic characteristics - sex, age, family status and others.

The research has been conducted in the period 01.05.2015 - 30.06.2015 including 224 customers of camping „Wulfener Hals“ (50% of them are men and 50% - women). The sample size is not representative due to time and resource limitations.

2.2.3. Research results

In result of the inquiry the authors differentiate consumers in eight groups according to their age. Consumer profiles and a comparative analysis of them is made in the following directions:

- **Communication channels**: those through which customers learnt about the camping and those that influenced their decision to use the animation services;
- **Approaches of learning**: classical, instrumental and cognitive;
- **Consumer behavior** including: Reasons to use the camping and its animation; frequency of visiting the camping and frequency of using its animation services.

First three groups (0-12; 13-17 and 18-24) learnt about the camping for the first time through family members, friends and colleagues and the last group through social networks too.

**The first two groups** use the animation services very often – 5, 6 or 7 days a week, while most of the third group use them more rarely - 2, 3 or 4 times a week and some of them even once monthly. Almost 40% of age group 0-12 uses the animation services all day long. In group 13-17 most respondents (66%) use animation once or twice a day and the rest 34% - five times a day. This shows that the youngest customers are in process of instrumental learning through
creating own experience and also using the services because of positive support – want to repeat after being satisfied. In the beginning they start because they are influenced by their families or friends and their direct experience as a base of the decision to start using animation services too. They trust their family /parents and friends enough to follow their advice or example and in the same time they do not have many other sources of information and the right to decide and act independently. The youngest customers are influenced by repeated information too. So the way to influence them is through classical learning approach by using intensive advertising and through convincing their parents that it is good for them and their children to use the animation services. The managers should stimulate the parents so that they will stimulate their children afterwards.

Regarding age group 18 - 24 figure 5 shows that 62% of them apply cognitive approach to learn about the camping animation services as they are influenced by friends, family and colleagues and use their direct experience as an information source. The rest 38% of this group also apply cognitive learning approach but they have been influenced to use animation services by the tourist consultants. These customers use the consultants’ indirect experience to reach goals like trying something new and have new skills (25 % - dance and surf courses) or to lose weight and keep fit (sports and fitness – 30%). (Fig. 7 and Fig. 10)

The first three age groups use the greatest diversity of animation services (Fig. 10). The older customers use less types of these services. It can be explained again by the desire to try different things and after personally perceived as good or bad the experience can lead to a decision to use again or never use again the particular service. It concerns the instrumental learning approach.

![Communication channels through which different consumer groups learn about the camping](image)

**Figure 4** – Communication channels for learning about the camping

**The group of age 25 - 30** uses social networks and communication with friends and colleagues to inform about the camping and animation services and a very small part used tourist consultant (Fig. 4 and Fig. 5). The decision of 50% of the customers in group to use animation services is influenced by their family. It can be explained by the fact that most of them are
married and they are willing to please their wives or husbands. 40% of them are interested in surf and dancing and another part (near 30%) want to keep fit and use sports and fitness animation services. For the customers in age groups 18 – 24 (30%) and 25 - 30 (28%) price is an important factor for taking a consumer decision (Fig. 6). This means that they mostly use cognitive approach to learn about the camping as they have the goal to receive good services at a certain price that they can afford and this requires to examine and compare more alternatives so that they can reach the best solution. 43% of them use the animation 3 - 4 times a week (Fig. 8) as 50% use such services 4 times a day. Therefore they still learn through instrumental approach and positive support by their experience too.

Figure 5 – Communication channels influencing the choice to use animation services

A part of the respondents in the two groups (18–24 and 25-30) have learnt about the camping through adverts in magazines or TV and internet (Fig. 4). Usually this means that they learn about this type of services applying classical learning approach and will react positively to the influence of advertising campaigns of the company.

Figure 6 – Factors influencing customers’ decision to use the camping
In age group 31 - 39 the part of the customers who used tourist agency for information about the camping increases compared to the younger groups (Fig. 4). 42% of them are influenced by a tourist consultant to use animation services too. This corresponds to the cognitive learning approach and is connected with a process of thinking about the goals and the behavior that would lead to their fulfillment.

**Figure 7 – Reasons for a decision to use animation services**

The bigger part (58%) of this group use communication with friends, social networks as main information source. They also apply cognitive learning approach but prefer to use direct experience rather that indirect. Their goals are to have rest at a place with pure air, to keep fit and lose weight and to learn something new (Fig. 6, 7 and 9). Accordingly they use mostly sports and fitness animation and surf and dance courses (Fig. 10). Price is not important for them if compared to the previous two groups (Fig. 6).

**Figure 8 – Frequency of usage of animation services at the camping**
44% of the customers between 31 and 39 use animation services often – from 3 to 6 times a week and 22% - every day. This shows that these respondents apply also instrumental learning through positive support (Fig. 8).

For the next three groups 40-49, 50-59 and above 60 compared to the younger customers, the most important information source seems to be the personal communication with the tourist consultant (respectively 62%, 42% and 62%, Fig. 5). Therefore they apply cognitive approach through indirect experience to learn about animation services offered by the camping.

In the group 40-49 the number of customers who learnt about the camping by adverts in newspapers and tourist magazines is quite big – 43%. So these are customers who apply classical approach learning about the camping. 50% (Fig. 4) of this group learnt for the first time about the camping from a tourist consultant (cognitive approach). The goals of the most respondents from 40 to 49 are connected with a rest in nature and they consciously choose to use trips and excursions from animation services; playing golf and keeping fit so they use respectively golf courses and sports and fitness animation (Fig. 6 and Fig. 10). They use the animation 2, 3 or 4 times a week (67%) and 15% of them even only once per month (Fig. 8). This shows that they do not apply instrumental approach to learn about these services.

Regarding age group 50-59 it can be seen that they use mostly cognitive approach to learn about tourist services and a place for vacation, as they use information from a consultant and indirect experience (55%, Fig. 4). The influence of family and friends particularly about the animation services is big (58%, Fig. 5) and this shows that they trust also direct experience probably because they have similar interests with the people in the referent groups.

