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**THE ANNALS OF THE  
"ȘTEFAN CEL MARE"  
UNIVERSITY OF SUCEAVA.**  

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**FASCICLE OF THE FACULTY OF  
ECONOMICS AND  
PUBLIC ADMINISTRATION**

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## CONTENT

<b>SECTION 1 .....</b>	<b>9</b>
<b>ECONOMY, TRADE, SERVICES</b>	
<b>SOCIAL LIFE CYCLE ASSESSMENT: METHODOLOGICAL AND IMPLEMENTATION ISSUES .....</b>	<b>11</b>
Paola Karina Sanchez RAMIREZ	
Luigia PETTI	
DASTA - Department of Business, Statistical, Technological and Environmental Sciences	
"G. D'Annunzio" University of Chieti-Pescara, Italy	
<b>THE SOCIAL COST OF HOSPITAL WAITING LISTS AND THE CASE FOR COPAYMENT: EVIDENCE FROM GALICIA .....</b>	<b>18</b>
Diego VARELA	
Universidad de A Coruña, Faculty of Economics and Business, Campus de Elviña, Spain	
Anca TIMOFTE	
Universidad de A Coruña, Faculty of Economics and Business, Campus de Elviña, Spain	
<b>WEALTH MANAGEMENT STRATEGIES IN THE ERA OF E-COMMERCE .....</b>	<b>27</b>
Lecturer Mohammed Shahedul QUADER	
University of Science & Technology Chittagong	
Chittagong, Bangladesh	
Assistant Professor Mohammad SHAMSUDDOHA	
University of Chittagong, Bangladesh	
Lecturer Akhter JAHAN	
University of Science & Technology Chittagong	
Chittagong, Bangladesh	
Associate Professor Ph.D. Alexandru NEDELEA	
Ștefan cel Mare University of Suceava, Romania	
<b>THE STUDY OF THE INFLUENCE OF THE CARDBOARD PACKAGE ON THE QUALITY OF THE FOOD PRODUCT. CASE STUDY – PIZZA PACKED IN CARDBOARD BOX.....</b>	<b>40</b>
Associate Professor Ph.D. Angela ALBU	
University "Ștefan cel Mare", Suceava, Romania	
Ph.D. Student Amelia BUCULEI	
University "Ștefan cel Mare", Suceava, Romania	
<b>RAPEX SYSTEM - AN EFFICIENT TOOL FOR EUROPEAN CONSUMER SAFETY.....</b>	<b>49</b>
Lecturer Ph.D. Corina ENE	
Petroleum-Gas University of Ploiesti, Romania	
<b>WAGE LEVELS AND AGENCY PROBLEMS IN PROFESSIONAL TEAM SPORTS .....</b>	<b>60</b>
José Manuel Sánchez SANTOS	
Department of Applied Economics, University of A Coruña, Spain	
José Atilano Pena LÓPEZ	
Department of Applied Economics, University of A Coruña, Spain	
<b>THE TAKING OF MARKETING DECISIONS IN CONDITIONS OF UNCERTAINTY AND RISK.....</b>	<b>75</b>
Lecturer Ph.D. Student Vladimir GROSU	
Vice-rector, The Academy of Economic Studies of Moldova	
<b>CREDIT CARD FRAUD.....</b>	<b>81</b>
Lecturer Ph.D. Lăcrămioara BALAN	
Lecturer Ph.D. Mihai POPESCU	
Ștefan cel Mare University of Suceava, Romania	
<b>THE STUDY IMPACT OF VIOLENCE REGARDING THE INFLUENCE OF VIOLENCE IN THE ROMANIAN ECONOMIC AREA.....</b>	<b>86</b>
PhD. Student Amalia-Florina POPESCU	
„Ștefan cel Mare” University of Suceava, Romania	
PhD. Student Anișoara-Nina DUMITROV	
„Ștefan cel Mare” University of Suceava, Romania	

<b>THE EVOLUTION OF THE LOW-COST AIRLINES IN US. THE CASE STUDY ON SOUTHWEST AND JETBLUE AIRLINES .....</b>	<b>92</b>
Teaching Assistant PhD. Laura DIACONU (MAXIM)	
Faculty of Economics and Business Administration, Al. I. Cuza University of Iasi, Romania	
Associate Professor PhD. Cristian C. POPESCU	
Faculty of Economics and Business Administration, Al. I. Cuza University of Iasi, Romania	
<b>IMPACT OF GENDER ON ADOLESCENT CONSUMERS' TOWARDS GREEN PRODUCTS (A STUDY CONDUCTED IN INDORE CITY).....</b>	<b>98</b>
Reader Dr. Dharmendra MEHTA	
FMS Pt JNIBM, Vikram University Ujjain (M.P)	
Reader Sangeeta JAIN	
Matushri Ahilyadevi Institute of Management, Indore M.P.	
Dr Naveen K MEHTA	
Faculty-MIT, Ujjain (MP)	
(Former Faculty- ICAI, New Delhi)	
<b>WESTERN BALKANS' COUNTRIES IN FOCUS OF GLOBAL ECONOMIC CRISIS.....</b>	<b>103</b>
Asc. Prof. Dr. Engjell PERE	
Economic Faculty – European University of Tirana, Albania	
Asc. Prof. Dr. Albana HASHORVA	
Economic Faculty –University of Tirana, Albania	
<b>STAKEHOLDER ANALYSIS OF THE ROMANIAN FOREST SECTOR.....</b>	<b>114</b>
PhD. Student Raluca NICHIFOREL	
Forestry Faculty, "Ștefan cel Mare" University, Suceava, Romania	
<b>SECTION 2 .....</b>	<b>127</b>
<b>MANAGEMENT AND BUSINESS ADMINISTRATION</b>	
<b>A REVIEW OF APPROACHES FOR SELECTING INTEGRATED WASTE MANAGEMENT SCENARIOS FOR LIFE CYCLE ASSESSMENT STUDIES .....</b>	<b>129</b>
Valentino TASCIONE	
Andrea RAGGI	
DASTA - Department of Business, Statistical, Technological and Environmental Sciences	
"G. d'Annunzio" University of Chieti-Pescara, Italy	
<b>THE TEMPERATURE-BASED DERIVATIVES CONTRACTS – NEW PRODUCTS OF WEATHER RISK INDUSTRY .....</b>	<b>141</b>
Associate Professor Mirela MATEI	
Petroleum and Gas University from Ploiești, Romania	
Teaching Assistant Cătălin VOICA	
Petroleum and Gas University from Ploiești, Romania	
<b>LEADERSHIP* AND ENTREPRENEURSHIP DURING THE CRISIS PERIOD.....</b>	<b>148</b>
Associate Professor PhD. Marian NĂSTASE	
Bucharest Academy of Economic Studies, Bucharest, Romania	
<b>THE CHOICE FOR SOCIAL DISCOUNT RATE.....</b>	<b>154</b>
Assistant Professor PhD. Ioan Alin NISTOR	
Faculty of Business, "Babes-Bolyai" University Cluj-Napoca, Romania	
<b>CONSIDERATIONS ON HUMAN CAPITAL CONCEPT .....</b>	<b>159</b>
Professor PhD. Emil HOROMNEA	
University Alexandru Ioan Cuza, Faculty of Economics and Business Administration, Iasi, Romania	
PhD. Student Alina – Mariana ISTRATE	
University Alexandru Ioan Cuza, Faculty of Economics and Business Administration, Iasi, Romania	

<b>ASSESSING RELATIONSHIP BETWEEN PERSONAL VALUE AND CUSTOMER SATISFACTION: EVIDENCE FROM NIGERIAN BANKING INDUSTRY .....</b>	<b>167</b>
Olaleke Oluseye OGUNNAIKE Department of Business Studies, Covenant University, Ota Ogun State, Nigeria Oladele Joseph KEHINDE (PhD) Department of Business Studies, Covenant University, Ota Ogun State, Nigeria	
<b>RISK ANALYSIS USING THE EXPLOATATION LEVERAGE COEFFICIENT AT PASSANGER ROAD TRANSPORTATION COMPANIES .....</b>	<b>176</b>
PhD. Student Vlad IORDACHE Academy of Economic Studies from Bucharest, Romania Assistant PhD. Student Costin CIORA Academy of Economic Studies from Bucharest, Romania PhD. Student Adina Andreea OHOTĂ Academy of Economic Studies from Bucharest, Romania	
<b>VALUE STREAM MAPPING - A LEAN PRODUCTION METHODOLOGY .....</b>	<b>184</b>
Msd. Eng. Emil SUCIU Msd. Eng. Mihai APREUTESEI Msd. Eng. Ionela Roxana ARVINTE University Transilvania of Brasov, Romania	
<b>INVESTMENTS – MAIN VECTOR OF ECONOMIC GROWTH IN THE REPUBLIC OF MOLDOVA.....</b>	<b>192</b>
PhD. in Economics Tatiana BUJOR University assoc. interim. professor SAUM	
<b>INVESTMENTS – MAIN VECTOR OF ECONOMIC GROWTH IN THE REPUBLIC OF MOLDOVA FOR THE SAKE OF DEVELOPMENT? MUNICIPAL GOVERNMENT AND LOCAL DEVELOPMENT IN EMILIA-ROMAGNA AND TURIN (1945-1975).....</b>	<b>197</b>
Daniela ADORNI University of Turin, Italy Stefano MAGAGNOLI University of Parma, Italy	
<b>SECTION 3 .....</b>	<b>209</b>
<b>ACCOUNTING - FINANCES</b>	
<b>CRITICAL ANALYSIS OF CURRENT NATIONAL ACCOUNTING REGULATIONS - COMPLIANCE OR NON-COMPLIANCE WITH EUROPEAN DIRECTIVES .....</b>	<b>211</b>
Lecturer Ph.D. Maria BERHECI (căs. GROSU) “Alexandru Ioan Cuza” University of Iași, Romania Lecturer Ph.D. Ionela-Corina CHERSAN “Alexandru Ioan Cuza” University of Iași, Romania	
<b>CORPORATE GOVERNANCE AND BANK PERFORMANCE IN ROMANIAN BANKING SYSTEM....</b>	<b>219</b>
Dan LUPU Alexandru Ioan Cuza University of Iași, Romania Andra NICHITEAN Alexandru Ioan Cuza University of Iași, Romania	
<b>ACCOUNTING TREATMENT FOR R&amp;D ACTIVITIES IN ACCORDANCE WITH IFRS AND ROMANIAN LEGISLATION.....</b>	<b>226</b>
Lecturer Ph.D. Iuliana Oana MIHAI <sup>1</sup> , Lecturer Ph.D. Camelia MIHALCIUC <sup>2</sup> , Assistant Cosmin MIHAI <sup>1</sup> , <sup>1</sup> “Dunărea de Jos” University of Galați, Romania, Business Administration Department <sup>2</sup> “Ștefan cel Mare” University of Suceava, Romania, Faculty of Economics and Public Administration	
<b>QUICK DETERMINATION MODEL OF INSOLVENCY FOR A COMPANY .....</b>	<b>237</b>
Lecturer Ph.D. Student Cristina Rodica GRADEA Wales University of Bucharest, Romania Faculty of Economic, Legal and Administrative Studies	

<b>EFFECTS OF THE ROMANIAN ECONOMIC CRISIS UPON THE BANKING SYSTEM.....</b>	<b>245</b>
PhD. Lecturer Gheorghe MOROSAN „Ștefan cel Mare” University of Suceava, Romania	
<b>COLLATERAL IN SMES’ LENDING: BANKS’ REQUIREMENTS VS CUSTOMERS’ EXPECTATIONS .....</b>	<b>255</b>
Assistant Professor Daniel BADULESCU University of Oradea, Romania	
<b>THE CONSEQUENCES OF FRAUDULENT FINANCIAL REPORTING.....</b>	<b>264</b>
Lecturer PhD. Mariana VLAD Faculty of Economics and Public Administration, Ștefan cel Mare” University of Suceava, Romania Associate Professor PhD. Mihaela TULVINSCHI Faculty of Economics and Public Administration, Ștefan cel Mare” University of Suceava, Romania Assistant PhD. Student Irina CHIRIȚĂ Faculty of Economics and Public Administration, Ștefan cel Mare” University of Suceava, Romania	
<b>FROM TOTAL TO STRUCTURAL HARMONIZATION IN THE FIELD OF EUROPEAN DIRECT TAXATION.....</b>	<b>269</b>
PhD. Associate Professor Mihaela GÖNDÖR “Petru Maior” University from Tîrgu Mureș, România	
<b>THE MONETARY TERMINOLOGY IN NATIONAL FINANCIAL SYSTEM.....</b>	<b>279</b>
PhD. Student Elena DEJU „Ștefan cel Mare” University of Suceava, Romania PhD. Student Amalia-Florina POPESCU „Ștefan cel Mare” University of Suceava, Romania	
<b>REFERENCES OF CONNECTING SOME FISCAL SUBSYSTEMS WITH OBJECTIVES OF ECONOMIC AND SOCIAL DEVELOPMENT .....</b>	<b>285</b>
PhD. Candidate Marius FRUNZĂ Faculty of Economics and Business Administration, “Alexandru Ioan Cuza” University of Iași, Romania PhD. Candidate Elena TOMA Faculty of Economics and Business Administration, “Alexandru Ioan Cuza” University of Iași, Romania	
<b>SECTION 4 .....</b>	<b>295</b>
<b>STATISTICS, DATA PROCESSING (INFORMATICS) AND MATHEMATICS</b>	
<b>A COMPARATIVE ANALYSIS OF THE ROMANIAN DEVELOPEMENT REGIONS, IN TERMS OF ECONOMIC AND TOURISM INDICATORS .....</b>	<b>297</b>
Assistant PhD. Student Adrian Liviu SCUTARIU Faculty of Economics and Public Administration, “Ștefan cel Mare” University of Suceava, Romania Assistant PhD. Ioana CIOTIR Faculty of Economics and Business Administration, „Al. I. Cuza” University, Iași, Romania	
<b>THE ROLE OF VENDOR IN SOFTWARE PROJECTS .....</b>	<b>308</b>
G.P. SUDHAKAR, MCA,M.Tech,EMBA,PMP,MIMA,ADM,(PhD in Progress) Head (In-charge), IT Division, Engineering Staff College of India, Hyderabad, AP, India	
<b>SECTION 5 .....</b>	<b>314</b>
<b>LAW AND PUBLIC ADMINISTRATION</b>	
<b>OVERVIEW OF HUMAN RESOURCE MANAGEMENT IN LOCAL PUBLIC ADMINISTRATION .....</b>	<b>316</b>
Lecturer PhD. Alunica MORARIU „Ștefan cel Mare” University of Suceava, Romania Faculty of Economics and Public Administration	

<b>MANAGING EMPLOYEES GRIEVANCES BY EMPLOYERS .....</b>	<b>323</b>
Lecturer PhD. candidate Cristina BĂLĂNEASA "Ștefan cel Mare" University of Suceava, Romania Professor PhD. Aurel MANOLESCU Academy of Economic Studies Bucharest, Romania	
<b>COMPARATIVE ASPECTS OF SELF-GOVERNANCE IN THE EU .....</b>	<b>329</b>
Univ. PhD. Lecturer Dumitrita FLOREA (IONESCU) University "Ștefan cel Mare" Suceava, Romania	
<b>LAW OF 24 JUNE 1925 – ADMINISTRATIVE UNIFICATION LAW</b>	
<b>PURPOSE, GOALS, LIMITS.....</b>	<b>337</b>
Lecturer PhD. student Marilena Oana NEDELEA Associate Professor Ph.D. Alexandru NEDELEA "Ștefan cel Mare" University of Suceava, Romania	
<b>GENERAL FRAMEWORK OF IMPLEMENTING DECISION NO. 2002/584/JAI ON THE EUROPEAN</b>	
<b>ARREST WARRANT.....</b>	<b>348</b>
Research Assistant Ana PÎRLAC University "Ștefan cel Mare" Suceava, Romania, Faculty of Economic Sciences and Public Administration	





## **SECTION 1**

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# **ECONOMY, TRADE, SERVICES**



## SOCIAL LIFE CYCLE ASSESSMENT: METHODOLOGICAL AND IMPLEMENTATION ISSUES

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### Abstract:

*This paper describes the development of the Social Life Cycle Assessment methodology. Introduce the debate about the inclusion of the social criteria in Life Cycle Assessment (LCA) and presents the actual framework. A second part presents and analyzes recent case studies published. This methodology allows increasing knowledge, providing information for decision makers and promoting improvement of social conditions in product life cycles. Its framework is at a very early stage compared to the Environmental Life Cycle Assessment and for its improvement it is necessary to carry out more case studies. One of the issues that are lacking into its development is the choice of social indicators for the inventory indicator and their standardization for the methodology application.*

**Keywords:** Social Life Cycle Assessment, framework, case studies

**JEL Classification:** Q56

### 1. INTRODUCTION

Social Life Cycle Assessment (S-LCA) is a methodology that aims at assessing the potential social and socio-economic impact, both positive and negative, of products/services throughout the life cycle (i.e. from cradle to grave) (UNEP, 2009). It allows increasing knowledge, providing information for decision makers and promoting improvement of social conditions in product life cycles (Benoit et al., 2010).

The debate on how to deal with social and economic aspects into LCA began in 1993 with the publication of a SETAC Workshop Report: "A Conceptual Framework for Life Cycle Impact Assessment" (UNEP, 2009). The first reference of the S-LCA was in 1995 with the summary report "The social value of Life Cycle Assessment" (News & News, 1996). In 1996, O'Brien, Doig and Clift (1996), proposed the first way to integrate the S-LCA with environmental analysis, called "Social and Environmental Life Cycle Assessment" (SELCA). In that work, the authors supported the importance of integrating the results of the S-LCA with those of Environmental Life Cycle Assessment (ELCA). The same authors also stated that an integrated assessment (environmental, economic and social) provides a more complete and intuitive potential impact assessment of a product or service in its life cycle. This integrated approach linked with sustainable development can be understood as the concept of Life Cycle Thinking.

"Life Cycle Thinking is about going beyond the traditional focus on production sites and manufacturing processes so that the environmental, social and economic impact of a product over its whole life cycle" (UNEP, 2009). Following the "pillars of sustainability" (environmental, economic and social), Life Cycle Thinking is divided in Environmental Life Cycle Assessment (E-LCA), Life Cycle Costing (LCC) and the Social Life Cycle Assessment (S-LCA) (Petti and Campanella, 2009).

In 90s decade the discussion on how to deal with social and economic aspects into LCA has not undergone significant improvements, in the early 2000, the first methodologies regarding the social aspects were presented. In some of these studies, the method recommended was appointed as "S-LCA". Some researchers referred to the letter "S" as "social" and others as "sustainability" (UNEP, 2009).

The difference between S-LCA and the majority of social responsibility tools, as Corporate Social Responsibility (CSR) and SA 8000, is at the level of the social impact addressed. While CSR

addresses the social impact at enterprise level using management information and SA 8000 focuses on the plant level; S-LCA uses information gathered at company, plant and process levels and it does so for the whole product life cycle (Benoit et al., 2010).

One important feature to be emphasised is that social impact is not directly linked to the production chain process of a product (Dreyer et al., 2006) (Dreyer et al., 2010b), it is not determined by physical flows, unlike the E-LCA, but from the way it interacts with the stakeholders (Jorgensen et al., 2008) (Hauschild et al., 2008). Therefore, the identification of all stakeholders involved on the product/service life cycle is a fundamental issue when performing an S-LCA.

## 2. FRAMEWORK

According to Weidema (2005) the application of ISO 14040 can be extended to S-LCA. Therefore the methodology has the same four phases of E-LCA: Goal and scope definition; Inventory analysis; Impact assessment and Interpretation.

Subsequently to Weidema statement, advances in the methodology development were undertaken because its framework was harmonized and had a similar structure of the former Environmental Life Cycle Assessment (E-LCA) that was already known by researchers.

The first proposal was from Weidema (2006) that created a new indicator at endpoint level. In the S-LCA we can find two types of indicators in the cause-consequence chain; this concept comes from the E-LCA approach. Midpoint indicators are constructed category indicators located somewhere along the cause-consequence chain, such as the global warming potential, instead, endpoint indicators are category indicators at the end of the cause-consequence chain, such as years of life lost (DALY) (Hertwich and Hammitt, 2001). The new indicator created by Weidema was called Quality of Adjusted Life Years (QALY). This indicator is composed by six damage categories under a general human life and well-being category. The indicator aggregates the results across the endpoint indicator into a single one, it is calculated by a combination of different statistics data. QALY should be understood in a similar way to the DALY indicator of World Health Organization (WHO). Therefore, QALY expresses reduced quality of living by shortening the life expectancy.

Norris (2006) proposed a method that uses the existing LCA impact endpoint of human health by introducing a simplified empirical relationship to characterize the health pathway, called Life Cycle Attribute Assessment (LCAA), to assist in the aggregation of data about processes attributes like "child-labor-free" or "fair Trade certification" of site specific information.

Hunkeler (2006) suggests the use of working hours as an intermediate variable in the calculation for the evaluation of societal life cycle assessment. He assumes that processes can be dismembered into labour statistics, considering only a single impact category. The approaches created by Weidema, Norris and Hunkeler have in common that make use of statistics data availability.

Dreyer, Hauschild and Schierbeck (2006) have defined a framework for Social Life Cycle Impact Assessment with a company perspective, affirming that companies have responsibility for the people affected by their business activities, but also are able to compete and make profit in order to survive in the marketplace. This shows that the two goals (social responsibility and the competitiveness in the market) are not in conflict with each other. Later, the same authors proposed a characterization model based on multi-criteria indicators to four impact categories (forced labor, discrimination, restrictions of freedom of association and collective bargaining and child labor) (Dreyer et al., 2010a). They also applied this model to six companies concluding that it is more suitable for larger traditional industries, primarily employing blue-collar workers, due the typical employment conditions, type and organization of work carried out (Dreyer et al., 2010b).

In 2004, the United Nations Environment Programme (UNEP)/SETAC Life Cycle Initiative recognized the need for an international task force on the integration of social criteria into LCA. In

2007, the task force was renamed to Project Group (Benoit et al., 2010), which resulted in the book presenting the guidelines on S-LCA (UNEP, 2009).

The guidelines propose two types of SLCIA approach of impact categories, which Parent, Cucuzzela and Reveret (2010) understand as characterization models. They also explain that the Type 1 use performance reference points, which means use of additional information, like international levels accepted as minimum performance, to understand the magnitude and the significance of the data collected in the inventory phase. The guidelines also established for the SLCIA approach Type 1 five stakeholder categories and the correspondent impact subcategories (table nr. 1) which were recognized internationally, although, the measurement and definition of these categories remains still a challenge. Not taking into account one of these subcategories should be justified, nevertheless new subcategories can be included. It is also important to highlight that the regionalization is an important issue because the context, in which the company is inserted, affects the relevant stakeholders involved in the product/service life cycle considered.

According to Parent, Cucuzzela and Reveret (2010) in SLCIA approach Type 2 the impact is assessed according to the use of impact pathways, where the inventory indicator is translated into a midpoint and after endpoint indicator. Furthermore, they also believe that for this type the approaches of Weidema and Hunkeler are indicated.

Ciroth and Franze (2009) proposed an assessment method to evaluate social impact with bases on the UNEP/SETAC guidelines. It's a simple and intuitive assessment method that uses excel tables and colours (read, green, orange and white) to show the social impact level (positive, negative or not present) from qualitative data.

Traverso et al. (2010) used the tool Life Cycle Sustainability Dashboard to perform the impact assessment phase.

Recently, the Project Group has released methodology sheets for each impact subcategories for public consultation (UNEP, 2010). The purpose of these sheets is to help in the implementation of the S-LCA with the suggestion of inventory indicators for each stakeholder and subcategories (Benoit, 2010). Even being internationally recognized the subcategories measurement and the definition of impact categories are still a challenge.

### 3. CASE STUDIES

An accurate literature survey was carried out to identify as many papers as possible available about S-LCA case-studies published at national and international level. In order to have harmonized studies, the effort was focused in the studies that applied the guidelines from UNEP. The output was four case-studies, of which the subjects were: 1) polycrystalline photovoltaic (Traverso et al., 2010); 2) biofuels: ethanol, biodiesel and biogas (Blom and Solmar, 2009); 3) a bouquet of roses (Ciroth and Franze, 2009); 4) Services: Video Conferencing and News regarding mobile phone (Moberg et al., 2009).

The first case-study aims at the identification of hot spots of social aspects in the production and assembly phase, using data from Italy and Germany. The second one has the purpose of performing social and economic impact hotspot of the production of the biofuels: ethanol, biodiesel and biogas, relative to each other, in order to identify the best socially sustainable option, using theoretical data. The third case has as a target the comparison of the social effects caused by the production of a bouquet of roses in Ecuador and Netherlands. The last one is a project that provides a basis for a discussion and considers the availability of information for these type of services; the system boundaries proposed include: materials (raw and manufactured ones), production, use and disposal. In this project no assessment was performed, just the classification on stakeholders category.

**Table 1. Stakeholder categories and subcategories. Source: Benoit et al. (2010).**

Stakeholder "worker"	Freedom of association and collective bargaining
	Child labor
	Fair salary
	Working hours
	Forced labor
	Equal opportunities/discrimination
	Health and safety
Stakeholder "consumer"	Social benefits/social security
	Health and safety
	Feedback mechanism
	Consumer privacy
	Transparency
Stakeholder "local community"	End of life responsibility
	Access to material resources
	Access to immaterial resources
	Delocalization and migration
	Cultural heritage
	Safe and healthy living conditions
	Respect of indigenous rights
	Community engagement
	Local employment
Stakeholder "society"	Secure living conditions
	Public commitments to sustainability issues
	Contribution to economic development
	Prevention and mitigation of armed conflicts
	Technology development
Value chain actors* (not including consumers)	Corruption
	Fair competition
	Promoting social responsibility
	Supplier relationships
	Respect of intellectual property rights

In order to analyze each case study, specific information was chosen, already used by Petti et al. (2010), which could well characterize them. This information was: geographic area of reference, product considered, objectives, functional unit, system boundaries, data origin, impact assessment method and strong points. Table nr. 2 summarizes this information.

**Table 2. Case-studies characteristics**

Case-Study Characteristics	Polycrystalline photovoltaic	Biofuels: ethanol, biodiesel and biogas	A bouquet of roses	Services: Video Conferencing and News regarding mobile phone
Geographic area of reference	Germany and Italy	Ethanol: Brazil to feedstock production, processing and refining Swedish for storage and transport to pump. Biodiesel and Biogas: Swedish.	Ecuador and Netherlands: production phase; Netherlands: cutting and packaging phase	News regarding via mobile phone: offices in Sweden for production: editorial work ; Video Conferencing: user in Sweden just for users the other information are general
Product considered	Polycrystalline photovoltaic	Fuel type: ethanol, biodiesel, biogas	A rose bouquet	Services: Video Conferencing and News regarding via mobile phone

**Continuation Table 2. Case-studies characteristics**

Case-Study Characteristics	Polycrystalline photovoltaic	Biofuels: ethanol, biodiesel and biogas	A bouquet of roses	Services: Video Conferencing and News regarding mobile phone
Objectives	Identification of hot spots or potential improvements of social aspects in the production and assembly phase	Performer social and economic impact hotspot of the production of the biofuels: ethanol, biodiesel and biogas. And identify the best socially sustainable option	The comparison of the social effects caused by the production of a rose bouquet in Ecuador and in Netherlands. And compare with the environmental assessment	Provide a basis for a discussion and consider the availability of information for services (Video Conferencing and News regarding mobile phone)
Functional unit	m <sup>2</sup> of Polycrystalline photovoltaic	Driving a car 100km	A bouquet of roses with 20 caulis per spray	News regarding via mobile phone: the average mobile reading of newspaper Y by one person during one year. Video Conferencing: one year of video conference meetings at Company A
System boundaries	Production phase	Feedstock production, processing, refining, storage and transport to pump	Production, cutting and packaging phase	Materials (raw and manufactured ones), production, use and disposal.
Data Origin	Research and interviews in two companies (one Italian and one German) of modules assembly	Internet, in literature, from national statistics and from interviews with interest and trade organizations with reference to the geographic area of the study	Mainly from governmental or non-governmental organization, with reference to Ecuador and Netherlands	Primary Data: news-company mobile anonymous manager and one user MALIN Picha. Use of video Conferencing equipment-TeliaSonera survey considering 574 employees answered the questionnaire. Bibliography data (News regarding via mobile phone average data and general information on the production of mobiles phones, electronics and raw material. Video Conferencing: considered similar social aspects for the workers involved in laptops production in China. The LCD



				production: the screen is fully automated and closed. Social impacts of notebooks production.)
<b>Impacts assessment method</b>	Life Cycle Sustainability Dashboard.	Excel tables and proposing a score system to indicate positive, negative or not presence of social impacts and also an aggregation through the impact categories	Own method developed to the study with excel tables	----- No assessment performed
<b>Strong points</b>	First works published using company data. Also proposed the use of Dashboard to assess the social impacts	First case study. It is based on the methodology of the UNEP/SETAC. Also proposed a method to assess social impacts	The case study is based on the methodology of the UNEP/SETAC guidelines for SLCA. Also proposed a new method to assess social impacts	First case involving services which a classification on stakeholders category is made. Category indicators for SLCA for use of Video Conferencing Equipment: – Usability, – Coordination With Other Daily Activities, – Efficiency.

A common problem in the assessment of social impacts is data availability. Data is often not available, is often qualitative and hard to quantify. Another common problem is the existence of different indicators for social impacts that render the interpretation of results difficult and not harmonized to make comparison of S-LCA studies.

### 3. CONCLUSIONS

This paper has established the state of the art of S-LCA methodology that is still in the early stages. Some work has been done to establish the framework, but much more is needed to make this methodology a useful tool for organizations (governmental and non- governmental) to assess their products. The choice of social indicators and their standardization for the methodology application still need to be developed. One assessment and aggregation method to the impact assessment phase, recognized by the Project Group from UNEP to be used in the S-LCA, is lacking. They are necessary to harmonise the results of the case studies. To improve the methodology it is also necessary to carry out more case studies to highlight where the methodology is weak. Indicators definition to be used for product categories that allow uniformity for S-LCA studies can be a feature.

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## THE SOCIAL COST OF HOSPITAL WAITING LISTS AND THE CASE FOR COPAYMENT: EVIDENCE FROM GALICIA

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### Abstract:

*In this paper we try to quantify the social cost of hospital waiting lists in Galicia, on the basis of the model by Cullis and Jones (1986). From official data of waiting lists for outpatient appointments published by the Galician Health Service (Sergas) and a survey of specialist doctors in the province of A Coruña, we estimate that the cost of waiting lists is 70 million euros annually. We argue that this estimate, which does not include surgical waiting lists, tends to be conservative. Finally, as a possible measure to reduce the costs of waiting, we propose the introduction of a copayment, which would bring about a direct efficiency gain from the reduction in waiting costs and an indirect "efficiency dividend" from the revenue of the copayment, which may reduce the need for market distorting taxes.*

**Keywords:** Waiting, rationing, copayment, efficiency, health

**JEL Classification:** I11, D45, H27

### INTRODUCTION

In Romania in the 1980s, basic food products such as bread, oil or sugar were rationed and "in theory" could only be obtained on the basis of individual or family rationing cards. In practice, however, owning a rationing card did not guarantee in any way the acquisition of products rationed in this way. Often, the purchase of products from the "card" was an extremely costly process, requiring whole hours of waiting in queues in order to obtain goods that, in theory, were guaranteed by authorities through the rationing cards. The issue was even more dramatic for the rural population (especially cooperativist peasants), who faced even greater difficulties to get hold of oil, sugar or even bread.

Meat and meat products were also rationed and, yet, were very difficult to obtain. Thus, before the fall of the regime, the authorities had decided that in Bucharest salami would only be sold on the basis of the identity card that proved the condition of resident of the capital. Besides, each legal resident of Bucharest could buy, after long hours of standing at the queue, a maximum of 200 grams of salami. For a greater quantity, it was necessary to stand at the queue several times (Tismaneanu et al., 2007).

The situation of scarcity fostered the development of a sense of cynicism in the Romanian people. Thus, when some of them observed that, after long hours of waiting at the queue, the bread they bought was hard, one could hear comments like 'the party authorities have ordered to wait until the bread gets hard before selling it in order to reduce demand.' Comments of this kind contain a sort of popular wisdom that goes beyond the bread queue, as we will show when we analyze a related phenomenon, namely hospital waiting lists.

Waiting lists are probably the main problem that public healthcare systems face in most developed countries. Spaniards, Britons, Australians... all of them have something in common when their health fails: the enormous amount of time they must wait until their problem is attended. Healthcare in Spain is a competence of the autonomous communities but so far none of them has been able to give a solution to the immense waiting lists for surgery, diagnostics and consultations with the specialist. In this paper we will analyse the case of a Spanish region (Galicia) but the main results are applicable to other regions and countries with similar public healthcare systems.

In May 2003 the Spanish Law for Cohesion and Quality of the National Health System established that it would be the autonomous communities the ones which would set the guarantees for maximum times of access to their menu of services. However, in the face of the unstoppable increase in patients waiting for surgery, in April 2004, the Ministry of Health committed to prepare a common protocol jointly with the autonomous communities in order to improve access to health services. On that date it was announced that no one should wait more than seven days for a basic diagnostic test, ten days for the first consultation with the specialist and 45 days for a programmed surgical intervention. More than five years later, those times are far away from reality.

**Table 1. Patients in structural surgical waiting, by service. Sergas**

<i>Service</i>	<i>Patients in waiting</i>	<i>Average waiting time (days)</i>
Angiology and vascular surgery	2,065	66
Cardiac surgery	320	86
Maxillofacial surgery	401	71
Paediatric surgery	1,157	85
Plastic and reconstructive surgery	1,335	96
Thoracic surgery	130	57
General and digestive surgery	5,368	63
Dermatology	338	34
Gynaecology	2,008	54
Neurosurgery	674	89
Ophthalmology	7,107	63
Otolaryngology	2,049	66
Traumatology	8,854	83
Urology	2,597	72
<b>Total</b>	<b>34,403</b>	<b>71</b>

Source: Galician Health Service (Sergas), 31/03/2009.

Table 1 shows the situation of waiting lists in Galicia at the end of March 2009. As the reader will notice, the figures are far from the objectives set by the Ministry of Health. The average waiting time for a surgical operation (not the maximum) exceeds the maximum set by the ministry in virtually all the specialties, with an overall average of 71 days. The number of patients waiting for a surgical intervention is also considerable, exceeding 34,000.

**Table 2. Patients in waiting for a first outpatient appointment, by service. Sergas**

<i>Service</i>	<i>Patients in waiting</i>	<i>Average waiting time (days)</i>
Allergology	3,175	47
Anaesthesiology and reanimation	315	62
Angiology and vascular surgery	3,631	108
Cardiology	5,302	41
Maxillofacial surgery	333	23
Paediatric surgery	1,004	42
Plastic and reconstructive surgery	1,352	83
Thoracic surgery	35	13
General and digestive surgery	7,121	32
Cardiac surgery	42	7
Dermatology	14,258	38
Digestive	9,442	56
Endocrinology	3,482	46
Geriatrics	434	45
Gynaecology	37,191	112
Clinical Haematology	620	44
Intensive medicine	6	24
Internal medicine	2,657	23
Nuclear medicine	7	11
Preventive medicine	165	25
Nephrology	397	21

Neonatology	7	15
Pulmonology	3,605	42
Neurosurgery	2,060	71
Neurology	8,677	77
Obstetrics	1,736	33
Ophthalmology	33,013	66
Medical oncology	82	11
Otolaryngology	7,901	27
Paediatrics	2,483	45
Psychiatry	4,254	26
Radio diagnostics	10	33
Radiotherapy	19	3
Rehabilitation	4,562	33
Rheumatology	5,730	62
Traumatology	24,443	54
Urology	8,734	56
<b>Total</b>	<b>198,285</b>	<b>64</b>

Source: Galician Health Service (Sergas), 31/03/2009.

The situation is not better as far as consultations with the specialist are concerned. Table 2 shows the state of waiting lists in Galicia at the end of March 2009 and even though the average waiting time (64 days) is somewhat shorter than the one for surgery, it is still far from the objective of the ministry for a maximum wait of 10 days. If we add up the great number of patients waiting for a first appointment (nearly 200,000), the situation is critical.

In this paper we will try to produce a monetary estimate for the social cost of waiting lists in Galicia based on official data and a survey of specialist doctors carried out by the authors in the spring of 2009. We will also make the case for copayment and the increase in the supply of doctors as a means of reducing this welfare cost. But it should be noted that the aim of copayment in this paper is not to reduce public spending on healthcare, but to decrease the cost of waiting lists for a service with excess demand at an exogenously given level of supply.

The rest of this paper is organised in four sections. In the second section we briefly review the literature on waiting lists, the estimation of their welfare costs and alternative rationing systems. In the third section we estimate the welfare cost of waiting lists in Galicia based on official data and our survey of specialist doctors carried out in the spring of 2009. On the fourth section, we present copayment and the increase in the supply of doctors as a means of reducing the welfare cost of waiting lists. Finally, on the concluding section we present a summary of the main results.

## LITERATURE ON WAITING LISTS, WELFARE, AND POLICY ALTERNATIVES

The official explanation is that waiting lists are merely backlogs (Ministry of Health, 1963). These explanations imply that the rate at which services are demanded in each period equals the rate at which they are supplied, but due to a backlog of cases, the market does not meet demand at a given time. Total demand for a given period exceeds total supply for that period because of a backlog of cases from previous periods, but such a gap does not indicate a long-term inadequacy of resources to deal with demand. Instead, it represents a backlog of cases that could and should be eliminated through short-term concerted efforts such as, for instance, temporarily making additional operating theatres available, diverting beds from other specialties, reducing the duration of hospital stays, performing surgery in outpatient departments, making use of military and private hospitals, etc. (Lindsay and Feigenbaum, 1984).

Lindsay and Feigenbaum (1984) offer a different interpretation of waiting lists, according to which they would be rationing tools. The argument is based on the fact that the value a medical service decreases with the time of waiting. This is due, among other factors, to the possibility that the condition aggravates with waiting. Besides, demand for health services is generally unpredictable, so waiting costs cannot be avoided by signing up on the list in anticipation.

The perspective of a long wait discourages many patients from demanding the public health services, opting in some cases for the subscription of private health plans. Indeed, Besley et al. (1999) show that longer waiting lists for treatment in the British National Health Service (NHS) are associated with more subscriptions of private health plans.

In other words, if in a free market system demand is rationed by increasing the price of products until the quantity demanded equals the quantity supplied, in a waiting list system rationing is achieved by increasing waiting times (thus decreasing the quality of service) until the quantity demanded equals the quantity supplied. This has considerable implications in terms of welfare.

Cullis and Jones (1986) develop the argument by Lindsay and Feigenbaum (1984) and propose a simple method to estimate the social cost of waiting lists. This is based on the fact that patients generally have one option to avoid waiting lists, namely private medicine. Indeed, despite the governmental prominence in the financing of health in many countries, the private health sector is still important. This is so even though most part of public provision is strongly subsidised and, in many cases, free of charge for the patient (Besley et al., 1999).

For Cullis and Jones (1986), therefore, the costs of waiting should not exceed the price of an equivalent service in the private sector, which provides us with a ceiling for the cost of waiting by any given patient. Obviously, waiting will not affect all patients on the list in the same way. Some will suffer the wait in such a way that the cost of waiting will be close to the maximum, i.e., the price of the private service ( $P$ ). On the other hand, other patients will hardly suffer from waiting, so that their cost will be near zero. If we assume that patients on the waiting list are uniformly distributed between these two extreme types, then the average cost will be equal to one half of the private cost of the service ( $P/2$ ).

This finding coincides with the results of a natural experiment analysed by Deacon and Sonstelie (1985). As a consequence of price controls of gasoline imposed in the spring of 1980, a series of Chevron fuel stations in California were obliged to reduce the prices of gasoline. The resulting prices were lower than those of other main brand providers and, as expected, long queues formed in these Chevron stations. The authors interviewed the customers of a low cost fuel station and those of two nearby stations, Mobil and Union, where prices were free. All the consumers in the sample faced a choice between two alternatives: relatively cheap gasoline with a significant time of waiting or relatively expensive gasoline without waiting. By choosing one of the two alternatives, the interviewed drivers revealed information about the opportunity cost of their time. The estimations implied that about half of the rent transferred from the Chevron station was dissipated in costs of waiting.

An alternative method for estimating the social cost of waiting lists is contingent valuation. For instance, Propper (1990) draws estimations of the costs borne by patients in waiting lists for non-urgent medical treatments. The estimations indicate that the average valuation of a month in the waiting list for non-urgent treatments in England in 1987 was about 40 pounds, although there were significant interpersonal differences in the valuations. Bishai and Lang (2000) estimate how much the patients on the waiting list would be willing to pay for an operation of cataracts in Manitoba (Canada), Denmark and Barcelona in exchange for a reduction in their waiting time. Their estimate is that an average cataracts patient would be willing to pay between 24 and 107 dollars of 1992 for a reduction of one month in the waiting time.

The method by Cullis and Jones that we use in this paper presents a number of advantages with respect to contingent valuation. Firstly, it is not based on hypothetical questions but on verifiable hard facts. Secondly, by not asking respondents about waiting lists overtly, the risk of an elicitation bias is reduced. Finally, the simplicity of the method allows applying it to wider contexts in order to compare the results of different healthcare systems and examine the evolution of the costs of waiting throughout time.

As far as copayment is concerned, the majority of studies on copayment focus on its relationship with healthcare expenditure (e.g. Rodríguez, 2007). However, because of the treatment given to copayment in this paper, it would fit more within the literature on the rationalization of waiting lists in order to reduce their welfare cost. One of the main alternatives proposed has been

the prioritization of patients by means of a point system based on their medical and social conditions (Rodríguez Míguez et al.).

### ESTIMATING THE WELFARE COST OF WAITING LISTS IN GALICIA

In this section we apply the method by Cullis and Jones to the estimation of the social cost of waiting lists for outpatient appointments in Galicia. Data on the size of waiting lists and average waiting times by medical specialty are published every three months by the Galician Health Service (Sergas). To these data we must add an estimate of the price of an equivalent appointment without waiting in the private sector.

The average price of a private appointment with a specialist doctor depends on specialty. In this paper we have estimated the different prices by means of a telephone survey we carried out in March and April of 2009. In order to avoid the risk of elicitation bias, we did not mention the fact that this was a survey. We just asked the date of the next available appointment and an orientive price for a first consultation. When the doctors mentioned a price interval, we used the mean.

The sample was selected in a systematic way. The list of doctors was drawn from the yellow pages of the province of A Coruña (*Páginas Amarillas, 2008-2009*). We called, by strict order of apparition on the telephone directory, all the specialist doctors. When there was no answer we called the next doctor in the list. When we reached the end of the list we started again from the beginning. We repeated this process until we obtained three prices for each specialty. In the cases where we were unable to obtain a sample, because they were rare specialties, we used the average price of the rest of specialist doctors in general for whom we did have estimates.

From data on the size of waiting lists and the average waiting time published periodically by the Galician Health Service (Sergas) we can calculate the number of patients treated per year, by dividing the total number of patients in waiting at a given point by the average waiting time measured in years. We then multiply the resulting number by one half of the estimated price of a private appointment ( $P / 2$ ) in order to obtain an estimate for the total cost of waiting for each medical specialty.

**Table 3. Annual social cost of waiting lists for outpatient appointments in Galicia, 2009**

<i>Service</i>	<i>Patients in waiting</i>	<i>Average waiting time (days)</i>	<i>Patients per year</i>	<i>Price of a private appointment</i>	<i>Annual social cost (€)</i>
Ophthalmology	33,013	66	182,572	80.00	7,302,876
Dermatology	14,258	38	136,952	96.67	6,619,567
Gynaecology	37,191	112	121,203	107.50	6,514,651
Traumatology	24,443	54	165,217	76.67	6,333,577
Digestive	9,442	56	61,542	166.67	5,128,570
Cardiology	5,302	41	47,201	196.67	4,641,484
Otolaryngology	7,901	27	106,810	80.00	4,272,393
Psychiatry	4,254	26	59,720	132.50	3,956,425
General and digestive surgery	7,121	32	81,224	95.00	3,858,136
Urology	8,734	56	56,927	123.33	3,510,401
Internal medicine	2,657	23	42,165	150.00	3,162,408
Neurology	8,677	77	41,131	130.00	2,673,530
Rehabilitation	4,562	33	50,458	90.00	2,270,632
Rheumatology	5,730	62	33,733	131.67	2,220,816
Pulmonology	3,605	42	31,329	115.00	1,801,427
Allergology	3,175	47	24,657	113.33	1,397,184
Endocrinology	3,482	46	27,629	90.00	1,243,301
Obstetrics	1,736	33	19,201	107.50	1,032,065

Angiology and vascular surgery	3,631	108	12,271	127.50	782,304
Neurosurgery	2,060	71	10,590	110.00	582,458
Paediatric surgery	1,004	42	8,725	105.00*	458,075
Paediatrics	2,483	45	20,140	40.00	402,798
Nephrology	397	21	6,900	105.00	362,263
Plastic and reconstructive surgery	1,352	83	5,946	76.67	227,922
Maxillofacial surgery	333	23	5,285	85.00	224,594
Geriatrics	434	45	3,520	95.00	167,211
Clinical haematology	620	44	5,143	60.00	154,295
Preventive medicine	165	25	2,409	105.00*	126,473
Medical oncology	82	11	2,721	90.00	122,441
Radiotherapy	19	3	2,312	105.00*	121,363
Cardiac surgery	42	7	2,190	105.00*	114,975
Anaesthesiology and reanimation	315	62	1,854	70.00	64,905
Thoracic surgery	35	13	983	105.00*	51,591
Nuclear medicine	7	11	232	105.00*	12,194
Neonatology	7	15	170	105.00*	8,943
Radio diagnostics	10	33	111	105.00*	5,807
Intensive medicine	6	24	91	105.00*	4,791
<b>Total</b>	<b>198,285</b>	<b>64</b>	<b>1,381,264</b>	<b>104.16</b>	<b>71,934,844</b>

\* Specialties for which no particular price could be estimated.

Source: Galician Health Service (Sergas), 31/03/2009 and telephone survey.

Table 3 is the result of applying the method by Cullis and Jones (1986) to waiting lists for outpatient appointments in the Galician Health Service (Sergas). The estimated annual cost of waiting amounts to 7.3 million euro for Ophthalmology, as a result of multiplying the number of patients (182 thousand) by the average cost of waiting (80/2). Similarly, the cost of waiting lists is estimated at 6.6 million euros annually for dermatology, 6.5 million for gynaecology, and so on.

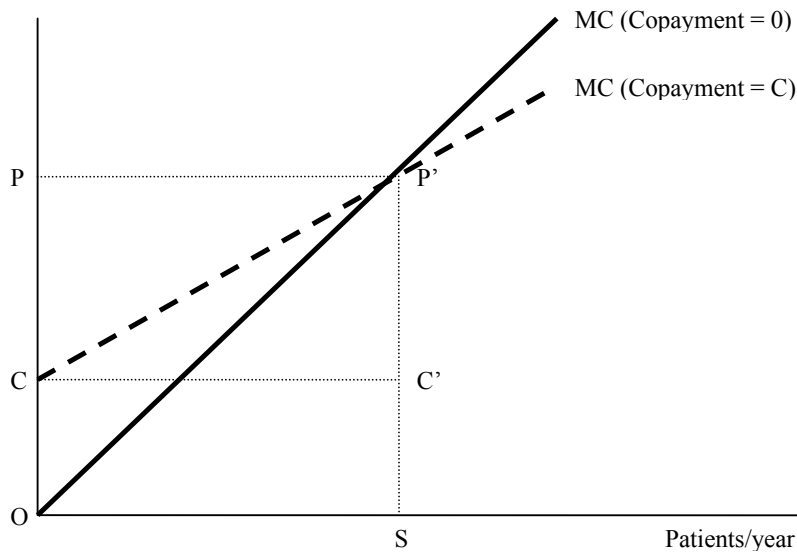
The average cost of an appointment with a private specialist is around 105 euros, which implies an average cost of waiting of 52 euros for an average waiting time of 2 months (64 days), which leaves us with an average cost of waiting of 25 euros per month. This estimate would be conservative if we compare it with those by Propper (1990) for the UK and Bishai and Lang (2000) for Canada, Denmark and Spain based on the contingent valuation method. Even so, the estimated social cost of waiting lists for outpatient appointments amounts to 71.9 million euros annually.

## COPAYMENT AND THE COST OF WAITING

The estimation above is based on the fact that consultations with specialist doctors in the Galician Health Service (Sergas), as in the British National Health Service of the 1880s analysed by Cullis and Jones (1986), are free of charge for users. But in other health systems patients must pay part of the cost of the service, which is known as copayment. As we will show below, such a copayment can affect the social cost of waiting lists considerably.

We start from the premise that the public healthcare system will be at 100% of its capacity, so that the number of patients treated annually is given exogenously by the capacity of the public health service (S) and that copayment is not introduced in order to reduce the number of patients but to improve the quality of the service. As long as copayment is lower than the price paid in the private sector for an equivalent service, the market for the public service will clear, in a particular application of Say's law that 'supply creates its own demand'. In this case, Say's law would not operate through a decrease in price, which is fixed at the level of the copayment, but through a reduction in waiting time for the public service.





**Figure 1. Effect of a copayment on the cost of waiting**

Figure 1 shows the effects of a copayment ( $C$ ) on the costs of waiting. The continuous line represents the marginal cost of waiting ( $MC$ ), i.e. the cost of waiting for the marginal patient, in the absence of a copayment. These costs are entirely costs of waiting, and are increasing due to the sorting of patients as a function of the costs of waiting. In an extreme is the patient that is not bothered at all by waiting ( $MC = 0$ ), whereas on the other extreme is the patient whose cost of waiting is equal to the cost of private service without waiting ( $P$ ). People with a cost of waiting above  $P$  will not use the public service, as they will rather use the privately provided services. The total cost of waiting is equal to the area of the  $OSP'$  triangle or, which is the same, one half of the private price  $P$  multiplied by the number of treated patients  $S$ , as in the model by Cullis and Jones (1986).

By introducing a copayment ( $C$ ), the cost of access for the patient is now the addition of the cost of waiting plus the copayment ( $C$ ). But the marginal patient treated by the public system will still have a cost of access (amount of the copayment plus the cost of waiting) equal to  $P$ . The number of patients is also kept constant at the level of full capacity of the system ( $S$ ). Thus, the new marginal cost line is the dashed one that goes from  $C$  (the case of the patient who does not care to wait) to  $P'$  (the case of the patient for whom it is indifferent between waiting for the public service and visiting a private doctor). The new marginal cost line has a lower slope than the one without copayment because, even though the subjective valuation of the cost of one day of waiting is unaffected, the copayment does reduce the average waiting time.

From a social point of view, the revenue from the copayment ( $C \times S$ ) is nothing but a transfer from the users of healthcare services to taxpayers, as it reduces the need of funds by the government. But a copayment also produces a net effect in terms of social welfare through the reduction in the costs of waiting. These costs are now the area represented by triangle  $CC'P'$ , this is,  $\frac{1}{2} \times (P-C) \times S$ . Therefore, the introduction of a copayment brings about a reduction in waiting costs equal to  $\frac{1}{2} \times C \times S$ , namely one half of the revenue from the copayment. In other words, each euro of copayment brings about a dividend of 50 cents in terms of social welfare.

Furthermore, because this efficient copayment reduces the need for public funds, it can lead to an additional indirect efficiency gain, as it reduces the need for market distorting taxes as a source of public finance. The benefit from this indirect effect is sometimes called 'efficiency dividend' and can be considerable, depending on the marginal cost of public funds. This cost varies among countries, mainly as a function of the structure of the tax system and the structure of the labour market. In the case of Spain, Sancho (2004) has estimated this welfare cost by means of a

computational general equilibrium model. The numerical results suggest that the marginal inefficiency of the tax system is considerable, of an order of 50% of the amount raised and spent under the conditions of budgetary balance at the margin (fixed public deficit). This implies that the total welfare gain (direct through waiting cost reduction plus indirect through the reduction in taxes) could reach 100% of the amount of the copayment.

There are other ways of introducing a deliberate cost of access to outpatient appointments that have been used in practice. One example is the requirement to sign up for the waiting list in person in the outpatient department of the hospital, far away from the health care centre and the domicile of the patient. This is often a practical requirement when there is a theoretical possibility to get the appointment by telephone, but patients are faced with a collapsed or unattended line. The costs of transport and time associated to this requirement ( $T$ ) produce a similar effect to a copayment of the same amount in terms of reduction in the costs of waiting ( $\frac{1}{2} \times T \times S$ ). However, the private cost in terms of time and transport ( $T \times S$ ) is a deadweight loss from a social point of view, not a mere transfer from patients to taxpayers. Thus, the net impact of a measure of this type is a reduction in social welfare of one half of its amount ( $\frac{1}{2} \times T \times S$ ) with respect to the waiting lists that is supposed to combat.

Another implication of the model is that the cost of waiting decreases when the price of private health services decreases. This can be achieved mainly through an increase in the supply of doctors. An example of such a measure can be found in the increase in the supply of dentists in Spain during the last 20 years as a result of regulatory changes, which has been paired with lower inflation than other non-hospital health services and the consumer price index in general, as well as an increase in the use of the private dentist vis-à-vis the public one, despite the fact that the list of services covered by the public system has increased throughout this period (Pinilla Domínguez and Stoyanova, 2008).