They use predominantly golf courses, excursions and trips and evening programs from the animation services (Fig. 10). Main factors to choose the camping are pure air (35%) and the
offered animation services (35\%). This shows that they know exactly what they want to receive during their vacation and they take the decision accordingly. The price is not as important as the compliance between what they want and what they receive for their money. Most of the customers (60\%) in the group use animation services once per month or once a week, less 2, 3 or 4 times a week (Fig. 8). This shows again that instrumental learning is not applied to high extent. This could be expected as those people already have much experience during the years. Most of them are regular customers and have already applied the instrumental learning with positive support in earlier life periods.

![Diagram]

**Figure 10** – Types of animation services chosen by different age groups

**Above 60** – the customers in this group are influenced mainly by information from tourist agents regarding the choice of animation services (Fig. 5) but to learn about the camping many of them have used also advertising information in brochures, newspapers and magazines (Fig. 4). This shows that regarding the camping the learning approach of a big part of them (49\%) is classical but regarding the animation services it is cognitive as their learning behavior is more purposeful and 64 \% of them trust indirect experience of a tourist consultant. These customers want pure air and need to enjoy their time by different activities appropriate for their age offered by the animation. Respectively 30 \% of them prefer organized trips and excursions (Fig. 10). Another part (48 \%) want to have the possibility to learn or play golf or to dive so they choose these services in the camping. Most of them (77 \%) use animation once per month or once per year. This shows that instrumental approach is not applied by this group of customers to learn about the animation services offered by the camping.
3. CONCLUSIONS

As a result of the research discussed above several conclusions regarding applied learning approaches and appropriate marketing actions were made.

Learning approach of consumers changes in time. Children and youths (0 - 17) are influenced by parents and friends, they have not much experience and financial independency as well as information sources to make a personal choice. Their learning approach is behavioral – both classical and instrumental. The youngest consumers should be influenced through convincing their parents first. By increasing age instrumental approach is less applied as people already have experience with certain product groups and services. Classical learning regarding the tourist services is used in all ages therefore repeating information by advertising is effective.

Cognitive approach for learning about tourist services is applied mainly by customers at age 18 and above. Middle age groups use with priority the direct experience of their referent groups while customers above 40 trust mostly the indirect experience of tourist consultant and information received from them. They also need to get more information, to estimate and compare alternatives before making a decision.

Price is a priority for consumers between 18 and 30 when choosing a place for vacation and types of animation services too. Their goal is to reach best proportion price – service quality and can be influenced by promotion service packages. Tourist consultants and people who are responsible for personal selling should focus on price in communicating with this group of consumers.

People at age up to 50 use many types of animation services. Therefore the advertising and personal selling should emphasize in their message to such consumers on diversity of services and possibility to practice new activities and have new skills. Knowing the types of animation services preferred by different groups the offer should focus on them. For example disco and surf are chosen by consumers to 40 year age, but riding is used from customers up to 24. If they want riding to be used from more customers they should show the positive effects of it and include it in a promotional package.

People above 50 use mainly 2 or 3 types of animation services, therefore communication should focus on them – golf, trips and excursions and evening performances. Another accent could be nature and pure air as it is a priority to this age group when making a decision about vacation place.

Another conclusion in result of the research is that people apply different learning approaches not only at different age but also regarding different types of product and services depending on their motivation and prior experience. For example some of the respondents use cognitive approach to learn about the camping and to choose a place for vacation and instrumental approach to learn about animation services. Therefore in communication with consumers marketers should differentiate their message and choose communication channels according to the aim – to communicate the camping or animation services offered by it.

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MARKETING COMMUNICATION THROUGH SALES PROMOTION

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ABSTRACT
Occurred as a result of an increasingly fast economic-social evolution and as a response to the new market challenges, sales promotion has affirmed itself lately as an original instrument able to ensure spectacular results for the organisation.
Thus, in a more and more competitive environment, sales promotion proves to be an important communication tool in marketing.
For today’s organisations communication is a main component of the marketing activity, it is practically the starting point in this activity.
The daily activity of each economic agent cannot be limited to the production and distribution of goods and services. The economic environment imposes these organisations to develop a system of communication with the market where it operates, system by which one aims both at the careful monitoring of potential consumers and influencing of their purchasing behaviour, and the support for the sales process.
Keeping in mind these considerations, the present paper aims at identifying the attitude of Reşiţa’s population towards the role of sales promotion in the communication between the organisation and the customer.

KEY WORDS: communication, marketing, sales promotion, consumer

JEL: D11, D12, M31

1. INTRODUCTION

The consumer – this guest of honour – is the core of the marketing specialists’ attention, consumption being the single purpose and the only target of any economic activity.
Part of people’s economic behaviour, consumer behaviour plays a more and more important role in economic life, its study and explanation undoubtedly becoming an absolute

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need, its ignorance being reflected in a negative manner on the entire activity, provoking serious misbalances.

2. GENERAL PRESENTATION OF THE RESEARCH

Through this research we aim at identifying the attitude of Reşiţa's population related to the sales promotion activity which is an important component of an organisation’s promotional activity.

In view of highlighting the important research aspects, we shall use the method of direct study of the inhabitants’ attitude toward the use of the main techniques of sales promotion by diverse companies in the town, information obtained directly from the inhabitants.

In order to reach this goal, in the research conducted we used the questionnaire-based individual structured inquiries and in order to ensure the sample representativeness, we chose as sampling method the quotas methods combined with the areolar survey.

Due to the complexity of consumption, even among a relatively small population group, the endeavour of its empirical study often imposes the realisation of a methodological adaptation, in the context of respecting the basic requirements of the standardisation of research methods (Stanciu, 2006).

In the case of our study, we set on the determination of a non-exhaustive poll, for which the minimum size of the sample is given by the relation below (Cătoiu (co-ordinator), 2009, Dobre et. al., 1995).