## CONCLUSIONS

In this article we have analysed the problem of hospital waiting lists. The standard version is that they are mere backlogs that would be solved with shock therapy. However, a more detailed analysis indicates that waiting lists act as rationing means to adjust the quantity of public health services demanded by users to the limited resources of the public system. The main difference with rationing by prices is that rationing by waiting lists reduces the quantity demanded by reducing the quality of the service provided. This reduction in quality has no counterpart in reduced costs of provision, so it represents a deadweight loss.

In this paper we have estimated the social costs of waiting lists for outpatient appointments in Galicia from the perspective of welfare economics by applying a method originally developed by Cullis and Jones (1986). Some of the advantages of this model are its objectivity and simplicity, which allows obtaining frequent updates of the estimates and comparing them to other healthcare systems. By applying this method, we estimated that the social cost of outpatient appointments in Galicia amounted to 71.9 million euros in 2009.

From a normative point of view, there is good news, however, because the costs of waiting lists can be reduced considerably through the introduction of a copayment, at the rate of 50 cents of saving for each euro of copayment. Furthermore, this copayment can be used to reduce the need of public funds of the public sector, thus reducing the need to have resort to taxes and other means of revenue with a distorting effect. This additional 'efficiency dividend' depends on the marginal cost of public funds but can also be considerable, accounting for to up to another 50 cents of gain per euro of copayment.

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## WEALTH MANAGEMENT STRATEGIES IN THE ERA OF E-COMMERCE

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### Abstract :

*This paper looks at the key strategies being applied by wealth management and their competitive position. Each approach has merits, although the multi-channel 'single brand' approach seems to be gathering momentum. E-commerce facilitates differentiation and requires focus, whilst making cost leadership more difficult. Choices between being a traditional or extended wealth manager, or simply a wealth product provider, are increasingly being made. Moreover need for strategic choice in the wealth management market is presented, before looking in more detail at the wealth management strategies commonly adopted. The relative success of each is considered, together with the competitive advantages to be gained.*

**Key Words:** Wealth management, Strategies, E-commerce.

**JEL Classification:** E01, E21, N3, L81

## INTRODUCTION

The main objective is to consider here the key strategies adopted by wealth managers, specifically in the context of the e-enabled environment. It also sought to understand the impact of adopting certain wealth management strategies upon the organisation's competitive position. How strategies are applied depend upon the decision whether to be a 'traditional' 'extended' or 'product' provider. Ultimately, the challenge for organisation is to adopt the right strategic mix, as strategies are not mutually exclusive. E-commerce enhances the ability to offer multi-channel strategies, potentially reducing costs and improving customer management. However, careful branding must be applied, with the 'single organisation, multi-channel' option becoming dominant. To be successful such a strategy must offer a positive client experience, problem solving solutions and a unified view of the client's overall relationship. Collaboration strategies can also be used, internally or on a B2B or B2C basis. However, they must create added value for the client (putting 'familiar' names together is insufficient). E-commerce may also expand client options, allowing smaller market competitors to collaborate with other and offer broader product choices. With new aggregation services and interactive tools being launched wealth managers face the risk of dis-intermediation in some sectors. The 'internal' aggregation offers the development of client interaction, by supplying improved information and knowledge to both sides. Brand value is also of greater importance online, where 'trust' in the medium is typically lower. A strong branding strategy leverages existing organisational strengths but must be customer focused and consistent in its message both off and online.

Segmentation enables providers to tailor online services to meet perceived customer needs and if applied correctly may ultimately lead to the bypassing of generic High Net Worth (HNW) segments to create a 'segment of one'. However it is unclear at present which 'segments' are best served in this way. Whichever strategy is adopted traditional private banks will come under

increasing pressure to increase client interaction and improve product choice, placing an additional burden upon client handlers, training and technology. Successful wealth managers will therefore thrive only if technology is used to complement, as opposed to replace, the relationship manager. With so many banks relying upon some form of segmentation of the High Net Worth Individuals (HNWI) market there is scope for quantitative research to be undertaken to establish how effective different segmentation approaches are. Are they effective, profitable or even practical in some cases? In addition, whilst market changes suggest the power of suppliers is falling (as their number have increased faster than apparent demand) the normal market reaction of intensified price competition has not been seen on as large a scale as in the retail financial services market. A study of the elasticity of both supply and demand in the wealth management market would therefore create prove of great use in reinforcing, or otherwise, the contention that 'price' in this highly specialized and often exclusive market is of far less importance to the HNWI than their overall service experience.

## STRATEGIC CHOICE

Wealth management providers can no longer rely upon customer loyalty in the intergenerational wealth transfer process (Ackermann, 2000) and the traditional step-by-step approach to business transformation may no longer therefore be appropriate (Watkins, 2000). Instead wealth managers may need to make a strategic 'leap' away from traditional business models – based on process integration, service bundling scale economy and the monopolization of extensive branch network (Li 2001) also warns of the possible 'deconstruction' or 'fragmentation' of traditional banking models, with new entrants focusing on particular sections of, or processes involved in, the market]. New approaches may therefore be required, with the careful tracking of key market conditions/ activities through a bottom-up approach, with strong strategic leadership (Broady-Preston & Hayard 1998). Given the multi- channel delivery of many wealth management services there is little doubt that a traditional top-down approach would be slow to react to market changes, with real-time online services capable of rapid evolution and therefore requiring a much shorter strategic decision and implementation process.

Some also advocate a 'blanched scorecard' approach (measuring customer retention, acquisition, satisfaction and profitability) as a method to assess customer 'success' and convert this into workable goals within and overall wealth management strategy (Broady Preston & Haywood (1998) and Little et al (2000). This shifts the focus of the organisation, towards the customer as the ultimate measurement of success and again in an e-enabled world, where online loyalties are not as great as we have seen in the more traditionally delivered private banking market this makes some sense. However, whichever, approach is adopted wealth managers must increasingly become more customer-focused and swift in their reaction to change. Robinson et al (2002) suggest that given clients' needs and wealth manager's capabilities then one of three business strategic should be pursued, as follows.

### 1. Traditional WM provider

Suited to private banks, trust companies and independent adviser. Provide comprehensive wealth management services, typified by high service quality, complementary external perception/branding, high skill levels, personal attention and strong advisory capabilities/ access to own and third party products.

### 2. Extended WM Provider

Suited to large groups brokerages and retail banks. Provide breadth of products, strong technology and multiple channel access.

### 3. Product Provider

Suited to insurance companies and fund/ asset managers. Provide new and innovative products at segment level, develop ties with distributors and compete by distinguishing products with value added services or on price/performance.

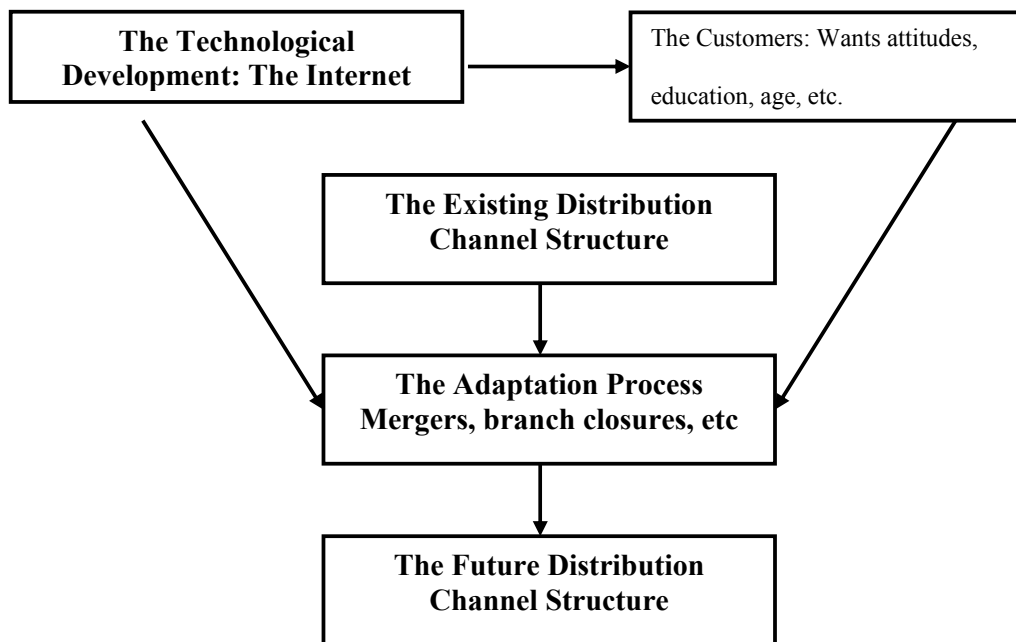
Whilst in the context of overall market strategy there will be limited choices, the organisational strategies adopted to deliver such a market position will vary, with the likelihood of multiple strategies being adopted, e.g. Charles Schwab & Co has adopted a multi-channel strategy, collaborating/outsourcing through its acquisition of US Trust Co, yet still maintaining its unique online branding strategy and thereby recognising changing customer loyalties, market segments and the value of the Internet in brand extension (Franklin & Latimore, 2002). Ultimately, the challenge for organisations is to adopt the right combination, and with this in mind the next sections will consider how e-commerce has impacted upon the strategic mix. Multi-channel, branding and segmentation strategies will therefore be considered, together with strategic collaboration and aggregation.

## MULTI CHANNEL STRATEGY

E-commerce allows wealth managers to enhance sales channels or modify/ create new business process. In turn, where properly managed new channels can create increased revenues, reduce costs and better manage relationship [confidence that a multi-channel delivery strategy is cost competitive is high, with 78% of Eurozone banks (89% of UK banks) and 83% of Eurozone insurers (80% of UK insurers) agreeing (Gandy, 2001). However, delivery channel choices are often complex, requiring a willingness to cannibalise past investments and competencies in order to effectively transform from the 'branch-based' to the 'multiple-distribution' approach (Mols, 2000). This also has implications for the re-alignment of technology, human resources and resource allocation, plus a need for greater co-ordination across complementary channels.

Mols (1998) suggest that in considering future distribution strategy organisations should first determine which distribution channel combination best meets customers' needs (see Figure 1 below) by asking what customers want, how much are they willing to pay, how such services can be provided and the costs of alternative distribution channels? In considering these questions it is worth looking at the experience of the wider financial services sector. In the report 'New Business Models' (Gandy-2000) the 'bank within a bank or virtual new entrant' business model was adopted by several established UK financial service providers to avoid the cannibalisation of clients and enabling lower cost delivery/competitive pricing.

This approach also facilitated channel choice segmentation and, where introducer relations are important, provides a strategy to avoid conflict. However US experience (citing Versital, Wingspandbank.com and mabanx as examples) and the collapse/ cancellation of Lloyds TSBs Crate ([http:// www. createwealth.com/](http://www.createwealth.com/)) MLHSBC and Swiss private banker Vontobel's 'y-o-u online bank, has suggested a 'clicks and mortar' approach (i.e. a multi-channel strategy) presents a more successful delivery alternative – with cannibalisation less of a concern to providers (Croft, 2002). This approach should help providers to deliver customer friendly environments across all channels, providing a 'click, call or meet' option for the client (in the case of Charles Schwab this has also meant opening bricks and mortar branches as education and sales centres).



**Figure 1. The adaptation process in distribution channels**

Source : Mols, N.P. (1998)

The gradual shift towards multi-channel delivery is perhaps not after all surprising. Research by McKinsey & Co. (Boss et al, 2000) highlighted several reservations held by potential on line customers, including the lack of physical ability to make deposits except by ATM (66%), the lack of face-to-face involvement (61%) insufficient trust in Internet transactions (51%), more confidence in physical banks (46%) and the inability to open accounts at a physical location (40%). Datamonitor (Fanning, 2001) also suggest that 69% of mass-affluent customers prefer making their arrangements face-to-face. Both therefore conclude that the threat from the virtual bank may not be as great as once thought. However that is not say that multi channel delivery will always be successful. As Austin (2002) points out, the development of online services by some UK insurance companies e.g. Norwich Union's 2001 launch of an online wealth management programme, offering a 60 second wealth check, financial planning tools, online share dealing and an ISA fund supermarket, may cause damage to traditional delivery channels (in this case the IFA introducer market) by competing too directly ([http:// www.norwichunion.com/](http://www.norwichunion.com/)).

Private banks have also historically relied upon strong, often exclusive, relationships with intermediaries. However, e-commerce allows links with intermediaries to be easily formed and strengthened, with simple initiatives such as email, dedicated online services and intermediary relationship managers, giving them a similar experience to that enjoyed by their customers. HNWI can also directly benefit from a multi-channel approach, downloading forms from web-sites, receiving portfolio valuations by email and communicating with their relationship manager online. Of course a multi-channel strategy presupposes a desire by the customer to use the online channel. As first Direct have shown in the retail financial services market, early adopters of new technologies will readily move online- but this may account for as little as 10% of a bank's current customer base. Retail banks have therefore adopted more aggressive methods to market online services. However, blunt and indiscriminate approaches do not sit well with more affluent clients. The answer therefore may not be to 'push' clients online but design the channel to 'pull' potential clients towards it (Forsyth, 2003). This requires a new form of channel strategy, building choices not for their cost savings, but for the customer experience and problem solving solution offered.

HNW clients desire an air of exclusivity and personalisation from their wealth manager and where interacting with more than one delivery channel they must be presented with a unified view of the relationship, if a multi-channel strategy is to succeed. In this way the likes of Northern Trust and Citibank allow information from multiple sources to be brought together, providing a consistent single view of their wealth irrespective of where they may be based or the device they use to enquiry upon (e.g. PDA Mobile, Internet of Telephone). This approach is also seen as a way to retain customer loyalty. Half of all European banks cited 'integrated access to other channels' as their principal method for retaining clients, followed by 'information rich services and competitive pricing' (Gandy, 2001). Again, this emphasises the importance of integration. Whilst free-standing delivery channels may yield ongoing cost advantage, without integration providers may be reduced to competing on information services (which clients would expect as a right) and ultimately price.

## COLLABORATION STRATEGY

Hensman et al (2001) in their study of the online financial services industry identified both advantages and disadvantages of being established incumbents (bricks) and new market entrants (clicks). However they concluded both need to challenge the 'legitimacy' of the other if they are to compete effectively. For 'bricks' this may entail the creation of partnerships (e.g. strategic alliances/joint ventures) and / or the use of 'legitimacy providers' in the Internet marketplace (such as financial media) to create a presence and protect against competition or the cannibalisation of their products / markets by new market entrants. Deise et al (2000, p86) describe collaboration as: "... a rethinking of processes in a way that provides a win-win-win outcome among suppliers companies and customers, an outcome where customer focus takes priority for strategic reasons". At its simplest level collaboration may be 'Internal' and a necessary pre-requisite for the delivery of true customer satisfaction. For example, many providers have evolved around divisional 'silos' leading to an incomplete picture of the clients overall relationship and making sound advice and personal service harder to deliver. Collaboration may also be applied to the relationship between the wealth manager and his client. It can establish a working relationship between them and as a by product, can help positively influence the take up of the bank's products and services.

Ackermann, (2000) puts forward the view that as customers increasingly seek functionality from online wealth management offerings more collaboration will be seen. For example, Northern Trust established a co-operation agreement with Northwestern Mutual Life to offer life assurance products and HSBC and Merrill Lynch set up a US\$1 billion global wealth management collaborative joint venture – with similar moves announced by Sweden's SEB, Credit Suisse and UBS and Swiss private bankers, Banks Vontobel (<http://www.vontobel.ch/>) (Croft, 2002). In MLHSBCs case the target was the self-directed customer, with those requiring more specialised advisory services referred on to specialist in-house wealth management arms of the two parents. However, such collaboration does not offer a panacea. The subsequent closure of MLHSBC to new business in May 2003 shows that crating web-based services for the wealthy does not necessarily mean that they will take such services up and that collaboration must offer sufficient added value to the client if the venture is to create competitive advantage. Less ambitious collaboration is more widespread, and can provide genuine customer benefits. Credit Suisse's collaboration with its UK insurers Winterthur has provided a dedicated website (Webinsurance Partners) to its IFA network, whilst Julius Baer ([http:// www.jnliusbaer.com/](http://www.jnliusbaer.com/)) have created their JB Fundnet' extranet platform for its investment fund distributors. Widespread collaborations also seen in the area of institutional research, with Harris direct (CSFB/Bank of Montreal), Schwabs (Goldman Sachs) and Fidelity (Lehman Brothers) all using third party providers. Schroders Private Bank, through its strategic partnership with can Frank Russell Company (global multi-manager), also shows how partnerships can allow the provider to supply services it would not otherwise have the experience to provide.

As seen earlier the demand from the HNWI for 'best-of-breed' products makes collaboration almost inevitable. Whereas larger providers can offer in-house solutions to the wealthy client's



needs, smaller private banks may retain an advantage in the introducer market. By not competing direct with the introducer the latter faces less poaching and, given that around 23% of affluent individuals use an IFA (or its equivalent) niche banks, such as Gerrards (<http://www.gerrard.com/homepage.htm>), may see this as an area where they can achieve competitive advantage. Increasingly therefore we may see smaller providers 'collaborate' as opposed to 'manufacturing' products and services, in order to deliver greater choice, quality and service for the HNWI. The drive to contain costs will also see an increasing number outsource traditional activities such as custody, research, trading, settlement and IT, e.g. Courts, Schroders and EFG Bank all currently outsource all or part of their fund management operation, with recent estimates suggesting 34% of private banks now outsource their custody requirements. 23% their trading/execution and settlement and 22% IT and securities processing (Financial-I, 2003).

## AGGREGATION STRATEGY

Account aggregation (pulling together a client's account balances and holdings for viewing on a web site via a single log-in) arguably offers a low cost way to consolidate the financial affairs of wealthy individuals. It also poses the threat of disintermediation, as non-financial service providers such as Quicken, Excite, and America Online Offer similar services free, via a single password. Aggregation works through the account aggregator's use of customer's account details (including any authentication/security data) to 'scrape' the required account data from their bank and send this to the aggregators own website for redisplay. Additional 'tools' such as portfolio performance indicators, can then be added to enhance the relationship, together with virtually any Internet accessed information such as airmiles, travel reservations, email, etc (given that only 40% of European HNWI's wealth – 60% in North America – is invested with just one provider the potential demand for aggregation services is present).

Despite the threat of disintermediation by aggregators Pennathur (2001) suggests banks hold the advantage, with customers seeing them as logical 'trusted' providers of aggregation service. Aggregation customers also tend to be receptive to product offers and can provide a good source of information upon which advice and services can be offered. For this reason aggregations increasingly being used by bank to extend 'private bank service to the mass affluent market and holds appeal to those wishing to offer a holistic view of a client's wealth, e.g. Citibank's 'My-Accounts' (<http://www.citibank.com/uk/portal/consumer/myaccounts>). Aggregation can exist at both the 'intra' and 'extra-company' level. Intra-company aggregation is still far from the norm amongst wealth managers and basic level account aggregation services should therefore first be introduced to consolidate data from legacy systems. Aggregation technologies can then be used by wealth managers to supply information to relationship managers; helping them in their advisory capacity to differentiate the services on offer. However whilst it is to be acknowledged that HNWI's normally maintain more than one banking relationship [Forrester Research reports the average online retail banking customer in the US has 4.5 financial relationships (Wicht & Grater, 2002)] what would result if clients of one bank use the aggregation service of another? Will they eventually move their banking and investments?

The possibility of course exists, although research by Forrester (Jeffs, 2003) predicts no more than 10% of the banking market will ever use aggregation services, so is aggregation therefore relevant to wealth management services? If affluent clients have several advisers, then aggregation can be used to distinguish the service provided by one wealth manager from another, whilst also introducing functionality for the relationship manager to maximise the quality of the client / adviser interaction. In this way Northern Trust (<http://www.northerntrust.com/>) has developed its 'Private Passport' and 'Family Passport' services for the HNWI and family office respectively, using balance and activity data drawn from multiple institutions to provide a common view of their wealth, and State Street (<http://www.staestreet.com/>) offer clients the ability to export aggregated data into their own bespoke systems. In short it may offer both these institutions a competitive advantage over

their rivals, although the relatively recent introduction of aggregation services means that only time will tell if they widespread appeal or not.

Aggregation can of course be employed by anyone willing to develop such a service and may appeal to those who have limited access to markets, such as brokers, financial advisers and custodians. This is evidenced by the number of software providers designing aggregation services to the wealth management sector. Aggregation can of course enable price comparisons to be readily made, allowing niche players to attack sectors of the wealth manager market with product focused aggregation services, e.g. the funds market. With some wealth management products viewed as commodities by clients and their advisers, the desire may simply be to invest in a fund with a sound reputation and a strong track record. It is here, at the level where products become the focus of aggregation, that the wealth manager needs to adopt an appropriate strategy to avoid disintermediation and recognise the importance of their brand value.

## **BRANDING STRATEGY**

E-commerce technology have transformed the delivery, distribution and differentiation of financial service, with new implications for the branding of financial services. Customers have become better informed, less loyal and more willing to switch provider, providing their need for security and reliability can be met. At the same time increased access to and information about wealth management services has the potential for them to be viewed as commodities, increasing the relative importance of brand and service as key differentiators. The result is that customers increasingly put value in 'trusted' brands, even if these are non-traditional financial institutions (according to PricewaterhouseCoopers (2001) image and reputations ranked 2nd as a key differentiator by CEOs and perceived as the highest ranked criterion for clients selecting a private bank or wealth manager and the top ranked measure of success). Although there is general recognition that branding can be a key differentiator wealth managers have traditionally been poor brand strategists. For example only six financial services brands appear amongst the ranking of the top 100 of the world's most valuable brands (all six are based in the USA) despite the often considerable values that brands can acquire as business assets (Interbrand, 2003).

So why are brands and the adoption of brand strategies so important? To answer this it is first appropriate to define what we mean by 'brands' Baker (2001, p11) defines them as follows: "Brands provide organisations with the means to develop higher order, long term, mutually trusting and profitable relationships. They become a key asset of the business." Evans & Wurster (2000) point us to the power of branding online, with the 'reach' of the Internet increasing customer choice, leading to more customer confusion and the reliance upon positive brand association. Stronger brands can also help protect wealth managers from new market entrants (whilst the same long-term potential for brand recognition exists for new entrants as for existing incumbents, the former will require a sustained and costly effort in order to establish its brands (Diese et al 2000). However maintaining a brand strategy online presents altogether different 'challenges and simple 'trust' in the provider becomes less likely to succeed. The potential iinteractivity, accessibility and anonymity of the web raises client expectations and lowers loyalty. In response effective brand strategies can be employed, with the Internet acting as an effective medium through which the wealth manager can make available interactive tools and applications to tie the user to them (McHale et al, 2002).

Baker (2001) also suggests that the Internet requires a more distinctive approach to brand building focusing upon the six critical issues of customer satisfaction, content, use of technology, security, price and first mover advantage. However, given the fact that financial services organisations have struggled in delivering brand identity in the past how can they be more effective online? There is evidence from Mainspring Inc. (Franklin & Latimore, 2002), which reveals that the HNW investor is more concerned with brand value than those with fewer assets to invest. This may benefit those private banks with a strong brand image, although this can quickly turn against them

should they use the Internet to expand into unfamiliar sectors of the affluent market, where they run the risk of alienating existing clients – who may feel that their custom is no longer desired. The choice therefore for the wealth manager will be to either exploit such traditional strengths by transferring a recognised brand online, or establish an new operating brand for the online only offering that is distinct from the master brand (Interbrand, 2001).

Irrespective of which option is adopted the objective of course must to create a ‘successful’ brand defined by Chaffey et al (2000, p159) as: “an identifiable product or service augmented in such a way that the buyer or user perceives relevant unique added values which match their needs most clearly. Furthermore, its success results from being able to sustain these added values in the face of competition”. Banks have approached brand selection with differing overall strategies. HSBC, in their short-lived tie up with Merrill Lynch, adopted the joint brand MLHSBC’ as an extension of two globally recognised financial services organisations. Others like Switzerland’s Vontobel develop their online strategy through a stand-alone and separately e-branded bank, ‘y-o-u (subsequently abandoned before its launch). However, both can be deemed to have ‘failed’, having absorbed considerable resources to establish their services and market branding. Arguably, adverse global economic conditions can be blamed, although in both cases new to market brand represented a high risk and high initial cost strategy, which in the end both were unable or unwilling ultimately to back.

In contrast. The Royal Bank of Scotland Group have adopted a multi-brand strategy, retaining private bank names such as Adam & Co. ([http:// www.adamandcompany.plc.uk/](http://www.adamandcompany.plc.uk/)) and Coutts ([http:// www.coutts.com/](http://www.coutts.com/)) as separate brands, each with its own distinctive customer image (Coutts was one of the UK wealth managers to launch Internet-based wealth management services thereby migrating their traditional brand online). A similar approach has also been adopted by Credit Suisse, who retain a stable of half a dozen or so small Swiss private bank brands in their portfolio. However, whichever approach is adopted, to maintain the success of brand building efforts the organisation must be effective in not only developing of multiple delivery channels, but also ensuring that a consistent, rewarding and interactive service is provided. It has also been argued that to gain a sustainable competitive edge it is necessary to establish a strong brand community (Forsyth, 2002). Brands are perceived to have both core functional and non-functional features (sometimes referred to as the ‘Augmented Brand) and by augmenting emotional values, added services and ubiquitous presence brands can be used to set one company apart from another (Baker 2001). Through the establishment of a strong ‘brand identification strategy; wealth managers should seek to cultivate an identity that clients value by providing rich information on products/ services or other attributes (real or perceived) enabling HNWI to shortcut the hierarchical search process and wealth managers to lock in customer habit and channel choice in their favour (Wharton School, 2002 and Evans & Wurster, 2000).

## SEGMENTATION STRATEGY

There are many different ways in which markets can be segmented. Chen (2001) points to the classical consumer marketing segments, identified by geographic, demographic, psychographic and behavioural variables, although in the wealth management market the following emerge as the key segmentation strategic currently being applied:

**Investor Behaviour:** Investor segmentation, described as loyalists, high maintenance, discounted and online, immersed and uninvolved (Asher 2001) is often used as the basis for segmentation. Another definition of client investing styles is used by Franklin & Latimore (2002) – see Figures 2 below. These, or near derivatives of them, frequently feature in the design of online services. However they originate from studies of offline behaviour and as ‘Create’ and ‘MLHSBC’ found to their cost, such behaviour does not necessarily translate online.

**a. Wealth Definitions :**

	<b>Investable Assets</b>	<b>Income</b>	<b>Net worth</b>
Middle Net Worth/ Emerging HNW	\$250.000+	\$75.000+	\$500.000+
Millionaire	\$500.000+	\$100.000+	\$1 million +
Ultra High Net Worth	\$5,000.000+	\$225.000+	\$10 million +

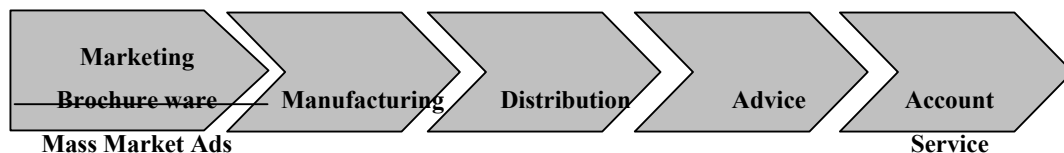
**b. Investing Style Definitions :**

Self- directed	Researches, trades, and manages portfollo independently
Cooperative	Uses advisor for some tasks: executes others independently
Dependent	Relies on advisor all personal financial management

**Figure 2. Wealth and Investing Style Definitions**

Source : Franklin, J. &amp; Latimore, D (2002), IBM Business Strategy Consulting.

Such investor behaviour variables influence not only marketing of wealth management services, but also the manufacture and distribution of products and the delivery of advice and account services (see Figure –3 below). Evidence of the use of such variables in the wealth management market is widespread, and commonly used in conjunction with measures of actual wealth.

**Figure 3. Online HNW Focus**

**Client Wealth:** HNWI is often described according to ‘current value’ (Figure -4 : HNWI Investor Type). E.g. Merrill Lynch’s experiment with the establishment of an office in Los Angeles exclusively for clients with over US\$ 10 million in investable assets and Schroeder’s reluctance to provide banking services to those with under £3m in available wealth. However, even within such segments there are likely to exist different sub-sectors. For example, whilst ‘average’ HNWIs may be investors in equities, would this also hold true for the younger HNWI who may be more interested in spending his/her wealth?

**A. High Net Worth Segment Types**

High Maintenance	14%
Discounted & Online	12%
Immersed	33%
Uninvolved	15%
Loyalist	26%

**B. HNWI Investment Decisions**

<b>Approach to Investment Decisions</b>	<b>High Maintenance</b>	<b>Discounted and Online</b>	<b>Immersed</b>
Makes most decisions after regularly consulting advice	26%	11%	38%
Uses variety of sources makes own investment decisions without advisers	30%	40%	19%
Advisor makes most or all investment decisions	6%	7%	14%
Makes most decisions but uses adviser for specialised needs only	26%	39%	21%

**Figure 4. HNWI Investor Types**

Source Asber, J., 2001

**Technical /IT literacy:** The challenge of the Internet as a delivery channel lies in providing a rewarding customer experience, which will vary from client to client. The HNWI is far less homogenous than may be the case in the retail market and customer demand may be influenced by the propensity to use the Internet. It may be logical therefore to expect online wealth management services to be designed around this segment's higher IT literacy (although if segmented in this way the Internet may actually act as barrier to future growth).

**Other Forms of Segmentation:** Cultural segmentation may be applied to reflect difference between say 'old wealth' and new wealth clients, with the latter typically created their wealth and being more technology savvy, requiring a wider choice of products and an altogether different level of attention and self-service. Another approach to segmentation has been adopted by Gibraltar Bank based in Florida ([http:// www.gibraltarbank.com/](http://www.gibraltarbank.com/)). Its success is claimed to be due to a focus on cultivating spheres of influence, particularly amongst professionals, irrespective of whether introduced clients meet popularly held wealth segment criteria. In this way they encourage quality referrals from satisfied professionals, effectively segmenting their business by introducer (Bernstel, 2002). We also see a widespread use of geographical segmentation with, for example, key differences in investor preferences on each side of the Atlantic so far restricting the impact of European wealth managers on the North American market and vice versa. Geographic segmentation also inhibits the ability of the extended' wealth managers to offer truly global services. Although some progress has been made by say the likes of HSBC and Citibank, they still have a long way to go before they are able to command anywhere near the type of recognition enjoyed by many non financial services organisations.

Increasingly, such methods of segmentation may become less relevant. Instead, there is a growing need to understand the factors that drive the individuals financial lives, such as life events, changing income, family structures/stages and future aspirations. More importantly perhaps is the client's own expectations. They predominantly wish to be treated as individuals and not categories so any organisation looking to segment needs to establish a clear strategy and provide the right client handlers, environment and delivery channel to cater for each segment's needs. Such an understanding will enable providers to give appropriate advice and act consistently in the clients best financial interests. According to Hall 2003, the value of such segmentation perhaps explains why even the largest Swiss private banks UBS and Credit Suisse, still retain a collection of smaller private banks (e.g. Bank Leu, Clariden, Hofmann, Ferrier Lullin, Bank Ehinger, Cantrade, Armond von Ernst and Banco di Lugano) each appealing to its own particular client segment.

**CONCLUSION**

Here the principal objective was to consider the key strategies adopted by wealth managers, specifically in the context of the e-enabled environment. A multi-channel approach to wealth

management is now certainly being adopted by all but a few, although the approach to channel branding often differs. The single brand multi-channel strategy is, however, meeting with a general acceptance. This does not mean that innovative new entrants cannot gain market share and, as we have seen with the introduction of aggregation services, the potential does exist for disintermediation. The resultant danger is that the market will then fragment into single service/product providers at a time when clients are increasingly demanding the opposite in order to deal with their ever complex financial needs. As a result it has been seen that branding is becoming more important in building and maintaining client relationships and, through appropriate segmentation, services can be delivered at the right time, through the customer's channel of choice (in reality most have elected to take a combined approach, adopting elements of more than one strategic choice. This reflects the immaturity of the online wealth management market, where long-term success is in short supply and the winning strategy remains unclear). However, the method of segmentation varies and as result there remains much uncertainty still about the segmentation formula that works.

Moreover, the second objective was to understand the impact of e-commerce upon the wealth manager's competitive position. Rethinking business strategy in a customer-focused manner requires a detailed understanding of client needs and the capabilities of the wealth services, providers. Private banks must also accept that to retain a competitive advantage it will not be enough to simply preserve the air of exclusivity. They must also compete for the new wealth, enhance their service and reduce costs of they are not to see their client bases mature. This is where e-commerce can help. It enables CEO's to focus upon 'differentiation' (as opposed to cost leadership) through distribution channel strategies and new products, interactive tools and online services are now emerging as wealth managers seek to tie clients to their special brand of wealth management. Traditionally, three generic market strategic have been put forward, namely cost leadership, differentiation and focus. However, the ultimate market goal must be to achieve a competitive and profitable advantage over rivals. In this respect e-commerce can facilitate all three, albeit that client perception and reality sometimes differ and few wealth managers have yet been able to provide a single interface to provide a solution to all a clients needs. Therefore, hard choices may have to be made in order to determine whether they remain, as Robinson et al (2002) suggested, 'traditional wealth managers', 'extended wealth managers or simply 'wealth product providers'.

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## THE STUDY OF THE INFLUENCE OF THE CARDBOARD PACKAGE ON THE QUALITY OF THE FOOD PRODUCT. CASE STUDY – PIZZA PACKED IN CARDBOARD BOX

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### Abstract:

*Food packaging is not considered any more just a necessary accessory to protect and transport the goods, it currently plays a complex role – technological, for protection, and for marketing. Because the packaging comes into direct contact with the product, it requires a number of restrictions and safeguards on the material used to make packaging, in order not affect the quality and safety of packaged food. However, migration of packaging constituents into food could not be stopped entirely. Developments in food packaging materials have significantly improved their stability, but nevertheless, we can affirm that it doesn't exist an ideal material for packaging, which shows only benefits.*

*In this paper we studied the influence of the cardboard box on a very popular product - pizza which is very often delivered in this type of packaging. The results show that there is the phenomenon of migration from the cardboard to the product and package significantly affect the quality characteristics of the food. One can say that there is an interaction between packaging and product, which results in lower quality and the emergence of risks associated with consumption of pizzas packed in cardboard boxes. Analyses were performed on unpackaged items at a time of packing and two hours after package. We noted that the properties of the product which is longer in contact with the cardboard are not the same as when placing into the package.*

*All food properties change due to inward migration of components to product packaging material.*

**Key words:** food quality, food safety, cardboard package, migration process

**JEL classification:** D18

## INTRODUCTION

Food is a universal human need and people hope and expect from their foods not to hurt them. The problem of food safety and food security is becoming an international concerning. More and more firms involved in food processing and distribution are trying to find the appropriate methods to limit the degradation of the products and to assure the food safety and security.

Food safety is describing the handling, preparation, and storage of food in ways that prevent food-borne illness. This includes a number of routines that should be followed to avoid potentially severe health hazards.

One of the most important methods used for assuring the food safety is packaging. The package is a very important accessory for the food product because it has to fulfil the following requirements:

- to assure an appropriate protection for the food product against the environmental factors;
- not to interact with the food in order not to change the product's properties;
- to create an inner environment favourable for the food, which do not allowed the development of micro organisms;
- to contribute to the promotion and marketing of the food product;
- to represent a mean of information for the consumers.

Food packaging can retard product deterioration, retain the beneficial effects of processing, extend shelf-life, and maintain or increase the quality and safety of food

Because the packaging comes into direct contact with the product, it requires a number of restrictions and safeguards on the material used to make packaging, in order not affect the quality and safety of packaged food.

In our paper we studied the influence of the cardboard package on the quality of pizza through the sensorial, physical and chemical properties of the product and we tried to assess the migration process.

## 1. LITERATURE REVIEW

The safety of feed and food at any point in the chain from producer to consumer is of worldwide concern. Food safety hazards may be introduced at any stage, therefore adequate control throughout the production chain is essential. A report of the ISO published at the end of 2008 ([www.iso.org/iso/focus](http://www.iso.org/iso/focus)) underlined that unsafe food is a risk for all – consumers can become seriously ill, and the industry can face costly corrective actions. Communication and raising awareness of potential hazards throughout the entire food chain – and therefore not restricted to one's company or department – is crucial. Food safety is a joint responsibility for all of the participating parties.

The European Union has a comprehensive food safety strategy. This covers not just safe food, but also animal health and animal welfare, and plant health. The strategy ensures that food is traceable as it moves from the farm through to table, even if this means crossing internal EU borders, so that trade is not held up and we have choice and variety in our food. The high standards are applied to food produced inside the EU and to food imports. ([http://europa.eu/pol/food/index\\_en.htm](http://europa.eu/pol/food/index_en.htm)).

Because peoples are getting more meals away from their homes, they need to be sure that food is safety and gets no risks for the consumers. Restaurants and other food services businesses are concerning to adopt the appropriate management methods to improve their activities and to avoid any kind of problem regarding the food safety (Redman, 2007).

The scientific literature is very abundant in works regarding the specific risks associated with processing, packaging, delivering and preserving the food. Hemminger (2000) makes a detailed description of the food hazards which can cause food safety problems and discuss about the facilities and the equipments used for controlling and monitoring the food preparation and other food services. The role of the package is outlined in the context in which more and more foods are delivered and consumed in a different location compared to the place of production.

The modern management of the restaurants is based on HACCP method and implementation of the ISO 22000 standard. In its book, Stavrositu (2008) pays a special attention to the management of the restaurants with all its aspects: organization, supply, food preparation and preservation, sanitation rules, service delivering and food safety. We can find here an interesting guide to implement the HACCP method in a restaurant which assures simultaneously the safety and the quality of the products. The time between cooking and serving the product is an important parameter in the assessment of its quality. Also, the specific food hazards for a restaurant are enumerated and described.

About the role of the package and the materials used for packaging, Marsh and Bugusu (2007) described the main roles as: protection/preservation of food products from outside influences and damage, containment and food waste reduction, marketing and information, traceability, convenience, and tamper indication. It is obvious that no packaging material can fulfil all these roles alone, because any of them is characterized by advantages and disadvantages. The trend is to combine different packaging materials with the aim of eliminate the disadvantages and use the advantages (Albu, 2006).

The direct contact between food product and its package lead to the phenomenon of migration – the mass transfer through the two parts in both directions. For the food safety it's important the migration from the package to the product which brings in the food contaminant substances. The migration is a slow process, so the contact time between package and product has a major importance (van Willige, 2002).

The migration process has two main impacts on the package food:

- the first impact is on the food safety – some compounds from package can be very dangerous if it will arrive in the food in sufficient quantity;
- the second impact is on the food quality – the substances which have migrated can affect the sensorial and chemical properties of the food (van Willige, 2002).

The requirements for the cardboard used for food package are specified in the EU legislation, making the difference between new cardboard and cardboard obtained from recycled materials. It is specified very clearly that the migration process from cardboard boxes and food products doesn't have to allow the transfer of dangerous products which can affect the health of the consumers. Also, there are very strict limits for the heavy metals compounds, chlorine and other organic compounds (Barnes and others, 2007).

For the specific food product we have studied – pizza – there is information about the requirements for the cardboard box: to protect the product against the light, to limit the transfer of the oxygen, water vapours and carbon dioxide from the atmosphere, to maintain the temperature and the humidity inside the box (Ahvenainen, 2000). The cardboard for pizza represent a real risk if they are produced from recycled paper; the traces of inks, glues, paints and other chemicals were found in the pizza by the Italian researchers from Milan University (2008). The main explanation of the migration phenomenon is the high temperature inside the box, (aprox. 65°C), which enhances the mass transfer. All the studies affirm the existence of the migration process, but can not assess precisely the quantity of the compounds transferred to the food product.

## **2. MATERIALS AND METHOD**

In our research we studied the both parts involved in the migration process – the package and the food product.

### **2.1. THE CARDBOARD PACKAGE BOX**

Package design and construction play a significant role in determining the shelf life of a food product. The right selection of packaging materials and technologies maintains product quality and freshness during distribution and storage.

The use of paper and paperboards (as cardboard) for food packaging dates back to the 17th century with accelerated usage in the later part of the 19th century (Coles, 2003).

Cardboard is thicker than paper with a higher weight per unit area and often made in multiple layers. These features lead to better barrier properties than paper. It is commonly used to make containers for shipping – such as boxes, cartons, and trays, and seldom used for direct food contact. Pizza delivered in cardboard boxes represents an exception from these usual types of paperboard package. There are 4 main types of cardboards used for packaging the food: white board, solid board, chipboard and fibreboard.

Brown board – is made from several thin layers of not bleached chemical pulp, is typically used as the inner layer of a carton; it is the only form of cardboard recommended for direct food contact.

Solid board – has multiple layers of bleached sulphate board which give strength and durability. When laminated with polyethylene, it is used to create package for liquids (milk, fruit juices, soft drinks).

Chipboard – is made from recycled paper and often contains blemishes and impurities from the original paper, which makes it unsuitable for direct contact with food. The least expensive form of paperboard, chipboard is used to make outer packaging.

Fibreboard – can be solid or corrugated; the solid type has an inner white board layer and outer Kraft layer and provides good protection against impact and compression. The corrugated type, also known as corrugated board, is made with 2 layers of Kraft paper with a central corrugating (or fluting) material. Fibreboard's resistance to impact abrasion and crushing damage makes it widely used for shipping bulk food and case packing of retail food products, but not appropriate to direct contact with food.

The cardboard package which enter in direct or not direct contact with the food don't has to allow the migration process of its own compounds to the food product. Because this is not possible (it doesn't exist an ideal cardboard), the substances from the package which are migrating to the food must not overcome the safety limits.

In the particular case we studied, the cardboard box for pizza was made from brown paperboard. The main analysis we made for package box were the measuring of its mass at various moments of time and the describing of its aspect. For the assessment of the mass variation we weight the cardboard box at 3 different moments: before entering the pizza inside the package, after 1 hour and after 2 hours from the moment of packaging.

At these 3 moments taken into consideration we also have analyzed the aspect of the box.

## 2.2. THE FOOD PRODUCT – PIZZA

Pizza is a traditional Italian food consisting in a thin piece of bread with circle form, covered by tomatoes juice and cheese, with different toppings, backed in oven. The name of this very delicious food came from Latin word *pissa*, which means "plane bread". The first pizzeria was opened in Naples in 1830 and it is still working now days. Till the Second World War pizza was known in France, England or Spain, but the foreign soldiers tasted this plate and spread it all over the world.

At the beginning, the dough was made only from wheat flour, salt, yeast and water, but during the time was added more ingredients like olive oil, sugar, milk or eggs. The mozzarella cheese and tomatoes juice are mandatory ingredients, besides them can be added vegetables, salami, sausages, meat, fish, even fruits. There are hundreds of recipes for pizza which satisfied all consumers' tastes.

For the study we choose the classical pizza made with bacon, mozzarella, mushrooms, onion, olives, tomatoes sauce.

Our study had the purpose to determine the influence of the cardboard package on the quality of the pizza. For this, we used several lab analyses for the assessment of the product quality:

- sensorial evaluation,
- physical and chemical determinations
- microbiological analysis.

From the first group, we evaluate the overall aspect of the product, including the dough and the ingredients aspect and the aspect in the section, the smell, the taste and the consistency. As work method, we used the Score method with the scale from 0 to 20 points.

The other group of methods consisted of the analysis of: water, fats, salt and other minerals content and acidity value (pH).

The microbiological analysis determined the number of micro organisms colonies.

All the analyses were performed at three moments of time, the same moments took into account for the package box assessment, e.g. after cooking the pizza (before entering the cardboard box), after 1 hour and after 2 hours from the moment of packaging.

The values of the lab determinations and the sensorial observations were used for the assessment of the influence of the paperboard package on the quality of the pizza and were compared with the values recommended from the standard of the product. The process was repeated for every moments of time took into consideration.

## 3. RESULTS AND DISCUSSION

After making the determinations listed above, we obtained the following results:

### 3.1. THE CARDBOARD PACKAGING BOX

The properties at the 3 times mentioned are presented below:

*At the first stage* – before entering the pizza into the package:

- we used a paperboard box with lid;

- the weight of the cardboard box – 140 g;
- the dimensions were 30 x 30 x 6 cm;
- the box was clean, without spots and unpleasant smells.

*At the second stage* – after 1 hour from the moment of packaging:

- the dimensions remained the same;
- the weight of the box – 162 g;
- we noticed some spots on the lid in the places where the pizza touched the box.

We considered that the increasing of the mass is due to two factors: first, the water vapours condensation from the inner atmosphere into the box, and second, due to the migration process, some fats from the ingredients passed to the cardboard box.

*At the third stage* – after 2 hours from the moment of packaging the pizza: all the process noticed at the previous stage continued, the mass was 175 g, the surface of the spots covered more than a third of the surface of the lid and there were spots on the bottom of the box, too.

### 3.2. RESULTS OF THE SENSORIAL ASSESSMENT OF THE PIZZA

The sensorial evaluation of the pizza used the following table with the scores for different sensorial properties:

**Table no. 1. The scores for the sensorial assessment**

Sensorial properties	Scores
External aspect	3 points maximum
Aspect in the section	5 points maximum
Consistency	3 points maximum
Taste	5 points maximum
Smell	4 points maximum
<b>TOTAL</b>	<b>20 points maximum</b>

Using this score method, we can have 5 quality classes:

**Table no. 2. The quality classes for the sensorial evaluation of the pizza**

Score [points]	Quality group
19,5 – 20	Excellent
18 – 19,4	Very good
16 – 17,9	Good
13 – 15,9	Satisfactory
under 13	Not satisfactory

After the assessment of our product at the three stages mentioned above, we obtained the following results:

**Table no. 3 Sensorial analysis of the pizza**

Sensorial properties	Score after the first stage	Score after the second stage (1 hour)	Score after the third stage (2 hours)
External aspect	3	2,5	2
Aspect in the section	5	4,5	4,5
Consistency	3	3	2,5
Taste	5	5	4,5
Smell	4	3,5	3,5
<b>TOTAL</b>	<b>20</b>	<b>18,5</b>	<b>17</b>

The total score obtained by the pizza led us to the conclusion that the quality is going down during the time of packaging in the paperboard box. At the first stage, before packaging the food product, the score for all the properties were maximum, so we graded the product in the "Excellent" class of quality; after 1 hour, the score was 18,5 points, the properties which had a decreasing score were external aspect, the aspect in section and the smell. The pizza was graded in the second quality class – "Very good".

In the third stage, after 2 hours of packaging, all the properties were decreased, so we score the product with 17 points, which means the "Good" class of quality.

As a partial conclusion, the sensorial properties are influenced by the time of staying in the package box, as time is longer, the properties are decreasing.

### 3.3 RESULTS OF THE PHYSICAL AND CHEMICAL DETERMINATIONS

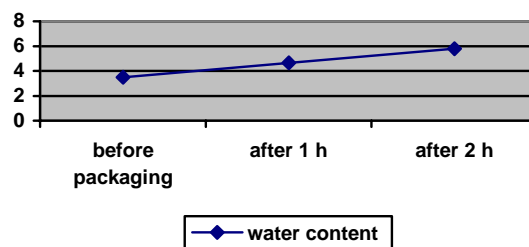
The main analyses performed were: determination of water, fats and salt content and pH value, repeated at every of those three stages of analysis.

Water has an important influence on the consistency and viscosity of the food products. It represents the dissolution medium for a lot of compounds and favours the development of the micro organisms. A value of the water content more than 16% favours the development of the moulds and at values bigger than 20 – 30% are developing the bacteria and yeasts. In our research we used the indirect method for the determination of the water content – determination of the dry substance. The values corresponding at the three stages of analysis are shown in the following table and graph:

**Table no. 4. Variation of water content**

Before packaging	After 1 hour	After 2 hours
3,48 %	4,65 %	5,8 %

For pizza product, the maximum value accepted for the water content is 10%.



The cause of the rising of the water content is the condensation of the water vapour from the atmosphere. The packaging box has a porous structure which allows the movement of the vapour into the box. Even the water content is rising, the values still remain under the upper limit of 10%, but more water in the product is the main cause of the decreasing the quality.

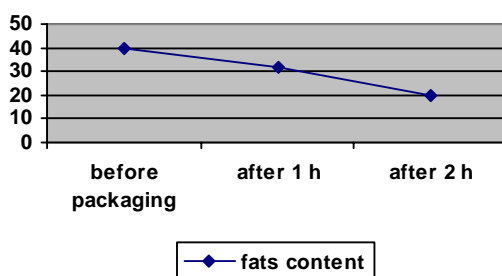
The fats are important ingredients in a food recipe; they improve the taste and led to the fullness feeling.

For determining the fats content we used a very popular and known method – Soxhlet method, and we obtained the following results:

**Table no. 5. Fats content in the pizza**

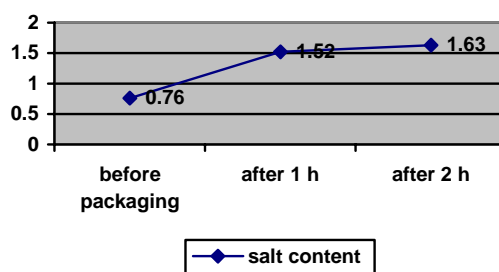
<b>Before packaging</b>	<b>After 1 hour</b>	<b>After 2 hours</b>
40 %	32 %	20 %

The fats content is decreasing during the package period and we assumed that the reason is the migration process from the pizza to the cardboard box. The spots on the packaging box are come especially from the fats of the product; those are in the liquid form due to the high temperature of the pizza after cooking.



The values are not exceeding the maximum limit claimed in the pizza standard – 40 %, which is attained only at the first stage, before packaging.

The salt from the pizza come from some ingredients (bacon, olives) and also was added according to the recipe. The maximum value of the salt content can be 3%, as the value is higher, as the quality of the product is lower. Due to the migration process, the salt content is rising during the staying in the cardboard box, as we can see from the graph below:



During the first hour of packaging the increasing of salt content is grater, the value after 1 hour is more than double regarding the initial one. All the values are under 3%, so we can consider that the pizza can be consumed, even if the quality is getting worse.

The content of the other minerals from the pizza was determined from the dust remained from the calcinations of the product, using the X-ray spectroscop EDX connected at computer. In the table no. 6 is the variation of the mineral content during the two hours period.

**Table no. 6 Minerals content in pizza**

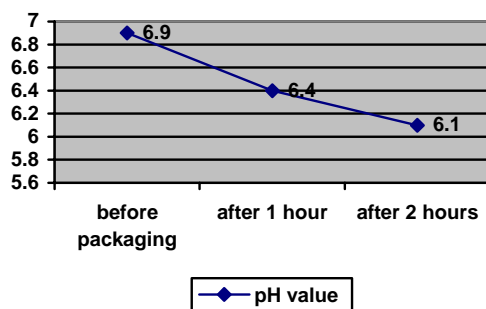
<b>Mineral substance</b>	<b>Before packaging</b>	<b>After 1 hour</b>	<b>After 2 hours</b>
Chlorine	58,148%	20,304%	9,358%
Calcium	18,118%	10,234%	5,346%

Potassium	13,182%	10,235%	9,876%
Phosphor	8,869%	8,476%	8,123%
Sulfur	1,269%	1,108%	0,986%
Iron	0,128%	0,034%	0,001%
Zinc	<b>0,127%</b>	<b>0,683%</b>	<b>1,25%</b>
Cooper	<b>0,047%</b>	<b>1,396%</b>	<b>1,987%</b>
Bromine	0,029%	0,023%	0,013%
Chromium	<b>0,024%</b>	<b>0,149%</b>	<b>0,954%</b>

As we can notice, the content of the minerals is decreasing at the major part of them, except zinc, cooper and chromium which record an increasing percentage; this fact can be dangerous for the consumer because these three minerals are included in the group of heavy metals – metals with high toxic potential. Comparing with the maximum values stipulated in the Government Decision no. 1197/2002, we found that they are grater than upper limit, which is a negative aspect.

We consider the migration process the cause of these results, the mineral from the paperboard are passing in the pizza during the staying in the packaging box.

The last analysis from this group was the acidity determination (pH value). The acidity of a food product is a very important indicator which gives information about the freshness status. As the food is loosing the freshness, as it becomes more acid. The limit value for the acidity is 6, superior values (which means pH less than 6) indicates a low quality for the product. With all the ingredients used for making the pizza, it has neutral to weak acid character. For the measurement of the pH values we used the digital pH-meter; the results are shown in the graph below:



The acidity of pizza is growing without overcoming the limit value, but we can affirm that after 2 hours of staying in the paperboard box, the pizza has poor properties, at the limit of acceptance.

### 3.4. THE RESULTS OF THE MICROBIOLOGICAL ANALYSIS

All the foods are very good media for the development of the micro organisms due to the nutrients from the composition of these products. The presence of water and the high temperatures favours, also the multiplication of the bacteria. For pizza, the maximum number of the micro organisms' colonies is 10000 at 30 °C. For our product, the results of the microbiological analysis are:

**Table no. 7. Number of micro organisms colonies**

Time [min]	Number of micro organisms colonies
0	8000
60	9000
120	10000



This analysis shows, too, that the quality of the pizza falls during the package in the box, the characteristics after 2 hours are on the lower limit of acceptance.