3. INTERPRETATION OF THE SURVEY RESULTS

(SAMPLE=1308 PERSONS)

1. The subjects’ position related to the impact of the sales promotion techniques on consumers

Following the survey conducted, 36.11% of the subjects (38.24% of men and 34.20% of women) consider that the temporary price cuts have the highest impact on consumers’ attitude. As regards age, the highest percentage is detained by people aged under 20 (50%), with the status of school pupils, high school students / college students.

At the opposite pole, with only 9.72%, we find those who claim that the games and contests are promotion techniques with strong impact on consumers.

2. Subject’s opinion regarding the temporary price cuts

Of the total persons questioned, approximately 75% (76.47% of men and 47.37% of women) have a good and very good opinion about this sales promotion technique. If we refer to age, very high weights are exhibited by those under 20 (92.86%), people aged between 20 and 29 (83.33%) and those between 40-49 years of age (83.34%), and as regards the social status, a high weight is represented by school pupils and students and college students, closely followed by clerks / public servants (83.34%) and intellectuals (81.81%).

3. Subjects’ opinion regarding the awarding of bonuses and gifts by the companies along with the product’s purchase

Most of the interviewed subjects, more precisely 43.05% (58.82% of men and 34.21% of women) think that these bonuses and gifts have, to a great extent, an effect on purchasers, and this is the prevailing conviction of the people under 20 (64.28%) and of the majority of people aged between 40 and 49 (50%). As for occupation, school pupils and students and college
students, but also those in the category of “other occupations” also represent a high percentage (50%).

The lowest percentage is represented by those who do not think that these bonuses and gifts have an influence on the purchase behaviour (12.50%), as – they think – people buy what they need not necessarily in order to receive something extra. This is the opinion shared especially by those from the category of intellectuals (9.10%).

4. The attitudes of the interviewed persons toward the contests and games organised by firms for future customers

Of the total sample, 63.89% (61.77% of men and 65.79% of women) are very satisfied and satisfied by the fact that some companies organise certain contests and games for the customers, and this is obvious among the people aged 20-29 (75%) and especially those from the category “workers” (83.33%).

5. The position of subjects in relation with the awarding of product samples and patterns

The majority of the interviewed persons, i.e. 83.33% (85.29% of men and 81.58% of women) consider that this sales promotion technique is efficient and very efficient, opinion expressed especially by the people within ages ranging between 20 and 49 (more than 90%), especially by workers (83.33%) and clerks (83.33%).

Those who consider this technique as being inefficient represent only 16.67% (14.71% of men and 18.42% of women), in general school pupils and student and college students.

6. The influence of the location and setup of the store in the efficient promotion of its products

Most of the respondents, namely 75% (70.59% of men and 78.94% of women) reckon that the location and setup of a store contribute to the efficient promotion of its products, opinion shared especially be the people aged between 30 and 39 (91.67%), and in this respect, the highest percentage is recorded among intellectuals (90.91%).

Only 11.11% of the persons questioned (11.76% of men and 10.53% of women) consider that the store location and setup do not contribute very much to an efficient promotion, the promotion efficient modalities being in fact other, different ones.

7. The respondents’ opinion regarding the importance of the presentation and highlighting of the products in the sale space

Among the people interviewed, 37.50% (35.29% of men and 39.47% of women) appreciate this thing as very important, especially people aged between 30-39 (50%) and especially intellectuals (45.45%).

The lowest weight is recorded among those who claim that the highlighting of products in the sale space is insignificant, and this is in general workers’ opinion.

8. The opinion of the persons questioned regarding the fact that the promotion techniques indicates a high quality of products

In relation with this aspect, most of the persons questioned (31.94%) consider that sales promotion with the help of these techniques is made only for high-quality products.

We should not neglect either the weight of the persons who affirm that this promotion has no connection with the product quality (16.67%), most of the respondents in this category being the people with ages ranging between 30 and 39 (25%).
4. CONCLUSIONS

Nowadays, sales promotion is one of the components of the promotional mix which is more and more often used. If we trace the evolution of the organisations’ investment to promote their products, we can realise how important and necessary this activity has become.

The effects of promotion are complex and are conditioned not only by the actions of sales promotion in se. They depend also on the stage of the life cycle of the product, the concrete market conditions on the moment of promotion and the success of collaboration with the market partners.

If publicity has a long-term action as it is related to the product image in time, sales promotion has a short-time action by the urge to purchase. This is why they say that if publicity provides us with a reason to buy, sales promotion offers us an incentive to buy.

From the above case study we reached the conclusion that most subjects are familiar with the sales promotion activity carried on by companies and furthermore they support the idea that any organisation sometimes needs the implementation of these techniques and instruments to promote its sales. Moreover, most people think that these sales promotion techniques are welcome, both for companies and for potential consumers.

As regards the main promotion techniques, more than one third of the interviewed persons think that the temporary price cuts have the most powerful impact on consumers, but the other techniques also should be taken into consideration, such as: offering gifts on the purchase of products, free operations (product samples and patterns) or their publicity at the sales location.

Many respondents consider that the sales promotion techniques are performed only for the high-quality products, but there are sufficient respondents who claim that these techniques have no connection with quality, and are implemented only to increase the short-time sales.

Taking into account all the above, it becomes obvious that sales promotion represents an essential component of the marketing activity and contains several stimulation instruments, usually used on a short term and assisting the consumer to faster purchase a product or service.

The research of consumers’ behaviour is not at all a simple thing, supposing a serious accumulation of information, originated from a sustained research activity. It is usually rather costly, but however the cost of consumers’ awareness is insignificant compared to the cost of ignoring it.