#### 4. CONCLUSIONS

This paper deals with the influence of the package on the quality of the food product, studied through the sensorial, physic, chemical and microbiological properties. The study focused on a very popular product – pizza – which very often arrives at the consumer in a cardboard box. Because the traffic becomes more and more heavy, pizza arrives at the destination after a longer time. This fact influences the characteristics of the product, whose quality is getting worse. The cardboard box creates a micro-environment into the package which favours the migration process in both senses which affect the quality of pizza. After 2 hours of staying in the package the product reaches the lower limit of its properties and it is not recommended to be consumed.

After this study, our opinion is that pizza has to be consumed immediately after the cooking and if it has to be deliver at a different place from the one where was made, the time must not overcome 1 hour.

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12. [http://europa.eu/pol/food/index\\_en.htm](http://europa.eu/pol/food/index_en.htm)

## RAPEX SYSTEM - AN EFFICIENT TOOL FOR EUROPEAN CONSUMER SAFETY

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### Abstract:

*The article analyzes the current state and future prospects of the European rapid alert system for dangerous non-food products (RAPEX), underlining its fundamental role in creating the necessary framework for the trade with safe products that meet consumers' right to privacy, health and safety.*

*The objectives and functioning of the RAPEX system, based on legislative initiatives geared towards the European consumer safety, converge, aiming at both monitoring the effectiveness and coherence of activities undertaken by the Member States' market surveillance, and promoting compliance with EU requirements on product safety, thus creating a base for actions at EU level sustaining the proper functioning of the internal market.*

**Keywords:** consumer protection, product safety, dangerous goods, GPSD, RAPEX

**JEL Classification:** D18, P46

## 1. INTRODUCTION

Developed and implemented gradually, in parallel with the rising of the degree of European integration and internal market dynamics, consumer policy in the European Union (EU) has emerged more clearly after the adoption of the Single European Act in 1986 [1], becoming a stand-alone policy upon the entry into force, on 1 May 1999, of the Amsterdam Treaty, which gave increased responsibilities to the European institutions in promoting consumer rights.

Currently, acting as a consumer, every citizen of the EU enjoys a similar level of protection, regardless of country of origin, in the context of the European Union paying particular attention to the legitimate interests of protecting the health and safety, economic welfare, information and education, compensation (redress) and association of consumers.

In a world of a common currency, development of electronic commerce, where trade barriers have been minimized, all these issues shape the desire to improve the quality of life through the integration of Community regulations in all relevant consumer policy areas of at Community level.

Thus, areas with an impact on the general interests of European consumers are considered to be, among others: trade practices and unfair contract terms; misleading and comparative advertising; labeling; indicating prices; distance and direct selling; travelers' rights, tourism services packages; using real estate as "timeshare".

Enforcement of European consumer protection have been gradually expanded, so that European vision and strategy for 2007-2013 [4] reflect the new objectives related to increasing power and consumer confidence, which must be effectively protected against serious risks and threats. The implementing dimension of the new strategy is found in multiple steps of a practical nature, especially in relation to those groups of goods/services that are likely to raise concerns regarding safety and security in their use or consumption.

## 2. RAPEX – its role and meanings

Since 1992 (by Directive 92/59/EEC [8]), continuing in 2001 (by Directive 2001/95/EC, currently under revision, replacing the previous one), the EU focuses its attention on developing and implementing general product safety regulations, which are based on systematic approaches capable of providing effective market surveillance, in cooperation with the competent authorities in member countries. The basis of this integrated approach consists of a dedicated system, entitled "RAPEX", created in 2004 on the basis of Article 12 of Directive 2001/95/EC on general product safety

(GPSD), which allows the market surveillance authorities and the European Commission to distribute and effectively fructify information about dangerous products identified in the European market, to the benefit of consumers.

The system was also created by virtue of the notification procedure established under Article 11 of Directive 2001/95/EC [8], improving the operation of the RAPEX system by defining new risk assessment methods associated with products, in support of the control competent authorities.

The GPSD Directive differentiates by gravity the risks associated to products, as follows [8]: art. 12 notifications relates to a high risk, while art. 11 relates to notifications of moderate risk (for which the user provides a distinct RAPEX procedure).

"RAPEX" (as the English acronym for "European Rapid Alert System for Dangerous Consumer Products" or "Rapid Alert System for Non-Food Consumer Products") is the single EU rapid alert system intended for dangerous consumer products, except for food, feed, pharmaceuticals and medical devices, which are regulated by other mechanisms (e.g. RASFF) [13]. The role of this system is to facilitate the rapid exchange of information between Member States and the Commission on measures taken to prevent or limit the sale or use of products posing a risk to consumer health and safety. Thus, RAPEX – an electronic system, currently including 30 countries (27 EU member states and EFTA/EEA countries: Iceland, Liechtenstein and Norway), provides the proper framework so that information about dangerous products withdrawn from the EU market and/or recalled from consumers, as well as adopted measures shall be transmitted quickly between Member States and the European Commission.

RAPEX also aims at products covered by sectoral /vertical directives (e.g. those for cosmetics, toys, electrical appliances, personal protective equipment, machinery, cars, vehicles), which pose a risk to consumer health and safety. Although some of these directives provide a separate notification procedure ("safeguard clause"), their purpose is not to be confused with the objectives of RAPEX.

Starting January 1st 2010, with the entry into force of Regulation (EC) no. 765/2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products, the scope of RAPEX has been extended to cover both "consumer" and "non-consumer" type of products, aiming also at risks for various public interests, such as health and consumer safety, environment, health and safety at work, public safety - referring to most products currently on the market.

Also, RAPEX refers to products supplied by or found "on-site" at service providers, involving active use by the consumer (e.g. hair dryers in hotels; sunbeds, if they are operated the consumer).

In addition to the European legislative framework underpinning the RAPEX, on 16 December 2009 was adopted the Commission Decision 2010/15/EU laying down guidelines for the management of the Community Rapid Information System 'RAPEX'. RAPEX Guidelines complement GPSD by defining and clarifying key-issues in the operation of the system. The components of the RAPEX system are of complementary nature [7], being essential for effective and efficient functioning; these include:

- a legislative framework underpinning the operating mode of the system (GPSD User's Guide);
- an online application ("RAPEX Application"), which allows Member States and the Commission a rapid exchange of information through an electronic platform;
- RAPEX national contact points network, responsible for the operation of RAPEX;
- RAPEX national networks, established in all Member States, including RAPEX contact points and authorities involved in ensuring the safety of consumer products;
- RAPEX team of GPSD Commission department, which reviews and validates the documents submitted by RAPEX, maintaining and ensuring the correct functioning of the RAPEX system;
- RAPEX website ([www.ec.europa.eu/rapex](http://www.ec.europa.eu/rapex)), which contains summaries of RAPEX notifications under Article 16 (1) of the GPSD;

- RAPEX publications (e.g. RAPEX statistics, RAPEX annual reports, informative materials).

Constant and rapid exchange of information between Member States is achieved through national RAPEX contact points, which are responsible for all information transmitted through the system by the country concerned. In this regard, Paragraph 10 of Annex II to the GPSD provides that "responsibility for the information provided lies with the notifying Member State."

The monitoring competent authority of each Member State (for Romania: National Authority for Consumer Protection) has, according to Article 12 of the GPSD and Article 22 of Regulation (EC) no. 765/2008, the legal obligation to use the RAPEX system and notify the Commission if the following *four criteria* are met [7]:

- the product is a consumer product;
- the product is subject to measures designed to prevent, restrict or impose specific conditions on its sale or use („preventive and restrictive measures”);
- a product poses a serious risk to consumer health and safety;
- the serious risk has a cross-border effect.

Prior to a RAPEX notification, the authority of a Member State must carry out a risk assessment to determine whether the product on which the notice is to be made constitutes a serious risk to the health and safety of consumers and if, in this way, it meets one of RAPEX notification criteria [7].

As a particular situation, the measures adopted on a product that poses a serious risk that may have only local effects (local events) will not be notified through RAPEX. This applies where an authority of a Member State considers that a product has not been and will not be made available (by any means) to consumers in other Member States (e.g. measures on a local product manufactured and distributed in a single Member State).

Since RAPEX is not designated for the exchange of information concerning products posing a less serious risk, notifications relating to actions taken with respect to such products can not be accessed through RAPEX under GPSD, art. 12. If a notification cannot be sent through the RAPEX notification system, due to not meeting conditions specified in Art. 12, the national RAPEX contact point may choose to use that data for information purposes only.

The RAPEX system can also be used to disseminate information relating to products raising a risk to consumers, but, however, can not be correctly identified by authorities as they do not have sufficient data to identify the product (e.g. mark, model number, product image, the packaging etc.). These notifications are distributed for information purposes only.

Beside the fact the RAPEX system is used only for non-food products, according to art. 2 of the GPSD, the products concerned may belong to the following *categories* [7]:

- “consumer products”, being designed, manufactured consumers and made available to consumers;
- “migrating products”, products initially designed and manufactured for professionals, which are likely to be used by consumers.

In respect of the types of RAPEX notifications, there are two alternatives: “Article 12 notification” (normal, usual cases) and “Article 12 notification requiring emergency action” (whether there is a risk that threatens life and/or there were fatal accidents, and in any other cases where a RAPEX notification requires urgent action by all Member States).

Notifications must be complete, stating the following *data categories* [7]:

- Information identifying the notified product: category, name and trademark, model and/or type number, bar code, lot or serial number code, customs classification, description and packaging accompanied by pictures;
- Information certifying the origin of the product: country of origin, name, address and contact details (e.g. phone, e-mail) of the manufacturer or exporter. Detailed information on third country producers allow the Commission to promote more effectively enforcement actions in those countries and help reduce the number of hazardous products exported to the EU

- Information on applicable safety requirements for the notified product: reference number, title of regulations and standards;
- The description of the risk posed by the notified product: description of laboratory and organoleptic test results, testing reports and certificates that prove non-compliance of safety, known information about accidents or incidents, a full risk assessment followed by conclusions;
- Information on the notified product supply chains in the Member States, together with information on destination countries, importers and distributors of the notified product;
- Information on measures taken: type (mandatory or voluntary), category (e.g. withdrawal from the market, recall from consumers), scope (national or local), date of entry into force and duration (permanent or temporary).
- Information of whether a notification, a part of it or its attachment(s) are covered by confidentiality (such a request must be accompanied by a thorough justification).

Weekly (every Friday), the Commission publishes a report regarding dangerous products reported by national authorities (containing summaries of RAPEX notifications, given the confidential nature of information) which mention the product, its associated dangers and the measures adopted by the notifying country.

As a mode of operation, the RAPEX procedure includes the following *steps*:

1. When the presence of a hazardous product (e.g. toys, child care articles, cosmetics, household appliances etc.) is remarked on the market, the national authority shall take appropriate measures to eliminate the risk (withdrawal, warning etc.).

Correct and accurate identification, based on details, is a key-element for compliance with regulations and effective market surveillance, as it allows national authorities to identify the notified product and to take necessary measures, distinguishing it from the same or similar products on the market.

2. Immediately, the national contact point informs the European Commission (Directorate General for Health and Consumer Protection - DG SANCO) about the product, the associated risks and the taken measures to prevent risks and accidents.

National authorities are required to assess risks posed by the product they intend to notify (using risk assessment under the RAPEX guidelines [7]), as only those products which pose a serious risk should be notified through RAPEX.

Before sending a RAPEX notification to the Commission, the RAPEX contact point in the notifying state checks the compliance with RAPEX notification criteria and decides what type of notification will be launched via the RAPEX ("Article 12 notification" or, where appropriate, "Article 12 notification requiring emergency action").

The RAPEX Contact Point conveys to the Commission - using a standard notification form - the following *product information and details*:

- the product identification (name, trademark, model, description, image);
  - product's risk (type of risk, the results of laboratory and risk testing);
  - measures taken to prevent risks (type of measure, scope, duration, date of entry into force);
  - the distribution channels of the notified product (manufacturer, exporter, importer, distributors and countries).
3. The European Commission validates and disseminates information to national contact points, which should ensure that competent authorities verify whether the recently notified dangerous product is currently on the market. In such a case, the authorities will take measures to eliminate the risk in various ways.

The Commission reviews the information provided on compliance with GPSD and RAPEX guidelines and monitor their implementation through a thorough process of validation. In particular, a notification is not valid if another country has already notified the measures for the same product and the same level of risk.

The measures taken by the notifying state may include both prevention and limitation steps imposed by national authorities and measures taken voluntarily by producers and distributors.

GPSD Article 8 [8] provides a list of various categories of *measures* notified through RAPEX, including the following:

- marking a product with an appropriate warning on the risks it may pose;
- establishing prior conditions to the marketing of a product;
- consumers' warning about the risks that a product might pose;
- temporary ban on the supply, offer to supply and display of a product;
- ban on marketing a product and any other accompanying measures;
- withdrawal of a product off the market;
- product recall from consumers;
- destruction of a withdrawn or returned product.

The most common measures consist in prohibition/suspending the sale, withdrawal of the dangerous product from the market, informing consumers about product risks, or recall a hazardous product from consumers.

### **3. THE ROLE AND OBLIGATIONS OF PRODUCERS AND DISTRIBUTORS IN RESPECT OF DANGEROUS GOODS**

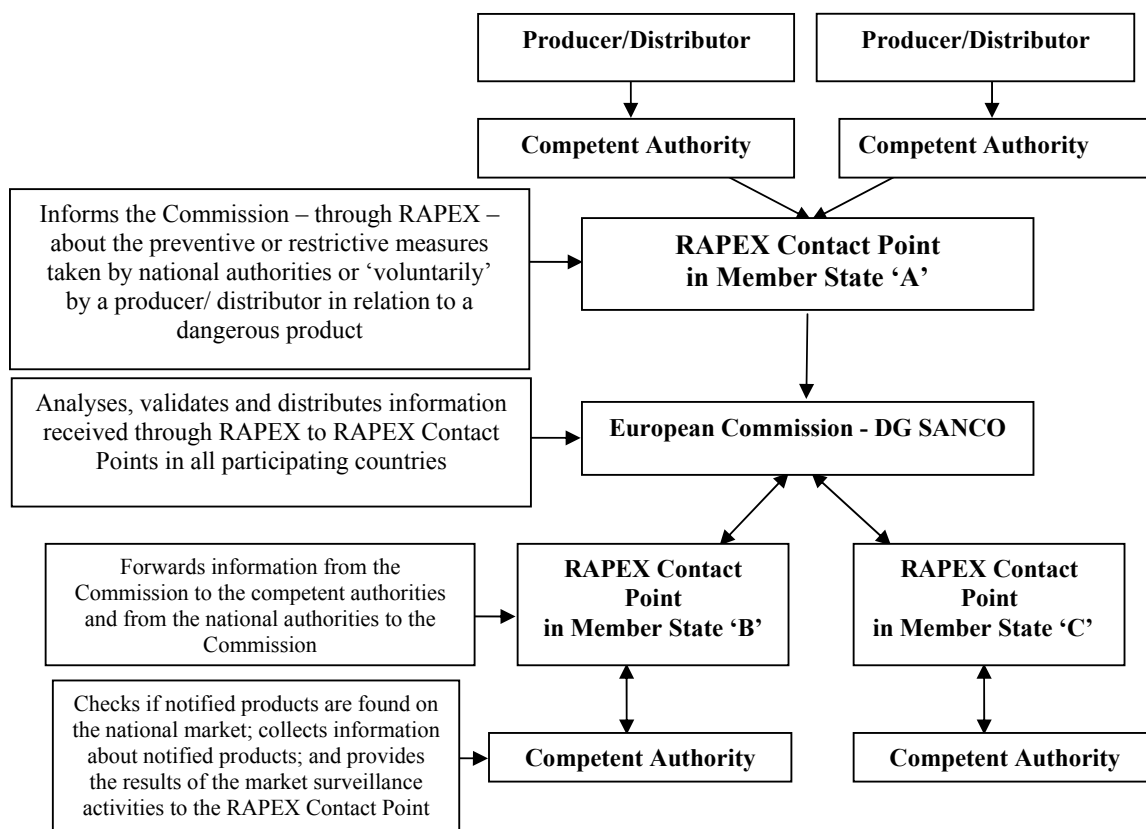
According to the GPSD and Regulation (EC) no. 765/2008, the role of national authorities is to ensure that companies comply with their obligation to place only safe products on the market. To this end, they must designate market surveillance authorities with necessary powers to take measures in order to prevent or restrict the marketing and use of hazardous products. Competent national authorities must take appropriate measures when identifying dangerous consumer products on the market, where a manufacturer or distributor has failed to take corrective action voluntarily.

Thus, product safety responsibilities are shared between the operators and supervising authorities, which, together, should establish and comply with the necessary framework to market only safe products that do not endanger the life, health or safety.

Economic organizations should be able to assess whether the products they produce/sell are dangerous because, as professionals, they have information about the product and keep contact with consumers. Therefore, once they became aware that a product is dangerous, they must take immediate action to prevent further risks to consumers. In addition, they must inform the competent national authorities, which clearly identify the product concerned, the risks posed and the information necessary to pursue. This information is then transmitted through the RAPEX system, to the Commission and other countries participating in the scheme.

Products presenting a serious risk and preventive or restrictive measures initiated by a manufacturer or distributor should be notified immediately to the competent authorities of Member States by the notification mechanism referred to in art. 5 of GPSD [8]. Operators' obligation to inform the authorities about dangerous products is a key-element in market monitoring using the procedures established by the GPSD. National authorities are able to monitor whether companies have taken appropriate steps to address the risks posed by dangerous products and to assess whether further measures are needed.

The figure below illustrates the cooperation between the European Commission, national contact points RAPEX and national markets.



**Figure 1. RAPEX NETWORK: cooperation between the Commission, RAPEX national contact points and national competent authorities**

Source: „Keeping European consumers safe”- Annual report, 2009, RAPEX,  
[http://ec.europa.eu/consumers/safety/rapex/docs/2009\\_rapex\\_report\\_en.pdf](http://ec.europa.eu/consumers/safety/rapex/docs/2009_rapex_report_en.pdf)

It is noted that there is an interdependence between these elements and the key-factor is the European Commission through its role as a “mediator” between producers/distributors and RAPEX contact points in Member States. These links are established through the competent authorities designated by the Commission in each state.

Consumers can learn about the risks of a product or the company that sold the product from the national authority, the Commission and/or media. In most cases, information is available to consumers in one of the following ways: warnings posted by the company/enforcing authority/Commission and/or withdrawal notices published in newspapers and magazines and/or posters displayed at sales points.

Regarding products recalling, if the acquisition requires the registration of a customer contact data (e.g. cars), they are informed on safety issues through letters individually sent by production companies.

Currently, European companies assume more seriously responsibilities for consumer product safety and quickly withdraw unsafe products from the market [13]. It appears that they start to use more regularly the rapid alert system for businesses (“Business Application”) which enables companies to notify online the authorities of the Member States relating to the dangerous products placed on the EU market. The online system allows businesses to alert all concerned Member States, while simplifying and speeding the whole process.

#### 4. CURRENT ASPECTS IN THE RAPEX SYSTEM FUNCTIONING

On 15 April 2010, the European Commission published the 2009 RAPEX Report [13], which points out to a significant number of cases consisting of dangerous products withdrawal from the market.

The RAPEX Annual Report 2009 is the latest report released by the European Commission, since the report for year 2010 will be published soon (in May 2011). It highlights the effectiveness of the cooperation within the EU regarding the consumer products, fact suggested by the increasing in the number of notified products by 7% in 2009 (1,993 notifications) compared to 2008 (1,866 notifications) [9]. Moreover, the total number of the notifications submitted through the RAPEX system has gradually increased since 2004 (when GPSD was transposed into national laws of Member States), so that in the sixth year of its existence, the number of notifications has increased over four times. Since 2004, the figures have grown *each year* as follows: 81% in 2005, 24% in 2006, 53% in 2007 and 16% in 2008, this phenomenon being partially fueled by the 2004 and 2007 enlargements of the EU.

In 2009, the European Commission released *1,993 notifications* [9] through the RAPEX system, including:

- 1,699 notification in accordance with Article 12 of the GPSD (preventive or restrictive measures taken by national authorities or voluntarily by operators on products posing serious risks to consumer health and safety, e.g.: stop or prohibit sales, market withdrawals, products recalling from consumers);
- 11 notifications under Art. 11 of the GPSD (measures taken by the competent national authorities on the products posing moderate risk);
- 283 notifications were distributed to Member States for information purposes, as they were not qualified for distribution in accordance with art. 12 or art. 11. Although one can note a decreasing in the number of notifications distributed for information purposes by 9% compared with 2008, notifications launched in 2009 had a higher degree of accuracy, the risks being clearly identified, which facilitated the activities of other states in taking preventive actions.

The total notifications number distributed through the RAPEX system in terms of products posing a serious risk is increasing each year. This is due to increased awareness, focus on the safety of products by national authorities and business sector, more frequent and more effective controls on consumer products market, joint market surveillance by national authorities and the RAPEX training conducted by the European Commission in different regions.

Thus, improving system efficiency is due to better market surveillance by Member States, but also to increased accountability of the operators on product safety, unsafe products being more quickly withdrawn from the market.

Regarding the situation of the notifications by notifying countries, it is noted that in 2009, 26 EU Member States and Norway have sent notifications through RAPEX. *Countries* that have sent the largest number of notifications are [2]:

- Spain (220 notifications - 13%);
- Germany (187 notifications -11%);
- Greece (154 notifications - 9%);
- Bulgaria (122 notifications -7%);
- Hungary (119 notifications -7%).

*Product categories* most frequently notified through RAPEX system were:

- toys (472 notifications, 28%);
- clothing, textiles and fashion items (395 notifications, 23%);
- automotive (146 notifications, 9%);
- electrical appliances (138 notifications, 8%);
- cosmetics (86 notifications, 5%).



Regarding the country of origin for the notified product, for 60% of notifications sent via the RAPEX system in 2009 (1,013 notifications), China (including Hong Kong) was indicated as the country of origin [9]. This situation should be analyzed in the context of the influence of various factors, such as: increasing imports of goods from China, the concentration of control actions taken at national level on Chinese products, more effective cooperation between EU and China and availability of provided information regarding the notified products' country of origin, which led to improved identification and product traceability.

In this respect, in January 2006, DG SANCO and the General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) of China signed a Memorandum of Understanding (MOU) on product general safety, according to which RAPEX information concerning Chinese products are made available on-line by AQSIQ through a special application - "RAPEX-China", which is based on quarterly reporting arrangement. At the same time, AQSIQ agreed to provide the Commission with information on the conclusions on actions taken regarding the data provided through the "RAPEX-China" application, which allows the Commission to monitor and analyze the activities of market surveillance by Chinese authorities on their territory, and allow both sides to identify and address weaknesses in their systems of cooperation [12].

In the case of 337 notifications (20% of all notifications sent via RAPEX) products have originated from the 27 EU Member States and 3 EFTA/EEA States. This is consistent with data from previous years (20% in 2008, 22% in 2007 and 21% in 2006).

Most frequently notified risk categories, which represented 82% of all alerts on dangerous products to consumers, were [9]:

- chemical (493 notifications, 26%), e.g. the presence of the substance Dimethyl Fumarate (DMF), used in consumer products, leather (shoes, furniture etc.), resulting in strong sensitivity after contact with skin (severely irritant);
- injuries (405 notifications, 21%), e.g.: of toys and childcare articles: toy weapons with arrows; beds, high chairs, cradles, writing instruments for children. The most common problems were sharp edges, insufficient stability or the presence of openings in which children could enter the feet, hands or head, thus enabling injury.
- choking (261 notifications, 14%), the overwhelming majority of notified cases refer to a choking hazard for toys for young children (under 36 months), containing elements that they could swallow;
- electric shock (214 notifications, 11%), e.g. technical defects that lead to the risk of electric shock due to insufficient wires insulation, improper cable fixing, or inadequate size of accessories;
- strangulation (182 notifications, 10%), e.g. clothes with a string/cord in the neck area for children under 7 years, which may be caught in playground equipment and cause strangulation.

It should be noted that some RAPEX notifications cover products that generate more than one risk (e.g. a toy may present a choking hazard due to small parts and, at the same time, a chemical risk due to excessive levels of dangerous substances). Therefore, the total number of notified risks is greater than the total number of notifications.

According to RAPEX data, is also concluded that each product may expose consumers to different risk categories. For example, the main risks that result from an unsafe toy for children are: suffocation by swallowing of small parts and chemical risks often associated with high levels of chemicals such as phthalates, lead and other heavy metals; the risk most often associated with electrical products is, obviously, electric shock, often combined with fire risk.

Regarding the reactions situation on the product type, of the total feedback, approx. 80% are related to RAPEX notifications covering the following five categories of products [9]:

- vehicles (790 reactions, 52%);
- toys (201 reactions, 13%);
- electrical appliances (90 reactions, 6%);
- clothing, textiles and fashion articles (83 reactions, 5%);

- childcare articles and equipment for children (56 reactions, 4%).

More than half of the received reactions (77%) were sent in response to notifications about consumer products that present the risk of injuries and fires - risks that are associated with motor vehicles. By figures, the most common risk categories included in the reactions are as follows: lesions (870 reactions, 54%), fire (195 reactions, 12%), chemical hazards (175 reactions, 11%), suffocation (127 reactions, 8%) electric shock (75 reactions, 5%) [9].

In most cases (1,392 reactions, 91% of total reactions), Member States have indicated that the notified product has been found of their market and that, nationally, appropriate (preventive or restrictive) measures have been taken. For 15 reactions (1% of total), the reacting country asked/offered information about the case, while for 27 reactions (2% of total), the country has not agreed to the notification information, mainly to the conclusions of the risk evaluation included in the notification made by the notifying state. For 96 reactions (6% of total), the Member States have notified the Commission that the product was not found on their markets.

In most cases where the country reacts to a notified product found its own market (1,392 reactions), measures have also been emphasized [9], as follows:

- in 80 cases (6%), the measures were ordered by national authorities (required action);
- in 1,171 cases (84%), measures were adopted by the operators (voluntary action);
- in 15 cases (1%), measures were both voluntary and compulsory;
- in 126 cases (9%) no measure was taken.

According to information presented in the 2009 RAPEX report, Romania (which, in 2009, along with Cyprus, received RAPEX training seminars) has not released any notification during 2009, undertaking only two reactions notifications launched by other states. In March 2011, Romania has launched three notifications, being also the country of origin for a notified product [10]. This may suggest a relatively low participation in the RAPEX system, while the presence of dangerous products on the market can not be considered negligible.

## 5. CONCLUSIONS AND PERSPECTIVES

The evolution of international trade has led to the need to create complex role bodies and mechanisms to protect consumer safety, which resulted in the designing the RAPEX system, based on an active and sustained cooperation between Member States.

However, the system functioning shows a lack of correlation between the number of notifications made by a Member State and the safety of products on its market. Thus, some Member States launches more notifications due to effective monitoring mechanisms, expanded market size, high level of imports, the large number of staff involved in inspections etc.

For that matter, increasing the number of notifications submitted through the RAPEX system does not necessarily mean that there are more dangerous goods on the European market. Rather, these results can be attributed to increased awareness and attention to product safety by national authorities and business sector, more frequent and more effective measures of control for consumer products, joint market surveillance by national authorities, EU enlargement in 2004 and 2007, and training provided by the European Commission for various stakeholders.

Simultaneously, a small number of notifications launched by a state (e.g. Romania) do not necessarily mean a reduced presence of dangerous products on the market. This may be the result of insufficient application of the RAPEX opportunities, inadequate monitoring of market operators and lack of interest in products safety.

Challenges for the future are related to the effects of initiatives such as the review of GPSD, strengthened checks at European ports, establishing a common European framework for market surveillance and traceability, the possibility of introducing risk analysis in the product design stage, creating a European database containing data about all complaints made by consumers, expanding the use of RAPEX to new groups of products.

Viable solutions on product safety should not omit the need to increase the responsibility of manufacturers and distributors, regarding both the safe nature of the products in the market and active involvement in the efficient and effective functioning of the RAPEX system by using the "Business Application" and taking voluntary measures or mandatory measures, as appropriate.

Thus, maximizing the safety of consumer products derives from several of steps such as: improving product certification and testing practices, the efficiency of the production quality control, optimization of market surveillance, the proper functioning of the RAPEX system (including application RAPEX-China) and European database on consumer complaints, along with increasing consumers' awareness of potential hazards.

These are possible through the united efforts of European institutions, national authorities, industry, research institutes and testing, inspection and certification sector.

We may conclude that the RAPEX system, although perfectible, plays an important role in product safety and is an effective instrument which, through constant exchange of information between participants, allows the adoption of necessary measures to ensure product safety requirements for consumers and facilitate the consistent market monitoring and surveillance, creating the proper framework for the compliance with the legislation in the Member States.

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## WAGE LEVELS AND AGENCY PROBLEMS IN PROFESSIONAL TEAM SPORTS

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### Abstract:

*This paper seeks to provide theoretical foundations to address the effects of the asymmetric information inherent to contractual relationships between teams and players in professional team sports. Particularly, a Shapiro-Stiglitz efficiency model version along with Rosen's insight about superstars economics is used to show that in addition to the high demand (i.e. marginal productivity) is necessary to consider a moral hazard problem as a source or as an explanatory factor of the rigidity and inflation that characterize sport superstars wages. The importance attributed to this approach lies in the fact that taking the results of the analysis as a reference, some ways of reinforcing players observance of internal team norms, reducing the costs of supervision and some channels of capping the non-shirking remuneration can be proposed.*

**Keywords:** incentives, efficiency wages, agency theory, professional team sports

**JEL Classification:** E24, J41, L83

## 1. INTRODUCTION

The enormous amounts of money earned by certain professional players have provoked much discussion, not only among the general public, but also in academic circles. The most readily cited and conventional explanation for this phenomenon is the particular nature of the demand for the service offered by this type of worker, that is, their high marginal productivity. Many of the reasons that underlie the wage levels of atypical workers such as sports superstars are explained in the seminal article of Rosen (1981) which provides an insight into many of the mechanisms at work.

This author tries to find an explanation for the high levels of remuneration obtained by certain individual agents, among whom he includes musicians and actors as well as professional sportsmen. The main features of the kind of work carried out by these groups of workers that determine wage levels are (i) the intensive nature of the labor factor, (ii) the imperfect substitutability that exists between the quality and quantity of the input and (iii) the significant economies of scale generated by this kind of activity (1). While accepting the general validity of Rosen's approach in the case of individual agents, it should be pointed out that it does not contemplate the possible existence of principal-agent relationships specific to team activities. This type of relationship does indeed exist when it comes to superstars when these are considered as an input in a collective production function. What is more, this allows them to achieve high levels of remuneration because of the peculiar contractual agreement that binds them to their club. Thus, Rosen's classical explanation may be completed by establishing a wage determination model that defines the parameters of this kind of activity.

From a purely analytical point of view, the wage-efficiency hypothesis offers a coherent response to problems such as wage levels, rigidity and dispersion among workers of identical characteristics. It also provides an insight into wage discrimination among groups whose activity it is difficult to observe due to the asymmetrical information inherent in a typical agency problem.

In accordance with the hypothesis cited above, the additional wage (the wage over and above the value that would theoretically clear the market under conditions of perfect competition) that an employer would have to pay his workers in order to ensure their maximum performance, will be inversely proportional to unemployment levels. Further, efficiency wages will be more

likely to arise within sectors in which it is difficult to assess the effort exerted by the worker and in those in which low worker performance negatively affects the firm's results. The labor market for those professional players commonly known as superstars is characterized by the practical inexistence of unemployment, the difficulty of verifying the amount of effort they exert with any precision and by the direct and significant influence of a sub-standard individual performance of these superstars on the economic results of their club.

Taking these factors as a starting point, the present paper seeks to show that it is possible to use the wage efficiency model of Shapiro and Stiglitz (1984) as a theoretical tool for evaluating both the levels and the rigidity that characterize the wages of professional players. The model also facilitates an analysis of the rationale and the effectiveness of the incentive systems incorporated within the contracts that regulate the relationship between the player and his club. There are several types of models that use the general wage-efficiency hypothesis as a reference. In this work we adopt the version commonly known as the shirking model which is based on the probability of firing a player as a disciplinary measure. The choice of this particular version may be justified on two grounds; first, it facilitates an explanation of the efficiency wages theory in terms of moral hazard and, second, unlike other variants of the model, it makes the assumption that the only way to motivate workers (i.e. players) is through the threat of firing them. In fact, this threat has the effect of reducing the player's income level by labeling him as undisciplined (2).

In order to better establish a coherent line of argument, our analysis will be set out in the following way:

Section 2 identifies and characterizes the problem of asymmetric information inherent in contractual relationships between teams and players. Special emphasis is placed on the problem of moral hazard and its relevance to professional team players. Section 3 provides a particular application of the basic Shapiro-Stiglitz model. From this application we derive some factors that explain the magnitude of the remuneration that must be paid to team sports superstars in order to guarantee optimal effort. Section 4 looks at the mechanisms that clubs might use in order to ensure that players fulfill their contracts while exerting maximum effort. Finally, section 5 provides the main conclusions.

## **2. THE AGENCY PROBLEM IN PROFESSIONAL TEAM SPORTS**

From a normative point of view, agency theory proposes changes in the design of contracts in order to align the incentives of the agent with those of the principal. The main aim of these changes is to provide a solution to the problems that arise from the fact that the principal cannot be absolutely certain that the agent carries out his main activity to the best of his abilities. The traditional means of achieving this objective is by linking monetary remuneration to the effort exerted by the agent. This solution is only effective however, when and if the "effort" in question is directly observable (objectively verifiable), in such a way that the remuneration is adjusted to the individual marginal productivity of the agent.

In professional team sports the assumptions that underlie the above approach are not applicable. In fact, when they come to applying this type of mechanism, the principals, in this case the clubs, come up against a two-fold difficulty. First, the process that leads to the service offered in the market is the result of a typical case of collective production and collective production is characterized by the fact that isolating the individual marginal productivities is, in essence, extremely complex (Rose, 2002; Holmstrom, 1982). Second, the above mentioned production takes place in a context of strong asymmetric information, which hinders any kind of monitoring procedure.

Within the context of group production, as is the case of team sports, it is impossible to determine the marginal productivity of each player, not simply because of the limited information available (Alchian y Demsetz, 1972), but also because of the contractual synergies that are peculiar to these activities. In team sports it is not really licit to talk about individual productivity but rather

team productivity. This is because collective output is greater than the sum of the contribution of each individual [ $f(A) + f(B) < f(A \& B)$ ]. In fact, a team really operates as if it were a coalition in which the synergies created give rise to a surplus which is the result of the cooperative activity undertaken by all the members of the team. The main problem resides in the fact that this surplus may be usurped by any of the team members and it remains impossible to identify the individual responsible (Rose, 2002).

In spite of the fact that players must negotiate their contracts within the context of a team production scenario, those that belong to the elite of their sport, possess a monopolistic bargaining power that allows them to appropriate this "surplus" by arguing that, without their contribution there would be no surplus in the first place, or that it would be vastly reduced. Further, the impossibility of asserting individual marginal productivities with precision often leads to a problem of *free riding*, given that although the personal benefit derived from low efficiency in the realization of the player's tasks may be privately consumed, the cost of shirking must be borne by all the members of the group collectively.

Information problems may be assessed by using the theoretical analysis of contracts, which assumes that the contractual relationship between the player and the club is characterized by asymmetric information which is liable to generate ex post opportunism or moral hazard. The origin of this problem lies in the fact that the principal, i.e. the club, has practically no way of evaluating the level of effort exerted by the agent, in this case the player, with any degree of precision. Hence a substantial proportion of the agent's activity is beyond the principal's control and is commonly termed, "hidden action". The moral hazard derived from the asymmetric information implicit in the contractual relationship between the club and the player is due to the fact that the player may decide to act dishonestly and to expend effort at a rate below his potential (shirking).

The nature of the work carried out by professional players requires a certain amount of creativity and this depends on the extent to which the player is motivated. Given these conditioning factors, a player might decide to limit his effort in order to take advantage of the asymmetric information and thus benefit from the surplus utility available. This, of course, is detrimental to the team as a unit. When a player's behavior is inefficient this tends to generate high costs for the team which are reflected in sub-optimal results. Since these patterns of behavior are difficult to detect, teams are obliged to look for different methods of protecting themselves from the "divergent" strategies of their own players with whom they do not always have the same interests. The simplest and most immediate response to this kind of problem is the use of direct supervision by monitoring the effort exerted by the player and/or by establishing a system of incentives that "discipline" the player so this effort is maximized.

When it comes to analyzing the performance of a "worker" in the sports' sector, there are certain tools of control and supervision available that do not exist in other kinds of firms. Direct or indirect supervision by the club its officials, managers, team mates, fans and the media, mean that player performance is under constant scrutiny, but this scrutiny does not eliminate the possibility of "dishonest" behavior. In this sense, and given that the performance of the player on the field is much easier to monitor, the probability that the player shirks off the field increases. Obviously, these behavioral patterns affect the performance of the team on the field of play.

In summary, the level of individual effort in a team sport is much more difficult to verify objectively than one might first expect. This is especially true if one takes into account the unpredictable nature of sport which normally makes it impossible to discern whether or not the players' patterns of behavior are strategic or are simply a consequence of the inherent uncertainty of the stochastic nature of player performance.

With respect to incentive systems, it should be underlined that shirking is more likely when the contract does not satisfy the incentive compatibility constraint. This restriction is fulfilled if the contract establishes a system of incentives that generate efficient agent behavior. In practice, the most commonly used incentive systems in the world operate via two distinct mechanisms: paying the player according to the team's results and/or according to whether or not the player takes part in

official games. The first of these mechanisms estimates the effort exerted by the player *ex post* and the latter *ex ante* (3). Both of these solutions are fraught with difficulties and, in general, it is extremely difficult to find a measure that allows the analyst to evaluate the effort exerted without biasing the player's response to the incentives (Heubeck y Scheuer, 2003).

Initially, it might seem that a system that establishes incentives according to team results would be an objective measure and would align both the interests of the club and the player. In this case, however, the player finds himself exposed to greater risk given that his remuneration depends on the degree of cooperation needed for the team to achieve the best possible results. In fact, problems of moral hazard may arise given that, when joint production (results) is the only indicator of player performance, it is not possible to identify the agents whose behavior is dishonest (Holmstrom, 1982). Further, the existence of multiple variables that are beyond the control of the player, expose him to additional risk (uncertainty in the generation of positive results, hidden contingencies, etc.). Thus, any solution based on this type of measure should take into consideration the existence of a trade off between the benefits of the incentives and the variation in the level of risk that the player must take on board when accepting these incentive agreements.

With regard to the use of objective indicators based on individual performance or *ex post* control measures, it should be emphasized that these may provoke a considerable distortion in the way the team performs as a unit (joint functioning) given that the production function is collective, and the players (inputs), are highly interdependent.

The approach adopted throughout this section leads to the conclusion that the problem of moral hazard inherent in a contractual relationship in which there is asymmetric information is especially relevant when it comes to professional players. In the case of this type of agent, the difficulty of establishing all-embracing contracts with efficient incentive systems is exacerbated by the high levels of demand that exist with respect to both potential employers and fans.

### 3. THE MODEL

For the sake of parsimony, in this particular adaptation of the Shapiro and Stiglitz wage-efficiency model, four basic assumptions are made:

(i) The players that are considered to be superstars in a given sport all have identical qualities. In the model, this collective is made up of that group of players whose performance is substantially higher than that of the average player. Strictly speaking, a superstar is not simply a player who plays in a professional league (4), but rather, he is a player who is considered to be a key component of the team and whose participation is deemed to be indispensable, and through whom, the club may build and project its "brand image". In economic terms, what sets these players apart from their team mates is that they have a direct impact on the club's income. Of course, in reality, not all of these agents have the same talent, but as a means of maximizing the model's explanatory power, differences in their levels of talent may be assumed to be negligible. Hence, from an analytical viewpoint, the adoption of this supposition does not impinge on the validity of the conclusions.

(ii) The number of teams competing to hire these superstars is given as  $N$  and it is assumed that these entities behave as conventional firms (5).

(iii) The behavior of professional players, as is the case with any other group of rational individuals, follows a strict logical pattern. The player attempts to maximize the present value of his expected individual utility. Hence, it is assumed that the general utility for each agent at a given moment in time is:

$$U = w - c \quad [1]$$

where "w" is the wage received and "c" the cost of the effort exerted by the agent. Thus, the agent's utility is the result of the income he receives for belonging to the club and the cost of fulfilling the task assigned and the normative internal restrictions or discipline imposed upon him by the club. The introduction of a supposition assuming that the agent is averse to risk may be incorporated by

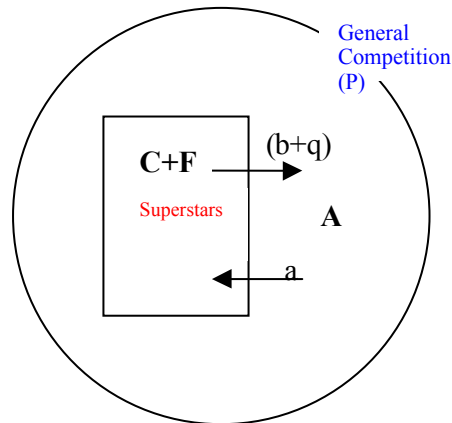


using the following utility function:  $U = \sqrt{w} - c$ . The use of this kind of function, as will be seen below, does not affect the conclusions of the model.

(iv) With respect to the agent's observance of the club's norms, it is assumed there are only two possible outcomes: the agent fulfills his obligations entirely, in which case the cost is  $c$  or, he fails to do so entirely, in which case the cost is 0 and he would be deemed to be a free rider within the group (6).

In accordance with these criteria, the players within the population (P) may be divided into three categories. Firstly, there are those who fulfill their obligations (C), that is, those individuals who exert maximum effort in the realization of their activity. Secondly, there are those agents who fail to comply (F), i.e. players that are members of professional teams that belong to the elite and whose effort is below that which corresponds to maximum potential. Thirdly, there are those agents that do not belong to the group of superstars and these make up the set of players (A). Of the population of players  $P = C + F + A$ , those superstars that are active, i.e. those that have a contract that is in force with a club will be known as (G), where  $G = C + F$ .

Once the groups have been defined, it becomes important to establish the way in which players leave one group and enter another. The probability that a shirker be discovered and expelled in a given period of time is  $q$ , while the probability that a diligent agent be expelled due to reasons other than those connected to effort is  $b$  (7). Players who are not considered to be stars, and who, as such, do not receive remuneration concordant with this status, have a probability  $a$  of being incorporated into the group G (see figure 1)



**Figure 1. Inter-group movement**

Given the above, the effort corresponding to aggregate fulfillment may be written thus:

$$Cc + 0F = Cc \quad [2]$$

that is, the productive results of the team are a growing function of the level of effort with which the members of the team perform their tasks:  $F'(Cc) \geq 0$ . The profit function of the team as a whole would be:

$$\mathcal{G} = F(Cc) - wG \quad [3]$$

Hence, if it is assumed that clubs are entities that aim to maximize the profits of partners and owners (*stakeholders*), and these will attempt to sign new players right up until the point when the cost of incorporating one new superstar is equal to the marginal cost of this incorporation.

$$\begin{aligned} \text{Max } \mathcal{G} &= F(cG) - wG \\ \left( \frac{dF(cG)}{d(cG)} * \frac{\partial(cG)}{\partial G} \right) - w &= 0 \end{aligned}$$

It has further been assumed, that the players in their turn, optimize their expected individual utility function, and this is reflected in the maximization of the current net value of one of their

main assets, that is, belonging to an elite club. On considering an infinite temporal horizon, the present value of this asset would be the sum of a sequence of the following kind:

$$V = \frac{d+g}{1+r} + \frac{d+g}{(1+r)^2} + \frac{d+g}{(1+r)^3} + \dots + \frac{d+g}{(1+r)^n} \quad [4]$$

$$\text{limited by } V = \frac{d+g}{r}.$$

That is, professional players try to maximize the value of belonging to a particular club. This asset has two components. First, there are capital gains  $g$ , which are considered to be constant, and exist as a result of belonging to the squad of a particular club. Indeed, being a player in an elite club conditions popularity, exposure to a wide-scale audience and other potential sources of income. Second, there is a dividend  $d$ , which corresponds to the remuneration that the player receives for playing for the team. There is also a discount rate  $r$ , and it is assumed that this is the same for all players irrespective of their status. This rate reflects the "impatience" that the players feel with respect the immediacy of their remuneration.

It should be noted that this approach makes the implicit assumption that those involved are maximizing their mathematical expectation of a function of the following kind:

$$E \int_0^{\infty} U(w_t, c_t) \exp(-rt) dt$$

According to our assumptions, the value of the different assets, i.e. those assets that correspond to non shirker players ( $V_c$ ), free riders ( $V_f$ ) and those that are excluded or outsiders ( $V_a$ ) may be calculated.

A player who is employed and does not shirk possesses an asset with the following value

$$V_c = \frac{(w-c) + b(V_a - V_c)}{r} \quad [5]$$

where  $b$  represents the probability of being excluded in spite of respecting all contractual norms without holding back any utility.

The value of belonging to a club for a *free rider* would be:

$$V_f = \frac{w + (b+q)(V_a - V_f)}{r} \quad [6]$$

Finally, the value of the asset that corresponds to an individual that does not belong to this group, that is, an outsider who has only a chance in the future of joining it, may be expressed as,

$$V_a = \frac{a(V_c - V_a)}{r} \quad [7]$$

Logically, if a club (principal) tries to fully develop the player's (agent's) potential and to persuade its players not to shirk, then it should guarantee the trustworthy team members a wage level which is at least as high as that obtained by those team members who act as free riders. Therefore, the lowest wage limit may be expressed as  $rV_c = rV_f$ , leading to:

$$(w-c) - b(V_c - V_a) = w - (b+q)(V_c - V_a) \quad \text{and} \quad V_c - V_a = \frac{c}{q} \quad [8]$$

Since  $c$  and  $q$  are positive, the *no-shirking condition* is necessarily greater than the remuneration for the *free rider*. For this reason, clubs should fix wage levels or guarantee that the benefits derived from belonging to the club are attractive enough to ensure that the player prefers to fully comply with his obligations rather than face the costs of a possible exclusion. From expression [5], the following more illustrative relationship is derived,

$$rV_c = (w-c) - b(V_c - V_a);$$

and hence,

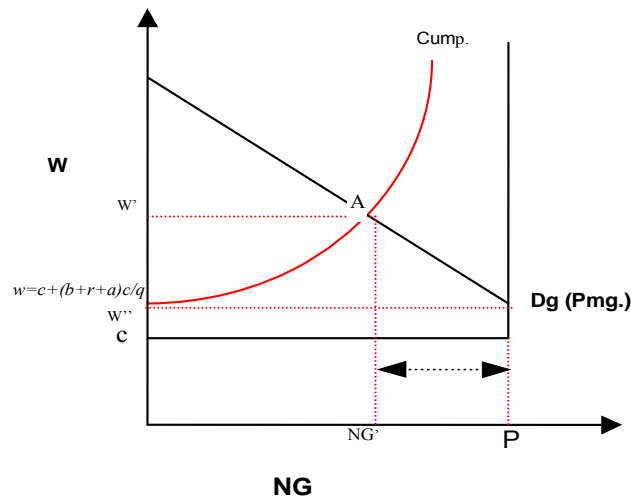
$$\begin{aligned}
 w &= c + b(V_c - V_a) - rV_c + rV_a - rV_a = \\
 c - b(V_c - V_a) + r(V_c - V_a) &= c - (b + r)(V_c - V_a) + rV_a = \\
 c + (b + r + a)(V_c - V_a) &= c + (b + r + a) \frac{c}{q} \quad [9]
 \end{aligned}$$

The above equation is a no-shirking condition curve that provides the wage levels needed to make sure that a player has absolutely no incentives to shirk. If the aversion to risk hypothesis ( $U = \sqrt{w} - c$ ) had been adopted, the no-shirking wages would be higher, but the conclusions would be identical. Hence,

$$w = c^2 \left( 1 + \frac{1}{q} (b + r + a) + (b + r + a)^2 \frac{1}{q^2} \right)$$

From [9] it may be concluded that the remuneration or benefit received by the players needed in order to guarantee that they uphold the internal norms of the club depends positively on the effort that players need to expend in order to perform their tasks optimally ( $c$ ), it also depends positively of the likelihood of exclusion due to factors beyond the player's control ( $b$ ), the probability of being hired by other clubs ( $a$ ) and the discount rate applicable to future remuneration ( $r$ ). Conversely, this remuneration depends negatively on the probability of detection and the punishment of those who shirk ( $q$ ).

A diagram of the model is given in figure 2. In this figure,  $Dg$  is the conventional demand curve determined by marginal productivity (8) and  $Comp$  represents the wage level curve that fulfills the no-shirking condition. This function is asymptotic when there is full employment. In other words, the wage level would approach infinity when the market was characterized by full employment ( $P$ ). Equilibrium would be reached at point A, for a wage level ( $w'$ ) which is greater than the wage level that would be obtained when there was full employment but without taking into account the no-shirking conditions ( $w''$ ). It can be seen that the difference between both wage levels increases considerably when and as the employment rate rises.



**Figure 2**

*Own Source: derived from Shapiro-Stiglitz*

#### 4. FACTORS THAT DETERMINE WAGE INFLATION IN PROFESSIONAL TEAM SPORTS

##### 4.1. THE RANDOM NATURE OF EXCLUSION AND THE PROBABILITY OF DETECTING SHIRKERS

From equation [9] it can be seen that the level of remuneration needed to guarantee that players respect the internal norms and exert maximum effort will be higher when (i) the random nature of exclusion ( $b$ ) is high and, (ii) when the probability that shirkers are detected and punished,  $q$ , is low.

Thus,

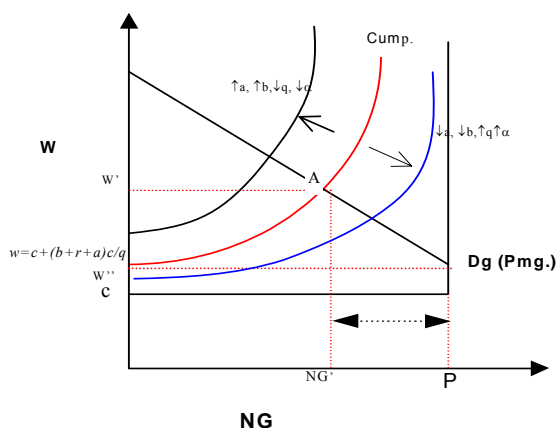
$$\frac{\partial w}{\partial q} = \frac{-c(r+b+a)}{q^2} < 0$$

$$\frac{\partial w}{\partial b} = \frac{c}{q} > 0$$

With respect to the randomness of exclusion (9) and the probability that the shirking will be detected, it should be reiterated that the level of individual effort in a team sport is more difficult to objectively verify than one might first expect. In practice, performance in sport is by nature "stochastic", i.e. it is characterized by what might be termed, "technical uncertainty". The source of this uncertainty lies in the fluctuations of quality and reliability inherent in the services that the contracted inputs (players) provide. Hence, individual performance will inevitably vary depending on the game and/or the season (Holmstrom, 1979, Krautmann, 1990). Therefore, professional players constitute a clear example of an input whose productivity is subject to a certain amount of randomness and which does not depend solely on the effort exerted by the player.

A player always has the option of blaming low levels of personal performance on factors or circumstances that are beyond his control (i.e. a bad run of results, the after effects of injuries, the quality and performance of his team mates, the incompetence of the manager or coach, etc.) (10). Further, there is always the possibility that some players normally exert a fairly high level of effort, but only perform to the very best of their abilities at economically strategic periods, for example, when their contracts are about to end. In short, there is a two-fold problem, in that, a player's behavior may be strategic and this very behavior takes place against a backdrop of unpredictability which, in a sense, constitutes the essence of competitive sport. Consequently, it is highly difficult to discern whether or not patterns of player performance depend on strategic behavior or are simply the product of uncertainty (11).

A further factor that should be taken into account is the extent to which the stability of belonging to a club might affect the parameters  $b$  and  $q$ . This factor generates wage inflation, since it reduces the efficiency of the methods of detection and sanction ( $q$ ), but also acts as a brake on this inflation since it reduces the probability of random expulsion ( $b$ ). This dynamic is intensified by the fact that belonging to a certain club constitutes a kind of capital that is highly specific and this creates barriers to the exit and entry of members and non-members respectively. Figure 3 shows the effects of changing the model's parameters. An increase in the value of  $q$  leads to a downward shift of the no-shirking curve. This reflects a decrease in the minimum remuneration received which makes the costs associated with forming part of a particular club acceptable. By contrast, a rise in the value of  $b$ , that is, in the level of randomness, shifts the curve upwards.



**Figure 3. Factors conditioning the evolution of wages**  
*Own source, based on Shapiro-Stiglitz*

From the above it may be deduced that there is a *trade off* between the probability of detecting and sanctioning shirkers and their levels of remuneration. The elimination or a reduction in randomness, i.e. by stabilizing contracts (a lower  $b$  value) provokes a decrease in the non-shirking remuneration, as does improved supervision (a rise in the value of  $q$ ). In keeping with the logic of the model, a reduction in  $b$  and an increase in  $q$  raise the costs of expulsion for non shirkers and this, in turn, facilitates disciplinary control. In fact, if the costs of expulsion are high enough, the players would have an incentive not to shirk, even in hypothetical conditions of full employment. In this sense, the establishment of any informative and/or punitive mechanism that generated a loss in reputational capital for the shirker would constitute an additional incentive to respect team rules.

In practice, the combination of imperfect mechanisms of supervision and control and the high level of demand for the type of service that professional players offer, explain the high wage levels commanded. Further, as stated above, teams have methods of disciplinary control that allow them to reduce levels of remuneration. In this sense, the efficiency with which contracts are designed and administered is essential to the efficacy of the monitoring mechanism.

The main channel for contractually reducing  $b$  and  $q$  is the redaction of complete documents that establish clauses that objectively link remuneration to effort, and which also guarantee that the player is willing to work to the best of his abilities. The design of complete contracts requires both a perfect foresight and the subsequent ability to ensure they are complied with and legally enforceable. Obviously, the very nature of the players' activity makes the unfeasibility of this task evident.

Insofar as the administration of the contracts is concerned, improvements would have a two-fold impact: First, there would be a rise in the probability of detecting dishonest behavior, and second, there would be a decrease in the levels of random or unjustified expulsion. Hence, the role of the manager or coach, and even the entire technical staff, becomes much more relevant. The manager's responsibilities involve planning, organization, leadership and control (Robbins, 1994). Planning implies the formulation of strategies in order to obtain specific objectives, while organization consists of the delegation and assignation of responsibilities, both with respect to the players, and other subordinates, both on and off the field. Leadership refers to the capacity to motivate the players so that they exert maximum effort in attempting to achieve the team's and the club's objectives. Finally, the control function involves correctly evaluating whether or not the players fulfill the tasks assigned to them and the team achieves its targets (Dawson y Dobson, 2002) (12). Logically, the extent to which the manager carries out his tasks and duties efficiently will contribute significantly to a rise in  $q$  and a reduction in  $b$ .

#### 4.2. THE PROBABILITY OF BEING CONTRACTED BY OTHER CLUBS

From expression [9] it follows that the remuneration received for fulfilling the terms of the contract will be positively linked to the probability of the player being hired by another team after being expelled,  $a$ . This means that, the no-shirking remuneration will be high when the demand for players is great and/or when the restrictions that condition the player's signing for another club are weak. Thus,

$$\frac{\partial w}{\partial a} = \frac{c}{q} > 0$$

From this perspective, the size of the labor market, i.e. the number of players that are active within it, may be a key factor in determining wage levels and the propensity to comply with agency contracts. Therefore, the threat of excluding a player or group of players from this market is not the only factor that affects remuneration and shirking.

To better analyze this hypothesis, it is assumed that the working rationale of the clubs is analogous to that of traditional firms. Further, it is also assumed that the sector itself is in a steady state, when there is no capacity for growth. This means that the number of players outside the group of superstars and the number of players expelled (*unemployment pool*) will be constant so that, over a given period of time, the number of players expelled will be equal to the number of players entering the group. In these conditions, and given that the level of remuneration would be over and above that required to ensure players exert maximum effort, players would find themselves subject only to random expulsion.

$$\text{Hence, } a = \frac{bNG}{P - NG}$$

from which it may be deduced that:

$$w = c + \left(r + b + \frac{bNG}{P - NG}\right) \frac{c}{q} = c + \left(r + \frac{bP}{P - NG}\right) \frac{c}{q} \quad [10]$$

It follows from expression [10] that the level of the no-shirking wage depends on the volume of individuals in the unemployment pool (A) from the subset of players that has been defined as superstars (G) (13). This means that, a rise in the percentage of players outside this sub set, those players that might potentially join the elite group of sports superstars, would provoke a decrease in the no-shirking wages. Under conditions of full employment, wages would be so high as to place the economic viability of clubs in jeopardy. Within this context, the survival of clubs would only be possible under conditions of perfect supervision and high levels of marginal productivity, conditions which, in practice, are unattainable.

If the enforcement of contracts is incompatible with full employment, clubs will have a vested interest in making sure full employment does not exist. For a club, signing a new player involves more than simply paying his transfer fee and the wages to ensure maximum compliance. Clubs must also take into account the additional cost that this player's incorporation involves in terms of the reduction of the number of unemployment pool. This reduction generates negative externalities among the teams, spillovers that would only be controllable if the league became a cartel, or if there was a real monopoly in demand, as is the case of the big leagues in the USA. It is also interesting to note that, a reduction in the size of the league would make it possible to improve the general level of well-being, because excluding more players would lower the costs of supervision. Thus, from this point of view, a set of limitations imposed on the size of the league might, in fact, be profitable for the professional league as a whole.

The mechanisms that influence the probability of hiring a player and those that contribute to increases in the pool of unemployed players are diverse: free agency, salary caps, other types of contractual clauses, agreements between clubs, trade union activity, the role of the media, the efficiency of recruitment in minor leagues, etc. Additionally clubs might also have other means at their disposal with which to reinforce the extent to which players comply with their contracts. For

example, all clubs employ certain mechanisms in order to devalue rival teams, or alternatively in order to foment loyalty to one's own team, thus reducing the chance of being signed by another.

A corollary of the above approach is that all leagues require a certain exclusion device in order to strengthen the adherence to internal norms, so the more exclusive a professional league is, the lower the direct remuneration received by players necessary to guarantee that they exert maximum effort. From this point of view, it becomes evident why there is a need to split or divide the leagues into divisions, as in Europe, or to establish a regulated system of access for clubs, as in the USA. In this sense, one factor that should be taken into consideration when it comes to defining the league's optimal size is that, *ceteris paribus*, all of the clubs obtain a benefit, in terms of wages, in limiting the number of teams that make up the "big" leagues. However, it should be noted that, although there is a decrease in these direct types of remuneration  $d$ , there is also an increase in indirect remuneration  $g$ , which corresponds to belonging to the most exclusive clubs.

### 4.3. THE DISCOUNT RATE AND LENGTH OF CONTRACTS

There is at least one other highly important factor that influences the wages of professional players; the player's perception of the stability of future remuneration and, in particular, the discount rates applied to it.

Our initial approach was based on the idea of an asset with no temporal limit, but logically, curtailing the maturity of this asset would result in a reduction in its value. Thus, a decrease in a player's working life would imply a decrease in the value of the asset of belonging to a particular club and a consequent contraction in the period of capitalization. Hence, the longer the player's career, the lower the dividend paid out as a bonus for fulfillment<sup>1</sup>.

This relationship is also characterized by potential post-contractual opportunism. In fact, the owners of clubs worry that long term contracts negatively influence players' motivation and induce shirking. Therefore, it becomes extremely important to educe whether or not remuneration and contract duration are complementary or substitutive factors. A priori, signing a long term contract provides the player with a new opportunity for shirking and, according to our model, higher risk on the part of the club. This is a factor that is not directly addressed by agency theory. However, the duration of contracts and their levels of remuneration may be highly complementary if long term contracts are used in order to improve the conditions of the most complete and trustworthy players, and as a means of rewarding the most productive (14). This does not contradict agency theory; rather, it facilitates the possibility of using long term contractual relationships as a device for "labeling" more trustworthy players, a factor that affects both the parameters  $b$  and  $q$ .

Expression [9] also establishes a direct relationship between the levels of remuneration needed in order to guarantee that players behave optimally and the discount rate that they demand ( $r$ ). In this sense, if the player identifies with his club and feels a sense of loyalty, this reduces the "impatience" or the discount rate applicable to levels of remuneration.

Finally, it must be remembered that there is a possible relationship between the duration of the asset and the discount rate. Effectively, if one takes into account the characteristics of, what has been termed, the permanency asset, then it becomes possible to identify an inverse relationship between the duration of the contract and the discount rate. This is because an increase in the duration of the contract would raise the interest risk, which would imply an additional risk premium whose magnitude would be related to the maturity of the contract.

### 4.4. TEAM SPORTS AS A COLLECTIVE ACTIVITY

When team sports are conceived of as a kind of collective activity in which there are a number of agents interacting in order to obtain a "team surplus", the problems of *free riding* and negative *spillovers* become especially relevant (Holmstrom, 1982) (15). However, the collective nature of team sports also means that individuals might begin to "identify" with the team and perhaps even develop a sort of collective rationality or a "we rationality" (Sugden, 2000).

In this type of activity in which results depend, to a large extent, upon the efficiency of the cooperation between individual agents, it would seem normal that there were agreements, either tacit or explicit, in which each member of the team takes into account the contribution of his team mates. This facet of the complex nature of team dynamics may be incorporated into the model in the form of sympathy relationships which exist between the agents (16). These relationships really reflect the interdependence of both the utility functions and the value of belonging to the club. The introduction of this factor alters the function that determines the dividend derived from belonging to the squad of a particular club. Under these new circumstances each player considers, not only his own personal benefit, but also the effects (measured as a percentage,  $\alpha$ ) that this behavior has on his team mates with whom he maintains a close interdependency relationship.

Logically, evaluations of this kind, carried out by no-shirking agents, provoke an important alteration in the incentives determining their behavior. This change can be seen in the evaluation of  $V_c$ . From [5] the following expression is derived:

$$rV_c = (w - c) - b(V_c - V_a) + \alpha((w - c) - b(V_c - V_a))$$

and hence,

$$V_c - V_a = \frac{\alpha w - (1 + \alpha)c}{-q + b\alpha} \quad [11]$$

This means that the difference in the evaluation of the asset of belonging to a particular club and expulsion becomes wider, if and when, the following inequality is fulfilled  $qw > (b + q)c$ , that is, it is a necessary condition that the expectation of a loss in the remuneration derived from belonging to the club is greater than the expectation of expulsion as the result of some random factor inherent in the nature of the sport. Thus, if the randomness is not excessive, a certain level of sympathy would imply the reevaluation of the player asset.

From the above result it becomes necessary to recalculate the non-shirking remuneration. In this case, if the condition relative to the level of arbitrariness is verified, the required remuneration will be lower.

$$\begin{aligned} rV_c &= (w - c) - b(V_c - V_a) + \alpha((w - c) - b(V_c - V_a)) \\ (1 + \alpha)w &= (1 + \alpha)(c + b(V_c - V_a) + r(V_c - V_a) + rV_a) \\ (1 + \alpha)w &= (1 + \alpha)(c + b(V_c - V_a) + r(V_c - V_a) + a(V_c - V_a)) \end{aligned}$$

thus, the minimum level of remuneration derived from belonging to the club will be:

$$w = c + (b + \frac{(r + a)(V_c - V_a)}{1 + \alpha}) \quad [12]$$

It follows that,

$$w = c + (b + \frac{(r + a)(\frac{\alpha w - (1 + \alpha)c}{-q + b\alpha})}{1 + \alpha}) \quad [13]$$

which is lower than that obtained in the reference case (see figure 3)

In short, if it is assumed that there is interdependency, the level of non-shirking remuneration decreases. Similarly, it may also be true that, in the presence of high levels of sympathy, the agents might be willing to continue belonging to the club even if their individual levels of remuneration were lower than the costs of performing their tasks.

## 5. CONCLUSIONS

The approach adopted in this paper allows us to show that the problem of moral hazard inherent in a contractual relationship in which there is asymmetric information is of special relevance when it comes to professional team players. One of the main reasons for the high levels of remuneration for some of these players (i.e. the superstars) is the difficulty of monitoring the



agency relationships. Consequently, one means of ensuring that players fulfill their contracts and exert maximum effort, in face of the high levels of demand for this type of agent, would be by increasing wages (efficiency wages). Although, the efficiency wage and the wage determined by the demand would converge in the full employment case, the scope of the informative asymmetry problem does not lose relevance to explain intermediate situations.

The remuneration or benefit received by the team members in order to guarantee that they respect the internal norms of the club and exert maximum effort, depends positively on the work needed to reach and work at their full potential, the randomness of exclusion from the team, the probability of being signed by another team and the discount rate applicable to future levels of remuneration. Conversely, this remuneration depends negatively upon the probability of detecting a player shirking and on the sanctions imposed.

The more exclusive a professional league is, the lower the levels of direct remuneration received by the players must be in order to guarantee that they fully comply with their responsibilities. This is a way of reinforcing the observance of internal team norms and reduces the costs of supervising the group as a whole. Consequently, from this point of view, a professional league might benefit significantly by reducing the number of member teams and, in particular, by "cartelizing" the group of teams that make up the league, and even by creating a monopsony or a monopoly of demand.

In addition to the above, there are additional channels via which remuneration may be reduced. These include the use of long-term contracts, the introduction of other kinds of penalization for shirking such as signaling a player's loss of reputation, disciplinary measures, expulsion from the market etc., or the promotion of the so called "we rationality". All of these factors are potential variables that ought to be considered in the complex process of establishing complete contracts, a task which is, in practice, economically unfeasible.

Finally, it should be emphasized that most of the above conclusions are, by extension, applicable to any collective activity which is labor intensive, characterized by imperfect substitutability between the quantity and quality of the inputs and in which there are agency relationships i.e. the performing arts, the music industry, etc.

## NOTES

- (1) The literature on how the professional sports labor market works and its idiosyncrasies is very extensive and the explanations of the determination of wage levels within this market are varied. Some of the outstanding works that have been used as references for subsequent research include the pioneering contribution of Rottenberg (1956), the contributions of Scully (1974) and Zimbalist (1992) or the more recent works of Gerrard, B. and S. Dobson (2000) and Lucifora and Simmons (2003). An application of the logic that underlies the work of Rosen specific to professional sports may be seen in Rosen and Sanderson (2001).
- (2) Other models that are based on the same general hypothesis are the model of labour *turnover* that looks at why firms want to retain their workers. The adverse selection model, on the other hand, considers that wages are a particularly good means of capturing well qualified workers. Sociological models diverge from the neoclassical perspective to better illustrate that wage rigidity may be a product of social conventions and ideas of socially acceptable behavior which are not the product of individualism but of certain norms of group behavior.
- (3) Among the *ex ante* alternatives there is a scenario entitled "*tournament*" in which the agents are faced with internal competition which they must overcome in order to obtain a first team place. This measure is ineffective however, in the case of superstars whose participation may be considered to be indispensable (Lazear y Rosen, 1981).
- (4) Examples of what we generically call the Big Professional Leagues are the MLB, NFL, NBA and NHL in the USA, or some of the professional football leagues in Europe such as those in England, Spain, Italy and Germany.
- (5) This assumption is, of course, open to debate given that, under certain circumstances, sporting success may not be conducive to the maximization of economic profit.
- (6) As mentioned above, in compliance with the club's norms may occur either on or off the field, and if in compliance occurs off the field this will have adverse repercussions in terms of performance. For example this kind of behavior would include alcohol or drug abuse, prolonged convalescence after injuries due to not following medical directives, selfish behavior in the changing room environment and any other bad habits that might have negative effects on player performance.

- (7) Taking into consideration the very particular conditions under which elite professional players work, it is most unlikely that low levels of effort are detected and, even when this occurs that the player in question be expelled from his club, hence the values of  $b$  and  $q$  tend to 0.
- (8) With respect to the demand curve, the traditional diminishing curve was chosen. However, the curve need not necessarily, take this shape. In fact, the synergies associated with collective or group production functions may give rise to a curve with a constant slope or even a rising slope, which would magnify the effects of wage inflation.
- (9) The arbitrary expression for exclusion refers to the situation in which, in spite of exerting a maximum effort, results are negative.
- (10) For example, a player will demand higher wages for signing for a club which is less likely to succeed, which has an unbalanced squad and/or is badly managed.
- (11) Among the body of literature that addresses the principal-agent problem in professional sport, Maxcy, Fort and Krautmann (2002) offer evidence that allows the verification of the efficiency of the mechanisms available for avoiding strategic behavior in the case of baseball.
- (12) In real terms, the manager or coach may influence player and team performance via two main channels. If the composition of the squad is considered as given constant in the short term, the manager will attempt to maximize performance using these inputs. This constitutes the direct contribution of the manager which depends; on the one hand, on his strategic input i.e. team selection and tactics and, on the other, on his capacity to motivate his players. In the long term, the manager may improve players' skills and/or reinforce the squad with new signings.
- (13) In this sense, the statements made by players expressing a willingness to leave their presents clubs in order to sign for clubs in which their status would be as a member of an "elite", but on lower wages, are paradigmatic.
- (14) Empirical evidence on the relationship between the duration of contracts and remuneration may be found in Krautmann and Oppenheimer (2002).
- (15) Under certain conditions, the spillover effects may explain that the productivity of a player depends on the team of which he is a member, and hence the wage level demanded may also vary. Further, the magnitude of the spillovers does not solely depend upon the individual characteristics of the player, but also on the performance of the other team members (Kendall, 2000)
- (16) Etymologically, the term sympathy alludes to the fact that the individual's well-being may be affected by the well-being of others in such a way that his decisions are not based exclusively upon the maximization of his own individual utility. In simple terms, it may be assumed that there are interdependent utility functions.

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## THE TAKING OF MARKETING DECISIONS IN CONDITIONS OF UNCERTAINTY AND RISK

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### Abstract:

*The choice of method of developing marketing decision alternatives and their evaluation depends significantly on the availability of initial information. The decision maker may not possess all the information or possess insufficiently precise information about external environmental conditions and their changes in the future. Such a situation is often observed in the case of macro-environment factors, but can also refer to the company's microenvironment. Given these circumstances, in different conditions there are applied different methods of affirmation and choice of decisions. The situation of certainty allows the use of deterministic methods and models, in the risk situation different probabilistic methods are used, while the situation of uncertainty requires the application of other methods and assessments.*

**Keywords:** marketing decisions; uncertainty; risk; alternative, probability.

**JEL Classification:** M31

## INTRODUCTION

The managerial decisions adopting, including in marketing sphere, requires taking into consideration of various external and internal environmental factors. However, the exact knowledge of the importance of various factors and their influence on the decision is not always made by individuals or groups who develop and evaluate decision alternatives. A particular difficulty is the fact that marketing decisions are often an incentive in relation to the competitors' decisions implementing, decisions that are difficult to predict. Thus, the marketing decisions are often taken under conditions of incomplete information or when the available data do not have the necessary reliability and truthfulness. Such situations are typical, for example, in case of decision on the development of new products, entering new markets, changing prices. As a consequence of this, there are real deviations from the realization of the decision, from calculated or expected results.

## 1. APPROACHES IN RISK AND UNCERTAINTY ASSESSMENT AT MARKETING DECISIONS ADOPTING

In the literature in this respect, it is analyzed the problem of risk in taking of marketing decisions. Namely the concept of "risk" is very complex, being interpreted differently by the different authors. Thus, Professor T. Danko says: "the managerial activity in a specific market space inevitably involves the risk as a potential threat, a random action in hopes of a happy ending, possible loss or failure in the commercial act, due to changes in market conjuncture". And still, the author expresses his view that management and business activity requires the use of the principle of risk. Thus, in this case, the risk is associated primarily with the actions of the decision making persons.

The academician Oleg Larichev notes the existence of three different approaches in defining the risk:

- a) risk as the probability of unwanted consequences or losses;
- b) the risk as the size of possible losses;
- c) the risk as a combination of probability and size of losses (for example, the average estimated value of losses over a period of time".

The differences between these approaches are quite significant. In the first of these, the risk is interpreted as the probability of the undesirable consequences' occurring, which may be treated differently in different situations. In this case, is not considered the qualitative measure of such

consequences (for example, resources unreasonably spent in the frame of an unsuccessful promotion). In the latter case, the focus is shifted from the size of the probability of undesired outcome occurring to the size of possible losses. The third approach, in fact, combines the first two ideas, and practically is reduced to the mathematical determination of losses.

But, these views have a common feature. Despite the different interpretation of risk, they are all based on the assumption that the consequences of marketing decisions are of probabilistic nature. The main differences are reduced to the problem of **measuring the size of risk**.

In the author's opinion, depending on specific conditions of the tasks' solving, for the person who adopts the decision these approaches may be of interest not only from the point of view of the concept of risk, but also according to its qualitative assessment. For example, in an extreme situation, when it comes to the business survival, the person who adopts the decision may choose that option of decision, which will more likely lead to its continuous existence. When selecting a volume of acquisitions of different goods, the manager may be driven by the assessment the expected profits.

The theory of decision-making includes and other indicators of the risk. One of the most important is the size of the standard deviation of profit (or losses). We evoke that the standard deviation of the random variable is an important feature of its variability around the mathematical expectation. Let us examine an example of using this indicator of risk in choosing a marketing decision.

Let us suppose that a commercial company examines two possible directions of diversification of store activity:

1. the opening of section of household goods;
2. the opening of section of perfumery and cosmetics.

The table presents some evaluations of the consequences of these variants of action. The probability of one or another outcome was assessed by the expert method.

**Table 1. Probability distribution of profit for possible alternatives of decisions**

Alternative 1	Profit (loss)	1,5	-0,5	0	1,0	1,5	2,5
	Probability	0,10	0,10	0,15	0,30	0,25	0,10
Alternative 2	Profit (loss)	-2,5	-1,0	0	1	2,5	4,0
	Probability	0,10	0,10	0,20	0,35	0,20	0,05

If we use as risk assessment the mathematical expectation, then the expected profit in the first version will be 0,725 monetary units  $((-1,5 * 0,1) + (-0,5 * 0,1), \text{ etc.})$ . In the second variant, the expected profit is higher, being equal to 0,8 monetary units:  $((-2,5 * 0,1), \text{ etc.})$ .

However, if it were to consider this approach with more prudence, we should take into consideration not only the mathematical expectation of profit, but also the estimated size of its variation. Dispersion and mean square deviation values of profits are presented in the table below.

**Table 2. The dispersion and standard deviation of profit.**

Alternative 1		Alternative 2	
Dispersion	Mean square deviation	Dispersion	Mean square deviation
1,214	1,102	2,564	1,601

In this case, choosing the second variant, the dispersion of potential values of profit is approximately one and a half times that in the first variant of decision. Namely, this fact can be taken into account in the risk assessment on decision taking. Thus, the second option is better in terms of possible losses (profits), but also more risky.

Here it should be noted that the issue of risk to marketing decisions have objective and subjective components. The first, as already mentioned, is related to the real decision-making

conditions, when the person who adopts the decision does not have all necessary information and it is not possible to calculate accurately the response to the taken decision by the competitors and consumers. In addition, the changes of external environment's factors often have a probabilistic nature and can not be defined precisely.

The subjective aspect of the problem relates to how the risk is perceived by the people who prepare and take the decision, their predilection to take risky decisions, the influence of external factors on the decision taking. In the works of several authors, the emphasis is on issues of risk perception and group decision-making. As different studies show, the risk considering in group decision-making has certain characteristics, primarily associated with subjective moments of conduct of members of these groups. In our opinion, namely the influence of subjective factors explains the fact that in similar marketing situations, different individuals take substantially different marketing decisions.

The risk issue can be examined also from other positions. The managerial decision making process involves the implementation planning of certain actions in the future, considering the company's external environment.

The external environmental factors relate to the conditions, situations and events that can not be influenced by those responsible for taking decisions, but which in future could affect the impact of those decisions. Concomitant with this, the decision maker may not possess all the information or possess insufficiently precise information about external environmental conditions and their changes in the future. Such a situation is often observed in the case of macro-environment factors, but can also refer to the company's microenvironment. As an example, may be referred to the emergence of new technologies, market entry of new competitors, changes in legislation regulating foreign economic activities, taxation.

Usually, the company's employees take totally new or corrective managerial decisions, based on a limited amount of data they have at one time. In this way, the volume of available information and its degree of objectivity, and qualification of the company's employees, are the primary prerequisites for effective managerial decisions making. It is obvious that the smaller (relative to needs) is the volume of available information at the company, the lower is the reliability of information and the greater is the risk at the decision making on this basis.

## 2. THE CHARACTER OF SITUATIONS OF MARKETING DECISIONS TAKING

Depending on the company's marketing environment understanding and ability to influence its components, there can be distinguished three situations in marketing decisions taking:

A. **The situation of certainty** – the company's marketing department has complete information that is necessary to solve the problem; it is possible to develop variants of decisions and the exact determination of decisions consequences after their completion.

In such circumstances, the problem to be solved can be accurately and unambiguously formulated, and criteria for selecting the best alternatives are clear. Taking decisions in such conditions is relatively simple. Although, of course, there may be tasks, the solving of which, despite all the necessary information, the identification of best option is quite complicated. To solve problems under conditions of certainty, the person who adopts the decision chooses the best potential results after its realization.

The right of decision-making under conditions of certainty is often sent to the marketing and sales department specialists. The most daily tasks of lower level managerial staff refers to the adoption and implementation of decisions in real conditions of certainty.

B. **The risk situation** – the company's marketing department can identify a problem occurred, predict the changing conditions of the external environment, formulate possible decision alternatives, originate qualitative assessment of the probability that the choice of certain alternative will lead to desired results.

The main particularity of the risk situation is that the outcome of each decision alternative is rather probabilistic in nature, than deterministic (unlike in the case of situation of certainty). It is also important to note that it is possible to estimate the probability of various outcomes and, consequently, determine the mathematical expectation of profit, losses or other indicators, with the support of which is performed the comparison and choosing of decision alternative. The volume and quality of information on external environment factors, available for the person who takes the decision, and risk assessment may vary significantly in specific instances. The content and veracity of information influences the perception of risk at the decisions' taking, but also determines the use of objective or subjective assessment of the probability of obtaining certain results and modifying the parameters of the company's external environment.

The future events (including achieving the expected results) can be determined by objective or subjective probability estimates. The objective probability (statistical) of the occurrence of an event, characterizes the possibility of its occurring in the future based on quantitative data of previous periods. Thus, in the decision making process the company's employees may determine the probability of one or other event by examining the reports of earlier years. It is necessary to take into consideration the fact that the objective probabilities may change over time, requiring an adjustment of previous decisions.

The unexpected and instantaneous changes of the external environment can generate the need to use the subjective indicators of probability.

The subjective probability of an event occurrence is an estimate of the possibility of its occurring in the future based on opinions and experience of company and marketing department leaders, and on opinions of invited specialists and experts. It is obvious that the quality of such estimates depends on qualifications and experience to solve similar problems in the past, employees' psychological characteristics (for example, readiness to accept a high degree of risk or, conversely, the wish to avoid it), and their role in the decision making.

**C. The situation of uncertainty** is characterized by the fact that the person who takes the decision does not have data that allow the estimation of the probability of the consequences of decisions taken.

Because in the situation of uncertainty is impossible to determine the probability of occurring of future events, it is not possible and the calculation of mathematical expectation of sales volumes, profits, losses and other indicators commonly used in comparing and choosing the marketing decision alternative. For the same reason, it is not possible to apply such criteria of risk estimating as is the mean square deviation. In conditions of uncertainty is often difficult to formulate precise and clear the marketing problem, possible decision alternatives and criteria for their evaluation.

In practice, most often, the managers are forced to work in these particular conditions. Thus, the uncertainty is manifested in the development and launch of conceptually new products, especially if there are used new technologies at their production. The company faces uncertainty whenever enter new markets (especially when it comes to foreign markets) or develops goods or services conceptually new for these markets, production and provision of which is linked to the use of new technologies. In addition to marketing area specific factors, a significant contribution in setting of conditions of uncertainty have the political, economic and legal aspects. However, despite the complexity of action in such circumstances, the managers take decisions based primarily on their own experience and intuition, and try to foresee the consequences of their decisions.

The highlighting of these three main types of situations at the decisions taking has, to some extent, a relative character. Therefore, in the situation of certainty it exist a certain probability of deviation of actual results of decisions taken by those expected. The issue consists in the size of this probability and size of deviations. In conditions of risk, the respective probability and deviation values will be higher, and in conditions of uncertainty they simply can not be assessed. If we consider the probable consequences of various decision alternatives adopting in terms of entropy, then we can say that in certainty conditions the entropy indicator is minimal, and the higher the risk

is pronounced, the greater is the entropy. In conditions of uncertainty, the entropy is virtually impossible to determine.

The systematization of conditions of marketing decision-making has not only cognitive interest, but also practical value.

Depending on situation, the person who adopts the decision possesses different information in terms of content and volume – comprehensive information for full certainty and minimum information in conditions of uncertainty. The choice of method of developing decision alternatives and their evaluation depends significantly on the availability of initial information. For example, to make an accurate forecast of demand (according to statistical criteria) based on models of multi-factorial correlation; it is necessary to have a fairly long dynamic range of sales indicators and factors influencing them. If such statistics can not be obtained by the person who adopts the decision, then this method of forecasting can not be used.

Given these circumstances, in different conditions there are applied different methods of affirmation and choice of decisions. The certainty allows the use of deterministic methods and models, and in the risk situation different probabilistic methods are used. Finally, the conditions of uncertainty require the application of other methods and assessments.

It is obvious that the greater the certainty, the highest – in cases of equals other conditions – will be the quality and efficiency of adopted decisions. The companies that have better information about the marketing environment possess a clear competitive advantage. Hence, the managers tend to ensure the reduction of uncertainty, to make the situation more clear and predictable. We further intend to examine more detailed the outcome of this problem.

It is clear that there are several ways to solve the problem, though; we will refer to a direction that would lead to reduction of the problem of uncertainty at marketing decisions adopting. Evidently, it is extremely important to improve the quality of marketing information. The decision is, in a sense, an informational product, its argumentation being dependent on informational support of decision-making system. For company, there are several ways to improve the informational support of marketing management:

- Managing of company's external marketing environment monitoring: defining the parameters to control, data obtaining sources, forms and periodicity of presenting the information, processing and storage methods, order of presentation (or access to that) of marketing managers and specialists, or other departments of the company.
- Managing of company's internal environment parameters' monitoring, which have particular importance in solving of marketing tasks. First, the marketing department likes to have complete and accurate information about sales and stocks of finished goods, order fulfillment status, production and sales costs and profits, processes of elaborating and development of new products manufacturing. Here are presented only general information groups. The informational support system of decision-making, must submit them in a disaggregated way, required for specific decisions adopting. Thus, sales data should include information on deliveries in terms of product types, geographic markets, segments and clients. Data on the internal and external environment monitoring have a dual utility. First, they allow the adoption of decisions based on the use of more complete, accurate and intelligent information. It is important to emphasize that the systematic analysis of information gathered in the database, can often be used to estimate the probability of occurrence of certain events, predict possible reactions of consumers and competitors on various marketing related activities. Secondly, good organization of marketing environment monitoring (especially if correlated with the forecast system), enables timely identify problems emerging on the market, to be precise it (monitoring) report incentives, weak signals, which require decisions adopting to adapt to assumed changes in the marketing environment.
- The marketing research performing has a direct relevance in terms of reducing risk and uncertainty. Of course, not all informational problems can be solved by such researches,



since, as already mentioned, there are factors and situations that are impossible to predict. At the same time, there is no doubt that the qualitative execution of research of consumer's intentions and preferences, demand forecasting and other issues reduce the uncertainty and the risk in marketing decisions adopting.

- The use of appropriate methods of decision adopting, even if they does not solve the uncertainty problem, they allow to take into consideration the specific of concrete situation, the probabilistic nature of future events on the company's markets. The comprehension of marketing professionals of modern methods of argumentation of decisions, their ability to correctly identify the occurred situations and to choose appropriate ways of approach, helps to improve the foundation of selected action variants in conditions of risk and uncertainty.

## CONCLUSION

In addition, it has to be taken into account another important fact. Many marketing decisions are, in essence, a future action plan on specific elements of the company's external marketing environment. First, this concerns the choice of target markets, positioning and marketing instruments using. The marketing mix is a set of means by which we can exert influence on consumers, competitors, intermediaries and other participants in market relations. In this way, the marketing decisions' implementing not only allows passive observation of the environment dynamics and adapting to it, but actively influence important processes and phenomena such as consumer preferences and intentions, demand, competitors actions, etc. The company tends to use the marketing tools so that this leads to increasing the probability of events' favorable conducting. However, this means that namely the marketing decisions – if they are rational and efficient – reduce the uncertainty and the risk.

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## CREDIT CARD FRAUD

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### Abstract:

*Credit card fraud is the misuse of a credit card to make purchases without authorization or counterfeiting a credit card. Credit cards are the most often used electronic payment instrument. Types of credit card fraud are: online credit card fraud, advance payments, stolen card numbers, shave and paste, de-emboss/re-emboss etc. If current growth rates continue, credit cards and debit cards will each exceed the number of paid checks before the end of the decade. As the industry continues to expand and offer credit to more and more consumers, fraud will also grow.*

**Key words:** credit card fraud, prevention, smart card, internet

**JEL Classification:** E59

## 1. INTRODUCTION

Credit card fraud is the misuse of a credit card to make purchases without authorization or counterfeiting a credit card. Credit cards are the most often used electronic payment instrument. If current growth rates continue, credit cards and debit cards will each exceed the number of paid checks before the end of the decade. As the industry continues to expand and offer credit to more and more consumers, fraud will also grow.

Credit card fraud is successful because the chances of being caught are small and prosecution is very laborious.

## 2. ONLINE CREDIT CARD FRAUD

The lack of face-to-face or voice interaction on the Internet makes fraudsters more daring by providing them with anonymity, which makes the detection and prevention of online frauds more difficult. Lists of stolen credit card numbers are also being posted on the Internet or sold in newsgroups and can be used by a variety of individuals to purchase goods online without the authorization of the credit card's owner.

### Credit Card Schemes

There are many different types of credit card schemes including selling the cards to thieves, family members using the credit cards without authorization, and fraudulently obtaining a card. Statutes relating to the misuse of credit cards generally prohibit the obtaining of property or services through.

Fraudulent activity normally occurs within hours of the loss or theft, before most victims have called to report the loss. Increasingly, victims aren't even aware that their credit cards are being fraudulently used until they receive their monthly statement. It is extremely important that victims report the loss or theft of their card within 3 days, as they will not be held responsible for any charges that occur during that time frame. If the credit card company is not notified of the theft and the card is used, the customer will be liable.

### Organized Crime Rings

Nigerian rings are especially notorious for stealing credit card and bank information from the mail. These articles are used to generate false identification documents, such as driver's licenses and Social Security cards. The credit cards themselves are duplicated and distributed to members of the rings. The false IDs are then displayed during purchases made with the stolen cards. Members of the ring go on spending sprees, ending only when the credit has dried up or the legitimate owner

reports their card as stolen. Often, counterfeit and stolen cards are express-mailed to members of the ring in other parts of the country.

### **Advance Payments**

Consumer regulations require credit card issuers to credit customers' accounts immediately upon receipt of payment. This means deducting from the balance of the account before the check or other payment instrument has actually cleared the bank. A loophole such as this is easily exploited by experienced fraud rings.

Using a forged or counterfeit check, an advance or overpayment is made on a stolen credit card. Since the issuer must credit the payment at the time it is made, there is no time to verify the authenticity of the check. Consequently, cash advances and purchases can be made immediately. This scheme can be extremely lucrative to the perpetrators.

### **Stolen Card Numbers**

The Internet has become a breeding ground for individuals to obtain stolen credit card information. The thieves who steal this information find credit cards or lists of credit card holders and the corresponding numbers to their accounts. They then make the numbers available to a larger group which uses the information to obtain goods and services in the name of the cardholder. Wrongfully obtained information may be posted on websites that originate in foreign countries. The international nature of the fraud makes it arduous to deter or punish. A recent report involved a Romanian website that displayed stolen credit card numbers of more than 450 individuals, most from the United States. The list contained identifying information of cardholders and was available for several weeks before being shut down.

### **Shave and Paste**

Any number of alpha or numeric characters is sliced from the card surface and other characters are attached to the card surface, utilizing fast drying epoxy-type glues. This might be done to put an entirely different but valid account number on the card or to change the name.

### **De-Emboss/Re-Emboss**

In this scheme, the credit card is exposed to heat, usually from a household iron, a candle, or hot water in the microwave. Plastic cards, comprised primarily of polyvinylchloride, become more elastic when heated, and the embossed alpha/numeric characters are removed. An embosser puts new numbers and names on the cards. This process will generally create a "ghost image."

### **Counterfeit Cards**

The fastest growing type of bankcard fraud involves the illegal counterfeiting of credit cards. Known as "white plastic" cards, this scheme utilizes credit card sized plastic with account numbers and names embossed on the card. This scheme works in conjunction with a corrupt and collusive merchant or a merchant's employee. Other counterfeit cards are manufactured from scratch using high speed printing facilities and used in association with organized crime groups. Manufacturing facilities have been traced to the Far East. The actual counterfeiting process has been immeasurably eased by new technology which allows more accurate duplication. Duplicating legitimate cards is still an intricate operation, however. Magnetic strips, numbers, holograms, and logos must all appear authentic. Desktop computers, embossers, tipping foil, and laminators are common tools in the reproduction process. Perhaps most difficult of all to accurately reproduce, however, is the hologram.

### **Telephone/Mail Order Fraud**

The fraudster might offer a free trip or other nice prize, with the only catch being that the winner must have a credit card. Once the thief has the number, he can order merchandise or have money wired to himself.

A great deal of credit card fraud is childishly simple to complete. Many crooks have great success by simply selecting a name from the phone book, calling, and pretending to be a Visa/MasterCard representative. The victim is told that his or her card number may have been obtained and used illegally by criminals. Or, a representative of a travel agency may call, claiming the victim has won a discount travel package. In any case, the victim is asked to read the card

number off for verification or inclusion in the discount deal. A surprisingly large amount of people fall for this scheme and give out their credit card information. Purchases through catalogues and mail orders are then often made using the victim's card number. They may select an unoccupied address to which their merchandise can be delivered, perhaps leaving a note asking the deliver service to simply put the package by the back door.

#### Mail Theft

A thief may steal credit cards already applied for by a bank's customer and issued by the bank. The thief will then attempt to use the card by posing as the intended recipient.

#### False Applications

Perpetrators might apply for a new card using information stolen from a wallet, purse, or the trash; or stealing a pre-approved credit card application out of the mail or trash. Also "take-one" applications that are prominent in stores offering credit cards to the public are ripe for fraud.

#### Credit "Doctors"

Credit doctor is the term used for fraudsters who sell stolen credit card account numbers via newspaper ads to people unable to get credit cards.

#### True Name Fraud

New credit card accounts can be opened by individuals possessing a victim's true name identification such as a driver's license or Social Security number. The true identification was either obtained as a secondary objective in the commission of a more aggressive offense such as robbery or as the primary target of a lesser crime such as pick pocketing.

#### Non-Receipt Fraud

A form of credit card fraud in which the perpetrator intercepts credit cards that are in transit between the credit issuer and the authorized account holder. Losses attributable to mail theft have declined significantly as a result of "card activation" programs, where the cardholder must call their financial institution and confirm their identity before the card is activated.

#### Creditmaster

This software program, downloadable from the Internet, allows the user to produce valid credit card numbers. Counterfeiters can then put these numbers to use in phony cards.

#### Probing

The fraudster sets up a computer program that lets him run stolen numbers through various financial institutions in the hopes that one of them will still honor the number. Numbers that clear are often sold en masse to counterfeiters.

#### Skimming

Credit card skimming is more frequent in businesses where an employee must leave the customer's presence in order to run the transaction. A restaurant patron, for example, hands his credit card to a waiter who swipes the card into a wedge while conducting the legitimate transaction. Once the waiter has collected enough numbers, he can either sell them to a counterfeiter or simply produce his own fake cards using the stolen information. It may be months before the customer notices phony transactions on his statement, making the point of loss very difficult to determine. It follows that the guilty waiter is, therefore, unlikely to get caught. Skimming can also occur by tapping into a line used to transport credit card data.

#### Pretext Calling

Some fraudulent actors will call unsuspecting customers and pose as bank or credit card agents. The actor will request account information or other identifying information from the victim and use the information to apply for additional credit cards or to use the credit cards to purchase goods or services.

#### Account Takeover

The fake actor may take over a victim's account by requesting a change of address on the account and then calling to report the card lost or stolen. The issuing bank will then send the replacement card to the new address.

#### Institutional Identity Theft and "Spoof,, Sites

Fraudulent actors may create false Internet sites, pretending to sell goods to buyers who must enter their credit card information and other personal information in order to make purchases. The "seller" then uses the information to make fraudulent purchases in the name of the buyer. More recently, fraudulent actors have begun creating "affiliate" sites of actual sellers or other creditors, such as banks. The perpetrator of the fraud then sends e-mails to existing customers of the actual seller or creator. These e-mails inform the unsuspecting customer that there is a problem with his or her account and asks the customer to log on to the site of the company that the wrongdoer has copied and to re-enter their personal and credit card information. The fraudulent actor then uses the information to make purchases.

#### Prevention

Prevention is the key to reducing credit card losses. Several programs can and are in place to reduce losses. Some of them are:

#### Education Programs

Tellers and merchants should be trained to be familiar with the security features of the credit card. Although the majority of counterfeit cards contain some of the security features, they usually are not complete and offer indicators that the card is not legitimate. Credit card issuers should take measures to inform their customers about credit card fraud, what the financial institution is doing about fraud, and how the consumer can help.

#### Liaison with Law Enforcement

Companies should develop strong liaison with law enforcement. When a company receives intelligence of hot frauds, law enforcement should be notified immediately.

### 3. FINANCIAL INSTITUTION MEASURES

Banks and other financial institutions have great resources at their disposal to prevent fraudulent transactions. Many of them need merely to enforce their existing policies.

- New account screening—educate personnel to thoroughly check applicants' information, comparing ID information, addresses, and credit reports for accuracy.
- PIN activation—bank customers are often required to provide personal identification numbers in order to activate their cards over the phone. Callers who are not able to provide the PIN number may have manufactured or stolen the card in question.
- Caller ID—most people calling to activate their card will do so from home. If the number on Caller ID does not match any of the telephone numbers listed in the customer's account information bank personnel should ask some identifying questions.
- Smart Cards contain a microprocessor memory chip instead of holograms. These cards are able to identify the user through encrypted information on the chip, and must be inserted into a "card reader" attached to the computer. That means the card cannot be used unless the purchaser is currently holding it. A pin number is also required for the card so the thief needs to physically have the card and the security code in order to use it. This allows cardholders more purchasing options as well as increased security.

### CONCLUSIONS

Judging from the past, credit opportunities for consumers will increase over time and, consequently, more will fall victim to fraud. In the future, the trend will be one card for all types of financial transactions. Prototypes are currently being developed and tested by the major credit card issuers. Fraud rings will adjust accordingly and new counterfeiting methods will emerge and law enforcement and investigators must maintain a global look when facing this type of fraud.

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## THE STUDY IMPACT OF VIOLENCE REGARDING THE INFLUENCE OF VIOLENCE IN THE ROMANIAN ECONOMIC AREA

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### Abstract:

*The term violence is often associated with brutal force, with extreme events. Violence includes a large number of definitions, theories and types and can be studied in relation to the norms of a society or group. When we talk about violence we think at the existence of cases or purposes and also some manifestations: economic, physical and mental through language or images. Violence has many causes and is not referred only to profanity, obscene or ugly words and phrases, but in the current economic situation, as money laundering, credit card theft or tax evasion are crimes that led to the murder or murders committed by individuals or organizations mafia. We will refer to some essential aspects of economic violence: money laundering, tax fraud, unemployment, unemployment benefit. We appreciate that violence can arise in any circumstance in which she appears to mask reality and persuading or manipulating the masses.*

**Keywords:** economic violence, money laundering, violent effects of unemployment, the unemployment rate.

**JEL Classification:** A12, A19

## 1. INTRODUCTION

The term violence is often associated with brutal force, with extreme events. Violence is a reflection of physical and mental states present in the Romanian society. This type of violence has become, perhaps, worrying for us. The extent of violence is one of the most serious social problems facing contemporary societies, including Romania. Violence includes a large number of definitions, theories and types and can be studied in relation to the norms of a society or group.

Reference should be made to explain, since the term 'violence' as Roman neologism (see fr. "violence"), based on width "violence" ("wild"), whose family of words, with followers in all Romance languages are retained for the present discussion: adj. 'Violence' ('fierce, enraged, wild') and verb, violō "(1. 'To bump, hit something that is not permitted': ~ patrem= to hit the father, ~ silvam securi = to struck the trees, 2. to violate, profanation, to stain: ~ 'fidem' = violating the oath of allegiance, ~ 'templum' = to profane the temple)(1). Violence, vulgarity and obscenity have become matters of special interest in the contemporary world. These phenomena, economic, psychological, social and historical, have their supporters, even in different environments.

When we talk about violence we take into account the existence of cases or purposes, but also some manifestations: economic, physical and mental through language or images. Violence includes a large number of definitions, theories and typologies. It can be studied in relation to the norms of a society or group. Violence has many causes and is not related to profanity, obscene or ugly words and phrases, but in the current economic situation, as money laundering, credit card theft or tax evasion are crimes that led to the murder or murders committed by individuals or organizations mafia (2). According to Noel Flageul 'banking crises and imbalances that are causing the real economy, given the growing ties between the countries and globalization, would take all of violence (3)".

## 2. ECONOMIC VIOLENCE EFFECTS AND CONSEQUENCES

We will refer to some essential aspects of economic violence:

- Money laundering is not just a new activity, and this phenomenon is dominated by tax evasion will increase the current Romanian financial crisis. This crime consists in the reuse of illicit profits by changing its use or where they are made to mask their pedigree.

- Tax evasion is sometimes impossible to evaluate and difficult to delimit in a country that is in a strong economic crisis. Law no. 87 of 18 October 1994, published in Official Gazette no. 299 of 24.10.1994, in his first article, considers tax evasion as' theft by any means in whole or in part from taxes, fees and other amounts owed to the state social insurance budget and special extra-budgetary funds by natural and legal persons, Romanian or foreign.

- Tax evasion is one of complex social and economic phenomena of the utmost importance that our country is facing and which seeks to limit unintended consequences as much, eradication is virtually impossible. The state must be concerned with systematically and effectively prevent and limit tax evasion violent phenomenon.

- Other offenses that are falling as economic violence: the handling of credit cards, stock issues, discounting policies, bribes on public procurement, etc.

Economic violence is the gist of the highly addictive financial control, isolation and inability to choose, to make decisions and to maintain self-esteem. Often, some needs are unmet and this form of violence includes:

- working ban
- unjustified expense
- Neglecting in return for meeting the needs of the family of the aggressor (alcohol, drugs, gambling, etc.).

Economic violence is strongly linked to social violence. Also, both theoretical and practical economic violence is strongly correlated with psychological violence, especially with the abuse on the destruction of personal property. Therefore, economic violence is reported only in conjunction with other types of violence never alone: 92% declare psychological abuse, physical abuse and 65%, 61% and 22% and social violence and sexual violence.

The incidence of violence on the Romanian economy:

- 4.2% of the adult population report economic violence in the family.
- Economic violence is prevalent without differences in both areas of residence.
- Economic violence is more than twice as frequent in Romanian society.
- 5.7%) than men (2.5%), regardless of age, ethnicity, religion, education or socio-professional category.

Monetary Violence in Romania has a great impact on individuals because it leads to an imbalance in the banks.

Another essential component of the economic violence is the unemployment with its negative effects on individuals, but also on current Romanian society.

Unemployment is a form of not useful employment production factor, the more negative aspect as the company bear significant costs for education and workforce training unoccupied, which remain unrecovered expenses (4). This phenomenon leads to reduced household income and increased social tensions, as a factor lowering the standard of living and worsening the quality of life and induces violence, aggression and poverty (5).

Unemployment is a phenomenon that affects, in different measures, all countries and which has many negative economic consequences (6):

- There are affected directly, individuals who are part of the active population underemployed, labor that has indicated its willingness and ability to work, but do not have a place;
- As a macroeconomic imbalance, unemployment affects not only material compartments of the national economy, but also its human elements, meaning that employment is one that supports the full social costs of serious;
- With growing unemployment and job appears on the "black market", a violent side of the economy;



- The phenomenon contributes to increased social costs that an economy has to bear in the form of unemployment benefits;
- Layoffs are a violent path of recovery impact in country's economic activity. In addition, there are amplified or disagreement between the states and the people working with a certain degree of underemployment (which are a source of violent social conflict).

Unemployment has a dangerous and aggressive materialized cost. Economic violence reflects real violence as a form of its translation into Romanian nowadays society. In recent years, economic life has suffered, of course, many changes, and some violence related to the macroeconomic crisis. Bombarded with, thus economic events aggressive, violence will depersonalize individuals and future generations will not charge just because they are already forming an awareness of the suffering caused by violence, that consciousness that causes you to fight back with aggression.

Unemployment effects of violence and aggression are reflected not only strong on those who became unemployed, but also those who are part of the working population because they participate with some of their income from public funds up social security.

According to economic statistics conducted by the National Agency for Employment, unemployment and the methodology of the International Labour Organisation (ILO) recorded at the end of January 2011, at the national level was 6, 74%, less than 0.13 p than in December 2010 with 1.38 and p less than in January 2010 (7). In terms of unemployment rate by sex, in January 2011, compared to the previous month, the male unemployment rate fell to a value of 7.47% in December, the value of 7.41% and the female unemployment rate decreased from 6.20% to 5.99%. Unemployment rate decreases violent recorded in 28 counties and in Bucharest, the most significant decreases in the unemployment rate recorded in Valcea (by 0.80 pp), Caras Severin (by 0.67 pp), Arges (by 0.61 pp), Calarasi (0.55 pp) and Brasov (by 0.53 pp). The highest levels of unemployment have been achieved in the counties of Vaslui (12.37%), Teleorman (10.82%), Mehedinti (10.76%), Ialomita (9.92%), White (9.89%), Covasna (9.87%), Dolj (9.83%), Buzau (9.74%), Galati (9.66%), followed by counties: Gorj (9.57%) and Olt (8, 68%) (8).

Therefore, analyzing the profile of people unemployed ILO we note that the highest risk of unemployment have the young people aged between 15 and 24 (18.6%), and it decreases steadily as people grow older. Unemployment is higher at men than at women; this is not necessarily due to a better state of affairs of women, as a higher percentage of people among their household (which may mask hidden form of unemployment). In rural areas the situation is quite similar - unemployment may be masked by declaring individuals as farmers (most times it is subsistence agriculture, high-risk location in poverty) (9).

On the other hand, specialists in economics believe that the positive consequences of unemployment are more or less grounded in reality (10):

- by what it implies (redundant workers), this phenomenon creates a potential pool of people willing to work, to cover possible additional demand for labor;
- it essentially occurs increasing labor productivity, discipline and punctuality of employees (for fear of future layoffs);
- Psychological factor, it is assumed that there are usually the least prepared redundant or low-skilled ones, defending raising interest work, but especially enhancing the competitiveness of existing workers.

Violence occurs everywhere, in every field, be it economic or social. Economic violence has a negative impact on these individuals, because they influence the meaning of deviant behavior. On the other hand, it appears not only in economics but also in fields that describe the verbal or physical violence.

### 3. SOCIAL PROTECTION OF UNEMPLOYED AND UNEMPLOYMENT ALLOWANCE - ASPECTS OF ECONOMIC VIOLENCE

In recent years, the European Union countries, social programs for the unemployed show that the conditioning of the employment relationship and benefits for, the basis for social protection system increasingly tends more towards strengthening the role of unemployment risk prevention than one or compensatory redress. Financing unemployment benefits system is achieved mainly contribution by employers' contributions show a decreasing trend and employee contributions, with a tendency to increase (11).

The evolution of social protection systems for the unemployed in the last decade has seen a change in orientation, moving from the scope of exclusive concern to ensure decent living conditions for the unemployed to work by stimulating their interest, their swift reintegration in an activity useful and reduce social dependency (12).

It was envisaged that the unemployment benefit should be considerably lower than the wages earned during the period of activity or even the net minimum wage for the economy does not lead to carelessness on the unemployed to find a new job. Approximation between price and (unemployment benefits) and price of labour (wages) has even lower interest in keeping a low paid job in circumstances where, without effort, you can receive a comparable amount. There was thus a natural consequence of the need for reassessment of the relationship between unemployment benefits and wages. The introductions of unemployment benefits while declining, while minimizing one year period during which the unemployed person may receive aid, seek greater concern for finding a job and protect themselves through employment (13).

Under the same conditions it is also necessary the imposing of tighter restrictions on the conditions to be met for the acquisition of social rights, namely increasing the minimum contribution period of at least a year and a better correlation with the level of compensation received contributions.

Increased obligations for welfare recipients, but especially by tracking their compliance checks carried out by specialized administrative services is another way of maintaining interest in employment. Attending a training, carrying out temporary activities in the public sector, presenting periodic interviews for employment purposes, accepting temporary jobs offered even if they do not meet training or if the salary is lower than had previously are as many ways to justify the usefulness of granting unemployment benefit, employment permits for integration, but also a prerequisite for receiving entitlements.

Active measures (subsidies for youth employment, loans on favourable terms to businesses that hire the unemployed, subsidies for the development of certain economic sectors or areas, retraining courses) that stimulate employment and generate new jobs began to show effects on positive programs to combat unemployment. Their share is still relatively low compared to passive measures (grants and aid money), because high involve additional costs and their results are not immediate, but moving towards such measures falls within the general trend of community-based social policies (14).

Minimum income guarantee for the unemployed is a problem common to all states, but the share of the aid and grant period are different. An unemployment allowance reveals classical actions on the working population in two main directions: the purpose of aid is to reduce the social costs of unemployment, how to track the amount of compensation is followed by the allocated amount (15).

Therefore, economic violence gradually became stronger and stronger, due to increasing concern cases of violence by developing feedback and negative opinions about people or events. Aggression and violence have become issues of particular interest in the economic, but also the contemporary world. These two phenomena, economic, psychological, social and historical, have their supporters, even in different environments. When we talk about violence we think at the existence of cases or purposes, but also at some forms of manifestation: the economic, physical,

language and images, or mental ones. Violence occurs against the backdrop of conflict in society due to poverty, lack of education and information. In this context young individuals acquire, learn and then replicate what they see, while some individuals mature consider natural tolerance aggressive and violent events.