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THE ROLE OF PSYCHOLOGICAL FACTORS IN THE SHAPING OF CONSUMER BEHAVIOUR

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ABSTRACT
The totality of research instruments in the psychology field is used with success in the research of consumer behaviour. Thus, the first currents of study in the psychological sphere are focused on the theory of motivation. Later on, this approach is joined by that related to the analysis of individuals’ personality, with the purpose of clarifying the behaviour differences. At present, the studies performed in the field of memorisation, perception, mental images etc. help to better understand the consumer behaviour. The contributions of these surveys are found in different domains, such as market segmentation, research of publicity effects, brand positioning.

Keeping in mind these considerations, the present paper aims at grasping the attitude of Reşiţa's population about the importance of psychological factors in the process of consumer conduct modelling.

KEY WORDS: consumer behaviour, psychological factors, purchasing process.

JEL: D11, D12

1. INTRODUCTION

We should all be interested in the consumer behaviour, for the mere reason that we are all consumers. The purchase of goods and services is an activity which varies during our entire life, which influences our way of thinking, mood, aspects and manner of spending our leisure time.


Furthermore, taking into consideration that we are all increasingly sophisticated and demanding consumers, the study of the consumer behaviour must be continued with utmost attention and a lot of scientific discernment.

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2. GENERAL PRESENTATION OF THE RESEARCH

As we do not have sufficient or representative information to formulate conclusions about the influences exercised by psychological factors on the Reșița consumers' behaviour, we conducted, for this purpose, a direct survey among the Reșița’s municipality population.

In order to study in detail all the aspects presented above, we resorted to methods of direct study of consumption demand, founded on obtaining direct information from purchasers, i.e. consumers.

In order to reach this goal, in the research conducted we used the questionnaire-based individual structured inquiries and in order to ensure the sample representativeness, we choose as sampling method the quotas methods combined with the areolar survey.

Due to the complexity of consumption, even among a relatively small population group, the endeavour of its empirical study often imposes the realisation of a methodological adaptation, in the context of respecting the basic requirements of the standardisation of research methods (Stanciu, 2006).

In the case of our study, we set on the determination of a non-exhaustive poll, for which the minimum size of the sample is given by the relation (Cătoiu (coordinator), 2009, Dobre et. al., 1995)

The determination of the sample size is made in different manners, depending on the polling rate (Demetrescu, 1991):

\[
R = \frac{N}{n} \times 100
\]

\[
n = \frac{t^2 \times p \times q}{e^2}
\]

where:

- \( n \) = sample minimum size;
- \( t \) = coefficient whose value depends on the trust threshold used;
- \( p \) = weight of the sample components characterised by a certain attribute, in other words the occurrence frequency of the studied phenomenon (most of the times the value of \( p \) is unknown and is considered equal with 0.50, to make dispersion reach its maximum possible value);
- \( q \) = weight of the sample components which are not characterised by a certain attribute; it is determined with the relation 1- \( p \);
- \( e \) = error margin that may be estimated in the research.

The error margin with which we shall operate in the research will be \( \pm 3\% \), which will correspond to a confidence threshold of 0.97. Afferent to this threshold, the value of the \( t \) coefficient will be 2.17.
3. INTERPRETATION OF THE SURVEY RESULTS
(SAMPLE=1308 PERSONS)

1. The opinion of respondents related to the extent to which the personality of individuals influences their purchase and consumption behaviour, for the food products.

Following the study conducted, most of the respondents, namely 44.45% (52.95% of men and 36.85% of women) consider that personality influences only to a low extent the purchasing and consumption behaviour for the food products. As regards age, this is especially the opinion of the persons aged over 60, more precisely the retired persons.

Only 19.44% of the subjects (17.64% of men and 21.05% of women) think that personality largely influences the purchasing and consumption behaviour for food products.

2. Subjects’ perception related to the extent to which an individual’s personality.

Most of the subjects interviewed, i.e. 45.83% (44.11% of men and 47.36% of women) consider that personality influences to a large extent the purchasing decisions for the long-use assets. This is the conviction, by a 75% weight, of the persons ranging between 40 and 49 (83.34%), this idea being present especially in the case of intellectuals.

A percentage of only 20.84% (26.48% of men and 15.80% of women) consider that personality influences to a small extent the purchasing decisions for long-use assets.

3. Extent to which the respondents lay the accent on the product image in the purchasing process.

Most respondents – 44.44% – (58.82% of men and 31.57% of women) affirmed that lay the stress, in a certain measure, on the image of products, this being the affirmation of 58.33% of the respondents aged between 30 and 39.

The lowest number of respondents– 20.84% – said they focus on the image of the products to a small extent.

A significant percentage of 34.72% (17.64% of men and 50% of women) claim they are extremely attentive to the image of a product in the purchasing process.

4. Importance of brand in the purchase of a product.

A high percentage, namely 41.66% (29.41% of men and 52.63% of women) of the interviewed subjects consider that brand is a very important element in the purchasing process. This is especially the opinion of the persons under 20 (78.57%) and of those aged between 20-29 (75%). As regards occupation, school pupils and students and college students (78.57%), as well as intellectual (63.63%) consider that brand is very important in the mechanism of purchasing process deployment.

The persons who declare that brand has no importance represent only 23.62%.

5. Extent to which the interviewed subjects are influenced by the packaging of the product in the purchasing decision making.
Among the interviewed persons, the majority – 41.67% (35.30% of men and 47.38% of women) – consider that the packaging of the product influences their purchasing power to a certain extent, and this is especially the opinion of the persons aged between 20-29, most of them intellectuals.

Only 6.94% (14.7% of men and no woman) claimed that the packaging does not influence them at all when they make the purchasing decision.

6. Beside the physiological and safety needs, which need is the most important for the respondents?

According to the survey conducted, most of the questioned subjects – 48.61% (41.18% of men and 55.26% of women) – answered that the need for self-development and recognition is the most important for them, the highest percentage being remarked among the persons with ages between 20 and 29 (75%) and the respondents aged between 30-39 (75%), most of them being intellectuals and clerks.

Rather surprisingly, for the subjects questioned the less important need expressed is the need for group belonging: 22.22% of the entire sample (32.35% of men and 13.16% of women).

The need for recognition and status prevail for 29.17% of the subjects (26.57% of men and 31.58% of women).

7. The respondents’ opinion regarding the factor with the highest influence on the purchase of clothing.

Of the total sample, 44.44% (55.89% of men and 34.21% of women) claim that the need makes them purchase clothing, and these are mostly persons aged over 50. As for the social-professional category, this is especially the opinion of workers and pensioners.

For the lowest number of respondents (8.33%), the belonging to a group, on the one hand, and publicity, on the other hand, are the main reasons for purchasing clothing.

Beside the „need”, most of the questioned subjects, i.e. 8.9% (29.41% of men and 47.37% of women) say that trend is the determining factor when they acquire clothing, with the highest percentage exhibited by the persons under 20 (78.57%), namely school pupils and students and college students.

8. The frequency by which the respondents purchase product out of impulse.

More of half of the studied sample, i.e. 54.17% (44.12% of men and 63.16% of women) claimed that they often buy products out of impulse, the highest weight being remarked among the persona under 20 (92.86%) and among the persons aged between 20 and 29 (91.67%), most of them being school pupils and students, college students and workers.

A percentage of 19.44% affirmed they never purchase products out of impulse (26.47% of men and 13.15% of women), and they are preponderantly persons over 60, i.e. 63.64%, namely retired people.

9. The net monthly income per family member.

Most of the subjects interviewed, more precisely 45.83% (50% of men and 42.10% of women), earn a net monthly income per family member of 250-400 euros, the highest percentage as regards age is represented by the persons between 30 and 39 years of age (66.66%) and especially intellectuals (63.63%).
A very low weight (2.78%) of them earn a net monthly income below 100 euros, and these are mostly pensioners. On the other hand, a percentage of 8.34% declared to have a net monthly income per family member higher than 400 euros, and they are usually aged between 20 and 49.

4. CONCLUSIONS

Most of the time it is rather difficult to find the reason why the buyer acquires a certain item of merchandise or another, because not all consumers appreciate the respective product or service according to the same criteria. On the contrary, the criteria according to which people appreciate the value of a good or service are very diverse.

The complexity of the consumer conduct can be explained only by the acknowledgement and research of the multitude of factors influencing the demand bearer, and in specific time and place conditions they have a higher or lower importance which makes it practically impossible to rank.

Thus, in order to be successful on a competitive market, the company needs to know as much as possible about the consumers: what they want, what they buy, when and where they get their supplies, why the buyer chooses a brand to the detriment of another, how the consumer makes the purchasing decisions etc.

As surveys have progressed in this field, it has become clear that the investigation of the purchasing and consumption conduct require an interdisciplinary approach. Thus the evolution of the consumer behaviour study has been in close connection with the development of other sciences, such as political economics, sociology, anthropology and last but not least psychology.

In order to observe the role of the psychological factors in the process of consumer behaviour modelling, we conducted a research on a sample composed of 1308 persons.

From this survey we remarked that a high number of persons lay the stress on the brand of a product, especially young people and women; many person buy products out of impulse, especially the youth, whereas the pensioners are more careful in this respect; personality plays an important part in the purchase of long-use goods, the need makes older people buy clothes, whereas young people are mostly driven by trend.

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CONTROVERSIES REGARDING THE CONTRIBUTION OF TRANSNATIONAL CORPORATIONS TO SOCIAL WELFARE

Anda-Laura URSULESCU-LUNGU

ABSTRACT

The fast rhythm of worldwide development comprises all activity fields. Nowadays we speak about businesses going beyond the country borders, namely “transnational” or “multinational corporations” (TNCs).

The TNCs are a result and a promoter of globalization and implicitly of economic development, drawing attention on the need for a legal framework in this sector. Globalization, in the lack of an efficient governance, creates the premises for TNCs to transfer social, economic and ecologic responsibilities to the nations, especially to the weakest, which are not able to face their pressures. In this context, besides a favorable influence on the economic growth, the explosion of TNCs corroborated with the economic globalization could not stop the increase of inequalities.

The aim of this paper is to raise awareness to both positive, but mainly negative aspects that accompany the development of TNCs. The vast biography in intended to offer an objective perspective upon the matter and underlie once more, the importance of regulation in this field.

In the economy of the future, international public institutions are needed to regulate the obligations of the TNCs and institutions to monitor the compliance to these directives. A blossoming economy must bring benefits to all its actors: individuals, states and TNCs as well.

KEY WORDS: transnational corporation (TNC), welfare, poverty, social responsibility, environmental protection.

JEL: F23, P36, M14

1. INTRODUCTION

The fast rhythm of worldwide development comprises all activity fields and economy does not make any exception to the rule. If at the beginnings we talked about some simple craftsmen or individual merchants, nowadays we speak about companies which go beyond the borders of a country, namely “transnational” or “multinational corporations” (TNCs). “The globalization of the business environment, the economic liberalization which is more and more emphasized lately, the proliferation of the international agreements, the increase of competition, the fast changes in the field of technology and Informatics, the transition from an industrial economy based on knowledge and information [...] the worldwide financial crisis which affects economy, in its assembly, represent the typical elements of a new world economy.” (Iamandi (2010), p.13).

In order to remain loyal to their guiding principle, their own obligation is to the shareholders, namely to generate profit, the TNCs integrate new categories of obligations in their own management policy such as the social and the ecological security because only by applying these policies, they can remain competitive on the market in the context of globalization.

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Globalization remains a fairly abstract term, even vague for most of us. Each tries to synthesize the quintessence of this term from one’s own perspective without making any mistake. A young man would say that globalization is for him a hamburger from McDonald’s which he eats in Romania, with bread from the USA, lettuce and tomatoes from Greece and beef from Argentina. An employee thinks of a salary above average in his country, whereas an investor associates globalization to new markets of production or sale. For a sick person, globalization means a new chance to life. These concrete cases underline the impossibility of gathering all the aspects of globalization in one definition. We agree with Glynn and Sutcliffe (1992) who begin from the premise that globalization represents a high interconnectivity between the worldwide actors or the extension of the capitalist relations of production. (Glynn and Sutcliffe (1992), p. 76-95).