Finally, we appreciate that violence can arise in any circumstance in which she appears to mask reality and persuading or manipulating the masses. Will they, by reason and humanity to master instinct culture of violence, aggression, slander and self-destruction that leads the human species from extinction on its own initiative? We believe that violence is not an invitation to reflection only for linguists, but also for economists.

#### 4. CONCLUSION

Aggression and violence have become issues of particular interest in the economic field, but also in the contemporary world. These two phenomena, economic, psychological, social and historical, have their supporters, even in different environments. The evolution of society over recent years has been influenced by the economic reforms that have resulted in profound changes in the labour market in Romania.

#### ENDNOTES:

- <sup>(1)</sup> Vezi DLR.
- <sup>(2)</sup> Apud, Noël, Flageul, *Violența financiară*, în vol. (coord) de Ferréol și Neculau, *Violența*, p. 263.
- <sup>(3)</sup> Ibidem.
- <sup>(4)</sup> Dobrotă, N., *Ocuparea resurselor de muncă*, Editura Economică, București, 2008, p. 294
- <sup>(5)</sup> Krugman, P, *Microeconomics*, Editura Books Ltd, 2008, p. 172
- <sup>(6)</sup> Năstase C., Popescu M., Boghean C., Scutariu L, *Macroeconomie: Concepte fundamentale*, Editura Didactică și Pedagogică, București, 2008, p. 189
- <sup>(7)</sup> [www.anofm.ro](http://www.anofm.ro) – Agenția Națională pentru Ocuparea Forței de Muncă
- <sup>(8)</sup> [www.anofm.ro](http://www.anofm.ro) – Agenția Națională pentru Ocuparea Forței de Muncă
- <sup>(9)</sup> Raport de cercetare privind economia socială în România din perspectivă europeană comparată, *Economia socială - model inovator pentru promovarea incluziunii active a persoanelor defavorizate*, București, 2010, p. 48
- <sup>(10)</sup> Ciobanu, Gh., și colectivul, *Macroeconomie*, Editura Imprimeria Ardealul, Cluj-Napoca, 2006, p. 249
- <sup>(11)</sup> Holoviyak, J. Stephen, *Managing Human Productivity-People are your best investment*, Sipkoff, Susan Stone, 2004, p. 201
- <sup>(12)</sup> Raportul Național Strategic privind Protecția Socială și Incluziunea Socială (2008-2010), București, septembrie, 2008
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- <sup>(14)</sup> Stiglitz, J., *Principiile economiei*, Editura Economică, București, 2007
- <sup>(15)</sup> Ignat, I., Pohoată, I., Luțac, Gh., Pascariu, Gabriela, *Economie politică*, ediția a 2-a, revizuită și adăugită, Editura Economică, București, 2002

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## THE EVOLUTION OF THE LOW-COST AIRLINES IN US. THE CASE STUDY ON SOUTHWEST AND JETBLUE AIRLINES

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### Abstract:

*The low-cost companies emerged for the first time in the USA airlines' industry, their model being subsequently taken by the world-wide operators. The purpose of the present paper is to analyze the development stages of the USA low-cost operators' market, identifying the determinants of the evolution of two major airlines: Southwest and JetBlue, through an empirical study conducted on these two companies in the end of the year 2009. Therefore, the information was collected both from secondary and primary sources, fact that allowed not only a descriptive approach of the low-cost airlines, but also an empirical research based on a questionnaire delivered by email to the two US operators. The information received was analyzed, tabulated and interpreted for each operator. The conclusions of this study suggest the fact that the market of the low-cost airlines from USA is in a stage much more advanced than those from other regions, being nowadays in the maturity phase. Regarding Southwest and JetBlue, we do notice the fact that the methods used by them in lowering the tariffs are based not only on the cost reduction, as it is the case of other low-cost operators, but also on maintaining a good ratio between their price and the quality of the services offered. The results presented in the end of the paper made the object of a larger case study.*

**Keywords:** low-cost airlines, cutting costs strategy, competition, traditional operators, development stage

**JEL Classification:** F23

## INTRODUCTION

Firstly developed in the US airlines' industry by Pacific Southwest, the concept of low-cost firm was subsequently implemented not only by the operators from Europe, Asia and Australia but also by firms that were acting on these markets in other fields of activity. Actually, the presence of the low-cost companies revolutionized the airline industry. The new competitive price structure established by these firms had a strong impact on the traditional companies, which have lost large parts of their profits. The responses to the challenges addressed by the low-cost operators came more rapidly from the traditional European and Asian airlines than from the USA companies, which, actually, were the first ones that had to confront with this phenomenon. Being forced by the competitive pressure exercised by the low-cost airlines, the traditional operators have lowered the prices. Yet, these reductions were not substantial because the traditional companies could not make the necessary adjustments in the level of the administrative, operational and human capital costs.

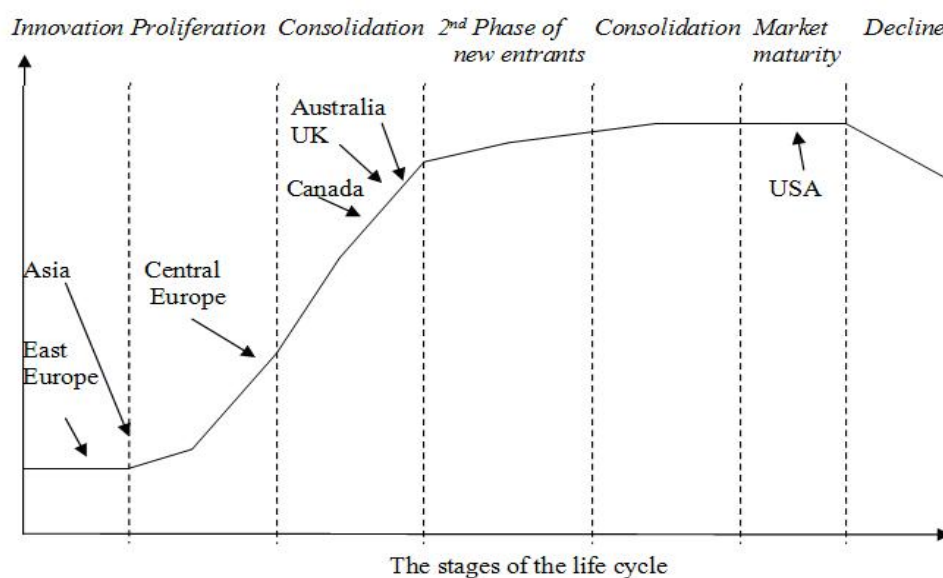
The main purpose of this study consists in analyzing the development stages of the USA low-cost operators' market, identifying the determinants of the evolution of two major airlines: Southwest and JetBlue. In order to reach this objective, it was conducted an empirical study on the two low-cost airlines (Southwest and JetBlue), which were selected according to the experience and performances achieved up to now. The contact with operators was established through the email, asking their cooperation in order to be included in the study. Subsequently, we delivered to each company a questionnaire, through email, that included general questions regarding the main methods used in developing the price strategy, the difficulties that they had to face, during years, in implementing it and also the critical factors on which relied the success of the firms. The information received from the Customer Relations Departments of the two companies was analyzed, tabulated and interpreted for each operator, being briefly presented in the last part of this paper.

## THE EVOLUTION OF THE LOW-COST AIRLINES IN THE USA MARKET

A low-cost airline is that operator which offers low tariffs, mainly because it eliminates many traditional services. Usually, the methods used by the low-cost airlines to cut the costs consist in maximum usage of the aircrafts, selling tickets through the internet (avoiding in this way the services paid to the travel agencies), the open seating system, only one type of tickets corresponding to one class (fact that allows the existence of a greater number of seats per aircraft than in the case of the traditional companies), the usage of the secondary airports, often located near the small towns, minimum staff on board, quick turnarounds and short breaks between two flights, flights on short distances, only point-to-point (without connections to other destinations), the paid catering services etc. (Doganis, 2001).

As we mentioned before, the "revolution" generated by the low-cost airlines started in USA, the concept being developed by Pacific Southwest but implemented for the first time by Southwest Airlines, in 1971. Subsequently, the low-cost airlines sector has gradually developed, in 2003 these companies having almost 25% from the internal market of the US, considering the number of the transported passengers. Although the rest of 75% belonged to the traditional operators, various studies show the fact that three quarters from the passengers transported by these companies were not satisfied with the ratio price paid - quality received. "The Americans were attracted by the low-cost companies because of their efficient services, with relatively high quality standards and with very reasonable prices. Operators such as Southwest or JetBlue became not only central pillars of the US airlines, but also the models of the best implemented practices, worthy to be followed by the other traditional companies" (*Successful Meetings*, 2005, pp. 47-64).

The US airline industry had experienced a certain timeframe that can resemble a life cycle of events that include the introduction up until the maturity of the low-cost market (Diaconu, 2009). This life cycle can be compared to similar situations that other low-cost airlines are, nowadays, experiencing around the world. Although the growth of these operators does not follow a uniform life cycle in all cases, a number of stages in the growth of low-cost carriers are clearly evident. Figure 1 shows the life cycle of the development of low-cost operators in the USA compared to the market developments of the low-cost airlines around the world.



**Figure 1. Market Developments of the USA Low-Cost Airlines compared to those from the global level<sup>1</sup>**

<sup>1</sup> Note: This life cycle model was developed considering the information regarding the low-cost companies from various specialized articles or reports of the airline industry

We have to mention that this entire model of the life cycle is specific for the US airline market. The state and the continents that are shown in the Figure 1 suggest that, nowadays, the low-cost operators from these markets are in that particular stage of the life cycle. So, we can notice that, while market of the low-cost carriers from Canada, United Kingdom and Australia has reached the consolidation phase, in Asia and Eastern Europe this market is only at the beginning, in the innovation stage, and in the Central Europe in the proliferation one.

As it can be seen in the Figure 1, in USA, the market of the low-cost carrier has already followed five stages up to it's nowadays maturity stage: the innovation, the proliferation, the consolidation, the second phase of the new entrants and the second phase of consolidation (Francis, Humphreys, Ison and Aicken, 2006).

*The innovation stage* (1971-1978) was possible due to the fact that at the beginnings of the '70s the regulations existent in USA allowed the development of the low-cost airlines but, until 1978, when the US Deregulation Act was adopted, these operators could not set routes, frequencies and fares.

*The proliferation period* of the low-cost model (1979-1985) was characterized by an increased price competition, the new operators that entered the market during these years using various elements of the low-cost model.

In the *consolidation period* (1985-1992), a relatively high number of new entrant low-cost carriers from USA either withdraw from the market, went bankrupt or merged with the major traditional airlines.

Between 1992 and 1996 *new operators have entered* the low-cost airline market of USA, called "copy-cats" of the Southwest model.

*The second consolidation stage* occurred between 1997 and 2000, when the majority of the new entrants either went bankrupt, or were taken over in response to the crash of a ValuJet aircraft, in May 1996, which raised consumer concern in relation to the safety aspects of low cost airlines.

*The market maturity* is specific for the present American situation, where there are some strong low-cost airlines, such as Southwest or JetBlue.

In order to survive on the market, many of the low-cost companies tried to find out other ways to particularize their offer, due to the fact that the number of these operators has increased and the price does not represent a differentiation aspect anymore. In USA, four of the low-cost operators - AirTran, Frontier, JetBlue and Southwest – have already announced the intentions of extending their networks, by offering new services on the business market segment. On short and medium term there is no risk that the market of these operators declines because, according to a survey published in 2005 in Business Travel News, 73% of the airlines' clients that travel for business purposes argue that, in the future, they will continue to use the services offered by the low-cost carriers, at least with the same frequency (*Business Travel News*, 2005, pp. 8-10).

## CASE STUDY: SOUTHWEST AND JETBLUE AIRLINES

Although Southwest entered the airlines market, in 1971, as a small low-cost operator, nowadays it is one of the biggest in USA. In order to transport almost 104 millions passengers per year to 64 destinations all over the world, the company has, daily, more than 3400 flights. Moreover, Southwest has the largest market capitalization of all the airlines in the world, greater even than the six traditional American operators, considered together.

The methods used in lowering the tariffs consist, mainly, in cutting costs through various procedures, in offering services with higher quality than other low-cost operators, maintaining a good ratio price-quality and, last but not least, in implementing an efficient management.

The Southwest's low costs are not based on low wages. Compared to any other US traditional airline, a great part of the Southwest employees are trade-union members and,

consequently, they are paid at the industry average revenue. The company's low costs are mainly based on the highly productive usage of its major aspects: aircrafts and employees.

It can be noticed the fact that Southwest used, during time, only one type of aircraft – Boeing 737 – fact that allowed a cost reduction not only in maintaining and repairing planes but also in trading the employees. The company considers that using only Boeing 737 offered the cockpit employees the possibility to know very well the plane and so to reduce at minimum the accidents' rate and to reach a performance in the operational safety.

Doing only point-to-point flights, served by small airports, allows each aircraft to be used more times per day – in average, 8 times -, with much smaller costs than operating connection flights through big international airports. The competitive advantage of small airports results from the possibility of attaining scale economies.

According to the remarks made by the Southwest officials, the company's flight staff perform more take offs and landings than any other airline in the world. This is possible due the fact that the company's philosophy consists in making the planes permanently flying – about 12 hours per day, in order to gain revenues as high as possible – and in having the fares low enough to keep people travelling. The Southwest managers also consider that the passengers will appreciate the elimination of the additional elements, such as business-class air-stations or catering services, as long as these economies will generate low prices. Yet, Southwest differs from the rest of low-cost operators through the fact that it currently offers minimum catering services, especially when the flight takes more than 3 hours.

Another aspect that has to be mentioned related to Southwest company, is that it uses the open seating system. This method seems to be very efficient first of all because there is no need for software to sort and hold seating assignments. Moreover, it saves time and money by eliminating the need for printing the boarding passes and then for verifying them as passengers boarded the aircraft.

In order to improve the performances of its aircrafts, Southwest implemented the Blended Winglets system. Its efficiency consisted in saving fuel, lowering engine maintenance costs and reducing takeoff noise.

From the very beginning, Southwest successfully applied methods and techniques of yield management, the principle that nowadays governs almost all low-cost airlines philosophy. In this way the company could notice the moments of the day when the demand was up, in order to practice higher tariffs, which were still about 20 times lower than the price of the traditional operators.

Another aspect that made possible the Southwest success was the development of 10 organizational practices in order to facilitate the coordination among the diverse functions existent inside the firm. These practices consists in: leading the organization with credibility and care, investing in the frontline leadership, hiring and training for relational competence, using conflicts to build relationships, bridging the work/family divide, creating boundary spanners, periodically measuring the global performances, keeping jobs flexible at the boundaries, making unions the company's partners, building relationships with the suppliers. As we can see, each of these practices is focused on building relationships of shared goals, shared knowledge and mutual respect, not only inside the firm but also with the external partners.

In what it concerns the JetBlue company, founded in 1999 and known nowadays also as "New Air", this became a global leader under many aspects: it was the first US airline that had the initial capital greater than 100 millions USD (130 millions USD), the first who offered 24 TV channels inside its aircrafts and the one that never used paper tickets.

As in the case of Southwest company, the JetBlue low costs and prices are mainly enabled by the types of the aircrafts used: only AIRBUS A320 and EMBRAER 190. The almost 100 AIRBUS A320 planes offer the customers wider seats and aisles, more overhead storage space and greater legroom than any other aircraft in its class. The advantage of the EMBRAER 190 planes is given by the two engines that allow an efficient rationalization of the costs and time necessary to do



multiple flights during a day. A specific element for both types of aircrafts consists in the fact that they are not conceived to ensure various classes of seats, which allow the company apply an unique tariff for two tickets bought in the same day, for the same flight.

Considering all these aircrafts' characteristics, we can say that JetBlue offers not only low tariffs but also a better quality of the services than the other low-cost carriers. Some features particular to this operator, such as comfortable leather chairs, the check-in made through the internet, the possibility of watching 24 different TV channels during the flight, the fact that almost all its airplanes are new, determine us to say that JetBlue revolutionized the classical model of the low-cost operators, guided mainly by the price. Therefore, the customers choose the services offered by JetBlue not only because they are cheap, but also because they are better. We agree with the fact that the JetBlue model is a consequence of the increased global competition, caused by two factors: by the entrance on the market of a great number of low-cost carriers and by the intention of the traditional operators to reduce the tariffs for certain destinations. Yet, while these last companies have lower prices by eliminating some services offered before and, consequently, by cutting the quality, JetBlue, as well as some other low-cost companies, compete not only through prices, but also through value.

## CONCLUSIONS AND FUTURE RESEARCH DIRECTIONS

The new competitive price structure established by the low-cost airlines had a strong impact on the traditional companies, which have lost large parts of their profits due to the rapid growth of the first ones. Yet, not all the low-cost airlines' markets have reached the same development stage. While in Canada, United Kingdom and Australia the market of the low-cost carriers is in the consolidation phase, in Asia and Eastern Europe it is only at the beginning, in the innovation stage, and in the Central Europe in the proliferation one. The greatest phase of development was reached up in USA, where the market of the low-cost carrier has already followed five stages - innovation, proliferation, consolidation, second phase of the new entrants and the second phase of consolidation - up to it's nowadays maturity stage.

Two of the most successful low-cost carriers from USA are Southwest and JetBlue. In both cases, the methods used in lowering the tariffs consist, mainly, in cutting costs and in maintaining a good ratio price-quality. The companies' low costs are based on the highly productive usage of two major assets: aircrafts and employees. In the case of Southwest, it could be noticed the fact that its performances were also enabled by the implementation of the efficient techniques of yield management.

An important aspect met at these two operators, but especially in the case of JetBlue, is the fact that they offer not only low tariffs but also a better quality of the services than other low-cost carriers. Actually, JetBlue revolutionized the classical model of the low-cost operators, guided mainly by price. In the nowadays context of increased competition, this aspect plays a great role in gaining market share, reason for which the low-cost airlines are forced to design their strategies considering not only the price but also the value as a significant criteria. Moreover, due to the fact that the number of these operators has increased and the price does not represent anymore a differentiation aspect, many of the low-cost companies tried to find out other ways to particularize their offer, in order to survive on the market.

These methods implemented by the low-cost airlines in order to differentiate them from other operators make the subject of another study started by us in October 2010 and conducted on a sample of six European low-cost airlines.

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## IMPACT OF GENDER ON ADOLESCENT CONSUMERS' TOWARDS GREEN PRODUCTS (A STUDY CONDUCTED IN INDORE CITY)

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### Abstract:

*There is a growing environmental-consciousness amongst all the denizens of Indian society. The Indians are not only conscious about their environment but also health conscious as well. This paradigm shift in attitude has made Indian consumers attractive to green marketers. India is beleaguered with hazardous problems such as air and water pollution. It has made the population more responsive and aware towards green marketing appeals. However, marketers are sluggish to develop effective segmentation strategies in India. There are lots of hindrances in the selection and application of a need based strategy. It is very imperative to boost the morale of younger consumers to adopt a positive attitude towards the purchase of eco-friendly products. It could witness marketers rewarded with long-term relationship with this segment. The previous research conducted on young consumers in the West has unfolded gender differences in attitude and action towards environmental issues. On contrary to this no such research study has been undertaken in Indian context. Thus, the present study is an attempt to study Impact of Gender on Adolescent Consumers' towards Green Products with reference to Indore city.*

**Key Words:** Green products, male, female, adolescent, behaviour, consumers.

**JEL Classification:** M31, Q59.

## INTRODUCTION

Green products are manufactured with the thought that the procedure of producing as well as distributing of such products will not be having any kind of negative impacts or harm to the environment. In today's world, people are becoming more concerned with global warming and the declining health of ecosystems, it's only natural to come across people interested in buying green products. The importance of caring for our environment is being acknowledged across the globe today. Going green brings many long term and necessary advantages. It also offers an unexpected chance to save money. This is the right time to ensure that our bodies are not poisoned with toxic substances that may become reason for severe health problems, and even leads to untimely death. Green products are readily available nowadays. These comprise of small articles from handmade papers bags, jute bags, and recycled papers to environment friendly fuels so on. It is very striking to note that the most harmful products do not advertise themselves as hazardous to health, so consumers are required to get smart and aware what to look for and what they simply want to avoid.

True green products don't contain chemicals or dangerous fumes, so they will be good for the consumers. Shopping for environmentally friendly products is the one of the best options to maintain the well-being of the planet and inhale fresh and clean air. Increasing demand for 'green' products, services and the adoption of green purchasing policies are very helpful in exploring new market opportunities. Improving the environmental performance of the products allows any organization to provide added value products to consumers. Marketing for green products can be both profitable and socially responsible. Markets for green products and services are increasing by leaps and bounds. For marketing of green products, the modern organizations have to focus on more traditional attributes such as price, quality or service.

At the same time, the marketers are challenged by low familiarity with green products. It hampers consumers from making purchase decisions. Generally, traditional products are well

known to consumers, and a relative comparison can be made using previously established preferences whereas green products are often unfamiliar and will be judged individually upon every purchase. Hence, it is felt that there is a great need to make people aware about the advantages of purchasing green products.

The awareness towards Green Products is quite visible in fast developing countries like India. Not only in metro cities like Delhi, Mumbai, Bangalore, Chennai but also in Mini Metro cities like Indore consumers are more careful in making a buying decision. Indore, popularly known as the business capital of Madhya Pradesh ( a state in central India), is facing the problems like air pollution, poor quality of potable water, high levels of exposure to severe traffic noise, high levels of garbage disposal are few to name them. All these deplorable conditions make the consumers of Indore to think and act seriously to come forward in unison to get rid of these problems. We can understand this fact that Indore is just at the stage of green awakening.

The government and citizens of Indore have started to realize the gravity of the environmental threats. The society as a whole is very sharp in responding than before appeals based on "green" issues. Emerging markets for environmental products and services in Indore is full of promises, opportunities and challenges too.

It is really a daunting task to define environmentally sustainable products. There is no such thing as a truly sustainable or green product, as all products we buy, own, use and discard in our everyday lives will have negative environmental impacts at some stage in their lifecycles. However, products can be classified according to the scale of these impacts, and a quality threshold can be drawn (Cooper, 2000). If a product has a low environmental impact, it is regarded as an environmentally sustainable product/green product.

Undoubtedly, market of Indore is having abundant potentials for green products. But at the same time, very little is known about consumers' green buying behaviors in this region. Green marketers have expressed their serious concern towards unavailability of market information. This often becomes a major hindrance to the success of expansion of green products. Without sufficient market information, many green marketers fail to practice effective market segmentation in their marketing strategies. Under such circumstances it is very interesting to study young consumers' Green buying behaviors and factors that affect their buying decisions. Adolescents constitute a large citizen group with the potential for constructing a powerful collective force in society for environmental protection.

Past research studies have revealed that young people are more prompt and positive than older generations to accept new and innovative ideas. Supporters of environmental protection tend to be younger in age. The objective of this study is to fill this void by studying impact of gender on Adolescent Consumers' towards Green Products of Indore City.

## LITERATURE REVIEW

Bord and O'Connor (1997) conducted a study on perception of environmental risks; they suggested that women reported higher perceived vulnerability to risks from global warming and hazardous wastes than men did. Lascu and Zinkhan (1999) have revealed that in making a purchase decision, adolescent consumers' choice is often made in accordance with peer group opinions. Kotchen and Reiling (2000) have found a positive correlation between environmental attitude and environmental behavior. Tikka et al (2000) have evidenced in his Western sample that female express more positive attitudes towards the environment than males do. Agarwal (2000) has highlighted that females' social networking should constitute an important basis for environmental collective force.

Moser and Uzzell (2003) unfolds that the media's interpretation of pollution levels has an effect on audience's perception of the seriousness of the pollution problems. Socialization theory postulates that because women are socialized to be more interdependent, compassionate, nurturing, cooperative, and helpful in care giving roles than men, women should have a stronger ethic of care

for others, including the environment, when compared to men (Zelezny and Bailey, 2006). Xiao and McCright (2007) examine the predictability of demographic variables to environmental concern. Age, educational attainment, political ideology, ethnicity, gender and value orientation have been found to have robust, consistent effects on environmental concern over time across different surveys and samples. Mostafa (2007) states that green purchasing behavior refers to the consumption of products that are: benevolent/ beneficial to the environment; recyclable/ conservable; or sensitive/responsive to ecological concerns.

### **HYPOTHESIS**

Female adolescent consumers would show higher environmental concern than their male counterparts in Indore.

### **RESEARCH METHODOLOGY**

A study designed to provide insight about male and female adolescent behavior towards green products in Indore.

### **DATA COLLECTION**

#### **SAMPLE- METHOD**

For reasons of convenience, Indore M.P. (India) is selected, being representative of the Madhya Pradesh socio-demographic profile. Sample Data has been collected from randomly selected adolescent buyers from markets / retail outlet of the green products.

#### **SAMPLE SIZE**

A total of 212 (98 males and 114 females) adolescents of Indore city covered in the present study. They are familiar with the purchase of these products and also responsible for the purchase decisions.

#### **SAMPLE CHARACTERISTICS**

The age of the sample was 15 to 19 years. Education of the respondent was also one of the most important criteria for analysis. The questionnaire administered individually to all the respondents and doubts regarding the statements dually clarified by the researcher.

#### **DATA ANALYSIS**

Likert 5 point scales were used in all measures. In order to achieve the objective of the study, the statistical tool has been used to analyze the data.

#### **LIMITATION**

A major limitation lies in the self-reported nature of survey used in the study. Survey has also been conducted in specific locality only.

### **FINDINGS**

Female adolescents scored significantly higher in environmental attitude, concern, perceived seriousness of environmental problems, perceived environmental responsibility, peer influence and green product purchase behavior than male adolescents in Indore. The study has revealed that most of the household purchase is much more often done by females than by males, green purchasing may be a concept more relevant to females than males. The top three predictors of green purchasing behavior among Indore female adolescent consumers were: peer influence, environmental concern and perceived environmental responsibility. The top three predictors of green purchasing behavior among Indore male adolescent consumers were: peer influence, environmental concern and self identity in environmental protection.

### **DISCUSSION**

- Peer influence was found to be the top predictor of green purchase behavior in both male and female adolescent consumers. It suggests that green purchasing recommendations may be most effectively delivered through interpersonal communication/interaction among adolescent consumers.
- Environmental concern was found to be the second top predictor of both male and female adolescent consumers. It indicates that adolescent consumers green purchasing behavior is more easily triggered by an emotional appeal than by a rational statement.

- The features of the adolescent stage also help to explain why emotional concern is one of the most important predictors of green purchasing behavior.
- Perceived environmental responsibility was the third top predictor of green purchasing behavior among female adolescent consumers. Gender difference in perceived environmental responsibility to the strong egocentric and relational orientations that have been socialized in females since their childhood.

## CONCLUSIONS

Findings imply that the common approach of rational appeals is not sufficient to motivate adolescents to make an environmental purchase. It is observed that adolescent consumers of Indore city are against harmful chemicals and are encouraging the use and production of green products. It's high time to bring out the conscious of the public about using only Eco friendly products. Green friendly products will offer a better tomorrow and a safe working environment for the generation next. Organizations with established eco-product development and environmental management programmes are better prepared to meet the challenges of the globalized world. Industries will have to plant more trees, overhaul and use power wisely without wasting to save energy, must use organic stuffs for the production, packing, selling and distribution of their finished products. By raising the environmental awareness the organizations can accomplish cost reductions. Purchasing power holds two powerful acts for the consumer. First, purchasing green allows the adolescent consumer to feel better about their choices and for personal care products, food and household items there are encouraging health-oriented reasons to make such purchases. There is an urgent need to educate, establish standards and make sure products do not lack in quality, style or cost too much. If the adolescent consumers will realize that they do not have to compromise on quality, taste or price, then it can be hoped that purchasing green would be on the top in the shopping list of the consumers. Purchasing of green products will also enable to eradicate the epidemic of corruption from the society. Undoubtedly, purchasing green holds the organizations more accountable for creating green options and having greener practices internally. The present study shows that the key to successful green marketing among adolescents lies in the effective use of emotional appeals in the marketing messages, peer networking to create mass/mouth publicity and gender -based market segmentation.

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## WESTERN BALKANS' COUNTRIES IN FOCUS OF GLOBAL ECONOMIC CRISIS

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### Abstract:

*The paper intends to analyze the impact of global economic crisis on the economies of Western Balkan Region. Albania, Bosnia & Herzegovina, Croatia, Macedonia (FYROM), Montenegro, Serbia, and Kosovo are part of this Region. The purpose of the paper is not to analyze the global crisis impact on specific sectors of the economies of the Western Balkan Countries, indeed, it focuses mainly on the macroeconomic level, identifying and analyzing fluctuations of major macroeconomic indicators of the economies of this Region. In this regard the paper analyzes the trends of macroeconomics indicators that reflect the development and macroeconomic balances of those economies, such as GDP, the level of employment, inflation, budget deficit, trade relation, etc, in two periods of time: before the crisis, and during the years of crisis.*

*Highlighting the deterioration of these indicators, the paper tries to identify factors that have contributed to these results, for example the level of opening of the economies of these countries, foreign direct investment, remittances, etc.*

*Analysis of macroeconomic indicators shows that the world economic crisis of 2008 have interrupted the positive trend of the development of the Western Balkan Countries. Characteristic of this influence is the fact that the global crisis actually appeared 9 or 12 months later than what was reflected in the developed European countries. On the other hand, the trend of positive growth, although modest, in industrialized countries starting from 2010, has been confirmed in the Western Balkans as well.*

*The paper has considered the different studies in view of economic development of the Western Balkan countries during the global economic crisis; based also on the data for economic development of these countries provided by the statistics IMF, and in particular on recent reports of the European Commission for EU Candidate and Pre-Accession Countries (October 2010 and January 2011).*

**Key Words:** economic crisis; economic growth; Western Balkans economies

**JEL Classification:** O10; O40; O57

## INTRODUCTION

The global economic crisis did not start in Balkan Region, but the crisis has affected the economy of Western Balkan's Countries as well. In contrast with others countries in Europe, the Balkan economies were still driven positively by inertia in 2008, with an average growth rate about 5.51%. But in 2009 most of the countries has been faced with a negative growth of GDP. In 2009 Croatia's GDP growth rate dropped from 2.4% to -5.8%; Serbia's from very good 5.5% to -3%, etc; Only Albania, and Kosovo had have a positive figures, although some point away compare with the years before.

At the same time according to IMF, forecasts are more optimistic for next two years; they predict a positive increase in real GDP for all Western Balkans Countries in 2010, (excepting Monte Negro), and 2011 (*World Economic Outlook -2010*).

In this viewpoint, the paper intends to illustrate the impact of the last global economic crisis in the Western Balkans Countries. In this region, are included Albania; Bosnia and Herzegovina; Croatia; Macedonia; Monte Negro; Kosovo and Serbia. The paper is structured in two main parts. The first part illustrates the development of economies in Western Balkans before and during the global crisis, (2008-2010). Based on the macroeconomics figures, the analyze intends to explain the impact of the economic crisis in those countries, showing for example growth of GDP, unemployment rate, inflation, trade balance, budget deficit, etc.,



The second part of the paper aims to explain the role of the main factors, which came from global crisis, that have influenced economic development in Western Balkans. Particularly, is illustrated the role of economic integration of countries with global economy, economic cooperation in the region, change of exports and imports volume, development of foreign direct investment, the role of remittances, etc.

## 1. WESTERN BALKAN COUNTRIES IN VIEW OF ECONOMIC GLOBAL CRISIS

The impact of world economic crisis in Western Balkan have been shown in almost all countries in the region. In a point of view, Western Balkan Countries have been characterized mostly as developing economies, with relatively low level of openness to world markets, with perhaps a stable banking system, which has been almost not affected by risky and unsafe financial instruments, etc. Like as some other developing economies, these factors have been somewhat inhibitory regarding negative impact of the global crisis. In other point of view, the Western Balkans Countries are still not quite stable economies, and specially they are suffering from vulnerability in the view of a global crisis. They suffer from the lack of "automatic stabilizers" of social welfare systems and also the access to the easier financing and support mechanisms. In this framework, it is important to make evident the impact of global crisis in the economies of Western Balkans; how much their economies have been influenced from global economic crisis. The channels that expose the Albanian economy most to the shocks from the world economic environment consist of falling hard currency inflows and the tightening of financing in general.

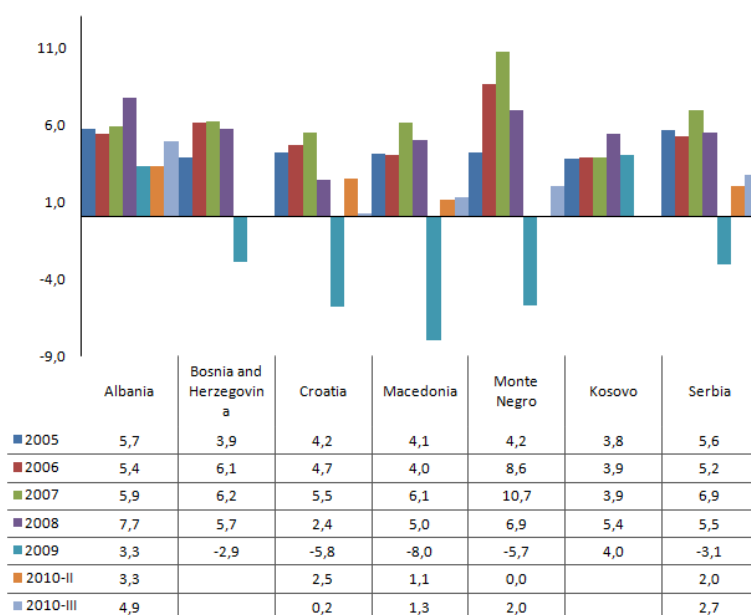
In this point of view, firstly it is to make clear, that there is an evident correlation between economic growth in developed countries, and growth in developing countries. But it is a fact also, that this correlation in recent years has weakened. Thus for example, the correlation between economic growth in OECD countries and developing countries has been about 0.5% before 80', it means that one percent of GDP's growth in OECD countries has affected approximately 0.5 % growth of GDP in developing countries. While in the period 2000-2007 this indicator has gone to 0.2%. Analysts give arguments for this variation using the impact of structural changes in developing countries, as well as the growth of the economies of so-called, "emergency", as China, India and Brazil, which seems to offset somewhat the negative impact of traditionally industrialized countries during the crisis.

In this focus the first question should be which is the concrete impact of global crisis on Western Balkan economy. From this perspective, before analyze the influence of various factors, it is important to reflect the real consequences of this crisis on Western Balkan; which have been the general development of these economies during the crisis period? In this view, we are not going to analyze "which are the factors that have influenced" the economies, but which was "the result of all factors" in the economy of Western Balkan countries? In this regard, to make an analysis as clear and significant, the paper is focused on macroeconomic level, without aiming to analyze the negative impacts of different factors, in particular economic sectors, or specific aspects of social development. In this point, initially it makes evident, what are the fluctuations of macroeconomic indicators that characterized the economies of the Region during the global crisis 2008-2010; what are the negative deviation that suffered macroeconomic balances, compared with their trends observed several years ago, it's mean before 2008

In terms of macroeconomic indicators, the **Gross Domestic Product (GDP)** has been one of the most positive and sustainable one in Western Balkan. The growth of GDP in the Region, compared to the average GDP growth of the 27 European members (EU 27), shows that before the crisis, all Balkan countries experienced rapid increase of economic output. In the years 2005-2007 the GDP growth in Western Balkan Countries was higher than that of the EU, with an average by 6-7% and was considered quite normal state of economic development. In 2007 the real growth of GDP was in Monte Negro 10.7%; Serbia 6.9%; Bosnia and Herzegovina 6.2%; Macedonia 6.1%; Albania 5.9%; Croatia 5.5% and Kosovo 3.9% (the lowest). Even in 2008, when the industrialized

European Countries felt in economic downturn, Western Balkan economies still driven positively. Although there was a slowdown in their economic growth, it was still suitable growth with an average about 5,5%; certainly not that sharp as the one leading to an EU average of 0.7%. Particularly in this year Albania had a real growth of 7,7% and Monte Negro 6,9%; the lowest increase was in Croatia by about 2,4%.

The data shows that Western Balkan Countries felt in economic downturn in the year 2009 (figure 1). It is typical for all countries in the Region, which expresses the likeness of economic development of these countries. The downturn has been substantial. It has been more obviously for Macedonia -8.0% from 5.0% in 2008, Croatia -5.8% from 2.4% (2008); Montenegro -5.7% from 6.9% (2008); Serbia by 5.5% -3.1% (2008), etc. The growth has been positive only Kosovo 4.0%, and Albania and 3.3%, although some points away compare with the previous year. Europe itself in this year had a negative GDP growth of -4.4%. The figures demonstrate that the Western Balkans Countries follow the general trends on global and European scale, but the change in trends is registered months or a year later. On the other side the data shows a partial recovery in the first and second quarter of 2010, which follow positive outlook for other countries in EU as well.



**Figure 1. GDP real growth 2005 – 2010 (%)**

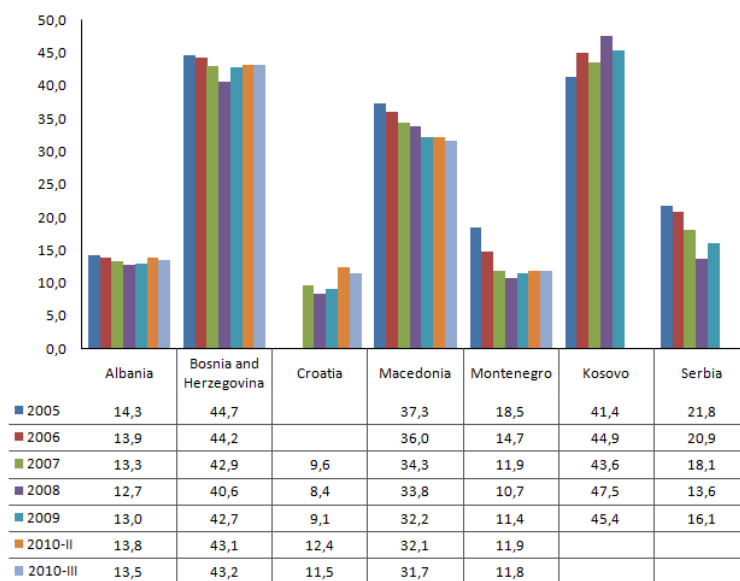
Source: "EU Candidate and Pre-accession Countries"; Economic Quarterly – CCEQ ECFIN Unit D-1 (8 October 2010 & 12 January 2011).

Another indicator, which is used to evaluate the impact of the economic crisis, is the **unemployment rate**. It is known, that during the global economic crisis, increasing rate of unemployment has been one of the main negative aspect of the crisis in many industrialized countries. This problem is more sensitive in West Balkan where countries in the region lack the "automatic stabilizers", otherwise as in the industrialized countries in the Europe.

The unemployment data indicate that the Western Balkans had serious unemployment levels even before the crisis, and they are got worse after 2008. All countries had higher unemployment rates than the EU (1). However, figure 2, shows a clear tendency of diminishing rate of unemployment for the entire period before crisis, from 2005 to 2008. But in 2009 its level reached higher rates for all countries. But while most of the countries have high yet still manageable problems, in Macedonia, Bosnia & Herzegovina and Kosovo have more than a third, quarter and

nearly half of the working force; respectively 32.2% for Macedonia, 42.7% for Bosnia and Herzegovina and 45.4% for Kosovo (for 2008).

On the other hand, according to EUROSTAT data for firsts<sup>1</sup> two quarters of 2010 showed the labor market had been effected of a deterioration of its indicators.



**Figure 2. Unemployment rate 2005 – 2010 (%)**

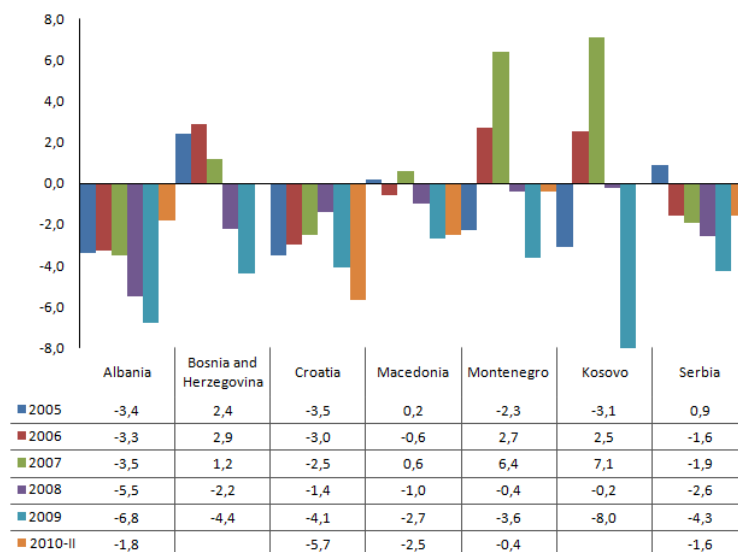
Source: "EU Candidate and Pre-accession Countries"; Economic Quarterly – CCEQ ECFIN Unit D-1 (8 October 2010 & 12 January 2011).

It is evident that each economic crisis will have a negative impact on the **budget deficit**, since the economic downturn will be reflected in decreasing of tax revenues as well. In this view deterioration of budget deficit is another indicator that will reflect the effect of global crisis in Western Balkan.

Data shows (figure 3) that keeping under control the budget deficit, has been always an important part of the macroeconomic stabilization for Western Balkan. In 2008 except Albania, all other countries have had a very sustainable deficit.

But 2009 noticed a significant increase of budget deficit as a percentage of GDP, which has reached -6.8% in Albania; -8,0% in Kosovo; -4,1 in Croatia and Serbia, etc. The intention to argue this negative increasing, throw the global economic crisis is not easy, because it is combine with a decline of GDP treated above, which brought an increase of the negative ratio of budget deficit to GDP. However deterioration of budget deficit is another negative effect of global crisis in the economic development of the region.

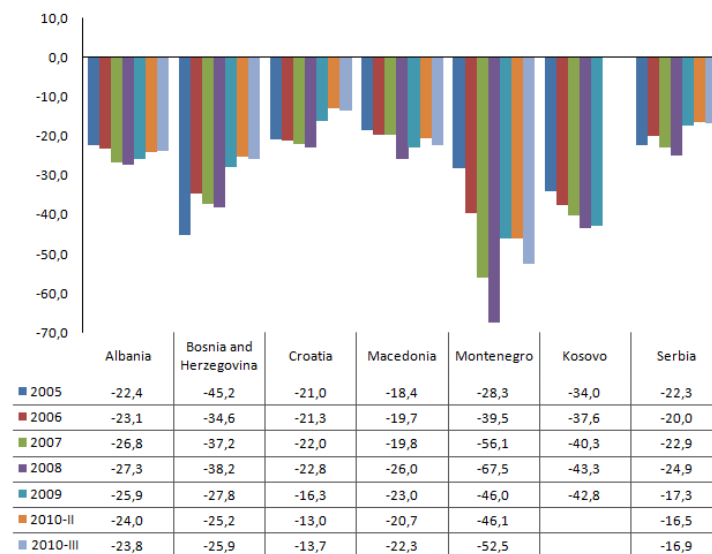
In view of macroeconomic analysis, a particular aspect is that of the external equilibrium, which is materialized on the **payments balance**. In this regard, the characteristic for Western Balkan Countries are the deficits significantly above the EU average, which have a trade balance deficit about -0,8% (EU27). Some countries have negative trade balances around the thirty- percent, as for example Albania and Bosnia & Herzegovina, while Montenegro and Kosovo near the forty-five percent (figure 4).



**Figure 3. Budget deficit to GDP 2005 – 2009 (%)**

Source: "EU Candidate and Pre-accession Countries"; Economic Quarterly – CCEQ ECFIN Unit D-1 (8 October 2010 & 12 January 2011).

The figure shows as well that during the crisis (2009-2010) the deficits were gradual reduced. In this point it is not clear, if the economic crisis has been affected or not this balances in particular. In this regards it is note that trade balance depends not only from export and import volume, but also from two main factors: price level in World Economy and local exchange rate. As will be argued below, there was a certain positive effect of the crisis on trade deficits in the Balkans, follow a decreasing of imports' prices for these economies.



**Figure 4. Trade balance deficit to GDP – euro (%)**

Source: "EU Candidate and Pre-accession Countries"; Economic Quarterly – CCEQ ECFIN Unit D-1 (8 October 2010 & 12 January 2011).

## 2. THE FACTORS THEY HAVE INFLUENCED WESTERN BALKAN COUNTRIES IN SIGHT OF GLOBAL ECONOMIC CRISIS.

Recognizing the impact of global crisis, particularly in economic growth, the next question should be: what are the factors that have had a significant impact in the Western Balkan Countries? The answer will serve to understand better "where" these countries are, the expectations for next years, and it we should expect a more positive economic performance, etc.

The impact of global crisis in developing economies is related to several factors, among these we can mention: the integration of these economies to the global economy; increasing of the prices during the crisis in the global economy, reducing of remittances from emigrants as result of the crisis in host countries, decline of the direct foreign aids; the difficulties of borrowing from banks, etc. The effect of these factors is certainly different in different countries and is related to their characteristics.

In this framework, we are going to do a short analysis of these factors. The analyze consists of making present the change of the factors, in the period before the crisis, until 2008, and during the crisis, in the years 2008-2009.

**The level of economic integration with the global economy.** One of the most important factors, that can overtake the international economics developments in to a specific country, is of course the level of integration of this country related to world economy. In an open economy, with considerable economic relation with the world economy, probably the impact of a global crisis will be more sensitive. Economic integration of a country with the world economy is analyzed generally through export - import volume of this country related to the rest of the World. Of course, in a large view, we can include here also the foreign investment, remittances, etc. Initially, we will focus on commercial relation, while the other factors will be analyzed later.

The economic level of integration of a country is demonstrated in the "openness index", which represents the percentage of the volume of exports and imports to GDP. With reference to the concept of the World Bank for the evaluating of exports and imports (2) whose indexes are shown in Figure 5:

In focus of international crisis, a relatively small opening of an economy would be a "positive" factor that can limit the impact of global crisis in the country. Data shows that Bosnia and Herzegovina; Montenegro and Macedonia have a higher openness index, even higher than West European Countries. It means that trade relation of these countries with the rest of the World has been more intensive, which represents more potential for over passing a negative effect of global crisis on the economies of these countries.

Total	2005	2006	2007	2008	2009
Albania	68	74	83	90	83
Bosnia and Herzegovina	107	102	112	107	89
Croatia	92	93	93	92	86
Macedonia	108	115	125	132	111
Montenegro	105	130	117	125	93
Kosovo	0	0	64	71	0
Serbia	75	82	82	84	69

**Figure 5. Openness Index**

Source: World Bank

Another factor that can affect economy of a particular country is also the structure of its commercial relations with other countries, which are affected by the economic crisis. If the export - import volume of Western Balkan Countries are mainly related with the countries that are affected significantly by the crisis, then it is realistic to assume that the impact of the crisis in the Region will be bigger. Figure 6 presents the structure of exports and imports of Western Balkan Countries for five major countries, in the year 2009. It shows that main partners are countries as Italy and

Greece (particularly for Albania), but also Germany and Russia, which are affected significantly from global crisis.

Albania				Bosnia & Herzegovina			
Top 5 exports countries		Top 5 imports countries		Top 5 exports countries		Top 5 imports countries	
Italy	16,1%	Italy	26,1%	Croatia	17,1%	Croatia	15,0%
Greece	7,4%	Greece	15,5%	Germany	14,7%	Germany	11,3%
Slovakia	5,5%	China	7,2%	Serbia	13,3%	Serbia	10,4%
China	4,8%	Germany	6,5%	Italy	12,7%	Italy	10,1%
Germany	3,4%	Turkey	6,4%	Slovenia	8,4%	Russia	7,0%
Other	62,8%	Other	38,3%	Other	33,8%	Other	46,2%

Croatia				Macedonia			
Top 5 exports countries		Top 5 imports countries		Top 5 exports countries		Top 5 imports countries	
Croatia	19,0%	Italy	15,4%	Serbia	24,2%	Germany	10,3%
Germany	12,8%	Germany	13,5%	Germany	16,7%	Russia	9,8%
Serbia	10,9%	Russia	9,5%	Greece	10,8%	Greece	8,7%
Italy	7,4%	China	6,8%	Italy	8,1%	Serbia	8,1%
Slovenia	5,5%	Slovenia	5,7%	Bulgaria	8,1%	Italy	7,1%
Other	44,4%	Other	49,1%	Other	32,1%	Other	56,0%

Serbia			
Top 5 exports countries		Top 5 imports countries	
Bosnia & Herzegovina	12,2%	Russia	12,3%
Germany	10,4%	Germany	12,2%
Montenegro	10,0%	Italy	9,7%
Italy	9,8%	China	7,1%
Romania	5,8%	Hungary	4,0%
Other	51,8%	Other	54,7%

**Figure 6. Top Exports & Imports Partners in Western Balkan (3)**

Source: UN Commodity Trade Statistics Database; BEC classification (2009)

**Price level.** Focusing on global crisis, a typical characteristic is the increased price level in countries affected by it. The higher prices extend their negative impact in other countries as well, making imports for these countries more expensive and increasing their costs of production. But it depends of course from the structure of the imports.

In 2009, in general for Western Balkan Countries' imports, the main items which was imported were machinery, equipment and spare parts, which have taken about 40-45% of total imports (4). In 2008 and 2009, the average increasing price for this group – products, in U.S.A. markets, was respectively 1,9% and 1,2%, which reflects in fact the general trend for the whole period after 2004. Other important groups are - products fuel, electricity and minerals (5), with about 8-10% of the total (2009). In the U.S.A markets, the fuel price in 2008 is increased by about +35%, but for 2009, its price fell average with -34%; in the meantime price index for electricity was +5,8% in 2008 and only +0,6% in 2009. The prices for the other imports' groups are products like the food, beverages and tobacco (6), which account about 6-11% of imports (except Serbia). In U.S.A it is increased. average from +9,3% in 2008 and by +2,3% in 2009.

On the other side, the PPI (*Producer Price Index*) in European Union countries, -which characterizes the level of prices of raw materials and intermediate consumption, in 2008 reflected an increase of about 8%, while in 2009 he suffered a decrease of -2.9%.

In the focus of data, it can be assumed that the price level of the global economy, has affected negatively the Region in 2008, but it should not have a considerable influence in 2009.

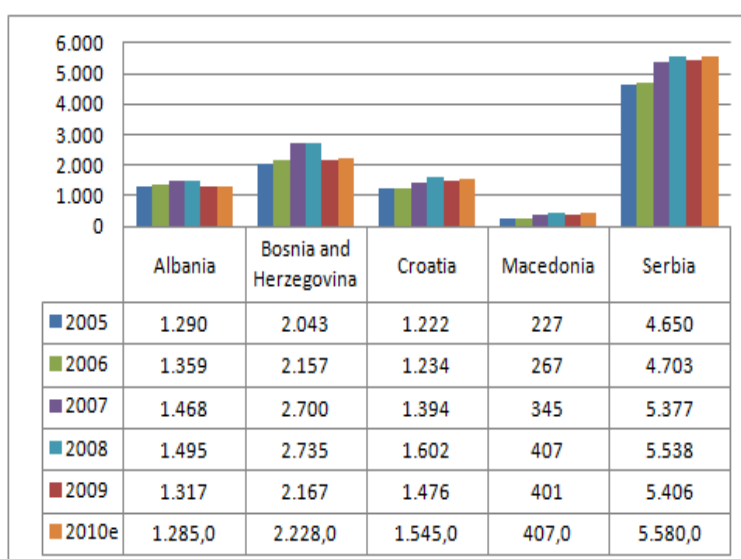
This conclusion in fact, is partly true. The costs of imports depend not only from the prices, but also from the exchange rates of local currency with foreign currencies, mainly with Euro. Here we have a different picture compare with the dynamic of the price level. Up to 2009 we have a stable exchange rate for almost all countries, while in 2009 some of the local currency are depreciated obviously against euro, mark Albania where LEK was devaluated about -7,7%; and Serbian RSD was devaluated about 14,8% (7).

**Remittances from emigrants.** The decline of remittances is considered one of the negative consequences of the global crisis in developing economies. In Western Balkan Countries remittances sent home by emigrants working abroad are an important part of overall GDP. Particularly those are significant for Serbia (5,6 billion USD, about 12,6% of GDP); Bosnia

Herzegovina (2,2 billion USD, about 12,7% of GDP) and Albania (1,3 billion USD, about 10,9% of GDP), countries which are included in 10 top remittance recipients countries in "Europe and Central Asia" Region (8). In these economies they have been in important levels, which served to reduce the deficit of payments balance and also an important source for financing domestic demand. Figure 7 shows the dynamics of remittances from emigrants during the period 2005 - 2010.

In 2009, remittances for the first time suffered a decrease for all countries. Is this decrease totally a consequence from the global crisis, or there are others factors that may have affected it? Remittances, for many reasons, are considered as economic absorbers of negative effects of crisis' period. In this regards, according to IMF remittances in the World Economy for 2008 are estimated in stagnation and in a decreasing in 2009 about -5,5%. The data from Western Balkan Countries in 2009 show a more "robust" decreasing, mark particularly Bosnia Herzegovina with about -20%; Albania -12%; and Croatia -8%.