2. THE HISTORY OF TNCS

M. Scully claims that there is evidence of some transnational “factories”, in their rudimentary form, ever since 2500 BC (Skully (1976)). Here, he refers to the traders who traded goods on different continents. But, only since the 14th century, since the founding of some companies such as British East India Trading Company, the ancestors of the present TNCs began preponderantly in the countries of Western Europe (England and Netherlands). The 19th century comes with the industrial capitalism, the factories begin to hunt the natural resources of the planet, from oil to mineral resources and food, creating the premises of the present TNCs. The beginnings belong to North America and Western Europe, Asia, through Japan, a primacy which is still preserved today. After the Second World War the bank investments in this field help TNCs development through gathering more capital, whereas the technological modernization through the facilitation of transport, of communication, of advertising develops and opens new markets for capitalism. In the last 25 years, the transnational companies have proliferated in an astonishing rhythm. If at the beginning of the 20th century we talked about only a handful of such companies, in the 70s there were around 7000 and nowadays there are over 60000 TNCs.

3. MULTI- OR A TRANSNATIONAL CORPORATION?

Specialized studies use the terms “multinational” or “transnational” corporation in an aleatory way, most of the times without authors making a distinction between the two terms. Anda Mazilu (1999) observes the predominant use of “multinational enterprise” by the Anglo - Saxons, while the United Nations Conference on Trade and Development recommends the associates to use the notion of “transnational corporation” (TNC), giving the term the meaning of economic entity which is formed from the mother company together with its branches abroad. The TNC comes with a meaning of superiority compared to a multinational corporation, for instance. Hood and Young (1990) underline that it should have branches in at least 5-6 countries and a minimum share of assets abroad that is at least 25 % in the gross. From our point of view, this classification can have a series of disadvantages, which result from the 1999UNCTAD report: worldwide speaking there are approximately 60000 TNCs, but the first 1000 have branches in almost all world countries of, which indicates that the others are at a smaller scale. We cannot compare a TNC such as Nestle or Lidl with Penny Markt GmbH, even if they have the same profile. Let not mention the little “border” firms, which, even if they met the criteria stated by Hood and Young, cannot be considered actual TNCs.
From our perspective, in order for a company to be considered a TNC it must meet a series of criteria: (1) to have general headquarters; (2) to have branches in several countries; (3) the workforce involved to come from the countries where the activity takes place; (4) to contribute financially and materially to the economic development of the states where they carry out their activity; (5) to impose an own ethical code. The ethical code transposes into the “value of the corporation” \(^2\) (Iamandi (2010), p. 18) which target mainly the management system, the concern towards the environment (the ecologic responsibility), the involvement in the community life and of course the employees (the social responsibility).

4. **"TOO BIG TO FAIL"**\(^{[1]}\)

The expression which in 2008-2009 made history in the United States of America is still subject of debate. Why are some “too big to fail” while others do not benefit from the same preferential conditions \(^{[2]}\)? Is it possible for corporations to have the same faith in the future? The banks found themselves in these situations due to the “toxic” loans, substandard assets, Alt-A, devaluations, etc which are little likely for a corporation. We believe that the absence of cash Lybeck talked about as being the main trigger of the 2008 economic world crisis could represent a real risk for any corporation.

At the worldwide level, the trade is dominated by the first 300 TNCs. They own at least a quarter from tall worldwide traded assets, sums which are estimated to almost 5 trillion dollars. The total sale of some of these corporations add up sums which surpass even the GDP of some countries annually.\(^{[3]}\)

Geographically, their distribution is the same with the one of the bankrupt banks: North America, Western Europe and Japan. If we corroborate their financial unbalance with the already existing substrate of “weak” economy, the results would be catastrophic. If in the case of banks, the state had the financial reserves to intervene, the numbers show that in such a situation, the reserves of the state would be insufficient.

Should the bankruptcy of a corporation such as the ABB Swiss giant that operates in 140 states or the firm H.J. Heinz that operates in 5 continents, be covered by the mother- country and is it reasonable even if theoretically speaking the state could? A corporation operates in several states, bringing benefits to each economy by creating new working places, by paying taxes, which oblige each state to react in its turn or on the contrary to derogate its responsibility towards other states.

These arguments are clear signals that in the case of a possible bankruptcy, irrespective of their size, these giants would be left to manage on their own. This happens in the case of “public corporations”, where the shares are traded at the stocks exchange, in the case of brokerage and especially in the cases of “private corporations” which are owned by families without an exterior access.

5. **PROs OF TNCs**

Even if the personal interests of the TNC shareholders do not always correspond with social good, it is remarkable the role which these corporations had in the world economic development. The globalization of the business environment and the proliferation of the TNCs in the developing countries have played a key role in the reduction of world injustice.
It is remarkable that in the countries where TNCs developed, the level of poverty has been diminished and the social protection has increased (the studies show a close connection between social protection, the reduction of poverty and the average income per capita) (https://www.oecd.org/dac/povertyreduction/43573310.pdf).

Prosper businesses create working places and assure the payment of health and social insurances for their employees and increase the investments through the reinvestment of the profit. The capacity of some giants such as Royal Dutch/Shell to contribute to the redistribution of welfare from the developed states (the host states) to the developing or underdeveloped ones exceeds the measures taken by the government or by international humanitarian organizations because of globalization, their financial power or technology. At the level of the developed countries, the need for behavioristic codes is necessary, especially what ecological and social responsibility are concerned. The codes should be implemented at the level of the corporation, therefore implicitly in all the states where they operate, thus bringing a series of benefits to less developed states.

‘By following socially responsible practices, the growth generated by the private sector will be more inclusive, equitable and poverty reducing.’ (DFID, p. 2.) The social responsibility correlates positively to the economic performance of the corporations. The benefits are considerable for TNCs and they continuously stimulate the improvement of activities in the economic field. A study elaborated by Harvard University has concluded that the companies which are involved in social causes had rates of economic growth 4 times higher and growth of the employees number 8 times higher in comparison with the ones which were uninvolved, which clearly denotes an increasing capacity of working force recruitment, including top-management. Philip Kotler and Nancy Lee’s studies (Philip and Lee (2005), p. 22-24) confirm this correlation. The campaigns of social awareness draw the attention to the company, it wins in terms of popularity and image, thus consolidating the clients ‘loyalty’ and altogether new partners in the community.

The most common causes that TNCs invest in are major health problems (Cancer, AIDS), problems which involve children (child abuse, domestic violence, education), social problems (natural disasters, poverty) or environmental problems. After deciding the cause, the corporation establishes the way the money is collected – by donating a fix sum for each product they sell or a certain percent of the price, the modalities for collecting are almost endless (http://www.responsabilitatesociala.ro/marketingul-legat-de-o-cauza.html).

Muhammad Yunus, the Nobel Peace Prize laureate for 2006, proposes in his book “Building Social Business: The New Kind of Capitalism that Serves Humanity's Most Pressing Needs” the development of the concept of “social business” starting from real examples which he himself implemented in his native country, Bangladesh. The model he proposes can be implemented at worldwide scale, becoming an international standard for cross-border “social businesses”. The concept of “social business” assumes that the business is self-financed and it can even have profit, on condition that the profit is reinvested (Yunus (2010)). The benefits of this experiment were by far major, the most important being the decrease of poverty and the implementation of the project at international level by a TNC would have remarkable consequences for the shareholders - who would win from a financial point of view - as well as for the poor - who would get out of poverty.

Kotler and Lee categorize the forms of social responsibilities as it follows: marketing associated to a social cause, corporate social marketing, corporate philanthropy, community volunteering, socially responsible business practices (Kotler and Lee (2005), p. 22-24).
The second most important issue nowadays that concerns not only TNCs, but the entire world population being a common good, is the environment. TNCs are largely involved in recycling campaigns such as Dell: the company run a recycling campaign of electric and electronic equipments the clients no longer needed. This campaign assured the transport of the equipment from the client’s place to the recycling unit. Another ingenious strategy, which proved to be more profitable to the company than expected, was launched in year 2003, when in order to stimulate its clients to take part to this program, Dell offered a discount of 50% of the recycling cost for maximum three equipments and a discount of 10% when buying its products.

During the last decades, several CTNs were involved in various pollution scandals, if we are to remember the Bhopal Case[4]. The management argues the lack of ecological measures should increase the final price that is to be paid by customers and thus the product becomes uncompetitive. In spite of all these, the positive trend from the last decade must not be ignored. According to this trend, more and more TNCs invest in measures for environment protection: for example the Dutch bank ABN Amro, the Norwegian corporation Hydro, as well as other TNCs that promote ”triple bottom line”, that is they do not promote only the profit, but also the impact on the environment and aspects of social responsibility. The change of perspective is made obvious by the large number of TNCs that take part to international forums on environment protection (Gleckman (1995), p.95).

By social involvement TNCs identify the social and the ecological risks and they can manage them better. TNCs have become extended communities, taking a series of attributions from the state, among which we have the solving of conflicts among the employees, employees versus the management or even conflicts between the states. How is this thing possible? The corporations are not really interested in defending the territory of a state but they defend their market, thus preserving a state of peace and prosperity, a constant level of the national currency.

Through corporations, the communication between the final consumers and the producers has been made easier: they could adapt to the needs of the market by increasing the export and implicitly the income which can be seen in the state development too.

All the above mentioned arguments confirm that TNCs are a result and a promoter of economic development.

6. THE EVILS OF TNCs

For any progress, humanity should pay a price and in the case of TNCs, the price which was paid by the man is not little, if we carefully analyses the data from behind the curtain which is gilded with good deeds. The economic globalization has benefits for the “host” countries, which are strong and industrialized, but brings major prejudices to the developing countries and especially to the poor ones. Adam Smith considers the market sets itself according to the report demand-offer, but nowadays the market is controlled by the commercial activity, the states lost their power to legislate what, who, and how is produced. People’s needs are influenced by research studies which are reflected in marketing strategies and manipulating advertising campaigns conducted by TNCs[5]. Moreover, Strange (1996) names the corporations “political institutions” because of the exchange of power between states and markets, which is based on technologic innovations and their costs, which are too high to be handled by some economies, especially the emergent ones. As we have shown above, the first 300 TNCs control 30% from the GDP of the planet. It is worrisome that these hire only 18.8 million people, approximately 1% from the world working force according to the World Trade Union Federation.
The effects are felt especially in the developed countries where the unemployment rate has grown alarmingly. This happens because the TNCs politics follow the growth of the profit by relocating the production in countries where the legislation is faulty offering facilities at tax payment, the protection of the environment comes second and the working force is cheap, as Vernon had sensed since 1966.

The governments of the industrialized countries have adopted a series of measures for supporting the corporatist politics, the liberalization of the market and the decrease of public expense, which has only lead to the creation of an anti-globalization trend; the governments are seen as an ally of the corporations and less representing the people’s interests. This is the neo-classic theory which considers the host state as a weak element, which is subordinated to private interests, state and TNC being in a complementary relation. Caves (1982) agrees that the host states only target the increase of the national income, without pursuing the interests of the people, by adopting the policies of the corporations.