Anyway the situation seems to be change in 2010, which is in the same line with forecast from IFM. Officially recorded remittance flows to developing countries are estimated to increase by 6,0% in 2010. This marks a healthy recovery from a 5,5% decline registered in 2009. Remittance flows are expected to increase by 6,2% in 2011 and 8,1% in 2012.



**Figure 7. Remittances in Western Balkan (2005 -2010) (9) million USD**

Source: World Bank "Outlook for Remittance Flows 2011-12"

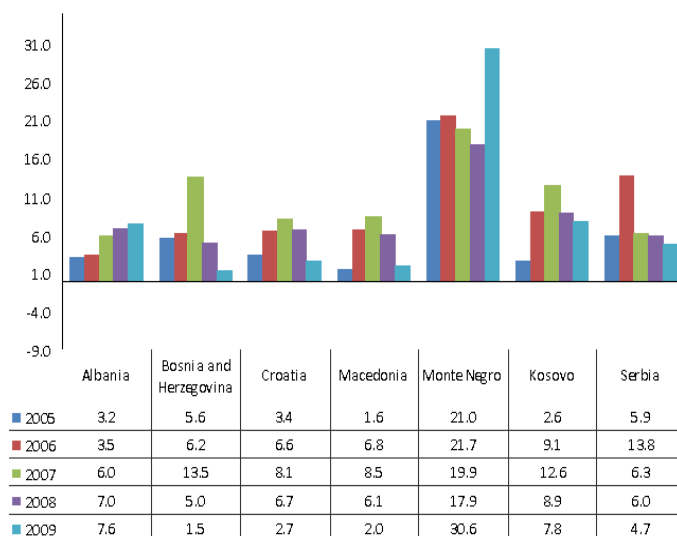
**Foreign direct investment (FDI).** It is presumed that the global crisis has affected developing countries also through decreasing of foreign direct investment. Data in figure 8 shows decreasing of FDI for the most of countries of Western Balkans. The exception is only Montenegro and Albania where in 2009 the growth rates of FDI have been positive (respectively 61% and 12%).

Decreasing of FDI in the Region has followed the world general trend of FDI during the crisis years. In world economy the FDI fell about 16%, during 2008, even more drastic was this in 2009 with about 37%; while in developing countries decline in 2009 was about 24%. In this regard, the data of figure 8 compared with those of figure 1, show even more significant go down of FDI for some of Western Balkan Countries, as Bosnia-Herzegovina (-71%), Croatia (-63%) and Macedonia (-60%).

On the other side, Western Balkan Countries have relatively low level of FDI, so for the South Eastern Europe region only Croatia, Serbia and Montenegro belong to the second group, which includes countries with FDI from 1.0 to 4.9 billion USD, while Albania and Bosnia Herzegovina are included in the third group (with FDI between 0.5 to 0.9 billion USD) and Macedonia belongs to the fourth group (the last), with FDI less than 0.5 billion USD. In this



regard, although the fall of FDI has affected down turn of economy, there have not been a drastic impact as in other countries.



**Figure 8. Foreign direct investment (FDI, net) % GDP**

Source: "EU Candidate and Pre-accession Countries"; Economic Quarterly – CCEQ ECFIN Unit D-1 (8 October 2010 & 12 January 2011)

**Difficulties in borrowing from banks.** The economic crisis have started from the banking system. Perhaps banking system in Western Balkan has been stabilized and banks have been quite far from being "infected". In addition in Western Balkan the economic activity coming from banking sector is much lower than in other countries. Thus for example while in EU countries the percentage of financial system assets to GDP is over 150%, in Albania its weight is about 82%.

But in other hand, the increasing of percentage of bad loans and decreasing of deposits in 2008 and 2009, tighten loans during the years 2008-2009. In this regards, in Albania (10) bad loans (non performing loans) has been increasing from 3,2% in 2007 to 4,7% in 2008 and 9,1% in 2009. The negative trend seems to continue also in the two first quarters of 2010, respectively 11,1% (2010/I) and 12,0% (2010/II). Also in Monte Negro non performing loans are increase from 3,7% in 2007 to 7,2% (2008); 13,5% (2009); 16,6% (2010/I) and 16,8% (2010/II). For some other countries a negative development is reflected in tightening of banks' deposits; for example in Croatia rate of deposits have been decreasing from 27,2% in 2007 to 7,4% in 2008; -15,2% in 2009; even more in 2010; -25,7% in the first quarter and -21,8% in the second quarter (figure 9).

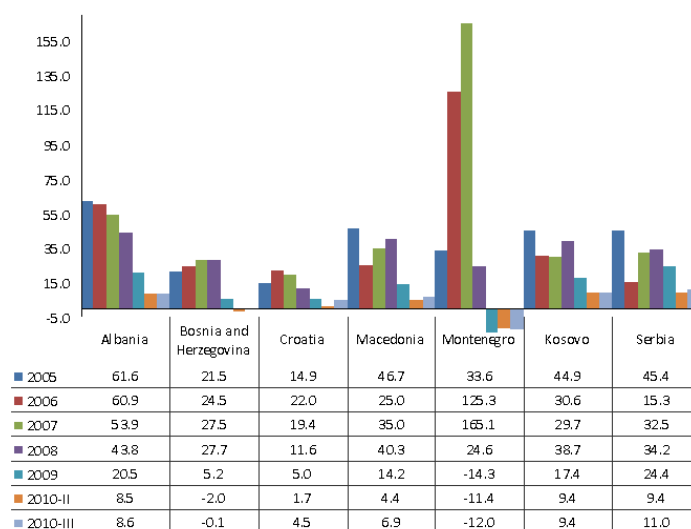
Bad loans and decreasing of deposits follow a restriction of the loans and investment and finally economic growth (figure 10).

	2005	2006	2007	2008	2009	2010-II	2010-III
Albania	na	na	na	14.8	-0.1	14.8	17.3
Bosnia and Herzegovina	23.5	27.7	36.1	15.4	-3.6	6.8	4.9
Croatia	18.5	51.6	27.2	7.4	-15.2	-21.8	-17.3
Macedonia	38.7	21.0	31.4	23.5	4.6	14.4	14.0
Montenegro	78.6	120.5	94.4	-4.8	-8.3	2.9	-6.2
Kosovo	25.8	30.6	29.7	38.7	17.4	9.4	11.0
Serbia	43.1	39.6	46.9	8.8	23.6	23.3	21.3

**Figure 9. Deposit Growth (%)**

Source: "EU Candidate and Pre-accession Countries"; Economic Quarterly – CCEQ ECFIN Unit D-1 (8 October 2010 & 12 January 2011)





**Figure 10. Credit Growth**

Source: "EU Candidate and Pre-accession Countries"; Economic Quarterly – CCEQ ECFIN Unit D-1 (8 October 2010 & 12 January 2011)

## CONCLUSIONS

- The impact of global crisis in the economy of Western Balkan Countries is reflected mainly in the decreasing of GDP growth rate. In 2009 it has been more obviously for Macedonia -8.0% from 5.0% in 2008, Croatia -5.8% from 2.4% (2008); Montenegro -5.7% from 6.9% (2008); Serbia by 5.5% -3.1% (2008), etc. The growth has been positive only for Kosovo 4.0%, and Albania from 3.3%, although some points away compare with the previous year.
- The unemployment figures indicate that the Western Balkans have had serious unemployment levels even before the crisis, and they have aggravated after 2008. During 2009 the unemployment level reached higher figures for all countries in Western Balkan. While most of the countries have still high manageable problems, Macedonia, Bosnia & Herzegovina and Kosovo have an unemployment rate respectively 32.2%, 42.7% and 45.4% (for 2008).
- During main 2009 in Western Balkan Countries noticed a significant increase of budget deficit as a percentage of GDP, which was particularly higher in Kosovo -8,0%; Albania -6,8%; and Croatia and Serbia -4,1. The intention to argue this negative increasing only throw the global economic crisis is not easy, because it is combined with a decline of GDP rates.
- Regarding trade relation, in Western Balkan Countries, the imports have had a negative impact on domestic production. But the analyze shows that this negative impact is coming mainly due to the devaluation of local currency against to Euro, and not significantly from the rising of imported goods' prices.
- On the other side, the structure of exports and imports of Western Balkan Countries shows that their main partners are countries as Italy and Greece (particularly for Albania), but also Germany and Russia, which are affected significantly from global crisis.
- Concerning opening of economy with the rest of the World, in particularly countries as Bosnia and Herzegovina; Montenegro and Macedonia have a higher openness index, even higher than West European Countries. It means that trade relation of these countries with the rest of the World has been more intensive, which presents a more potential factor for over passing a negative effect of global crisis on their economies.
- Data shows decreasing of FDI for most of countries in Western Balkan. The exception is only Montenegro and Albania where in 2009 the growth rates of FDI have been positive

(respectively 61% and 12%). On the other side, Western Balkan Countries have a relatively low level of FDI, in this point of view although the fall of FDI has affected down turn of economy, there has not been a drastic impact as in other countries.

## ENDNOTES

- (1) EU has an unemployment rate average about 8,9% in 2008
- (2) As per World Bank, Exports and Import of goods and services represent the value of all goods and other market services provided to the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude compensation of employees and investment income (formerly called factor services) and transfer payments.
- (3) There are no available data for Montenegro and Kosovo.
- (4) Categories "2" and "4" in BEC classification, valuation based on UN Commodity Trade Statistics Database.
- (5) Categories "3" in BEC classification; valuation based on UN Commodity Trade Statistics Database.
- (6) Categories "1" in BEC classification; valuation based on UN Commodity Trade Statistics Database
- (7) Kosovo and Monte Negro using as local currency Euro.
- (8) Migration and Remittances Factbook 2011; ([www.worldbank.org/prospects/migrationandremittances](http://www.worldbank.org/prospects/migrationandremittances)).
- (9) There are no available data for Montenegro and Kosovo.
- (10) Source: EU Candidate and Pre-accession Countries"; Economic Quarterly – CCEQ ECFIN Unit D-1 (8 October 2010 & 12 January 2011)

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## STAKEHOLDER ANALYSIS OF THE ROMANIAN FOREST SECTOR

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### Abstract:

*This study undertakes a stakeholder analysis of the forest sector in Romania, in order to gain a better understanding of how the various stakeholders are involved in the creation of forest policies in Romania. It evaluates the existing relationships among stakeholders in the forest sector and their interests with regard to the forest resources. The data for this analysis has been collected through in-depth interviews. There have been carried out a number of 49 interviews with the main actors and key-informants within the forest sector. Using a matrix diagram, the stakeholders have been classified in different categories. The matrix is a result of evaluation of the interest and influence of the stakeholders over the forest policy. Conceptual content analysis suggested the following: among all stakeholders, the National Forest Administration is the most important and influential stakeholder. Although the Association of Private Forest Owners, the Association of Forest Administrators and trade unions are important, they don't participate much in the decision-making process, thus being less influential as stakeholders. There is a similar situation for the environmental non-governmental organizations, due to their weak representation. The stakeholder analysis of the Romanian forest sector conducted in this paper contributes to an improved understanding of the stakeholder structure and of interactions among them. Increased public participation, improved communication and cooperation between different actors are the foundations for good forest governance, therefore for supporting sustainable forest management and the sustainable development of the forest-based industries in Romania.*

**Keywords:** stakeholder analysis, forest sector, forest policy, Romania

**JEL Classification:** Q23

## INTRODUCTION

### Background

The forest sector consists of a range of industry branches: wood processing industries, wood manufacturing industries (furniture and wood construction), pulp and paper industries and non-wood forest products and services (NWFPs). The forest sector is characterized by a large number of stakeholder groups, representing these industry branches.

Among the characteristics of good governance there is public participation. Therefore, in order to achieve good governance within the forestry sector, the stakeholder participation and their influence in designing forest policies has to increase. This can be done through strengthening capacity, supporting equity and fostering empowerment (Gow, 1998).

The stakeholder analysis has gained increasing attention and it is central to many participatory natural resource management initiatives (Mushove and Vogel, 2005). The popularity of stakeholder analysis in natural resource management and policies reflects an increasing recognition that stakeholders should influence environmental decision-making.

In Romania, stakeholder participation in designing and formulating forest policies is relatively faint. In the near past, only forestry experts have participated in the creation of forest policies (Austroprojekt, 2008). Generally, the collaboration among different forest institutions is weak and fragmented.

In order to describe the Romanian forest policy arena, a stakeholder analysis will be carried out. The main objective of this research is to gain a better understanding of how the various stakeholders are involved in the creation of forest policies in Romania. The study evaluates the existing relationships among stakeholders in the forestry sector in Romania and their interests with regard to the forest resources, through a stakeholder analysis.

### **General facts about the Romanian forest sector**

Romania is rich in forests, with about 27.7% (6,495 million hectares) of the country total area covered by forest and forest land (Marin, 2010). Forests are categorized by their functions: 53.3% are forests with special protective functions and 46.7% are forests with production and protection functions.

Historically, forests have played an important role in Romania's economic and social development. They were a source of rural employment and income mainly through harvesting, wood processing and non-timber forest product industries. The forest contribution to the GDP (gross domestic product) accounted constantly around 2.4% in production and 2% as gross value added (COST E30 Romania Country Report, 2005). Wood industries represent around 5.6% of the manufacturing industry in term of production, and 12% in term of employees (Bouriaud et al., 2004).

Romania's forests are ecologically important, due to their rich and diverse flora and fauna. Romania's forests comprise some of the last natural and old growth forests still remaining in Europe.

After the fall of communism in December 1989, the Romanian Government has started a program of forest restitution. New property rights have arisen and these new transformations in the property rights system have led to important changes in the Romanian forest sector. The main critique regarding the governance of the forest restitution process is that it has been done without a proper institutional framework.

At present, the structure of the forest area after their restitution to former owners is: 53% state forests, 15% municipalities, towns and communes' forests, 2% forest belonging to churches and educational institutions, 11% forests of communities / undivided private ownership and 19% private individuals' forests (Marin, 2010).

The legislative framework consists of law, regulations, governmental decisions, ministerial orders, guidelines and the Forest Code (Law 46 / 2008).

The country's forest policies and management practices are designed to ensure the sustainable management of the Romanian forests and also they are based on the concept of multi-functionality of forest. Sustainable forest management is the management of forests according to the principles of sustainable development, aiming to ensure that the goods and services derived from the forest meet the present-day needs; at the same time, it contributes to long-term development while respecting the values people attach to forests.

After the last ministerial reorganization in December 2009, the Department of Forests was transferred from the former Ministry of Agriculture, Forest and Rural Development (MAFRD) to the Ministry of Environment and Forests (MEF) (Governmental Decision no. 1635 / 2009 of December 29, 2009). The former MAFF has designed the forest strategy – the Policy and Development Strategy of the forest sector in Romania for the period 2001 – 2010 (*Politica și Strategia de dezvoltare a Sectorului Forestier din România, 2001-2010*). At present, the Ministry of Environment and Forests is the public central authority for forestry in Romania, responsible for the elaboration of an updated forest strategy.

The National Forest Programme has been issued in 2005 also by the former Ministry of Agriculture, Forest and Rural Development, with the participation of 28 persons from: three ministries (the Ministry of Agriculture, Forest and Rural Development, the Ministry of Economy and Commerce, and the Ministry of Waters and Environmental Protection), the Academy for Agriculture and Forest Sciences, the National Institute for Forest Research and Forest Management Planning, the National Forest Administration, two faculties (Suceava Forestry Faculty and Oradea Environmental Protection Faculty), the National Agency for Tourism, the Association of Private Forest Owners (APPR), the Association of Forest Administrators (AAP), the Association of Romanian Foresters and one non-governmental organization (*Grupul Verde Oradea*).

Concluding, the Romanian forests are naturally of great interest to many groups: the foresters who have managed it all as state property through the years of communism; the rural

communities who live and farm around it; to those concerned with conservation of it; and not the latest, the companies who need wood as the raw material for their operations.

## THEORETICAL FRAMEWORK

The development of the framework for stakeholder analysis of forest sector in Romania was based on scientific concepts and methods of stakeholder analysis.

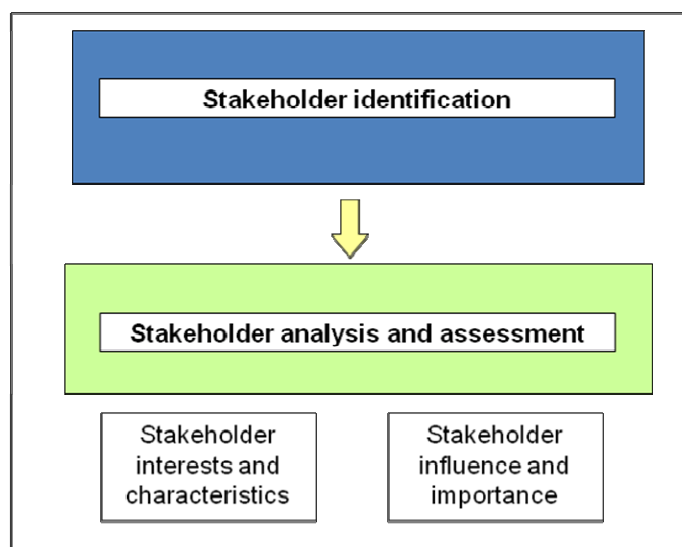
The initiator of the *stakeholder theory* is considered to be R. Edward Freeman, with his book "Strategic management: A Stakeholder Approach", published in 1984. He has defined the stakeholder as *"any group or individual who can affect or is affected by the achievement of the organization's objectives"* (Freeman, 1984). Further, the definition of the term *stakeholder* has been extended in order to include all groups which have interests with respect to an institution or a domain, regardless of their interest's nature. According to Carroll (1989) the word *"stake"* refers at having *"an interest or a share in an undertaking"*. Yet, the stakeholder theory appears as opposite to Friedman shareholder paradigm (Friedman, 1962), which states that the shareholders are the only one having a claim on the business.

Stakeholder analysis is a process of systematically gathering and analyzing qualitative information, in order to decide whose interests should be taken into account when developing or implementing a policy. The analysis includes: stakeholder characteristics, interests related to the policy, position for or against the policy and potential alliances with other stakeholders, as well as their ability to affect the policy process.

Stakeholder analysis can be defined as a methodology for gaining an understanding of a system, and for assessing the impact of changes to that system, by means of identifying the key stakeholders and assessing their respective interests (Grimble, 1998).

The goal of the stakeholder analysis is to develop a strategic view of the human and institutional landscape, as well as the relationships between different stakeholders.

Grimble and Wellard (1996) highlight the usefulness of stakeholder analysis in understanding complexity and compatibility problems between objectives and stakeholders. Freeman and Gilbert (1987) propose the concept of "stakeholder management" as a framework to help managers understand the turbulent and complex business environment. Therefore, the term "stakeholder" is often associated with corporate management. According to Freeman, an important supposition is the manager's ability to manage stakeholder relationships.



**Figure 1. Framework of stakeholder analysis of the forest sector in Romania**

The framework of stakeholder analysis of the forest sector in Romania is shown in Figure 1. The framework consists of two major modules, the second one comprising two categories. The first module "Stakeholder identification" covers the identification and selection of relevant stakeholders within the forest sector. The second module "Stakeholder analysis and assessment" includes the development of stakeholder profiles and the identification of stakeholder influence on forest policies and their importance. The first category "Stakeholder interests and characteristics" deals with general characteristics like the type of the organization, its goals and main activities carried out.

The literature presents different approaches for stakeholders' classification. Kakabadse et al. have compiled from the literature some sub-categories, for example voluntary and involuntary stakeholders, social and non-social stakeholders, intrinsic and instrumental stakeholders (Kakabadse et al., 2005). Lantos (2001) has described four levels on which stakeholders can be pictured: the macro-environmental level, the micro-environmental level, the business organization level and the personal level (Lantos, 2001).

Most commonly form of classification is that in primary and secondary stakeholders, depending on whether they are immediately affected by (positively or negatively), or can immediately affect the system. The primary stakeholder is the group "*without whose continuing participation the corporation cannot survive as a going concern*" and the secondary ones are "*those who influence or affect, or are influenced or affected by the corporation, but they are not engaged in transactions with the corporation and are not essential for its survival*" (Clarkson, 1995). However, some groups can be involved in natural resource management in both active and passive way (for example the local communities).

Another classification groups the stakeholders in *internal*, *interface* and *external* (IIED, 2005). The internal stakeholders are those people operating entirely within the boundaries of an organisation. External stakeholders are further divided into three categories, depending on their relationship to the organisation: those who provide inputs to the organisation, those who compete with the organisation, and those with a special interest in how the organisation functions. Interface stakeholders are those who function both internally and externally in relation to the organisation.

There is a range of conceptual frameworks which can be used to analyse and map key strengths, weaknesses, linkages and areas of potential conflict: Importance / Influence matrix, Conflict / Complementarity matrix, Actor linkage matrix (Matsaert, 2002).

*Influence* is the power that stakeholders have over the forest policies, through controlling what decisions are made, facilitating the implementation of forest policies, or exerting positive or negative influence on the formulation of forest policies. Thus, influence is the extent to which stakeholders are able to convince the decision makers to take different actions.

*Importance* refers to the stakeholders which needs and interests are a priority for forest policies. Not all the stakeholders are equally important and they have different degrees of influence on the decision-making process.

## RESEARCH METHODS

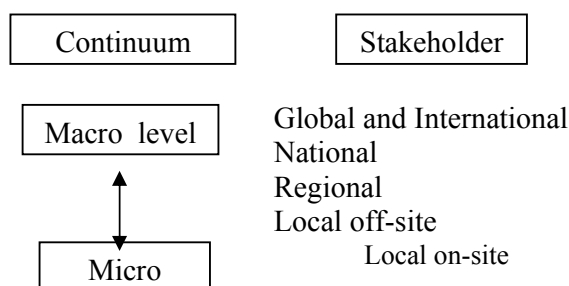
Methodologically, the research uses a socio-political qualitative approach for data collection and data analysis.

The research uses the framework proposed by Grimble et al. (1994) for the identification of the stakeholders from micro level to macro level, based on literature review and discussion with key informants. This method provides a checklist of the many different levels at which stakeholders can be found: local, regional, national, international and global (Figure 2).

There are a variety of methods for data collection on stakeholders' interests and analysis for the various groups which have been identified (Grimble, 1998).

The present data collection has been done in two steps. First, a primary identification of the decision makers and of the stakeholders in the Romanian forest sector has been realized through literature review, including the use of secondary data.

Second, the stakeholder analysis had been undertaken using an interview approach (in-depth interviews with the main actors and key-informants). There have been carried out a number of 49 interviews with representatives of the main stakeholders within the forestry sector in Romania.



**Figure 2. Typology of stakeholders on a macro to micro continuum**

Source: Grimble *et al.*, 1994.

Using the above notions, a comprehensive investigation was carried out and the main stakeholders have been identified on the basis of the following questions: (i) Who has been involved in the creation of the *Policy and Strategy for the development of the forest sector in Romania*? (ii) Which are the most interested groups in managing, using and benefiting from the forest resources in Romania? (iii) Which are the most dependent groups on the forest resources in Romania?

After identifying of the stakeholders in the Romanian Forest Sector, the second phase of stakeholder analysis follows the assessment of their influence and importance, as well as their potential impact on forest policy. For data analysis, the identified stakeholders were grouped according to the classifications found in the literature.

The *Importance / Influence matrix* is used to map out the relative importance and influence of key stakeholders. By combining influence and importance using a matrix diagram, stakeholders can be classified into four groups: high importance / high influence, high importance / low influence, low importance / high influence and low importance / low influence (IIED, 2001).

The *Conflict / Complementarity matrix* is used to map areas of conflict and cooperation between key stakeholders. It is a useful tool for establishing area of consensus and therefore starting points for cooperative work.

The *Actor linkage matrix* is relevant to map linkages and flows of information between key stakeholders, in order to gain an understanding of the key institutional linkages.

The key questions for this step that have been addressed to interviewees were: (i) Who is directly responsible for the forest policy formulation? (ii) Who is influential in forest policy? (iii) Who will be affected by the forest policy? (iv) Who will promote / support the forest policy?

## RESULTS AND DISCUSSION

### Stakeholder identification

Grimble *et al.* (1994) propose the identification of stakeholders from micro level to macro level. Table 1 presents the stakeholders of the Romanian forest sector.

Among all the stakeholders identified the main ones (key stakeholders) are listed below:

- the European Union, represented by its institutional architecture;
- the Ministry of Environment and Forests - the public central authority for forestry, subordinated to the Romanian government;

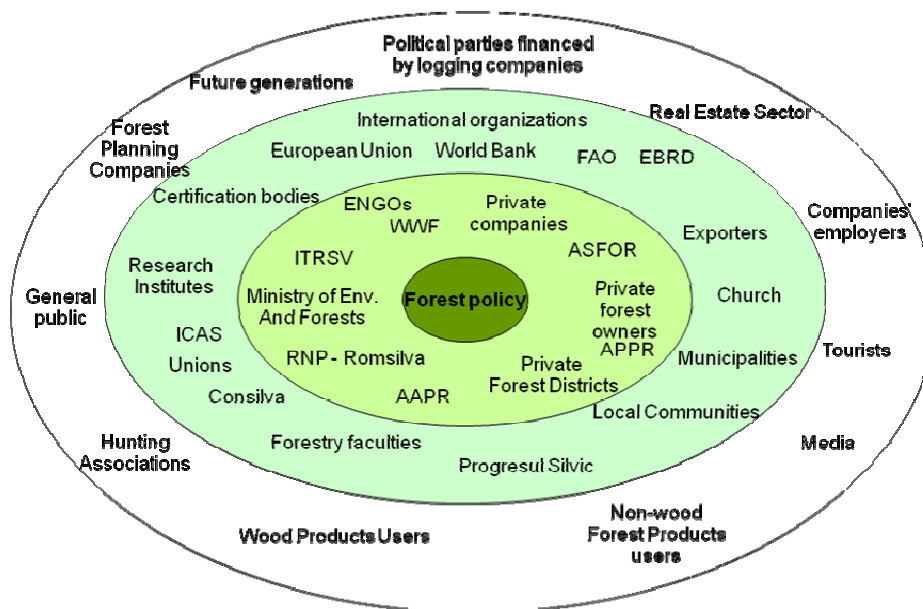
- the National Forest Administration - NFA (*Regia Națională a Pădurilor – Romsilva*) - the main manager of the State public forests, implementing the national strategy in the forest sector;
- Forest Inspectorates (*Inspectoratele Teritoriale de Regim silvic și de Vânătoare* - ITRSV);
- research and innovation bodies;
- trade associations;
- the Association of Private Forest Owners (*Asociația Proprietarilor privați de Pădure* - APPR);
- the Association of Forest Administrators (*Asociația Administratorilor de Păduri* - AAP);
- "Progresul Silvic" - the largest environmental non-governmental organization (ENGO);
- World Wide Fund for Nature (WWF);
- other ENGOs;
- media.

**Table 1. Stakeholders in the Romanian forest sector**

Level	Stakeholders
Global and International	<ul style="list-style-type: none"> <li>○ European Union</li> <li>○ International organizations (e.g. World Bank, Food and Agriculture Organization of the United Nations, European Bank for Reconstruction and Development etc.)</li> <li>○ International environmental non-governmental organizations (ENGOs)</li> <li>○ Tourists</li> <li>○ Future generations</li> </ul>
National	<ul style="list-style-type: none"> <li>○ National Government</li> <li>○ National Political Parties</li> <li>○ Policy makers</li> <li>○ Ministry of Environment and Forests / Forest Department</li> <li>○ National Forest Administration (RNP-ROMSILVA)</li> <li>○ Forest Inspectorates (ITRSV)</li> <li>○ Forest-based industries</li> <li>○ Unions (e.g. CONSILVA)</li> <li>○ Research and innovation bodies</li> <li>○ Certification bodies</li> <li>○ trade associations (ASFOR, APMR, ROMAP)</li> <li>○ the Association of Private Forest Owners (APPR)</li> <li>○ the Association of Forest Administrators (AAPR)</li> <li>○ Hunting Associations</li> <li>○ Progresul Silvic</li> <li>○ World Wide Fund for Nature (WWF)</li> <li>○ Real Estate Sector</li> <li>○ General Public</li> <li>○ Tourists</li> <li>○ Media</li> <li>○ Future generations</li> </ul>
Regional	<ul style="list-style-type: none"> <li>○ Municipalities</li> <li>○ Companies within the forest-based industry</li> <li>○ Church' forests (<i>Fondul Bisericesc</i>)</li> <li>○ Wood products users</li> <li>○ Regional Pressure Groups</li> <li>○ Media</li> </ul>
Local	<ul style="list-style-type: none"> <li>○ Local communities</li> <li>○ Local elites</li> <li>○ Church</li> <li>○ Non wood forest products users (NWFPs)</li> </ul>

The stakeholders have been further divided into primary, secondary and tertiary stakeholders (figure 3).





**Figure 3. The Identification of stakeholders in the Romanian Forest sector**

### **Stakeholder analysis and assessment**

The stakeholder analysis is realized in order to assess the degree of involvement of different actors in forest governance.

#### *Stakeholders' interests and characteristics*

The main stakeholders identified within the Romanian Forest Sector are listed below and their activities / functions are shortly described:

The **European Union (EU)** is a central actor on most international environmental issues, playing an important role in global policy making (Vogler, 2005). As a political system, the EU includes political actors, political institutions (Council of Ministers, the European Parliament, the European Commission and the European Court of Justice) and decision-making processes.

The interests of the European Union are related to the accomplishment of the objectives established through its forest policy.

In 1998, the Council Resolution on a Forestry Strategy for the European Union established a framework for forest-related actions in support of sustainable forest management.

The EU Forestry Strategy emphasises the importance of the multifunctional role of forests and sustainable forest management for the development of society, and identifies a series of key elements, on which it bases its implementation (European Commission website):

- forest policy is mainly a Member State competence, while the EU can contribute to the implementation of sustainable forest management through common policies, based on the principle of subsidiarity and the concept of shared responsibility;
- implementation of international commitments, principles and recommendations through national or sub-national forest programmes developed by the Member States and active participation in all forest-related international processes;
- the need to improve co-ordination, communication and co-operation in all policy areas of relevance to the forest sector, both within the Commission and with the Member States, and also among the Member States.

The harmonization of the forest policies of the member states with the EU forest policy is implemented by the European directives which are transposed in laws or in governmental decisions adopted at the national level. The European Union can exercise its power by means of different

ways, such as financial resources, coercitive measures or by the possibility to initiate the procedure of infringement against Romania.

The **Ministry of Environment and Forests** is the public central authority for forestry, subordinated to the Romanian government. Its activity is regulated by the resolution / governmental decision 1635 / 2009, regarding the organisation and operation of this ministry. The Ministry carries out activities related to sustainable development, climate change, natural protected areas, biodiversity conservation and forestry. Among the ministry's functions there are: creating strategies, implementing and coordinating, regulating and advising, monitoring and controlling, as well as dealing with non-refundable funds from the European Union and other external credits. One of ministry's divisions is the Forest Department (*Direcția Generală Păduri*), comprising the following subdivisions: Forest Policies, Forests and Forestry Development and Forest Control.

At Ministry's order there are the following organizations: the National Agency for the Protection of the Environment, the Danube Delta Biosphere Reserve, the National Environmental Guard and 9 Forest Inspectorates. The National Forest Administration (RNP Romsilva) is functioning under the authority of the Ministry of Environment and Forests.

The **National Forest Administration - NFA** (Regia Națională a Pădurilor – Romsilva) is the main manager of the state public forests, implementing the national strategy in the forest sector and acting to protect, preserve and manage the public forests in a sustainable way.

In addition to its management function, the NFA oversees timber traffic on public roads. The NFA also fulfils a regulatory function which includes implementing the forest regime within the forests under its jurisdiction (the forest regime is represented by technical, economic and juridical forestry standards regarding the planning, regeneration, harvesting, health and guard of the forests, with the final objective of assuring sustainable forest management).

At the same time, the NFA has been directly involved in the implementation of the forest regime in private forests, through participating in wood marking. It has also been the key institution providing information and technical assistance to private owners, after the restitution of forests.

The **Forest Inspectorates (ITRSV)** are legal entities, empowered to follow up legal actions, as their main function is to control the enforcement of norms and regulations imposed by the ministry, for owners and administrators of public and private forests.

The main **research and innovation bodies** within the forest sector are: the Academy for Agriculture and Forest Sciences, the National Institute for Forest Research and Forest Management Planning, the National Institute for Wood Science, and forestry faculties. Also, in Romania there exist about 50 private firms for forest planning.

There are three main **trade associations** that officially represent the forest logging companies and wood industry operators: the Association of Romanian Foresters (ASFOR), the Association of Romanian Furniture Producers (APMR) and the Association of Romanian Pulp and Paper Producers (ROMPAP). The main goal of these trade associations is to represent members' interests to official authorities.

ASFOR includes the majority of the logging, transport and primary wood processing companies, APMR includes the furniture operators and ROMPAP includes the pulp and paper industry operators.

The **Association of Private Forest Owners (APPR)** is a national level umbrella non-governmental organization representing all categories of private forest owners in Romania.

The **Association of Forest Administrators (AAPR)** is a non-governmental organization of foresters involved in forest management.

The largest environmental non-governmental organization (**ENGO**) is "Progresul Silvic", mainly formed by Romanian forestry engineers. "Progresul Silvic" supports the Romanian forestry and promotes forest and environmental protection awareness.

The most active international non-governmental organization is **Wilde Wide Fund for Nature Romania (WWF)**. Their mission is to stop the degradation of the natural environment, through the conservation of biodiversity, the rational use of renewable natural resources and

through promoting the reduction of pollution and wasteful consumption. They act as a lobby and advocacy NGO, forming partnerships with the government, other ENGOS and private companies.

WWF has been involved in the FSC (Forest Stewardship Council) forest certification process in Romania, being the moral author of the forest management certification of the Forest District Naruja, the first private forest district that has been certified in 2005.

#### *Stakeholders influence and importance*

Based on the results of content analysis of the information derived from the interviews, stakeholders have been classified according to their influence and impact, as mapped in figure 4.

Quadrat A includes the stakeholders having high influence in the decision-making and more impacted upon, such as the Ministry of Environment and Forests (including the Forest department) and the NFA. They were the ones most engaged in dialogue, working together and possible form partnerships. In practice, the Ministry and the Forest Department are the sole authorities to take decisions and they consult mainly the NFA.

Within the formulation of the forest policy, the stakeholders within the quadrat B have also been consulted, in a passive or a more interactive way: *Progresul Silvic*, exporters, the local communities etc.

Within the quadrat D, there are the "information giving" actors, which are less impacted by the forest policy, but they have a certain influence on forest policy.

In the quadrat C there are the "information gathering" actors, who are less impacted by the forest policies and they have had also less influence on it.

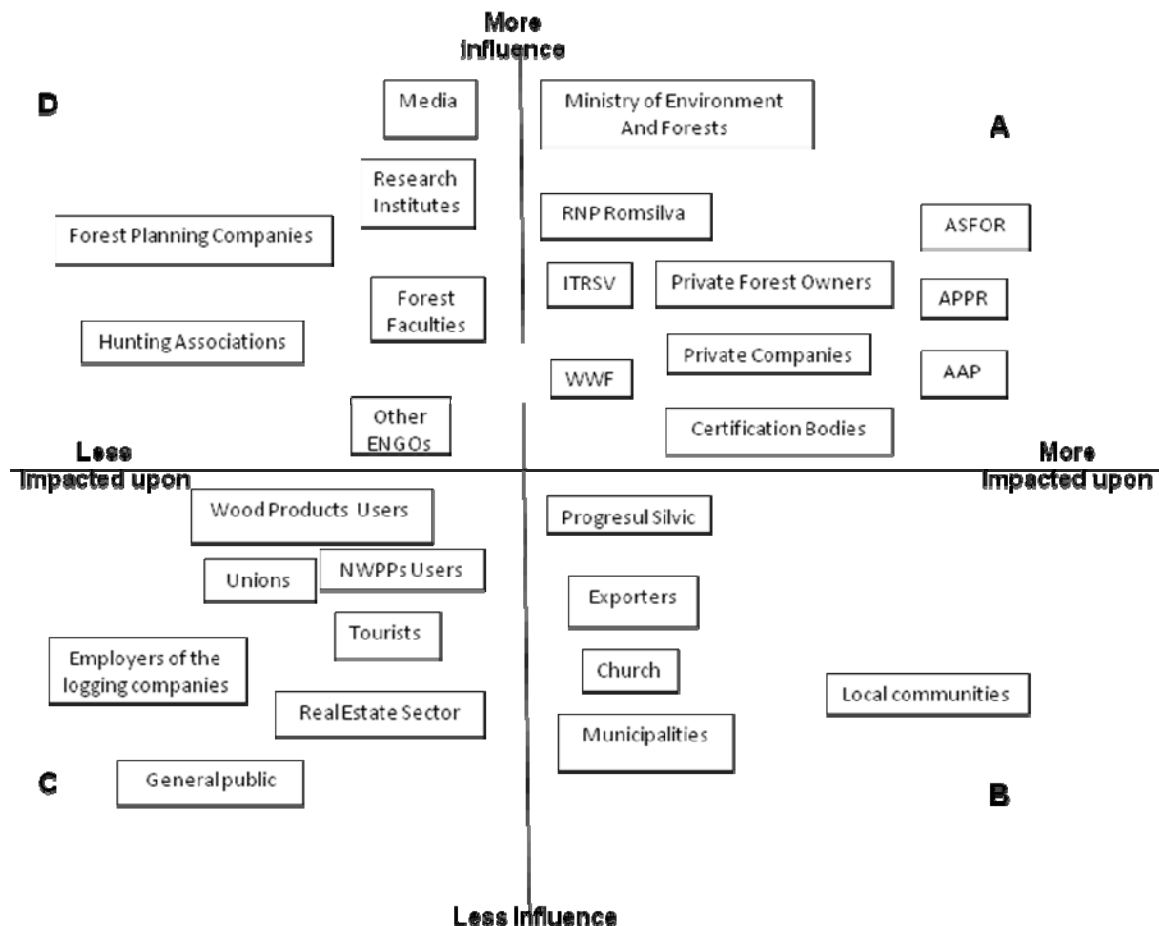


Figure 4. Stakeholders Analysis Grid

Further, using the information derived from the interviews, on their views on other stakeholders' interest in the use of forest, as well as on their interactions with each other over the use and management of the forest, stakeholders have been depicted (table 2), using the framework proposed by ODA, (1995).

**Table 2. Stakeholders' table**

Stakeholder Group	Nature of interest in policy decision	Potential impact on policy	Relative importance of interest	Importance of group	Influence power of group
EU	Global policy-making	High	High	High	High
MEF	Policy making	High	High	High	High
NFA	Institutional responsibility	High	High	High	High
ITRSV	Law enforcement	High	High	Medium/High	Medium
Research and innovation bodies	Research	Medium	Medium	Medium	Medium
Trade associations	Economic interest	Medium/High	High	Medium/High	Medium
APPR	Forest use	Medium	Medium	Medium/High	Low
AAPR	Forest management	Medium	Medium	Medium	Low
Progresul Silvic	Protection of forests	Medium/High	Medium	Medium	Low
WWF	Protection of forests Biodiversity conservation	Medium/High	Medium	Medium	Low/Medium
Rural communities	Fuel-wood security	Low	Medium	Medium	Low
Wood and NWFPs users	Income	Low	Medium	Medium	Low

Conceptual content analysis suggested the following: among all stakeholders, the National Forest Administration is the most important and influential stakeholder. Although the Association of Private Forest Owners, the Association of Forest Administrators and trade unions are important, they don't participate much in the decision-making process, thus being less influential as stakeholders. There is a similar situation for the environmental non-governmental organizations, due to their weak representation.

## CONCLUSION

Romanian forests and the forest sector are very important from an ecological, economic and social perspective. Due to the heterogeneity of the forest-based industries a large number and a wide range of relevant stakeholders need to be considered in the policy arena.

The stakeholder analysis of the Romanian forest sector conducted in this paper contributes to an improved understanding of the stakeholders' structure and interactions among them, through the identification of the stakeholders who play a central or a peripheral role.

The analyses reveals that, despite the relative high number of organisations with a stake in forest policy, the decision making process is still very centralised and limited to few primary stakeholders (NFA and ITRSV). The private sector, from business and from private forestry is less influential than in the case of other European countries with a long tradition in the market economy. The civil society sector is represented only by the active involvement of WWF in the policy formulation process. Professional organisations have lost their power being merely created with staff belonging to NFA and ITRSV.

Consequently, increased public participation, improved communication and cooperation between different actors are the foundations for good forest governance, therefore for supporting sustainable forest management and the sustainable development of the forest-based industries in Romania.

Further, as complementary to the stakeholder analysis, the "4R Framework" (Dubois, 1998) needs to be applied to the Romanian forest sector, in order to depict better the stakeholders roles, defined by their rights, responsibilities, returns / revenues and relationships. Also, an institutional analysis of the Romanian forest sector needs to be developed.

## ACKNOWLEDGMENTS

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## **SECTION 2**

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# **MANAGEMENT AND BUSINESS ADMINISTRATION**





## A REVIEW OF APPROACHES FOR SELECTING INTEGRATED WASTE MANAGEMENT SCENARIOS FOR LIFE CYCLE ASSESSMENT STUDIES

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### Abstract:

*LCA is a decision support tool that evaluates the environmental impacts throughout the life cycle of a product or a process. This tool can also be used to assess the environmental performances of an integrated waste management system or to identify the one with the best performance through a comparative analysis of different scenarios. The result of the analysis depends primarily on how scenarios to compare are constructed, that depends on which fractions, and in what amounts, are sent to certain treatments/destinations.*

*In the first part of the paper, we will introduce the concept of scenario, how it can be classified and how it can be built, as is clear from the literature.*

*Then we will try to examine the criteria used in choosing the scenarios of waste management systems under the LCA, through a literature review. This critical review, which is the first phase of a larger study, highlights that arbitrary criteria are generally used in the selection of scenarios. In this way the best combination among all possible ones might not be considered; indeed, the best one among a discrete set of possibilities can just be identified.*

*Furthermore, the paper highlights the advisability to identify an LCA-integrated tool that allows one to find the most environmentally-sound scenario among all those theoretically possible.*

**Keywords:** LCA, Life cycle assessment, integrated waste management system, scenario, case study review.

**JEL classification:** Q51

## 1. INTRODUCTION

An objective of the EU's policies is to minimize waste production through better use of resources and more sustainable consumption patterns. The approach of the EU to waste management is based on the following principles: waste prevention, recycling and reuse and the optimization of final disposal and monitoring. The waste hierarchy is the basis for selecting priorities in waste management (Del Borghi et al., 2009). It gives top priority to prevention, then reuse, recycling, recovery and, finally, disposal follows. The waste hierarchy does not attempt to assess the environmental impacts of a specific waste management system but provides guidelines for the preferred strategy for waste management if the available data for an environmental assessment is very limited (Kirkeby, 2005).

In waste management, waste can be subjected to various processes, such as landfilling, incineration with energy recovering, recycling, composting, each of this with specific consequences in terms of environmental impacts. Therefore, it is important to assess accurately the destinations of waste that minimize these consequences.

A system approach to waste management was proposed by W.R.Lynn in 1962 described as "viewing the problem in its entirety as an interconnected system of components operations and functions" (McDougall et al., 2003).

Kreith and Tchobanoglous (2002) have defined an integrated waste management system as "the selection and application of suitable techniques, technology and management programs to achieve specific waste management objective and goals".

In 1991 a task force of the UNECE (Economic Commission for Europe) published a Draft Regional Strategy in which there is a relevant definition of integrated waste management, which is defined as "process of change in which the concept of waste management is gradually broadened to eventually include the necessary control of gaseous, liquid, and solid material flows in human environment" (McDougall et al., 2003). Today the concept is broader and includes the use of

different treatment technologies depending on situations, and overall approach being taken with respect to the analysis, optimization, and management of the whole system (Staniškis, 2005).

McDougall et al. (2003) define the integrated waste management system as a system of waste that has control over:

- All types of solid waste material;
- All sources of solid waste;

And it would include:

- Materials recycling;
- Biological treatment;
- Thermal treatment;
- Landfill.

To guarantee sustainable development regarding solid waste management three areas have to be ensured (Francke and McDougall, 1999):

1. Environmental sustainability
2. Economic sustainability
3. Social acceptance.

The concept of Life Cycle Thinking is appropriate to ensure environmental sustainability, because it is based on a holistic and systematic approach and covers all the phases of the life cycle from cradle to grave (Francke and McDougall, 1999).

Life Cycle Thinking and life-cycle-based approaches have become very important in the sustainability policies of the European Union (EU). According to ISO 14040:2006, LCA methodology is applied to assess the potential environmental impacts and resources used throughout a product's life cycle, i.e., from raw material acquisition to waste management (ISO, 2006).

Life cycle assessment (LCA) can provide qualitative and quantitative information on energy and resources consumption and production, and emissions, concerning a waste management system. LCA can also consider the environmental benefits (related to some options as recycling) (Baumann and Tillman, 2004). Therefore, the LCA tool can be used in policy- and decision-making to compare various potential management strategies in different districts or regions. The waste management is a complex system which cannot be limited to mere hierarchy of options but must include more processes. So, in the planning phase we can define the scenarios with the rate of waste that will be conveyed to the various treatment options/disposal.

As the first phase of a wider study we have carried out a critical review with the aim to provide an overview of how identification of these scenarios in LCA for integrated waste management systems is generally made.

The first part of the paper will introduce the concept of scenario, how it can be classified and how it can be built, as is clear from the literature. Then, we will outline the criteria using to choosing the scenarios of waste management systems under the LCA, as emerged in the literature review carried out. Finally, we will draw some preliminary conclusive remarks.

## 2. SCENARIO DEVELOPMENT

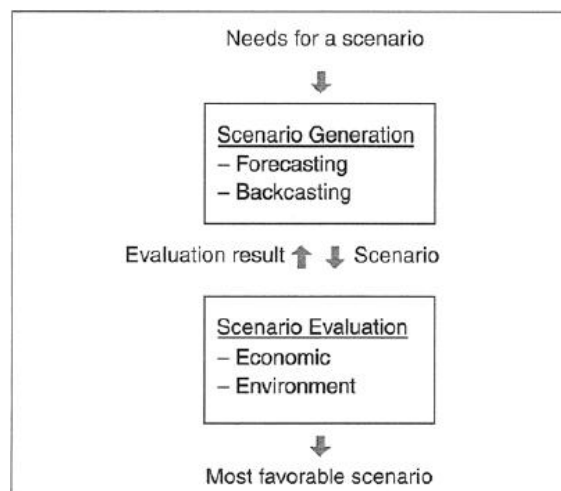
The term "scenario" is typically used referring to the "the setting of frame conditions or a description of the system to be modelled" (Pesonen et al., 2000). Many definitions of scenario were given in the past years, in many areas such as the games or the military field. All the definitions in the literature include three basic elements: the description of alternative future situations, the pathway from the present to the future and the inclusion of uncertainty about the future (Pesonen et al., 2000).

Different methods to create scenarios have been defined. The SETAC-Europe LCA Working Group (Pesonen et al., 2000) has proposed the following steps:

1. *Preparation*. Definition of scenario space and key driving forces thought to be important to the future of the domain are listed.

2. *Development.* Definition of key measures (that might include forces such as economic growth, legislative environment, technological changes, etc) and events. Every scenario in the set will include projections of the same measure. Probable events, which can impact the key measures can shape the scenarios in several ways and should also be defined.
3. *Reporting and Utilisation.* The best documentation for scenarios is in most cases a simple set of charts and narratives describing the future presented by each scenario.

In general, scenarios are used by decision makers in the strategic processes introducing into analysis anticipations and assumptions. For scenario generation, forecasting or backcasting are used. According to Fukushima and Hirao, (2002), the forecasting analyzes the situation that can be obtained as a result of certain decisions when you can choose between different options, stating from the existing trends. Instead, backcasting starts from desirable future and looks at how this can be obtained (reverse path). In this way different scenarios are built, that are evaluated through different viewpoints (such as economic and environmental) by decision makers. The results returns to the scenario generation which continues until you get the most favourable one, as shown in Fig. nr. 1.



**Figure 1. General framework of scenario development (Fukushima and Hirao, 2002).**

According to Börjeson et al. (2006), a deeper classification can be made. Three different categories of scenarios can be distinguished: predictive, explorative and normative (summarized in Table nr. 1).

The ‘predictive scenario’ answers the question *What will happen?* in order to predict what is going to happen in the future. Moreover, this type of scenario can answer the question *What will happen, on the condition that the likely development unfolds?* (forecasts) or *What will happen, on the condition of some specified events?* (what-if scenarios), according to the kind of conditions they place in the predictions. When a forecast is performed, it is focused on the assumption that the resulting scenario represents the most likely development. Forecasts can be used as a support in planning and can be influenced by external factors such as economic events, natural phenomena, etc. These forecasts are suitable for short term, due to the fact that uncertainty is reduced in the development of external factors. Instead, in a what-if scenario one investigates what will happen in the near future, given certain events (external events and/or internal decisions) of great importance for future development.

**Table 1. Summary of the scenario according to the classification proposed by Börjeson et al. (2006).**

<b>SCENARIOS</b>	<b>PREDICTIVE</b> <i>What will happen?</i>	Forecast <i>What will happen, on the condition that the likely development unfolds?</i>
		What-if <i>What will happen, on the condition of some specified events?</i>
	<b>EXPLORATIVE</b> <i>What can happen?</i>	External <i>What can happen to the development of external factors?</i>
		Strategic <i>What can happen if we act in a certain way?</i>
	<b>NORMATIVE</b> <i>How can a specific target be reached?</i>	Preserving <i>How can the target be reached, by adjustments to current situation?</i>
		Transforming <i>How can the target be reached, when the prevailing structure blocks necessary changes?</i>

The 'explorative scenario' answer the question *What can happen?* Its objective is to study situations that might occur, usually from different perspectives. Typically, a number of scenarios are built to have a wide range of possible developments. Unlike what-if scenario that starts from the present situation to built scenarios, explorative scenario has the starting point in the future and has a long time-horizon in order to analyze deeper changes. We can distinguish two types of explorative scenario: external and strategic scenario. The external scenario answers the question *What can happen to the development of external factors?*, focusing only on factors out of control of the relevant actors, and is used to help the assessment of policies and strategies. Instead, the strategic scenario answers the question *What can happen if we act in a certain way?*, aiming to describe the various possible consequences of strategic decisions. Strategic scenarios focus on internal factors (factors that could affect), and consider the external aspects. They describe how the consequences of a decision depend on what may occur in the future situation

Finally, the 'normative scenario' answer the question *How can a specific target be reached?*. The starting point is normative, and attention focuses on some future situations or objectives, and how to achieve them. Depending on how the system structure is treated, we can distinguish a preserving scenario (*How can the target be reached, by adjustments to current situation?*) and a transforming scenario (*How can the target be reached, when the prevailing structure blocks necessary changes?*). The goal of the preserving scenario is to discover how a target can be reached effectively. This can be done with an optimization model, or in qualitative way. The starting point of a transforming scenario, that is a backcasting study, is a high level goal that seems unreachable if the current development continues. A marginal adjustment of the current development is not sufficient and breaking the trend is needed to achieve the goal.

Now, we can identify which of these scenario categories are best suited to the LCA tool considering the background and the foreground system, and the attributional and consequential LCA.

The foreground and background systems are defined, respectively, as the part of the LCA model which include "processes on which measures may be taken as a result of decisions based on the LCA study", and "processes which are not under the direct influence of the decision maker" (Baumann and Tillman, 2004). An attributional LCA is a model which describe the environmentally relevant physical flows between the system under study and the environment and is like a photo of the actual system; instead, a consequential model try to answer the question "what happens if", so aim to identify changes in the environmentally physical flow when there are consequences following possible decisions (Finnveden et. al., 2009).

As analyzed by Höjer et al. (2008), forecasts can be used to assess the environmental aspects of all decisions on the background system, but only in its most important part. What-if scenarios are rarely used to describe the background system due to limited knowledge of the technological

subsystem and the causal relationships involved. Essentially, a what-if scenario for the foreground system coincides with a comparative LCA. Instead, a strategic scenario can be seen as a comparative LCA that include external scenarios for the background system. In fact, it can be used for assessing different options for the foreground system under the influence of different external scenarios. For the normative scenario, the preserving is used to identify foreground system that meet a specified requirement. In this case options should be limited to decisions regarding the foreground system as are those who can influence decision-makers.

External scenarios are widely used in LCA for a waste management system. For example, when energy by fuel is replaced by energy recovered from incineration. In this case there will be change in the fuel system.

Transformative scenarios are not usually involved in LCA because they are used when great changes in a long-term are needed. For this reason there is a problem of availability of data necessary for an LCA (Höjer et al., 2008).

According to Börjeson et al. (2006) scenarios are developed in a process consisting of three phases that regards: the generation of ideas and data collection, the integration in which elements are combined into sets and the check of the consistency of the scenarios. Each phase is developed using techniques. In short: *generating techniques* aim to generate the collection of ideas, knowledge and views regarding an aspect of the future (examples of such techniques are workshops, panels and surveys); *integrating techniques* integrates parts into wholes and are often based on mathematical models; *consistency techniques* has as its main advantage the insurance of consistency between or within scenarios.

In the LCA framework, the SETAC-Europe LCA Working Group has defined scenario as "a description of a possible future situation relevant for specific LCA applications, based on specific assumptions about the future, and (when relevant) also including the presentation of the development from the present to the future" (Pesonen et al., 2000).

The structure of the scenarios is defined in the first phase of the LCA, the goal and scope definition, but it affects all other phases of the study. The frame conditions of scenarios defined give the framework for the modelling (that is done in the LCI and LCIA), and the models, in turn, have to follow these (Pesonen et al., 2000).

The SETAC-Europe LCA Working Group Scenario development in LCA has proposed two basic approaches in the context of the scenarios LCA: what-if scenario and cornerstone scenario (Pesonen et al., 2000).

The most used approach is the what-if scenario. It is used for studies in which researchers can set defined hypotheses on the basis of existing data in order to compare two or more scenarios. These are often studies that estimate how some specific changes may affect the environmental impacts within the present system. The result is the quantitative comparison of selected options. It is an approach used in case of short or medium term decision-making situations.

The cornerstone approach does not necessarily give a quantitative assessment. It is usually the base for further research as it provides guidelines. Different options are chosen, also very different from each other, that serve as a "cornerstone" of the studied field. Thus, the cornerstone approach gives an indication about the direction and possible alternative paths. It is a tool for long-term planning and, therefore, it has more a strategic objective than the previous approach.

The results of a cornerstone approach are often the basis for further research where the scenarios can be constructed with what-if approach. According to the authors, the cornerstone approach is more appropriate for strategic planning and research for the planning of public policies.

### **3. CRITICAL REVIEW**

#### **3.1. MATERIALS AND METHODS**

The literature review carried out was focused on LCAs concerning integrated waste management systems, thus excluding the case studies assessing individual treatment options. Thirteen case studies have been reviewed: 11 of these are European, including 4 Italian papers. All

of them are published in international journals, except for two research reports. The review was aimed at highlighting the criteria used to identify the integrated waste management scenarios to be evaluated by comparative LCA. Therefore we have omitted the results of these case studies, which are not relevant here.

### 3.2. RESULTS AND DISCUSSION

In some studies among those reviewed, the construction of scenarios was made taking into account European and national policies, with special emphasis to guidelines and targets for source-separated collection and landfilling.

In particular, the study by Emery et al. (2007), who analyzed four different scenarios related to Wales, is based just on this criterion. If the reference scenario (100% of waste landfilled) and the 100% incineration scenario are excluded, the other two scenarios meet, respectively, the recovery targets of the "Wise About Waste Wales" for the year 2009/2010, with a combination of recycling and composting, and the targets of the Landfill Directive for the year 2020 through a combination of recycling, composting and incineration with energy recovery.

Also the case of the Japanese city of Kawasaki (Geng et al., 2010) refers to the recycling targets set by the government for 2015, particularly in one of the scenarios analyzed. That study attempts to integrate municipal waste management and industrial symbiosis, through the involvement of firms located in that area. In scenario no. 1, the mixed waste paper is delivered to Corelex Papers for the production of toilet paper. In scenario no. 2 wasted plastics packaging is used by JFE as a reducing agent in steel-making processes. In scenario no. 3, the organic wastes from companies are treated for energy recovery in local biogas facilities. Residues from this process are used in cement production. Finally, in scenario no. 4, three recycling options are combined, with the following recycling rates set at government level: 62% paper, 69% plastics, 30% organic waste. All the remaining mixed wastes are sent to the four incinerators of Kawasaki for combined heat and power (CHP) generation.

In other case studies, the criterion of targets and policies is combined with other types of parameters. The Italian case of De Feo and Malvano (2009) starts from a scenario with a rate of 35% separate collection, which is the minimum level required by the Italian law, to develop nine additional scenarios through stepwise increases of 5%, up to 80%. At this separate collection rate two more scenarios have been identified entailing two different ways of waste treatment.

In the JRC report (Koneczny et al., 2007), referred to some European countries, six scenarios are assumed (in addition to the baseline). Some of these comply with the EU Directives and consider an increase in recycling and composting and the production of refuse derived fuel (RDF) in dedicated plants. Other scenarios include an intensive use of recycling, composting or incineration, respectively.

The recent study about Castellon de la Plana in Spain (Bovea et al., 2010) also combines various elements, notably: the recycling targets to be achieved by 2015 according to the "Spanish National Waste Plan", different collection models implemented at a national level, different treatment approaches for the biodegradable fraction, and the residual wastes that are landfilled. Twenty-four scenarios are analyzed and grouped into three systems which differ for the fractions and their shares. All systems are then analyzed considering two alternatives for biological treatment (composting or biogasification) and landfilling, with or without energy recovery (Fig. nr. 2).

SCENARIOS	COLLECTION SYSTEM (see Table 5)			TREATMENT			
	1	2	3	BIOLOGICAL TREATMENT		LANDFILL	
				COMPOSTING (A)	BIOGASIFICATION (B)	WITHOUT ENERGY RECOVERY (a)	WITH ENERGY RECOVERY (b)
1Aa - 1*Aa	x			x		x	
1Ab - 1*Ab	x			x			x
1Ba - 1*Ba	x				x	x	
1Bb - 1*Bb	x				x		x
2Aa - 2*Aa		x		x		x	
2Ab - 2*Ab		x		x			x
2Ba - 2*Ba		x			x	x	
2Bb - 2*Bb		x			x		x
3Aa - 3*Aa			x	x		x	
3Ab - 3*Ab			x	x			x
3Ba - 3*Ba			x		x	x	
3Bb - 3*Bb			x		x		x

Collection system	Bring system (street-side container)	Bring system (high-density materials banks)
1	Rest waste (89.98%)	Glass (2.26%) Packaging (1.85%) Paper/cardboard (5.51%)
2	Rest waste (86.53%) Packaging (4.29%)	Glass (3.29%) Paper/cardboard (5.89%)
3	Rest waste (79.17%) Putrescible (8.26%)	Glass (3.16%) Packaging (1.97%) Paper/cardboard (7.44%)

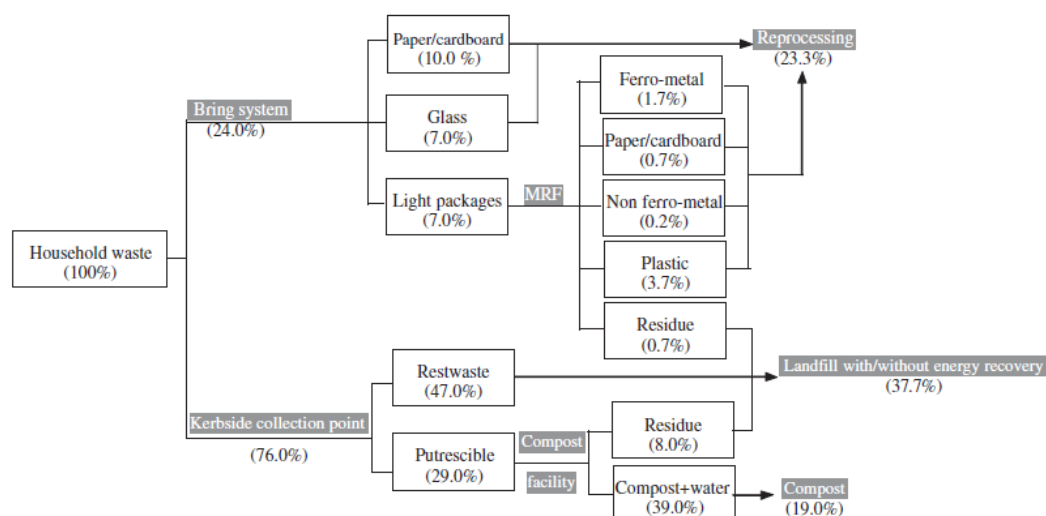
**Figure 2. Alternative scenario proposed by Bovea et al. (2010) and the relative collection system implemented (fraction and percentage of collection).**

Similar criteria are used by Rigamonti et al. (2009), who assumed three scenarios: 35%, 50% and 60% source-separate collection. The first one meets the Italian targets for 2007 (year of the study), the second one refers to the level of recycling which had been reached in some Italian districts in the previous years, and the third one is an estimation of the level that could be reached in the medium term at district-scale. From these two studies an additional selection criterion emerges consisting of making reference, as a good practice, to an already tested management model.

As we have seen from the aforementioned JRC case-study, as well as in a study for the Spanish town of Valencia (Bovea and Powell, 2006), another method for scenario definition is to focus on a particular treatment. In this paper, the scenarios proposed in the management plans combine two different types of waste collection (bring system and kerbside system) with different levels of source-separate and residual waste collection. The combination of these different types of collection is the basis for the creation of different scenarios. Besides the baseline scenario, referring to the situation in many areas of Valencia, the scenarios called 1/1v and 2/2v were defined.

In scenario 1/1v, household wastes are divided into three fractions: putrescible waste, recyclable waste, and restwaste. This scenario emphasises the recovery of the putrescible fraction, which is sent directly to a composting facility, while the restwaste is landfilled without energy recovery (scenario 1), or with biogas recovery for energy production (scenario 1v). Glass and paper/cardboard are sent to a reprocessing facility, the light packaging (plastic, ferro-metal and non-ferro metal, paper/cardboard) to MRF (material recovery facilities) where they are separated in 5 fractions. Four of these are sent to reprocessing facilities, and the residues are landfilled with or without energy recovery (Fig. nr. 3).



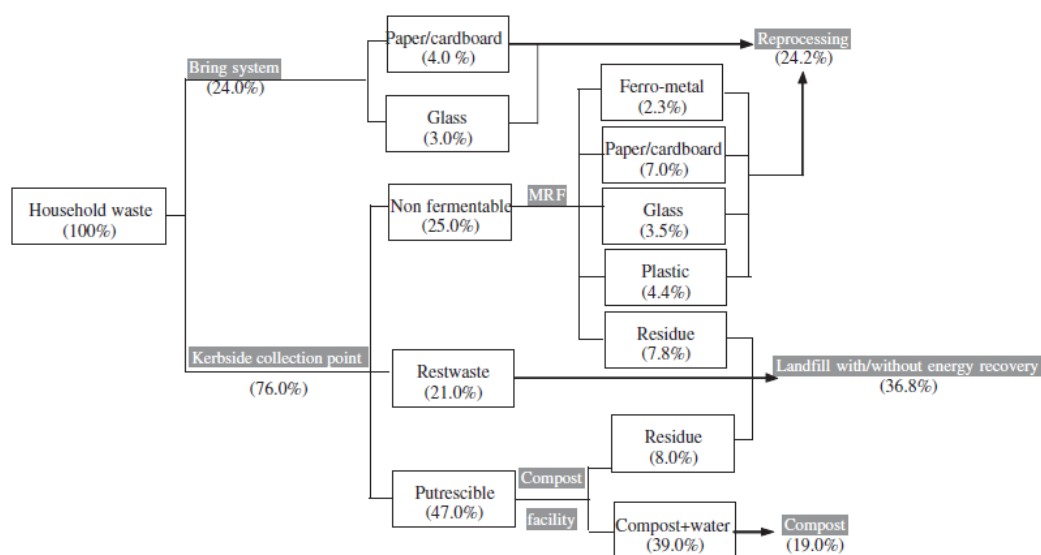


**Figure 3. Flowchart of the scenario 1/1v (Bovea and Powell, 2006).**

Scenario 2/2v emphasises the quality of the recovered materials, both organic and inorganic. The waste is separated into: putrescible, inorganic, recyclable, and restwaste. The putrescible fraction is sent to a composting facility. The inorganic fraction is sent to MRF, where recyclable recovered fractions (ferro-metal, paper/cardboard, glass, plastic) are sent to the processing facility. The residues from these facility, together with the residues from composting, and the remaining restwaste are landfilled without energy recovery (scenario 2) or with gas recovery for energy generation (scenario 2v) (Fig. nr. 4). This study shows that each fraction is sent to a single specific treatment.

The 2008 case study of Tianjin (Zhao et al., 2009) do not refer to any criteria for the choice of a few percentages. Excluding the baseline scenario S0, and with the exception of the S3 scenario, where a recycling rate of 30% was chosen according to data from U.S. EPA, and the S2 scenario, in which all waste is considered to be incinerated, for scenarios S4 (centralized composting) and S5 (anaerobic digestion) an arbitrary separation rate of 50% was assumed. Finally, the last scenario (S6) combines S3 and S5.

The case study of Torino District (Blengini et al., 2008), in Italy, offers four scenarios where recycling is emphasised. In the first two scenarios the separate collection is fixed at 52.1% and in the other two at 65.7%. Other processes involved are incineration with energy recovering, pre-treatment and landfilling. However, how these rates were set was not specified.



**Figure 4. Flowchart of the scenario 2/2v (Bovea and Powell, 2006).**

In other two case studies scenarios were defined arbitrarily, disregarding criteria inspired by regulations, planning or best practices. This is the case for the Austrian study by Salhofer et al. (2007) where for each waste stream (such as waste paper, biogenic waste, residual waste, etc) different options were considered for collection, recycling and treatment. Then, eight scenarios were defined by combining more or less recycling of recyclables (e.g. waste paper or plastics) with two different treatments options for other types of waste (e.g. residual waste): MBP (mechanical-biological pre-treatment) and MSWI (municipal solid waste incinerator). After the team of experts has listed the options for each waste stream, final options were chosen and allocated to the various scenarios in collaboration with the designers and with the agreement of all parties involved. The term scenario is used to indicate a combination of options for individual waste streams, including effects on other waste streams.

In the Swedish study (Eriksson et al. 2005), the newspapers (75%), glass (70%) and metal containers (50%) are source separated and recycled outside the system studied. These processes are common to all scenarios and are therefore excluded from the system. The rest is included in the residual waste within the boundaries of the system. With regard to biodegradable waste, plastic (HDPE) and cardboard containers, the maximum limit practically attainable of separate collection in households (70%) was chosen, even if the actual percentage of source separation in Sweden had been estimated around 30%. The percentage of 70% is justified by the method of refining scenarios designed to bring out the differences between the various strategies.

A different case is the one developed for the Bologna District (Buttol et al., 2007) in which the building of two new incinerators is assessed, and scenarios are obtained by a projection of current data to the time when the plants will start to operate, taking in to account treating capacity of incinerating facilities.

Finally, another Spanish case (Muñoz et al., 2004) proposes three scenarios. However, the shares of each waste fraction sent to the various processes are not specified and general choice criteria – such as waste generation, environmental regulations at different levels, technological capabilities, the local context, potential market for the materials recovery – are referred to.

#### 4. CONCLUSIONS

This review has confirmed that comparative studies for the assessment of integrated waste management systems consider discrete sets of scenarios, which are not identified according to scientific approaches, but are often based on rather unclear and arbitrary criteria. In any case, such criteria do not take into account all possibilities. In fact, however broad the spectrum of identified combinations can be, the best theoretical scenario might just not be included.

Therefore, it is appropriate to develop a tool that integrates LCA and that identifies the best scenario, from an environmental perspective, among all possible. This tool could be a useful support for decision making.

However, a major problem is that the traditional LCA models are static. This means that, in an integrated waste management system, they cannot give us information about the right time for investments in waste processing plants. Furthermore, LCA can identify the best management strategy to address the current needs of society, but investments in waste processing facilities are huge and cover many years. This means that a system currently available may not be any more helpful to meet the needs of future society. The problem can be solved through methods for future studies, such as those proposed by Börjeson et al (2006), and described previously.

A promising answer can be found, for example, in linear programming models, as discussed by Mercuri and Raggi (2004). The strength of these models is that, in principle, any combination of waste and treatment is omitted. On the other hand, its weakness is that the optimisation process should be carried out for a specific impact category at a time. That model could be improved and extended by simultaneously considering various impacts, and by also including economic issues.

Ekvall et al. (2007) state that the LCA tools are steady-state type and are not able to tell us what is the optimum mix of waste management. For example, if recycling is considered the best solution, this is not always true. With increasing amounts of waste, the better solution might be different due to, for example, the distance from plant, transportation costs, etc. Linear-programming (LP) models are linear models that account for boundary conditions. Optimising LP models for waste management systems can be integrated in an LCA. The ORWARE model and MIMES/waste are examples of LP models that integrate the life-cycle perspective and, also are tools for LCA (Eriksson et al., 2003). However, according to Ekvall et al. (2007), an LP model is not a very precise representation of the real system. Non-linear programming is useful for evaluating more complex non-linear relationships. But, a more complex system requires more data and high quality data for an LP model can be difficult to obtain. It is, for example, difficult to estimate the maximum collection rate that can be achieved through bring systems (Ekvall et al., 2007).

The project will continue on this path, trying to figure out if such an instrument can be identified and, if so, how to develop it.

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# THE TEMPERATURE-BASED DERIVATIVES CONTRACTS – NEW PRODUCTS OF WEATHER RISK INDUSTRY

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## Abstract:

*The temperature-based derivatives contracts have appeared while the first deregulations in the utilities and the energy sectors from USA in the years 1990-2000. The transfer of the some services in the private sector has involved a better control of costs and revenues of different companies. The private investors who have turned to this area, have imposed a risk reduction management more complex than that used by any public company, in order to ensure their profits and a smaller variation of profit from one year to another. Initially, the temperature-based contracts were traded on over-the-counter market, but this type of trading has not provided a fast development of market. A turning point in the growth of market was the launch of the first derivative exchange-traded contracts in the summer of 1999 at the Chicago Mercantile Exchange (CME). In this article, we conducted an analysis of the temperature derivative contracts having regard to their economic importance, the major implications of weather on national economies and lack of traditional insurance products for temperature's variance. From their occurrence to date, these contracts have won every field that is influenced by meteorological variables always being finding new ways to translate in derivatives contracts different components influence of the weather.*

**Key-words:** weather derivative, HDD, CDD, temperature,

**JEL Classification:** G10, G20

## THE INSTRUMENTS OF WEATHER DERIVATIVES MARKET

Derivatives on variations of temperature have appeared in the U.S. during the years 1990-2000 with the first deregulation in the field of energy and utility. The deregulation of power energy has created new needs for the companies from this field: in order to stabilize their earnings, these companies have needed specific products to hedge the risk caused by unexpected weather conditions.

The existing products on the financial market did not provide full coverage of risk, for which it sought new ways to offer a minimization of the weather risks to an acceptable level. One of the factors that have a notable influence on the level of energy companies' revenues is the temperature variation. This unknown factor has created a demand for insurance against that risk which was not offered by existing products on the market.

In 1996, the first contract on temperature variations was concluded between Koch Energy and Enron valid through the winter of 1997 in Milwaukee. An important factor in developing the market for contracts on temperature variation was the high temperatures caused by El Niño phenomenon during the winter of 1997-1998, which caused substantial reductions in the sales of utilities companies. Since then and until now temperature variations contracts had an upward trend. Initially, they were traded on the OTC markets (over-the-counter), but this type of trading didn't provide a fast developing market.

The importance of the weather for the economy is demonstrated not only by the launch of these derivatives, but also by the establishment of associations with preoccupation in this field.

In 1999, Weather Risk Management Association (WRMA) was founded in order to attract public and corporations' attention on risk from weather and its management, and to promote market development and improvement.

Association's contributions to market development took place in the following field: improving access to weather data; standardizing documentation of weather transactions; establishing credit standards; expanding the weather market geographically; broadening the

market's commercial scope, establishing and annual sponsorship of the benchmark survey of the weather industry in conjunction with PricewaterhouseCoopers

A turning point in the growth of the trading of contracts on the temperature variation was represented by the launch of the first derivative contracts on temperature variations in the summer of 1999 at Chicago Mercantile Exchange (CME). Between 1999 and 2003, 24,094 contracts were concluded on temperature variations and the trend was growing and extending, reaching in 2006 a total of 801,122 contracts.

After their appearance in the U.S., contracts on temperature variations and other weather components helped to develop markets in other regions of the world such as Canada, Europe and Asia.

The weather derivatives are considered financial instruments and the market of these derivatives has two facets because some of these products are used for management of risk and some of them are used for commercial trading of weather risk. (P. Barrieu, O. Scaillet, 2009).

Now, through CME and OTC markets are traded different types of contracts like: contracts for temperature variations; contracts on frost days; contracts on snowfall; contracts on rainy days; contracts on sunny days; contracts on wind intensity.

So, there are many underlying "assets" (variables) for weather contracts like temperature, snowfall, frost days, humidity, rainfall, hurricane etc., but the most used variable is the temperature. The success of temperature based contracts could be explained through the intense use of these contracts by the power companies that are among the principal actors of this market and the fact that the temperature is a more manageable variable than rain or snow that are characterized by discontinuities (Hamisultane, 2006).

Along with energy firms, such contracts allow hedging to the firms from other working areas that are also affected by weather. According to a study commissioned by WRMA, potential users of hedging instruments based on weather are working in the following areas: energy; agriculture; retail; construction; transport; others.

Through the weather derivatives, we can affirm like Rayner that the companies from different fields "have attempted to domesticate weather, climate change and their consequences for millennia" and weather derivatives are an indirect form of commoditization of nature. (Rayner, 2003).

**Table 1. Correlation sector-climate risk**

Sector	Main climate-related risks to hedge
Energy	Temperature
Agriculture	Temperature, precipitation, frost
Agribusiness	Sun, Temperature, Decrease in consumption due to climate
Distribution	General meteorological conditions
Tourism	Snow, Sun, Temperature
Health	Very cold winters, very hot summers
Transportation	Wind, Rain, Snow, Frost, Icing
Building and construction	Wind, Rain, Snow, Frost, Icing

Source: A primer on Weather Derivatives, Pauline Barrieu and Olivier Scaillet, 2009

In addition, "...weather derivatives may re-shape forms of economic and environmental governance and do so in ways not conducive to the future production of sustainable ecologies and economies" (Pollard, 2009).

## METHODOLOGY FOR THE CALCULATION OF CONTRACTS ON TEMPERATURE VARIATION

The first contracts have been directed to hedge temperature variation risks of utility companies, in this way establishing the use of the degrees Celsius (Fahrenheit U.S.) as a measure of agreement. It was also established that a temperature of 18° C (65° F) requires no heating or cooling of housing and spaces for human activity, although in warmer climates it can be used a higher values. Based on these premises there have been issued two new concepts:

- HDD (Heating Degree Day) for the days when heating is required for human activities. HDD index is generally used during the cold season when temperatures drop below 18° C
- CDD (Cooling Degree Day) for days when cooling is required for human activities. CDD index is used in the hot season when temperatures exceed 18° C

To obtain the HDD or CDD, the average of maximum and minimum temperature recorded at a meteorological station or in a certain city is calculated by the formula:

$$T_i = \frac{T_{i \min} + T_{i \max}}{2} \quad (1)$$

where:

$T_i$  - the average temperature recorded on the day I;

$T_{i \min}$  - the minimum temperature recorded on the day I;

$T_{i \max}$  - maximum temperature recorded on the day I;

The average temperature at a particular station, calculated above, is used to calculate the HDD or CDD according to the following formula:

-for HDD

$$HDD_i = \max(0, T - T_i) \quad (2)$$

where:

$HDD_i$  - heating degree day on day i;

$T$  - temperature of 18° C (65° F);

$T_i$  - the average temperature recorded on the day I;

-for CDD

$$CDD_i = \max(T_i - T, 0) \quad (3)$$

where:

$CDD_i$  – cooling degree day on day i ;

$T$  - temperature of 18° C (65° F);

$T_i$  - the average temperature recorded on the day I;

The daily values of HDD or CDD are added up in order to get the HDD or CDD value for total contract period, according to the following formula:

$$HDD_t = \sum_{i=1}^n HDD_i \quad (4)$$

$$CDD_t = \sum_{i=1}^n CDD_i \quad (5)$$

where:

$HDD_t / CDD_t$  – total amount of daily values ;( $HDD_i / CDD_i$ ) which can be calculated on a week, a month or a season.

### Exemple

Transfuel Company is active in the field of providing fuel for thermal power producer CET. According to studies conducted by risk management department, it was established that, if the temperature will be higher than -5° C in December and January, the unit will register a drop in profits.

The following are known:



- For the unit to achieve a satisfactory return is required to deliver an average of 380 tons of oil daily at a price of 1.720 u.m. / tone ;
- This need is met when the daily outside temperature is at the level of  $-5^{\circ}\text{C}$ ;
- A rise of temperature determines a drop in fuel needs;
- And a temperature drop drives the increase in demand for fuel.

To ensure against risk, the unit decided to conclude a contract on temperature variations. A contract on temperature variations can be made specifying the following seven parameters (Zeng,2000):

1. Type of contract.
2. Contract period.
3. Official station from which weather data are obtained.
4. Definition of the Index (W) on which the contract is based.
5. Threshold exercise (S) for W.
6. Tick (k) or linear or binary payment scheme to pay constant (P0).
7. Premium.

For the presented case study the parameters are:

1. Contract: Purchase of European style put option;
2. January 2010;
3. Weather recording station;
4. The contract is based on HDD index calculated during the above mentioned
5. period;
6. Threshold exercise HDD 713 ;
7. Tick:  $1^{\circ}\text{HDD}=2000\text{ m.u.}$ ;
8. Premium = 50000 m.u.;

**Table 2. Temperature values in January**

Temp:	01.01	02.01	03.01	04.01	05.01	06.01	07.01	08.01	09.01	10.01	11.01	12.01	13.01	14.01	15.01	
MAX	0.00	-1.66	-3.90	-6.67	-10.00	-4.44	-2.79	-1.66	-4.44	-6.12	-7.22	-6.67	-5.00	-2.22	-1.66	
MIN	-4.44	-5.00	-7.22	-11.11	-14.44	-12.22	-8.33	-7.22	-6.68	-9.44	-9.44	-11.11	-12.78	-6.66	-5.00	
AVG	-2.22	-3.33	-5.56	-8.89	-12.22	-8.33	-5.56	-4.44	-5.56	-7.78	-8.33	-8.89	-8.89	-4.44	-3.33	
Temp:	16.01	17.01	18.01	19.01	20.01	21.01	22.01	23.01	24.01	25.01	26.01	27.01	28.01	29.01	30.01	31.01
MAX	0.78	1.67	1.67	1.11	0.88	5.00	8.89	5.00	3.89	4.44	3.33	6.67	5.00	5.00	5.56	2.78
MIN	-3.00	-6.11	-1.67	-1.11	-3.10	-2.78	-2.23	0.56	-1.67	-4.44	-3.33	-2.23	-2.78	-5.00	-5.56	-7.22
AVG	-1.11	-2.22	0.00	0.00	-1.11	1.11	3.33	2.22	1.11	0.00	0.00	2.22	1.11	0.00	0.00	-2.22

**Table 3. Daily HDD**

	01.01	02.01	03.01	04.01	05.01	06.01	07.01	08.01	09.01	10.01	11.01	12.01	13.01	14.01	15.01	16.01
$t^{\circ}\text{C}$	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
$t_i^{\circ}\text{C}$	-2.22	-3.33	-5.56	-8.89	-12.2	-8.33	-5.56	-4.44	-5.56	-7.78	-8.33	-8.89	-8.89	-4.44	-3.33	-1.11
HDD <sub>i</sub>	20.22	21.33	23.56	26.89	30.22	26.33	23.56	22.44	23.56	25.78	26.33	26.89	26.89	22.44	21.33	19.11

	17.01	18.01	19.01	20.01	21.01	22.01	23.01	24.01	25.01	26.01	27.01	28.01	29.01	30.01	31.01	HDD <sub>T</sub>
$t^{\circ}\text{C}$	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	
$t_i^{\circ}\text{C}$	-2.22	0	0	-1.11	1.11	3.33	2.22	1.11	0	0	2.22	1.11	0	0	-2.22	
HDD <sub>i</sub>	20.22	18	18	19.11	16.89	14.67	15.78	16.89	18	18	15.78	16.89	18	18	20.22	651.33

In Table 2 the average temperature is calculated using formula (1), in Table 3 the daily HDD values are calculated using formula (2) and for the HDD<sub>T</sub> formula (4) is used.

To get cash flow of the contract, we compare the obtained HDD<sub>T</sub> value with the threshold exercise value:

- HDD<sub>T</sub>>S –heating degrees value was higher than the exercise threshold stipulated in the contract and the only cash flow is the premium paid (50000 m.u.). The company recorded a profit drop equivalent to the premium paid, in turn it recorded a higher income related to a general increase of fuel consumption due to low temperatures recorded.

- $HDD_t < S$  –heating degrees value was lower than the exercise threshold stipulated in the contract and the cash flow received by the firm is calculated as  $k \times (S - HDD_t)$ , which in our case becomes  $2000 \times (713 - 651) = 124000$  m.u..
- From this value we deduct the initial paid premium  $124000 - 50000 = 74000$  m.u. and we obtain the value by which the return is increased.

In (Fig.1.) it can be seen the evolution chart of the contracts' return and payment for different values of  $HDD_t$ . The chart shows that if the value of  $HDD_t$  is lower than the threshold, meaning that the average temperature of the month was not below  $-5^\circ\text{C}$ , the contract generates payments correlated with the  $HDD_t$  value. If the value of the  $HDD_t$  is higher than the threshold the contract will not register any payments except the premium.

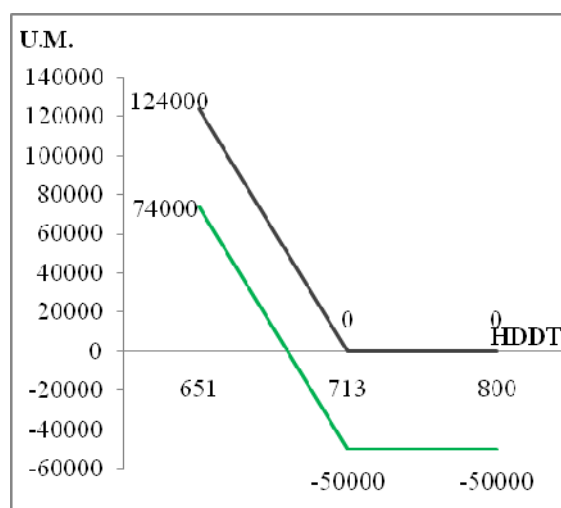


Figure 1. Return and payment

In order to offer more opportunities to companies and investors, on CME weather market are available three types of derivatives contracts: monthly contracts; seasonal contracts and seasonal strip contracts.

## CONCLUSIONS

Weather is the major topic in all discussions. At the first sight, weather is an environmental issue but taking in account its economic implications, it is an important key economic factor.

The weather risk can affect the entire economy of a country, but the most sensitive sector is the energy industries. The main player on this weather risk market are energy companies like Aquila Energy, Hess Energy, British Gas, financial institutions, insurance companies and hedge funds.

Because of economic implications of weather risk, there are many preoccupations in financial field regarding the hedging of weather risk. The results consist in the launch of many financial instruments or products like exchange traded derivatives contracts.

The success of these derivatives contracts is due to their characteristics and differences from the traditional insurance products:

- they are standardized contracts traded on the exchange;
- in order to receive the money, there is no need to prove the damages;
- they cover small variations of variables like temperature that can cause huge losses for the companies.

In addition, the contracts are based on some indices that do not depend on actions of market participants (so, there is little moral hazard) and the payoffs of these contracts are based on indices that are publicly available and objectively measured (Vedenov, Barnett 2004).

The weather indices are flexible and ease to construct, but the main problem of weather derivatives is the spatial variability of the weather that is source of basis risk - the weather risk is a geographical risk that can not be controlled. (Barrieu, Scaillet, 2009)

These financial products could be used not only for hedging purpose but also for speculative purpose by different types of individual or institutional investors because their returns are not highly correlated with the returns of traditional securities like bonds or shares. So, the weather derivatives contracts are excellent diversification vehicles for investors and these instruments "can improve the risk-return trade-off in asset allocation decision" (Cao, Li, Wei, 2004).

In addition, through the purchase and the sale of these contracts by financial investors, we assist to the weather risk transfer on the capital market.

The specialists consider that the development of weather derivatives market depend, in some extend, on the meteorological science and its capacity "to measure, forecast and render, in a commodity form, knowledge of different atmospheric components." (Rayner, 2003). So, the weather derivatives are an indirect for of commodification of nature and the weather indices are a commodity within the weather derivatives market.

The implications of the existence of these derivatives contracts are important. For example, in many countries, the public authorities are interested in order to adopt and strengthen new crop insurance program because the traditional agricultural insurance schemes are affected by problems like asymmetric information and systemic risk. (Stoppa, Hess, 2003). For these reasons, in countries like Canada, USA, innovative insurance program, based on weather derivatives, have been tested and developed.

Despite the success of these derivatives contracts on the financial market, the quantitative and qualitative development of this market will be different from other segments because of some aspects:

- the underlying asset (weather) is not traded on the spot market, so, some arbitrage or speculative strategies are not available for this „commodity”;
- the liquidity of the weather derivative market has been improved, but the level is not very high as we can observe on other traditional financial market because the weather is location specific and non-standardized commodity;
- the financial derivatives are useful for price hedging and weather derivatives are used for quantity hedging.

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## LEADERSHIP\* AND ENTREPRENEURSHIP DURING THE CRISIS PERIOD

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### Abstract:

*We assist today to interesting and challenging times for everyone, regardless of his hierarchical position or his field of activity. The globalization process that have brought a lot of positive effects at international, national and regional level, proved to be one of the most important carrier for an unexpected and unwished economic phenomenon: the economic crisis.*

*It's important to understand that for SME's sector the leadership is a crucial variable that has to be carefully managed under these circumstances. Leadership is a hot subject, from the boardroom to the shop floor, throughout the organization, influencing to a large extent the performances and evolution of any company.*

**Key words:** leadership, entrepreneurship, SME's sector, economic crisis

**JEL Classification:** M12

### THE GENERAL CONTEXT

Some specialists have the opinion that economic downturn at the world level can be compared with that of 1930 and that's not all! Even if some countries as USA and Germany send optimistic signals for recovery, most countries struggle still to face the negative consequences of this threat.

The explanations can wear a wide range of clothes from a too much emphasize on profit, bad risk management, bankers greed, population enthusiasm for spending, bad real estate investments a.s.o.

The fact is that all the sectors of the economy and public sector are strongly affected, with direct and indirect impact over societies' stability and level of living standards. It's easily to notice that we passed pretty fast from a huge availability of the money, both for companies and population spending, to a stage where the financial resource is seen as critical one and the bankers are very reluctant in offering it for different operations.

The difficulties for accessing the money create high difficulties for the companies to fund their activities, to carry out their economic cycle at the same or closer parameters as before.

Due to this cause, the possibility for modernizing the technologies and equipment is pretty low, thing that will be reflected in lower quality and productivity. The fall of population buying power attracted a contraction of the supply and the diminishing of production automatically created a pressure on the companies' managers for dismissing a lot of employees.

### CHANGE AND LEADERSHIP

Organizations are subject to the change process with a higher frequency and intensity. The environment's complexity, the dynamics of its components, all of these force the organizations to permanently assess their position related to the context and to anticipate or to react to challenges they face.

Under the new conditions the leaders around the world who understand that face the same challenges, to a certain extent, began pushing authority downward and horizontally in order to experiment the empowerment management. But, for most cases, the reality demands more basic reforms first to take place within companies. For working with the stakeholders in the new conditions, the specialists consider that developing company-wide leadership without new models could become an almost "for sure" failure for the typical organization.

Of course, many people have still the tendency to describe good leadership, as 'charismatic' considering this quality on the top of their list. During the tough periods as the crises, people have

almost a need to think that somebody has a miraculous quality that will be able to solve all the problems that they face.

But the profound economic crisis has created a real challenge for leaders. But also for their followers! Many employees see their entrepreneurs as charismatic! People who have a lot of initiative and know how to manage. And for sure, they are going to find solutions for the present situation, too!

Such approach is often met in the SME's sector where, for a lot of time, the entrepreneur as the leader of community, involved in all aspects of the organization, making the most of the decisions.

But, the pressures that the entrepreneur is subject to, the need for speed and the complexity of his environment place a lot of pressure on him, in order to start trusting more his employees and if he wants to get people to listen to him, he has to be also prepared for the vice-versa.

There is a real need for the professionals who are able to assist him and who can stand beside him in order to attain the objective proposed for these difficult times.

Innovation and change become attributes that are now stronger connected to the knowledge based leadership as actions that are more often associated with a leader's decision in order to assure that competitive advantage will be reached. Building an organizational knowledge map is one of the most difficult action for a leader, as he has to thoroughly assess the knowledge potential of the organization and how it can be better valued.

Learning organization can be developed only when the leader succeeds to transform the organization and himself in both sender and receiver of information, building a climate of trust and embedding it within the organizational culture (Năstase, 2008).

It's not possible to set and achieve challenging objectives without creating a team of capable, creative and committed employees. The communication process get new value, regardless of the fact that we talk about horizontal, vertical or oblique communications. Permanent monitoring of the environment, meeting the stakeholders' needs means to be able to connect with a solid informational system, able to provide the raw materials for decision making process.

Attaining the organizational objectives is a process that imposes a better cooperation among the people from inside and outside of organization and finding the right balance between internal conditions and external requirements.

## **CHALLENGES FOR ROMANIAN SME'S**

The specialists demonstrated that the level and particularities of the business environment vary from one country to another. The entrepreneurship is a social and economic phenomenon that is influenced by economic and non-economic conditions. The economic conditions comprise : access to profit, the existence of some groups with a leaders position, opportunities, chances and capital.

The non-economic factor can be grouped in non-economic motivators, the insatisfaction generated by the present job, values or by factors regarding the business environment.

After a period of powerful economic growth Romania knows a deep crisis with major negative effects in all the society's fields.

Till now the SME's sector proved to be one of the most dynamic sector from the Romanian economy, generating over 80% of GDP. But, at the same time, it proves to be the most affected by the economic crisis.

The present financial crisis has a negative impact over the most part of SME's sector, contributing dramatically to the increase of failures; the most exposed being the starts-up. It is normally, if we think that they don't yet have the required resources for resisting and surviving.

The negative impact is easily noticed over the SME's in the fields of real estate, trade and services. The diminishing of exports, the crash of investment and the the financial blockage generate more pressures on the entrepreneurs. It is estimated that at least 90% of 600.000 SME's are affected and 1/3 face the spectrum of closing.

The number of failing SME's is almost double comparative with the period of 2008, due to the fact that the possibility for getting credit or other forms of funding diminished substantially at the level of 2010.

According to the researches carried out by specialists, almost 25% of SME's have the risk to close down this year and 90% of the managers have in plans to dismiss more than 10% of their personnel for 2010.

Most of the SME's entrepreneurs think that they will have negative results for 2010 and they intend to survive by restraining their activities, searching for new investors and firing a large percentage of their workforce.

At the same time the leaders of employers associations claim that the delay in resuming the crediting process will have disastrous consequences over the remaining SME's, as they are placed in the impossibility of financing their economic cycle.

The Romanian entrepreneurs have to face also the higher competition from the part of companies with tradition in European and international market and to be able to adapt to the more sophisticated demands from their stakeholder.

It's really a necessity to be able to develop new competencies that will provide the Romanian entrepreneurs and leaders from SME's sector, with the necessary managerial tools for survival and development.

### **LEADERSHIP WITHIN SME'S**

It's not too much to say that the leadership development is at a crossroads in our days. As we live a time of crisis, the temptation for the employees is higher and higher to place all our hopes in the hands of a few charismatic persons who, we believe, could be able to discover those tools that will bring the required success.

But we have to be aware that leadership is also powerfully connected to the entrepreneurial culture that, in a way, led to some of the crises faces that we see today.

While we testimony periods of rapid change in technologies, markets and competitive conditions, the globalization increase the range and the depth of challenges that we face.

Consequently, the progress depends on entrepreneurial initiative and leadership competencies that we develop at individual and company's level.

Today the SME's environment becomes too complex for a single "heroic" individual to cope with! It requires a more collective effort for bringing in, sharing and applying the knowledge that could lead us to achieving our strategic objectives.

Conflicts sources analysis helps leaders to understand which is the provenience of the pressures that are exerted over them and their group. The identification, even if it happens a little bit later, because of the causes that generate the tensed situation could place the leaders in the position to adopt decisions that could cease the conflict in a starting stage.

At the same time, they have the opportunity to make a decision to what extent there is a problem that deals directly with us or are targeted to other components of our groups.

The leader's competency in the change process means that he succeeds to see beyond the boundaries of the routine activities and classical settings and to create a fluid organization where the knowledge is flowing rapidly and people are networking intensively.

Coping with change means to have abilities to lead the process since the perception of the need for change and untill the changes are not only in place, but they are internalized by most of the personnel.

Credibility and leaders commitment are important as, still, for many organizations, knowledge sharing is regarded as a threat, as an exposure of the employee, who reveals the knowledge, to the attack of those around him.

But, the leaders offer the possibility as the personnel, to the large extent, to find itself, to identify with the promoted elements. They promote the dialogue and they are under permanent interaction with the organization's members.

Now, the emphasize will be placed on leader's abilities for convincing the employees to expand and use their knowledge. Knowing how to do the things becomes a day-by-day preoccupation for employees at all level, in their race for survival and development.

Some of leaders appreciate the conflict, search or provoke them as we consider them as a source for stimulating and assessment. Others prefer to ignore them, to avoid them, in order to reach a high social comfort.

Regardless of the initial approach, the leaders will be involved, with or without their will within a range of conflicts of different nature and dimensions. Solving conflict is an important part of the leaders activity, it is part of a learning process and contributes to the leadership development, adding an important component to the leaders' competencies.

It is important to be able to develop an organizational culture that supports the idea of change and where the people are stimulated to permanently learn.

Developing and posting the new values, attitudes and mechanisms that are required by changes will not be possible without a continuous learning process that has to take place at all organizational levels.

## CONCLUSIONS

The field of responsibility for today's knowledge based leaders as entrepreneurs, due to globalization, but also for the high interconnectivity, reshapes their challenges. We can talk about the required information, about workforce diversity, the emotional intensity that the leaders have to deal with, make us easier to understand the complexity of their task.

This complexity is amplified by the characteristics of crisis, especially for the Romanian economic environment. We don't have to think to any individual entrepreneur, no matter how smart or capable or successful he is, but to think that we have a whole sector of SME's that is struggling to find out solutions and the decisions makers from the management, legal and juridical fields have to support in this journey.

We are aware that there isn't only one solution and then persuade others of its soundness. We need tailored solutions adapted to each case, but this is indeed the responsibility of each entrepreneur, of each leader that acts in this real "backbone" of the Romanian economy.

But the policy makers can really contribute to build up a favorable framework for SME's sector, to assist them in finding alternative funding solutions as, for example, the European funds, to support the development of a training structure, able to provide the up-to-date competencies need for a entrepreneur to survive in the knowledge based economy. Proceeding in this way, we assure the premises for Romanian companies to expand across the globe, to be part of the world business culture.

The entrepreneurship development means that the entrepreneurs and the other leaders within SME's sector have the task of knowing much more than their own job in the organization, as they did it till now.

They have to invest in developing the body of knowledge that they master and to create the necessary premises for their counterparts to be an active part in a knowledge based network. It means knowing the job and challenges of those whom they serve, it means leading with sincerity and devotion and, especially trusting the others.

Even if it seems that you understand the challenges, and customers better than your rivals, you have to be able to keep a strong contact with your stakeholders. Evolution is not the task only of top management, but it involves more and more the whole organization.

Today's knowledge based entrepreneurs have to rely in implementing strategies, on quality and customer, but also with a special emphasis on the employees' leadership abilities. They have to be able to master decision making at every organization level. Lonely individuals at the SME's top cannot implement themselves a successfully business strategy, but there is the need for a team and a competitive organizational culture.



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## THE CHOICE FOR SOCIAL DISCOUNT RATE

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### Abstract:

*Discounting is used to mean any process of revaluing a future event, service or product, to give a present equivalent value (present value). While there are many ways of determining a discount rate for private investment, when it comes to governments, things turn more complicated. Sometimes data is elusive or hard to interpret or there might be inconsistencies among sets of stated and imputed discount rates. Therefore politically derived discount rates are a cause for doubt and are unlikely to reflect future values appropriately.*

*Theories proved that the decision of individuals in their political capacity as citizens are unlike those made in their economic capacity as consumers. Experiments found that individuals chose a lower discount rate as being appropriate for public than for personal decisions.*

*Discounting helps in the process of investment analysis and other decisions between present and future. Those who analyze projects need to judge which ones are worthwhile so they need to compare the value of early costs with that of benefits and values of cash flows expected to be received at different points in time. Only when all cash flows have been discounted to equivalent values at the same point in time can discounted benefits be evaluated.*

*Looking at some examples and at the Rosia Montana Project, a large scale and long term project, the paper evaluates some of the "choices for social discount rate" raises some questions and brings suggestions towards the steps that the governments (and particular Romanian) should do, to bring objectivity and transparency in investment decisions.*

**Key words:** Discount rate, risk, investment, social policy, decision

**JEL Classification:** H43, G32

## INTRODUCTION

"Social Discount Rate is a measure used to help guide choices about the value of diverting funds to social projects. It is defined as the appropriate value of  $r$  to use in computing present discount value for social investments" (Gruber, Jonathan (2007)). Determining this rate is not always easy and can be the subject of discrepancies in the true net benefit to certain projects, plans and policies. There are a number of qualitative differences between social and corporate discount rate and evaluation of projects associated with them. Of course, the governance of social project funding is different, because estimating the benefits of social projects requires making ethically subtle choices about the benefits to others.

Discounting is used to mean any process of revaluing a future event, service or product to give a present equivalent value (present value). The process of discounting reflects the complexities of financial markets, of natural resource availability but also of human psychology, investment behavior and aversion towards risk.

The effects of discounting are easily set out. Suppose that, for whatever reason, we as humans prefer to have something good now, rather than on the same date next year. But soon as the element of time will be present and a postponement will interfere, it will be necessary to quantify "how much" better it is to have it now.

Discounting helps in the process of investment analysis and other decisions between present and future. Those who analyze projects need to judge which ones are worthwhile so they need to compare the value of early costs with that of benefits and values of cash flows expected to be received at different points in time. Only when all cash flows have been discounted to equivalent values at the same point in time can discounted benefits be evaluated.

Sagoff (1988) argues that the decision of individuals in their political capacity as citizens are unlike those made in their economic capacity as consumers. Experimentally, Pope and Perry (1989) found that individuals chose a lower discount rate as being appropriate for public than for personal decisions. When is no stated, how does a government's choice of discount rate may be discerned?

What social discount rate has been or will be adopted by a government is not always clear. It cannot be said that the citizens voted directly for a particular discount rate, since even the discount rate can be one of the reasons for electoral success.

While the discount rate (where it has been chosen) may be well known to government and academic economists, and accessible in public documents, it is rarely a matter of widespread public knowledge and discussion. This signifies more probably the mysterious nature of investment decision than a lack of public concern about resource allocation. On the other side, the interest rate is of course subject to frequent and open critical comment, and its effects on well-being are directly experienced by citizens through loan repayments and level of economic activity. But interest rate is an instrument of monetary policy, which may have only a loose association with the discount rate adopted by the government in relation to investment policy.

These difficulties make it debatable whether there is direct democratic legitimation for a government's discount rate. Nonetheless, it might be argued that a knowledgeable, rational and responsible government will choose the optimal set of policies for the well-being of its citizens, including policies of investment and resources allocation.

### **SOCIAL POLICY AND THE DISCOUNT RATE.**

Since the rates of saving and of economic growth affect the balance between present and future consumption, policy choices affecting these variables may reveal a government's preferred discount rate. Walshe and Daffern (1990, p.26) suggest that the social discount rate "will be slightly in excess of the growth rate of the economy".

Scott (2007) judges the social discount rate to be both the minimum acceptable rate of return on low risk commercial projects and the rate at which the value of government revenue and expenditure is taken to decline over time. Scott argues that a rational government equalizes the marginal value of funds applied to each purpose: if "the percentage rate of fall in value of one purpose can be measured, this is the social discount rate for all funds." He chooses as an indicator the value of "base-level income" (the poverty level at which the government intervenes to increase household income).

Unido 2008, Harou 2003 suggest that the appropriate discount rate can be found by studying governmental choices of individual public projects. A government should not select an investment whose social rate of return is less than the social discount rate (and whose NPV is therefore negative). The lowest social rate of return on projects accepted in the past therefore indicates the upper limit of the social discount rate and if investment is at optimal level, it should equal the social discount rate.

However, (Harou 2003) states that there are several problems that arise:

- The past social discount rate might have been different. If so, an alternative is to appraise the rate of return on projects currently being implemented, or passed as acceptable
- Governments choose projects to meet many objectives: social, environmental, macroeconomic and thus strategic values should be included in the rate of return

By analogy with the upper limit, the lower bound of the social discount rate should be the highest social rate of return found among projects which have been explicitly rejected by government. However, such projects may have been rejected because (1) their social rate of return was less than the social discount rate or because (2) the NPV of the project was less than that of alternative public sector projects.

There are several reasons why the social discount rate should be lower than the social rate of return on public investment.

A hypothetical selection made from the projects listed in Table 1 illustrates how this rule can make sense of otherwise difficult decisions. Suppose a government chooses project A and project C, but rejects project B and project D. Rule 1 says that the social discount rate is greater than the 4.7% IRR of rejected project B, but less than the 2.9% IRR of accepted project A:  $2.9\% > r > 4.7\%$ .

On the other hand, using rule 2, a social discount rate less than about 2% makes the NPVs of both A and C higher than the NPVs of either B or D, and the choice is rational. Rule 2, allows a greater range of project selections to appear rational.

**Table 1. Performance of four projects (NPV in Euro). Example.**

	Project A	Project B	Project C	Project D
IRR	2.9%	4.7%	8.5%	3.6% & 38.2%
NPV 10%	-999 000	-738 000	-174 000	520 000
NPV 5%	-870 000	-93 000	814 000	301 000
NPV 3%	-67 000	861 000	2 142 000	-235 000
NPV 1%	8 972 000	5 812 000	8 803 000	-3 426 000

### **RISK IN PUBLIC INVESTMENT. QUANTIFYING RISK ADJUSTMENT.**

The treatment of risk in public investment has been widely debated. Arrow and Lind (1996) indicate that risky projects in the public sector should be discounted at a riskless rate, reasoning that returns from a particular project may not be correlated with those of other public projects. Thus the only risk is specific risk, which is spread among so many taxpayers as it become insignificant.

On the other side Hirshleifer (1993) argues on the contrary, that discounting at the riskless rate of return ignores the opportunity cost of subsidizing risky private projects. Arrow and Lind consider that this leads simply to transfer of risk: the advantage of public investment is that it relieves not only the private sector, but the whole economy of the cost of risk-bearing. If we compare the two positions we can conclude that the relationship between public and private risk-adjusted rates depends on whether risk can be eliminated by a change of economic organization (Sandmo 2005) and on whether public projects have a social insurance value (Grinols, 2001).

Capital asset pricing model (CAPM) is used to determine a theoretically appropriate required rate of return of an asset, if that asset is to be added to an already well-diversified portfolio, given that asset's non-diversifiable risk. The model takes into account the asset's sensitivity to non-diversifiable risk (also known as systematic risk or market risk), often represented by the quantity beta ( $\beta$ ) in the financial industry, as well as the expected return of the market and the expected return of a theoretical risk-free asset. (source: Wikipedia)

The Capital asset pricing model (CAPM) attempts to quantify the above discussed factors. A discount premium is determined for the risk of an individual investment, according to how its returns vary with those of a diversified market portfolio.

For example, a riskless investment might be acceptable if it earns 4% annually, but a risky one, only if it earns 10% annually. This could mean that either the IRR or the present value of risky investments is required to be 2.5 times that of a riskless investment.

Suppose a forest project, giving single revenue after 50 years, is riskless and that the riskless discount rate is 4%. For each 1000 Euro invested, the investment is acceptable if revenue exceeds 7106 Euros ( $NPV > 0$ ). If this is systematically risky, and if risk premium is interpreted as a risk charge, it is acceptable only if revenue exceeds:  $7106 \text{ Euro} \times 2.5 = 17.767 \text{ Euro}$ .

But this, however, represents an IRR of only 5.9%, not 10%. To achieve an IRR of 10%, the required revenue would be 117.391 Euro. That represents an increase on riskless revenue by a factor not of 2.5 but of 16.5.

CAPM has also been subject to criticism but remains most widely discussed and applied tool for adjusting discount rates for risk.

### **ROSIA MONTANA PROJECT.**

We presented some of the ways and principles that governments should follow while assessing the impact of an investment. A very big challenge for the present or future Romanian government is or will be the Rosia Montana Project. Due to the large scale of the project as well as

the impact of it, we consider that a transparent and thorough analysis should be carried out and not only the results of the analysis should be presented to the large public, but also the methods used to reach to these results.

As an example we provide here some of the data that is showed on the website of "Rosia Montana" Gold Corporation. It is stated there that "The business plan of the mining project provides for total benefits of approximately 4 billion dollars for the Romanian economy". We also find out that 1.8 billion USD will go directly to the State budget. These funds include the dividends obtained by the Romanian State, which holds 20% of the RMGC's assets, royalties paid by the Corporation, as well as other taxes and duties paid directly to the local, regional and national State budget. The remaining 2.2 billion USD will be spent in Romania for human resources, construction, electricity, materials, transportation, reagents, spare parts and others. These amounts are a direct investment in the Romanian economy and will reach the workforce, entrepreneurs and Romanian companies which will provide products and services for the company, during the construction and operation phases.

The money looks good, but has the government correctly evaluated the project? Which is the value of the discount rate used?

### **SHORT CONCLUSIONS AND SUGGESTIONS.**

Before any discount rate is adopted, the assumptions about government decision making should be that is knowledgeable, rational and responsible.