Table 1. The relation TNC- state of origin and the host –state, mirrored in international literature

<table>
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<tr>
<th>CTN – state of origin</th>
<th>Conflict</th>
<th>Complementarity</th>
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<tr>
<td>Hymer</td>
<td>Fiscal “Paradises” concerning the politics of environment</td>
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<td>Vernon (sovereignty in discussion)</td>
<td>“Paradises” concerning the costs and the protection of the working force</td>
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<tr>
<td>The Marxist vision</td>
<td>The theory of the life cycle of the product</td>
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<td>The neo-classic theory in general</td>
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<td>The eclectic paradigm (Dunning)</td>
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(Source: Rugman and Verbeke (2003))

It is estimated that at international level one third of the commerce is intracompany (Swami (1980), p.118-119) harming the states by avoiding he payment of taxes and the VAT. The prices for goods, services, technologies, loans etc. are established depending on the law of the involved country and the TNC’s interest, in most cases at values which are a lot above or below the market level, the governments having no power regarding these practices.

More and more well-considered persons state that the world is run by corporates (Korten (1995)) and that in order to reach their goals they influence institutions and politicians. The aversion of the public opinion towards the authorities is due to the multiple cases of corruption among the officials from the host states for promoting certain economic policies in return of financial contributions to the political parties, the support of some election campaigns or even
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bribe. The strong industrialized states fight for the TNCs’ interests, sometimes military interventions are used- the most known example is the one of the International Telephone and Telegraph Corporation which had tried to bribe CIA with a million dollars in order to sabotage Salvador Allende’s election as president in Chile (Barnet, Muller (1975), p.81-83), an episode which led to the change of the legislation in the field. The US has intervened in Guatemala too (1954) in order to stop the government from sharing land from United Fruit Company to the peasants to cultivate it. (Dalip (1980), p. 118-119).

From our perspective, this procedure of the authorities is legitimate as it promotes investments, creates working places or, depending on the situation, it avoids the increase of unemployment and the per capita income, the standard of living etc. At the opposite pole there is the conflictual relation between state and corporation. The advocates of this theory consider there are no advantages for the state, mostly jobs in inhumane conditions, with insignificant payments.

The high demand for new working places is due to the incapacity of the population to self-manage in terms of food. The corporatist agriculture and the development of corporations in general and in some rural areas, the export of production corroborated with the disinterest of the corporatists in promoting a sustainable agriculture, as well as the continuous increase in food demand have led to the incapacity of the local farmers to assure the necessary food locally. Worldwide we can see a constant increase of the food price. Many consider that humankind is heading towards a food bubble with little chances to stabilize and we can see that if we analyze China’s food demand in the past years.

![Figure 1 - Soy production and its consumption in China, 1984-2010](http://www.mybudget360.com/the-food-bubble-financial-cost-of-feeding-the-world-wheat-prices-futures-global-financial-markets/)

The increase of the population living standard is due to TNCs in many countries and directly proportional with the increase of the number of cars and with the demand of fuel and indirectly proportional with the quantity of fuel and with the quantity of food which is produced at the world level: USDA draws alarm signals emphasizing that the agricultural areas are used in the detriment of population by cultivating them to obtain fuel, which leads to the increase of the food price.
In order to achieve their policies to increase the profit, TNCs know no limits when applying the dirtiest practices, they even exploit people, influence governments and manipulate them.

7. CONCLUSIONS

The TNCs are a result and a promoter of globalization and implicitly of economic development, implying positive aspects as well as negative ones, drawing the attention on the need for a legal framework in this sector. Globalization, in the lack of an efficient governance, creates the premises that the TNCs transfer the social, economic and ecologic responsibilities to the nations, especially to the weakest, which are not able to face their pressures. In this context, besides a favorable influence on the economic growth, the explosion of TNCs corroborated with the economic globalization could not stop the increase of inequalities.

The numbers confirm the fact that we face a concentration of the power in the hands of a very limited group of corporations. Taking into account their size and amplitude, their eventual collapse would cause major disequilibrium at international economic level. In order to counteract the possible misconducts, rules are needed regarding TNCs without which those aimed at tend to avoid to meet their duties. In the global economy of the future, international public institutions are needed which regulate the obligations of the TNCs and institutions which monitor the compliance to these directives. We do not deny the importance of TNCs to the international economy, the free market or the competition, but these must bring benefits to the TNCs without harming the interests of the states where they develop their activity and of course the persons involved or aimed at by their activity.
Notes:

1. In 1984 the congressman Stewart McKinney uses this phrase in a trial about the intervention of the federal state in saving The Continental Bank of Illinois from bankruptcy. The phrase was used in the overseas press before 1984, but its use on a larger scale was done with the beginning of the economic crisis. Stern and Feldman (2004) popularizes the terminology at the launch of the book “Too big to fail: the hazards of bank bailouts”. In 2009 Andrew Ross Sorkin wrote a book with the same title.

2. Citibank, Merrill Lynch or Bear Sterms were saved by injecting governmental funds, while Lehman Brothers was left to go bankrupt, drawing the bankruptcy of other financial institutions (see AIG).

3. In 2000 Austria’s GDP was lower than the sales of Itochu company, Iran’s GDP was equal to the sales of Shell company. Turkey, Denmark, Portugal sum the GDPs as much as the sales of General Motors are and 50 billion US dollars more than the total GDP of sub-Saharan African states.

4. The explosion in 1984 at the power plant Union Carbide in Bhopal, India is considerate the biggest industrial disaster in the world. In a report from 2012, the government has confirmed the death of 3787 people and 558.125 injured people who would suffer consequences for the rest of their lives: eye damage, neurological and neuromuscular damage, breathing problems etc. (https://en.wikipedia.org/wiki/Bhopal_disaster#cite_note-rehabilitation1-3). There are sources which state that there were over 20.000 bodies (Stiglitz (2008), p.169).

5. Nestle is one of the most controversial corporations at the world level, being involved in a series of scandals connected to its advertising campaigns through which they wanted to manipulate the public opinion. It is estimated that in the 80s approximately 1.500.000 babies died because of the water which was used in preparing the powder milk which was aggressively promoted by the company. In 2005 in Italy, major quantities of powder milk were redrawn from the market, as they were contaminated with chemicals. Another strategy of marketing targets the obtaining of new markets in the countries in course of development or underdeveloped where the local competition is easy to end.

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