But governments are not always completely knowledgeable about all pertinent data on each project they choose or reject, therefore employing economists to undertake cost-benefit analysis should be a step toward correct evaluation. The absurd situation may arise when a government employs economists to supply analysis, such as an objective discount rate for evaluation projects, and economists indirectly ask the government about the previous choice of projects.

To achieve re-election, or avoid overthrow, a government must please the present population. This means either satisfying its desire for early consumption, or persuading it that sacrifices for the sake of the future should override short-term interests. It will usual be a material consideration in making decisions which are politically awkward, that future generations are not among politicians' views.

A government may of course be purely disinterested and act for the long-term good of present citizens and on behalf of future generations, without regard to its own popularity. Still, even such a conscientious government would have a plausible justification for offering a programme which appeals to the present electorate. Because if it does not, another party would be elected to power, with an even shorter time perspective. The party offering a plausible short-term programme of benefits is favored over the one with long-term views.

Governments are expected to weight the interests of their own citizens more than those of citizens of other countries. What is clear at this point is that politics and ethics do not align.

While there are many ways of determining a discount rate for private investment, when it comes to governments things turn more complicated. Sometimes data is elusive or hard to interpret or there might be inconsistencies among sets of stated and imputed discount rates. Therefore politically derived discount rates are a cause for doubt and are unlikely to reflect future values appropriately.

An example in the direction of governments to bring objectivity in investment decisions and thus deriving objectivity in discount rate chosen comes from the following US agencies. The two most prominent U.S. government agencies involved in benefit-cost analysis are the Congressional Budget Office (CBO) and the Office of Management and Budget (OMB). CBO's mandate is to provide the US Congress with: Objective, nonpartisan, and timely analyses to aid in economic and budgetary decisions on the wide array of programs covered by the federal budget and the information and estimates required for the Congressional budget process. The CBO makes in this way recommendations of a rate depending on the project. CBO assists the House and Senate

Budget Committees, and the Congress more generally, by preparing reports and analyses. In accordance with the CBO's mandate to provide objective and impartial analysis, CBO's reports contain no policy recommendations. (Quoted from CBO website, CBO's Role and Work).

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## CONSIDERATIONS ON HUMAN CAPITAL CONCEPT

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### **Abstract:**

*The present study is capturing the defining elements of the concept of human capital as they are seen from different approaches and perspectives, conducted by researchers in the field. For this purpose, twenty-three research articles from scientific journals and relevant legislation of the last three years have been closely studied. Any source taken from previous books was quoted only when we considered it to be a representative element of reference. This is a fundamental study with a positivist epistemological approach.*

*The final part of the study outlines a series of conclusions on the current state concerning the directions of approach, the meaning, the defining elements and the forms of recognition, and also the implications of human capital on economic and social development. After consulting the literature on human capital problem, it was concluded that this is a current and frequently approached issue, representing the main source of innovation, flexibility and economic growth.*

*Assuming the fact that the development of a society is practically impossible without the direct involvement of human factor, the present study deals in a modest manner with the literary approaches on the defining elements that can be associated with the term **human capital**.*

*This study aims to highlight not only the most important aspects and elements that contribute to human capital creation, but also the factors that define it and give it substance.*

**Keywords:** human capital, economic development, education, knowledges, Knowledge Society

**JEL Classification:** O15, E24

## INTRODUCTION

Nowadays, we hear people talking more and more about the Knowledge Society. The contemporary world is named this way due to the significant changes that have occurred, namely the place of the material resources was taken by knowledge. The crucial role that knowledge have in ensuring economic prosperity, with positive effects on GDP (Gross Domestic Product) growth has been proved over time. Therefore, the human factor, an important holder of intellectual capital, has become a subject of interest and research. It was and is necessary to establish the contribution of human capital on economic development, in order to take the best decisions concerning the investment policy both at the enterprise level and nationwide.

The success of economy or of an organization is no longer guaranteed by financial capital, equipment or land. Human capital has that responsibility because it is the only form of capital that is not consumed in production processes and cannot be imitated. In the same vein, if a particular resource can be easily replaced, there is no substitute for human capital. Thus, employee training and competence are key factors, distinct, that ensure the success of an organization, more than the availability of financial and material resources do. It is obviously required a combination of all factors, without denying the usefulness and importance of any.

Starting from this economic reality, we made a research based on specialized studies on the concept of human capital to see what it means, what are the elements that define it and also the importance of it.

The manner in which the research was structured delineates and highlights the main considerations, drawn from studies of authors who have tackled this area.



## BODY

The whole world is influenced by the globalization process, including professional and business field in particular. The new technologies, the innovation process, the complexity of transactions and processes determine a continuous refresh of the knowledge about the human factor. *"The exponential growth in scientific and technical field recorded during the twentieth century, has accredited the new concept of **Knowledge Society**, outlining the role of creativity as a basic and resulting factor of knowledge - now the main factor of progress in all fields"* (Burtică, & Pop, p. 489). Although physical work has been mostly replaced with automated forms of doing productive activities, in achieving performances human factor plays a decisive role because it establishes development goals, the strategies for achieving them and the forms of control, and also the adaptation strategies to constantly changing conditions of internal and external environment. Human factor is permanently accumulating knowledge that can continuously be developed and renewed.

Defining human capital is not a simple thing to do, taking into consideration the fact that in literature there are many approaches to this. Leif Edvinsson, Skandia, and Pat Sullivan define human capital, equivalent to the term ***intellectual capital***, as *"knowledge that can be converted into value"* (Sveiby, 2001). This is not a complex and demanding definition, but this simplicity does not necessarily mean "non-including". In our opinion it may well mean clarity and relevance, as it is in this case.

To bring additional clarity to this aspect, we will say that, *for employers*, human capital is the higher qualification, the theoretical and practical knowledge degree, the multitude of skills and abilities that give high quality and efficiency to the activity performed. On the other hand, *in terms of employee*, human capital is equivalent to the effort and the task to develop his skills and to consider both education and improvement a continuous and a lifelong process.

## HUMAN CAPITAL IN DIRECT, POSITIVE RELATION WITH THE EDUCATIONAL LEVEL AND THE LEVEL OF SOCIAL DEVELOPMENT

Studies have shown that, in education, the investments have resulted in the formation of human capital and its profitability is higher than the profitability for investments in material capital.

In this respect, The United Nations Development Programme pleads in its annual reports made after 1990, for a new development concept, namely the Sustainable Human Development (Nica, 2008).

The same conclusion can be drawn from the study conducted by Lajos Koteles and Katalin Rozsnyai, who state that the concern for the quality of labor has become an integral part of economic investments, with the highest profitability. In the U.S., two thirds of economic growth gained in the 1990s were triggered by human resource development (Koteles & Rozsnyai, 2008).

The consequences of the human capital formation on economic growth within the state are also presented through a study on the impact of investments in higher education, conducted at the State University of New York. The analysis results show that the investments in higher education and the income are dependent and that the University has a significant positive effect on the economic growth of the state (Vogel, & Keen, 2010).

Another study (Erosa, et al, 2010) examines a heterogeneous model of individuals who invest in the quantity and quality of schooling, quantifying the importance of human capital differences in total factor productivity. It appears that human capital accumulation increases the differences between countries in terms of factor productivity.

This study, unlike others that examine the link between human capital and education, takes into account not only the financial costs incurred in the preparation of the human factor, but also the time factor. The both costs, financial and the time spent learning, are seen as an explanation of the inequalities between countries and between different regions of the same country.

The effects of human capital on economic development, in terms of training and specialization, in five areas: agriculture, information technology, business and services, human sciences and medicine, have been evaluated. The results highlight again the importance of education in the development and economic growth, human capital in the IT sector having major influence (Tsai, et al, 2010). Currently, progress means advanced information technologies that replace the human factor, increasing labor productivity. We must never forget that these technologies are the result of the work and effort of the human factor, and for having advanced technology, we need trained people, able to produce them.

In the paper "*Human capital spillovers, Productivity and Regional Convergence in Spain*", the authors examine the differential impact of human capital on productivity and regional convergence, according to different levels of schooling. The empirical analysis on Spanish provinces between 1980 and 2007, confirms the positive impact of human capital on the regional productivity and convergence productivity.

By another study (Zamarik, 2010), ***a direct link between the economic growth of a country and the human capital*** was established. This study shows that a higher level of education contributes to the employee value increasement, and at the same time, to the increasement of labor productivity. Using the empirical method, ***a direct and positive relationship between school preparation and regional growth*** for a group of U.S. states was illustrated.

## HUMAN CAPITAL - THE BASIC RESOURCE IN THE CURRENT KNOWLEDGE SOCIETY

With the information and industrial revolution, we also witness a revolution of knowledge. The fixed assets are necessary for the business to be able to operate, but prosperity is achieved by reconsidering the role of intangible assets. The intellectual capacity of employees, their skills, their knowledge and company's capacity to acquire knowledge are the most important resources on which the Knowledge Society is based. Property and traditional capitalism become "*something new and bizarre*" (Toffler, 2006). The value of a company is given by knowledge, ideas and information held by its employees who, in Cooper's opinion, should have the following skills :

- recovery of basic knowledge, assimilated through education and experience;
- combining and processing information/knowledge, including technology IT, in order to produce new knowledge;
- assimilation of new knowledge and share them with the rest of the employees;
- lifelong learning both from own experience and using databases provided by computer networks.

If until recently human society was not very concerned to find and process exhaustible resources, currently in the Knowledge Society, the emphasis is on the main ***inexhaustible resource***, namely human intelligence, which has the task of finding ways to optimize the relationship between resources and needs, and ways of development and prosperity (Dinu, 2008).

## HUMAN CAPITAL - THE MOST VALUABLE ASSET, BUT THE BIGGEST EXPENSE OF THE COMPANY

Human capital, as top employees, can be considered ***the most valuable asset*** (wealth), but at the same time and ***the largest expense*** (Davenport, et al, 2010). As part of the property, in order to attract the most professionally advanced and valuable employees, a more careful selection is recommended by removing the instincts, and use methods of analysis and evaluation. In this respect, modern and developed companies increasingly adopt more sophisticated methods of data analysis of the candidates, in order to qualify personnel that can assure competitive advantage increase. Employment, remuneration and development of performing teams that bring added value in a company require, in most of the cases, costs to the extent of their value.

Finding, acquiring, developing and keeping the human capital that is needed and that can support the development, is a challenge and also a source of competitive advantage for organizations. In the context of major changes in internal and external environment of organizations, special attention should be paid to human aspects involved in the process of change, especially to change management and staff retraining.

### HUMAN CAPITAL - INTELLECTUAL CAPITAL

In his paper, D. Ulrich attributes to human capital the sense of *intellectual capital*, outlining the need for an appropriate management approach of it, because it is the one that allows the organization to “*learn quickly and continuously*” (Ulrich, 1998), in order to adapt to new conditions.

### HUMAN CAPITAL - A MANAGERIAL AND RELATIONAL PERSPECTIVE

The new economic conditions (the rising international competition, the increasing preference for cost-based economy against the economy based on mass consumption, globalization, profitability through growth, technology, intellectual capital, changes) have changed the personnel policies and have determined a concern about creating new capabilities (Lut, 2007). The author deals with human capital from *a managerial perspective* and talks about a *school of human relations* based on a psychosociological theory of the organizations, focusing on relationships between individuals who work in groups and taking into account: human recognition of belonging to a social group, motivations (professional, intellectual, psychological), ambient factors, interpersonal communications, psychosocial phenomena that occur in small groups, informal relationships, social conflicts.

The study focuses on an economic reality present in all entities: *finding the best strategies related to personnel policy and creating a harmonious relationship is a challenge for human resource management and it represents an appropriate framework for recovery and development of human capital.*

### HUMAN CAPITAL AND SOCIAL ENVIRONMENT

Coleman talks about human capital and physical capital, making a comparative analysis that reveals especially the differences and the influences between them. While physical capital takes a material form and is used predominantly in production, human capital is intangible and is reflected by those personal characteristics embodied in skills and abilities that make the individuals able to act in different ways.

*The social capital* also takes the form of intangible capital and consists of those relationships, between people, that form the base of the activities, with an important role in creating human capital and developing future generations. All three forms of capital work together and facilitate economic activity.

Like Becker, Coleman presents the social influence on human capital issues. He attributes a crucial role to the family, in terms of the investments that it makes in educating children. *The family* is recognized as a major investor in human capital formation process. The next factor as importance is the *State* that must provide an adequate education to individuals, supporting a continuous development of human capital.

On the social connotations line should also be noted that human capital is the product of social environment and a culture, too.

## HUMAN CAPITAL - A LINK BETWEEN TECHNOLOGY, INFORMATION AND DECISIONS

In an information society based on revolutionary technology and information systems that permit the production of high performance, people, as keepers of knowledge, experience, creativity, are the *link between information and knowledge of information technology* (Brezai, 2006). Information systems produce valuable information that require human intervention in order to be capitalized. Without the ability of people to make the best decisions based on valuable information obtained through advanced technologies, the efforts and the costs involved for obtaining them are useless.

## THE QUALITY OF HUMAN CAPITAL UNDER THE INFLUENCE OF BIRTH AND DEMOGRAPHIC CHANGES

The approach of the notion of human capital also captures the relationship between human capital and demographic area. The quality of human capital as influence on fertility rates is analyzed. Thus, the more a country's population becomes larger, the more the quality and preparation of human factor decreases, as a result of the reduction of public expenditure on education for each individual. The school system and the investments cannot be extended in order to cope with the increasing number of students, given the fact that public expenditure on education are low. Thus, a low level of education for a large population will have a negative impact on economic growth.

The novelty of the study is given by the idea that investments in health human capital in the sense of responsibility to birth, should be given priority before the investment in education, internationally speaking, through cooperation and mutual aid. This idea is a valid one because, as long as the public sector has limited financial resources that can be devoted to education, and the population grows, it is impossible to form a valuable human capital in that particular country. According to the author's opinion, the human capital is the root cause and the key of development and, therefore, it must have priority over other investments (Wolfgang, p. 3046).

Gregory Clark subscribes as well to this idea (2006), which examines human capital influenced by fertility and industrial revolution. He stated that the industrial revolution and demographic changes are the two major forces underlying revenues in the current context.

Demographic changes, in terms of birth rate and aging population, show that aging results in an increased demand for welfare, which may lead under certain conditions, to an increased quality of the human factor and to an increased consumption per capital (Lee, & Mason, 2010).

*The small number of children in a family means a greater investment in children's education, which adds an extra point to human capital value and economic development.*

## HUMAN CAPITAL - ACCOUNTING APPROACHES (KNOW-HOW)

Employees are considered to be valuable assets of the organization, because they are key actors in the process of knowledge. The market value of an enterprise is mostly generated by intangible assets and secondly by the material component.

From an accounting perspective, human capital is recognized as an intangible fixed asset. In the international approach, an intangible asset is a fixed asset, an identifiable and non-monetary asset, without physical substance (IAS 38, 2009).

In the national approach, intangible assets are identifiable non-monetary assets, without physical support, held for being used in the production process or for good/services supply, for being rented to others or for administrative purposes.

We can note that according to both approaches, *human capital is recognized in accounting field as the know-how*, meaning that specific knowledge, held by an individual or a company, on a

product or process, often achieved through researches and costly development work (Horga, & Grosu, 2008).

There are research studies that try to evaluate and to “measure” human capital, in order to account it and record it the company’s financial statements.

### **HUMAN CAPITAL - LIMITED LIFETIME CAPITAL**

A new approach to the research, outlines the fact that *human life is limited*. Therefore, the accumulation of human capital that can influence and support the long-term development is impossible (Growiec, 2010).

Although we acknowledge this inconvenience, we should mention, contrary to this view, that people who possess human capital come from different generations and some knowledge can be transmitted from generation to generation. New generations appear to be more intelligent and with a greater capacity for acquisition of value, that allows the “inheritance” of knowledge from previous generations, knowledge which is eventually developed and passed other generation. Only the financial resources that contributed to the creation of human capital are lost, the knowledge is not. Further investments are needed in order to create and develop human capital, without reaching the conclusion that they are useless.

### **STREET GANGS - A SOURCE OF HUMAN CAPITAL ?**

Dnes, A. & Garoupa, N., (2010) offer an interesting approach of the human behavior as a *member of a gang*. They draw attention to the fact that abnormal behavior can hide behind a valuable human capital, resulted in valuable personal characteristics that can help to form groups and to strengthen the relations within them. This potential of human capital can be exploited by increasing the opportunities for gang members to integrate into society.

Finally, we must retain a professional opinion - Arvetta Powell, HR Director at Wal-Mart Stores Inc., the manager of more than 3.000 employees: *“the future success of organizations may well depend on people's strategic skills”*. Reed-Woodard subscribes to this view as well (2010) by highlighting an obvious reality: the human capital acquires an increasingly important place in the market value of the society and it represents the advantage of the competitive companies that increasingly rely more on performance.

### **CONCLUSIONS**

Our conclusion is that the importance and the value of human capital is widely recognized, with a diversified approach and substance. It attracts researcher’s attention more and more because the importance that it wins to the detriment of other areas is growing day by day.

After researching the literature, we concluded that the human capital issues, the influences, the relationships and the connections established in the modern society are complex and timely. The approaches and the research directions are multiple and diverse. They point out, every time, the importance of human capital as factor of development and progress at enterprise level and, therefore, at society level.

The concept of human capital refers to the emotional and cognitive capacities of individuals, whose role is to raise capital and to enhance development at economic entity level and generally at city, country, society in generally.

When we talk about human capital, we need to reserve a special place to education. It is the main factor which helps to create and develop human capital. Investments have a major role for this. Human capital involves public investment, private investment and self-development.

Development and utilization of human capital is not only a prerequisite for progress. Limitation and even the danger of the exhaustion of available resources, the growing demands,

globalization, the economic crises, the climatic disturbances, are just some elements that require human factor development and innovation in order to find new solutions that are necessary to sustain the development of the society, and even its survival.

The study made an inventory of the main issues that should not be neglected when we are talking about human capital. At the same time, it can stimulate interest and curiosity, creating a promising path for future research on this area.

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## ASSESSING RELATIONSHIP BETWEEN PERSONAL VALUE AND CUSTOMER SATISFACTION: EVIDENCE FROM NIGERIAN BANKING INDUSTRY

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### Abstract:

*This study investigated personal value and its relationship with customer satisfaction in the Nigerian banking industry. Results implicated self-transcendence as having positive relationship with customer satisfaction while self-enhancement has negative relationship with customer satisfaction. It was also established that the overall personal value has significant effect on customer satisfaction. The research measures showed encouraging psychometric values. These findings were discussed and situated within the Nigerian banking industry. It was recommended that the banking industry should place more emphasis on target marketing practices thereby enhancing the quality delivery of services to customers. Areas of further studies were also suggested.*

**Key Words:** Personal value, customer satisfaction, self-transcendence, self-enhancement, Nigerian Banking Industry

**JEL Classification:** M31

## INTRODUCTION

Today's customer, in virtually every company, is demanding ever-higher levels of satisfaction from companies particularly in respect to delivery of service in line with their personal values. A customer is referred to as a current or potential buyer or user of the products of an organization. Customers are individuals who buy products for themselves or on behalf of their household. The customer is the person or unit receiving the output of a process on the system. In fact, it is worth emphasizing that a customer can be the immediate, intermediate, or ultimate customer. Also, a customer may be a person or persons, or a process or processes. The service sector has become a dominant force in the economy of many countries and has created a wealth of new jobs (McDonal & Harris 2001). Throughout the years, customer satisfaction has been a major topic of research in the service sector (Anderson & Roland, 1997; Odekerken-Schröder and Bloemer 2004; Taylor & Thomas 1994). However, up till now, little research has investigated the impact of personal values on customer satisfaction in such a service context.

Yet, better understanding of this relationship is important as customer service satisfaction is one of the fundamental antecedents of personal value (Anderson, 1973; Heskett & Leonart 1997; Jones and Sasser 1995). Once a value is internalized, it becomes either consciously or unconsciously, a standard for guiding actions and making choices. The value then determines behaviors or modes of conduct. Because values are at the basis of choice, the choices that people make reflect their perception of what is right, just, or what is cherished at a particular time (Pfaff 1972).

The impact of personal values on human behavior has been widely addressed. Rokeach (1973), for instance, has argued that 'values are ... significantly related to all kinds of behavior'. Values can be defined as broad goals that apply across contexts and time (Bardi and Schwartz 2003) – although they can change in the long run. Values form the psychological core of the "self" (Finegan 2000; Wade-Benzoni 2002) and are standards from which beliefs, attitudes and, consequently, behaviors are shaped (Kouzes and Posner 1987; Madrigal and Kahle 1994).



In this respect, the personal values held by a customer, the perceived organizational values of the service company and the congruence between the personal and perceived organizational values influence customer service satisfaction. According to Swan and Longman (1972), an early and influential writer, defined value as the constellation of likes, dislikes viewpoints, inner inclinations, rational and irrational judgments, prejudices, and association patterns that determine a person's view of the world. The importance of a value system is that once internalized it becomes, consciously or subconsciously, a standard or criterion for guiding one's action. The purpose of this study is to examine some of the systematic consequences of customer satisfaction and dissatisfaction among industrial buyers

At the same time that organizations act to attract and satisfy customers, the customers themselves exercise ultimate influence. Their satisfaction depends on both their expectations and their treatment. Through their personal values, customers decide which organizations survive and thrive, determine what goods and services are available, and shape how they are provided.

## **LITERATURE REVIEW**

### **CONCEPT OF VALUE**

The values concept is used widely in individual behavior, philosophy, psychology, sociology and related behavioral science, and different scholars have made different definition from different perspectives. According to the explanation of Anderson and Roland (1997), 'Values are an integral and daily part of our lives. They determine, regulate, and modify relations between individuals, organizations, institutions, and societies'. Generally, values can be divided into personal values and socio-cultural values, which are interrelated with each other. This project pays attention to personal values. The concept of values is not an easy one to define because values have different meanings and implications to different people. Because of the complex nature of value system orientation, there is considerable variation in the approach and in the amount of attention given to the subject of values in the several fields of learning. Thus, scholars trained in sociology or anthropology typically assign a different level of abstraction to, and define values differently from those trained in psychology, philosophy, or organizational behavior. However, there are certain commonalities in the definitions and some theoretical consensus seems to be developing as to the meaning of values. Several definitions from prominent scholars in different disciplines are noted below.

Values can be defined as broad goals that apply across contexts and time (Bardi and Schwartz, 2003) – although they can change in the long run. Values form the psychological core of the "self" (Finegan 2000; Wade-Benzoni 2002) and are standards from which beliefs, attitudes and, consequently, behaviors are shaped (Kouzes and Posner 1987; Madrigal and Kahle 1994). Bennett & Kassarian (1972), considered values as the criteria for performance and choice, that is, the reason behind an individual's actual behaviour. They specified how that value is distinctive from yet related to attitudes (orientations toward specific objects or situations) and behaviours (manifestation of attitudes and values). They also felt that values are reflection of one's conception of the desirable. It is that explicit or implicit belief system that guides choice from the many available means and ends of action. The importance of a value system is that once internalized it becomes, consciously or subconsciously, a standard or criterion for guiding one's action.

Allport and Vernon, (1931) defined values as beliefs regarding preferable end-states of existence, which may serve to guide actions attitudes and judgements across specific situations and objects. He suggested that a value is a disposition of a person, much like an attitude but more basic. It has to do with our concern for standards and rules of conducts, honesty, cleanliness, truth, beauty, pleasure, and other ideas about what is desirable. Rokeach (1973) felt that values operate in hierarchical form, and that two people with the same value may rank them differently in terms of their importance. Values can range from common place, such as belief, hard work, self reliance and punctuality, to psychological areas such as concern for others, trust in them, etc. However, value

was defined as belief upon which a man acts by preference. Personal values play a very important role in consumers' attitudes and behaviors. (Allport and Vernon, 1931)

### **CUSTOMER SATISFACTION**

The customer is the person or unit receiving the output of a process on the system. In fact, it is worth emphasizing that a customer can be the immediate, intermediate, or ultimate customer. Also, a customer may be a person or persons, or a process or processes. Customer satisfaction, however, is when the customer is satisfied with a product/service that meets the customer's needs, wants, and expectations. Satisfied customers represent "an indispensable means of creating a sustainable advantage in the competitive environment of the 1990s" (Olshavsky & Spreng 1997). Highly satisfied customers spread positive word-of-mouth, demonstrate readier acceptance of other products in the product line, and exhibit brand loyalty or increased intentions to repurchase (Jones & Sasser, (1995) Thus, the investigation of overall customer satisfaction is dependent on their values. Industrial customers' judgments of components of satisfaction are modeled as influencing overall satisfaction. Empirical results test the relationships that are proposed. Customer satisfaction refers to the extent to which customers are happy with the products and services provided by a business.

The definition of customer satisfaction has been widely debated as organizations increasingly attempt to measure it. Customer satisfaction can be experienced in a variety of situations and connected to both goods and services. It is a highly personal assessment that is greatly affected by customer expectations. Satisfaction also is based on the customer's experience of both contact with the organization (the "moment of truth" as it is called in business literature) and personal outcomes. Customer satisfaction differs depending on the situation and the product or service. A customer may be satisfied with a product or service, an experience, a purchase decision, a salesperson, store, service provider, or an attribute or any of these. Customer satisfaction is an ambiguous and abstract concept and the actual manifestation of the state of satisfaction will vary from person to person and product/service to product/service. The state of satisfaction depends on a number of both psychological and physical variables which correlate with satisfaction behaviors such as return and recommend rate. The level of satisfaction can also vary depending on other options the customer may have and other products against which the customer can compare the organization's products.

Customer satisfaction is a highly personal assessment that is greatly influenced by individual expectations. Some definitions are based on the observation that customer satisfaction or dissatisfaction results from either the confirmation or disconfirmation of individual expectations regarding a service or product. Customer satisfaction is a measurement of customer attitudes about products, services and brands. To avoid difficulties stemming from customer expectations and differences, some experts urge companies to "concentrate on a goal that's more closely linked to customer equity." Instead of asking whether customers are satisfied, they encourage companies to determine how customers hold them accountable. In the public sector, the definition of customer satisfaction is often linked to both the personal interaction with the service provider and the outcomes experienced by service users.

Consumer satisfaction has been typically conceptualized as either an emotional (e.g., Oliver, 1999; Campbell, A. (1972) or cognitive response (e.g., Anderson, 1973). Furthermore, there are several conceptual and operational definitions indicating that the response may be comprised of both cognitive and affective dimensions. More recent satisfaction definitions concede an emotional response (Oliver 1999; and Olshavsky and Spreng 1997).

## THEORETICAL FRAMEWORK

### EXPECTATION CONFIRMATION THEORY

The originating author of the theory is Oliver (1999). Expectations-confirmation theory posits that expectations, coupled with perceived performance, lead to post-purchase satisfaction. This effect is mediated through positive or negative disconfirmation between expectations and performance. If a product outperforms expectations (positive disconfirmation) post-purchase satisfaction will result. If a product falls short of expectations (negative disconfirmation) the consumer is likely to be dissatisfied (Oliver, 1996; Olshavsky & Spreng, 1997). The four main constructs in the model are: expectations, performance, disconfirmation, and satisfaction.

Expectations reflect anticipated behavior (Swan and Longman, 1972). They are predictive, indicating expected product attributes at some point in the future (Olshavsky & Spreng, 1997). Expectations serve as the comparison standard in ECT – what consumers use to evaluate performance and form a disconfirmation judgment (Heskett & Leonart, 1997). Disconfirmation is hypothesized to affect satisfaction, with positive disconfirmation leading to satisfaction and negative disconfirmation leading to dissatisfaction. A major debate within the marketing literature concerns the nature of the effect of disconfirmation on satisfaction. The root of the problem lies in the definition of predictive expectations as the comparison standard for perceived performance. In such case, the confirmation of negative expectations is not likely to lead to satisfaction (Jones & Sasser, (1995).

### SCHWARTZ'S VALUE THEORY

Schwartz (1992) defines values as desirable, trans-situational goals, varying in importance and serving as guiding principles in people's lives. The crucial aspect that distinguishes among values is the type of motivational goal they express. Schwartz derived 10 distinct motivational goals that are expressed as the following types of values: power, achievement, hedonism, stimulation, self direction, universalism, benevolence, tradition, conformity, and security.

The theory also explicates the dynamic structure of relations among values (Schwartz, 1992). Some values are incompatible, in the sense that actions undertaken in order to fulfill a certain value may conflict with the pursuit of other values. For example, behaviors engaged in the pursuit of stimulation values, which emphasize experiencing excitement, novelty, and challenge, are likely to impede the attainment of security values, which emphasize safety and stability. The total pattern of relations of conflict and compatibility among values yields the structure represented in Figure 1. Competing values emanate in opposing directions from the center; complementary values are in close proximity going around the circle.

The circular structure can be summarized into two basic conflicts. The first conflict is self-enhancement versus self-transcendence: Power and achievement values are in conflict with benevolence and universalism values. Both of the former emphasize pursuit of self-interests, even at the expense of others, whereas both of the latter involve concern for the welfare and interests of others, close and distant. The second conflict is openness to change versus conservatism: Self direction and stimulation values are in conflict with security, conformity, and tradition values. Both of the former emphasize independent action, thought and feeling, and readiness for new experience, whereas all of the latter emphasize self restriction, order, and resistance to change. Hedonism values share elements of both openness and self-enhancement and are in conflict with both self-transcendence and conservatism values.

Values are defined as desirable, abstract goals that motivate actions. Schwartz's Value Theory identifies 10 basic values postulated to be universally important in societal functioning: power, achievement, hedonism, stimulations, self-direction, universalism, benevolence, tradition, conformity, and security. These 10 basic human values guide the selection and evaluation of behaviors. Bardi and Schwartz posited two explanations as to why people behave according to their value: (1) there is a need for consistency between one's beliefs (values) and action; and, (2) value-consistent action is rewarding as it helps people attain satisfaction from this action.

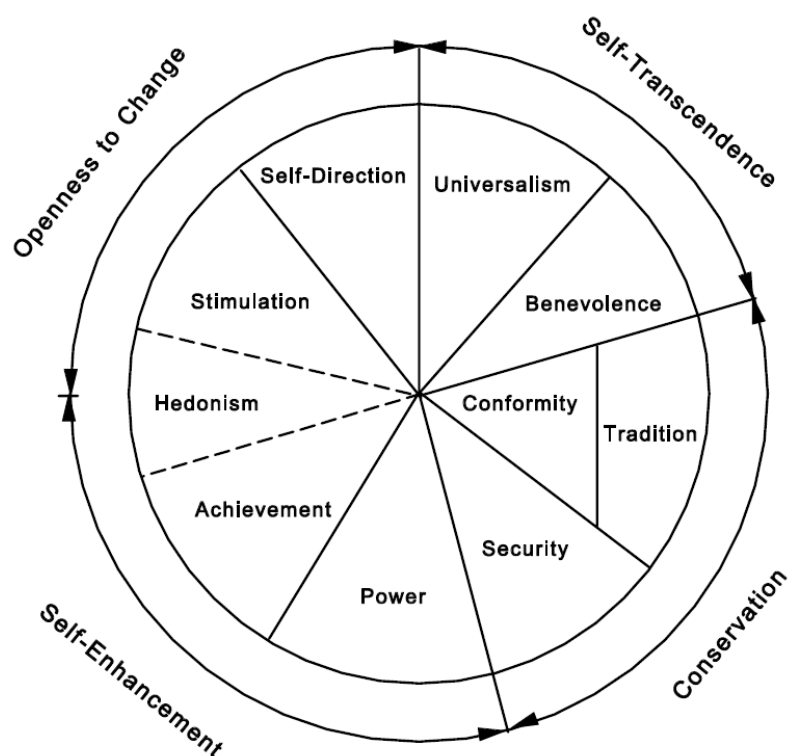


Figure 1: Theoretical model of relations among motivational value types and two basic bipolar value dimensions

Source: Schwartz, S. H. (1992). Universals in the content and structure of values

- Self-enhancement vs. self-transcendence: On this dimension, power and achievement values oppose universalism and benevolence values. Both of the former emphasize pursuit of self-interests, whereas both of the latter involve concern for the welfare and interests of others.
- Openness to change vs. conservation: On this dimension, self-direction and stimulation values oppose security, conformity and tradition values. Both of the former emphasize independent action, thought and feeling and readiness for new experience, whereas all of the latter emphasize self-restriction, order and resistance to change. Hedonism shares elements of both openness and self-enhancement, but in most cases hedonism is closer to openness.

The general objective of this study is to assess the significance of relationship between personal value and customer satisfaction. In order to achieve this, this study shall therefore address the following specific objectives;

- To examine if there is any significant relationship between self-transcendence and customer perception of service quality
- To determine the strength of the relationship between self-enhancement and customer satisfaction.
- To determine the effect of personal value on customer satisfaction.

## RESEARCH METHOD

The major source of data for this research was a set of questionnaires distributed to members of a local community who are patrons of four different banks situated within that particular community, at Ota in Ogun state, Nigeria. The questionnaire has six sections. The first section of the questionnaire dealt with demographic information of the respondents, while the second section

of the questionnaire dealt with self transcendence value, third section dealt with self enhancement, fourth section dealt with openness to change, the fifth section dealt with conservativeness while the last section dealt with customer satisfaction.

Each question in sections B, C, D, E and F was designed so that respondents could react to the degree of agreement to the issue being discussed as follows:

Strongly Agree=5; Agree = 4; Undecided= 3; Disagree= 2; Strongly Disagree=1.

The population for the study consisted of all the patrons of those local branches of the four different banks situated within that particular community. 400 copies of the research instrument (questionnaire) were hand-delivered to a convenience sample of patrons that were found within the banking halls of those banks in a particular week. However only 315 copies of the completed questionnaire were found useable for the present study. Some copies of the questionnaire were returned directly by the respondents or were retrieved personally by the researcher after reasonable time period had elapsed. In all cases, the researcher allowed reasonable time for questionnaire completion.

The key variables used in this research included four different dimensions of personal value and customer satisfaction. These key research variables were developed from extant literature and supported by empirical and anecdotal evidence. All the data analysis procedure was done using the SPSS computer package. Data analysis was executed at 95% confidence level or better. The statistics, measurement scale, data analysis, reliability and validity tests used in this research followed the research suggestions in extant literature (Cronbach, 1951; Nunnally, 1978; Ryan and Mohsin, 2001; Svensson, 2002, among others). The Cronbach's Alpha of the measurement scale for the study was found to be 0.793

## RESULTS AND DISCUSSION

This study centered on the following three hypotheses:

H<sub>0</sub>: There is no significant relationship between self transcendence and customer perception of service quality

H<sub>0</sub>: Self-enhancement has no significant relationship with customer satisfaction.

H<sub>0</sub>: Personal value has no significant effect on customer satisfaction.

Results and their associated discussions along these three main issues will now be presented.

### HYPOTHESIS ONE

H<sub>0</sub>: There is no significant relationship between self transcendence and perception of service quality

H<sub>1</sub>: There is a significant relationship between self transcendence and perception of service quality

**Table 1. Showing relationship between Self-transcendence and Service Quality**

		Self transcendence	Service quality
<b>Self transcendence</b>	Pearson Correlation	1	.463
	Sig. (2-tailed)		.012
	N	315	315
<b>Service quality</b>	Pearson Correlation	.463	1
	Sig. (2-tailed)	.012	
	N	315	315

Source: Field Survey 2011

DECISION: From the table above, the decision is to reject the null hypothesis and accept the alternative hypothesis. The above result implies that there is significant relationship between self transcendence and service quality.

### HYPOTHESIS TWO

H<sub>0</sub>: Self enhancement has no significant relationship with customer satisfaction.

H<sub>1</sub>: Self enhancement has significant relationship with customer satisfaction

**Table 2. Showing relationship between Self-enhancement and Customer Satisfaction**

		Self-enhancement	Customer Satisfaction
<b>Self-enhancement</b>	Pearson	1	-.522
	Correlation		
	Sig. (2-tailed)		
	N		
<b>Customer Satisfaction</b>	Pearson	-.522	1
	Correlation		
	Sig. (2-tailed)		
	N		

Source: Field Survey 2011

DECISION: From the table above, the decision is to accept the alternative hypothesis and reject the null hypothesis. The result above revealed that there is negative relationship between self-enhancement and customer satisfaction.

### HYPOTHEIS THREE

H<sub>0</sub>: Personal value has no significant effect on customer satisfaction.

H<sub>1</sub>: Personal value has a significant effect on customer satisfaction.

**Table 3. Regression Showing Effect of Personal Value on Customer Satisfaction**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.365	4	.341	.736	.002
	Residual	143.840	310	.464		
	Total	145.205	314			

Source: Field Survey 2011

DECISION: From the table above, the decision is to accept the alternative hypothesis and reject the null hypothesis. The result implicated that personal value has significant effect on customer satisfaction.

### CONCLUSION AND POLICY RECOMMENDATIONS

The findings from this research present some policy and research challenges. On the policy side, it is recommended that sustained efforts be made by management of the banks to ensure that staff are properly trained to render qualitative services to its customers. The marketing concept calls for understanding customers and satisfying their needs better than the competitors. But different customers have different needs, and it is rarely possible to satisfy all customers by treating them

alike. This study has further corroborated the findings of earlier related studies by emphasizing the significance of target marketing practices in banking industry as against the mass marketing.

*Mass marketing* refers to treatment of the market as a homogenous group and offering the same Marketing mix to all customers. Mass marketing allows economies of scale to be realized through mass production, mass distribution, and mass communication. *Target marketing* on the other hand recognizes the diversity of customers and does not try to please all of them with the same offering. The first step in target marketing is to identify different market segments and their needs. For example, it was observed from the findings of the study that the managements of Nigerian banks need to serve customers with different personal values differently.

It was interesting to find out from the study that customers with self-enhancement values perceived service quality differently from those customers with self-transcendence values. The study revealed that self-enhancement value has negative relationship with perceived service quality while self-transcendence value has positive relationship with customer satisfaction. The findings corroborated extant literature stance on the fact that self enhancement and self transcendence are two opposing personal values.

On the research challenges associated with this research, it is suggested that future research efforts be directed towards covering all the different types of personal value. That is, relationship between other personal value dimensions like openness to change and conservation with customer satisfaction should also be ascertained. In addition, further research efforts should give closer attention to sub-dimension of personal value. For example, instead of considering self transcendence as a whole, effect of universalism and benevolence on customer satisfaction would have been considered differently. In addition, research efforts may have a broader scope thereby capturing at least some selected local governments in Nigeria.

This study is not without limitations. Although it is logical to suspect that some of the findings from this research might also hold for other communities both in Nigeria and outside the country, there is no way to ascertain this logical extension and relevance of the findings (Honig and Karlsson, 2004). It is suggested that replication of this study in other communities in Nigeria be undertaken to enhance generalizability.

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## RISK ANALYSIS USING THE EXPLOATATION LEVERAGE COEFFICIENT AT PASSANGER ROAD TRANSPORTATION COMPANIES

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### Abstract:

*Business activity is usually influenced by the emergence of operational risk, but we should not overlook the impact that the structure of funding sources can have on the outcome of the enterprise.*

*The purpose of this paper is to show the level of operational risk present at a number of five listed companies in the passenger road transportation industry. The analysis was based on interpretation of risk level using the results obtained by calculating the coefficient of economic leverage for a period of five years; the purpose was to demonstrate that using this tool managers can make decisions in a short time so that decision making process will not be long standing.*

**Keywords:** breakeven point, degree operating leverage, economic risk, elasticity, risk

**JEL Classification:** G32, M40

## INTRODUCTION

The Basel Committee (2004) defines operational risk (economic risk) as the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events.

The operational risk, depends mainly on fix expenses level, same level of fix expenses being better absorbed by a greater turn over.

When starts the analysis of economic risk the basis is the relation between profitability and risk, in the sense that profitability is a performance indicator, no matter its nature.

Profitability is approached and determined differently function of the participants of the enterprise activity: managers, shareholders, bankers and employees.

Financial analysis approaches both profitability in general by studying the performance of exploitation related to the result account, and the impact used financing resources with respect to used means.

Expenses structure, mainly the proportion between fix expenses and variable expenses with respect to turnover has a significant influence over profitability. Pieces of information regarding expenses and incomes can be brought together in a model that allows the determination of production level at which the profit is zero and starting from which the companies activity becomes profitable. This point is called breakeven point or critical point.

Irrespectively of the chosen computation means, the production expenses are split in variable expenses (depending on the volume of activity) and fix expenses, elements that make the analysis be more difficult, because the financial statements do not include such a statement.

Variable expenses are directly proportional with the production level and usually refer to raw materials an materials, salary of the directly production personnel, and so on.

Fix expenses are independent of the activity volume, being in general those resources used with the purpose of the enterprise normal operation, and being paid even if the profit is absent.(water, electricity, administrative personnel, amortization expenses, and so on)

The above classification must be seen from the time perspective because on the long run all expenses can be considered variable and only on the short time some are variable and other are fix.

Operating profitability together with operating risk, condition the level of other related profitability and risks: financial, total, bankruptcy

The term risk is significant only when the future is presented and is tried to estimate profitability fluctuation for the elaboration of forecasts.

## METHODOLOGY

For estimating the operating and the financial risk, business practice uses an analysis tool known under the name breakeven point, an instrument of forecast analysis that allows for the determination of condition necessary to realize the microeconomic equilibrium, with or without profit (breakeven point).

Using the breakeven point as a risk assessment tool implies a good knowledge of the computation methodology and its cognitive value. The determination of breakeven point can be made monetary units or physical units, in number of days, for the whole activity or just for one product. (Muntenau, Askar 2008)

The operating (economic) risk relates to the fluctuation of operational result, function of the breakeven point and operational cost structure (fixed and variable). (ȘUȘU, 2006)

a) A first way to assess the operational risk has as a basis the safety margin and the safety interval that reflects the turnover position with respect to breakeven point.

The safety interval known also as position indicator (flexibility) express the enterprise's capacity to modify the production and to adapt to market requirements. The greater its value is, as higher, the enterprise flexibility is, and thus the economic risk is lower.

This indicator can be determined both in absolute values ( $\alpha$ ), and in relative values ( $\alpha'$ )(M. Niculescu,2005)

$$\alpha = CA_{reală} - CA_{PR} \quad (1)$$

$$\alpha' = \frac{CA - CA_{PR}}{CA_{PR}} \quad (2)$$

Where  $CA_{reală}$  – current turnover

$CA_{PR}$  – turnover at breakeven point

The position indicator in absolute value is also known as absolute flexibility indicator, it reflects the company's capacity to modify and to adapt the production at marker requirements. Company flexibility level is given by its technical potential, by the human potential, by the state and quality of technical potential and by the company's organizational structure.

The company situation with respect to the position indicator's value expressed in relative measure is the following>

- a safety interval of less than 10% shows an instable situation
- a level of 20% is characterizing a relatively stable situation
- over 20% show a stable situation with respect to the breakeven point.

b) Economic risk assessment can be made on the basis of operating leverage coefficient (CLE) or the degree of balancing the company's operation – degree-operating leverage (DOL).

Operating leverage coefficient expresses the operating result ( $Re_{xpl}$ ) at sales variation which measures the percentage increase of this result, as an answer to one percentage increase in sales (turnover) ( $qCA$ ) ( Silvia Petrescu,2004):

$$CLE = \frac{\Delta Re_{xpl} / Re_{xpl}}{\Delta qCA / qCA} \quad (3)$$

Where  $qCA$ – turnover based on production

This indicator can be calculated using two ways

1. Relative value:

$$CLE = \frac{\Delta Re_{expl} / Re_{expl}}{\Delta qCA / CA} = \frac{I_{Re_{expl}} - 100}{I_{qCA} - 100} \quad (4)$$

2. Absolute value:

$$CLE = \frac{\Delta Re_{expl} / Re_{expl}}{\Delta qCA / qCA} = \frac{\Delta R_{expl}}{\Delta qCA} \cdot \frac{R_{expl}}{qCA} \quad (5)$$

By determining the operating leverage coefficient is expressed through value the level of economic risk, giving it a numeric dimension that brings us closer to a correct quantification of this type of risk.

Economic leverage ratio can be determined using also the turnover:

$$CLE = \frac{\Delta Re_{expl} / Re_{expl}}{\Delta CA / CA} = \frac{\Delta Re_{expl}}{\Delta CA} \times \frac{CA}{Re_{expl}} \quad (6)$$

From the factorial point of view, the operating risk is directly proportional with total expenses, (Ct) thus the risk increases with the expenses growth by profit decrease:

$$CLE = \frac{\Delta(CA - Ct)}{\Delta CA} \times \frac{CA}{Re_{expl}} = \frac{CA}{CA - Ct} \quad (7)$$

## ECONOMIC RISK LEVEL ASSESSMENT AT PASSENGER ROAD TRANSPORTATION COMPANIES

Next, we will exemplify on the basis of risk computation methods presented above the evolution recorded by the levels of risk at a number of five companies in the passenger road transportation industry.

It must be stipulated that that this industry is present in the Stock Exchange quotations, but the investors' interest is very low with respect to the decision to invest in these companies; moreover, in the moment of sampling from the total of 24 traded companies at the Stock Exchange only these five had all their financial statements, making thus possible the analysis of the level indicators for risk quantification.

Thus, one of the reasons for the lack of interest on this industry may be the lack of transparency of these companies.

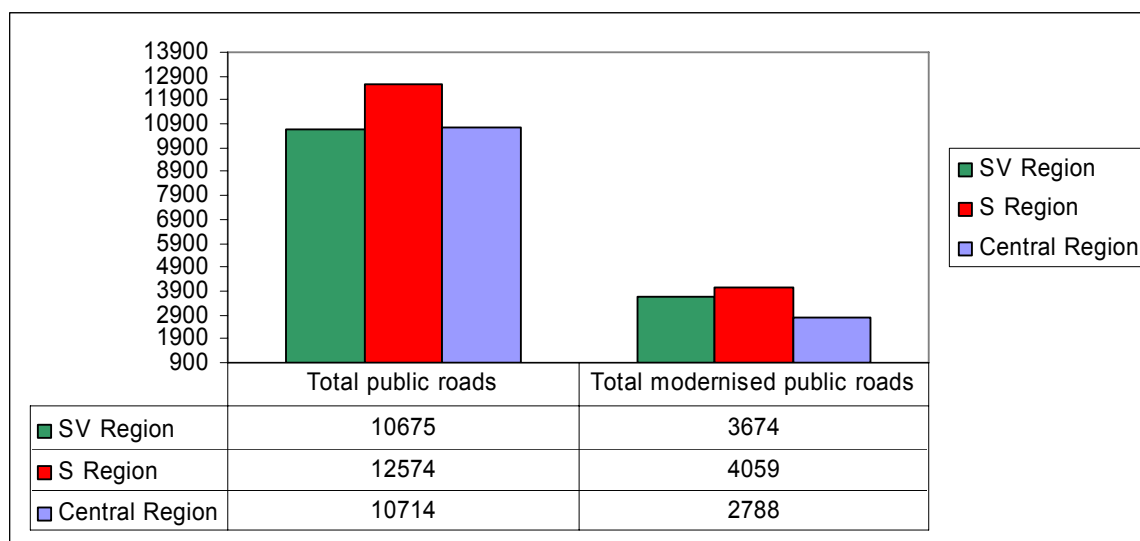
We used this sample to quantify risk using the economic leverage coefficient from the desire to justify the shareholders' lack of interest determined by high levels of risk that make this industry totally unattractive.

The companies under analysis are presented below:

**Table 1. Analyzed companies**

Company name	Trade symbol	Development region
SC EXPRESS TRANSPORT SA Tg. JIU	EXPR	South – West region
SC MONDOTRANS SA Targoviste	MOTU	South region
SC TRANSALBA SA Alba Iulia	TRVA	Central region
SC TRANSBUZ SA Slatina	TRSO	South – West region
SC VALEA PRAHOVEI SA Câmpina	VAHO	South region

The selection of companies was made according to their appurtenance to the development regions where the public road infrastructure is the most developed and the percentage of modernized roads in total roads is very high. The data was summarized in the chart from below:

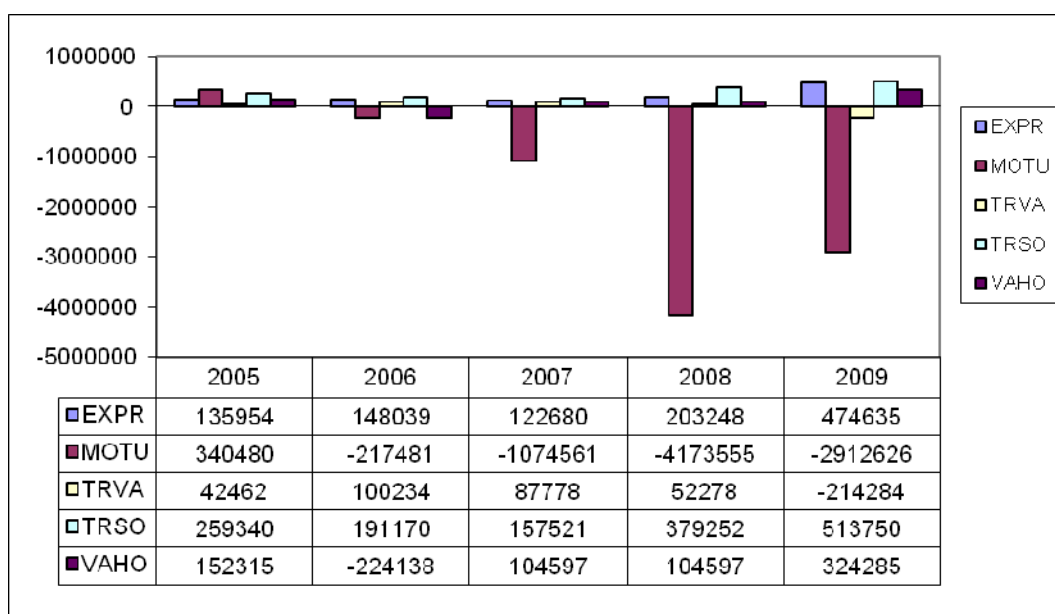


**Figure 1. Modernized roads in total public roads**

Source: National Institute of Statistics of Romania

From the pieces of information presented above, we can conclude that the percentage of modernized roads from total public roads in the three development regions is around 31%, which puts it very close to the country average.

We started the operating risk evaluation by comparing the evolution recorded by the operating result during the whole analyzed period at the sample companies. In the assessed period, the evolutions of the operating result were different at the five companies analyzed. The operating result has recorded a three times increase with respect to the 2005 year at EXPR, TRSO and VAHO companies, whilst MOTU and TRVA have presented negative values at the end of the analyzed period, as a result of the more pronounced increase of the operating expenses volume against the incomes. The summarized data are presented in Figure no. 2.

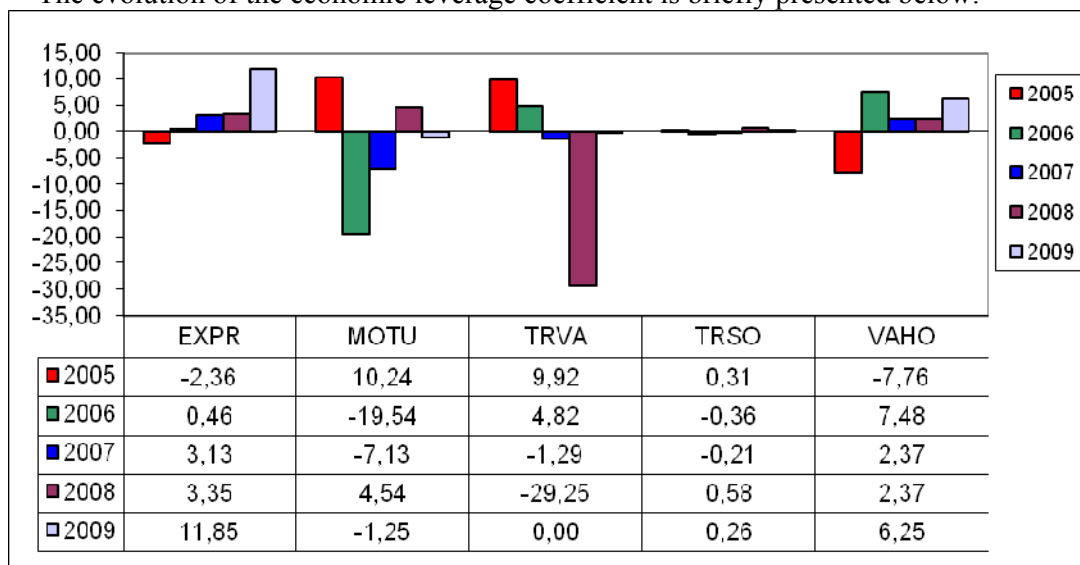


**Figure 2. Evolution of operating result over 2005-2009**

Source: Personal computation on the basis of financial data presented by the companies at BSE

With respect to the quantification of the risk level of analyzed companies, we can observe that by computing the economic leverage coefficient all companies have registered very high levels, which express a very high level of operating risk. The only company that registered small values of the economic leverage coefficient and thus a low degree of risk is TRSO.

The evolution of the economic leverage coefficient is briefly presented below:



**Figure 3. Evolution of operating leverage coefficient during 2005-2009**

Source: Personal computation based on financial data presented by the companies at BSE

The evolution of the economic leverage coefficient on the five companies registered differentiated modification during the period under consideration. The registered levels of operating risk are not the kind that let us state that from an operating risk point of view the companies do not register very high levels so the resulting situation is not a concerning one. The resulting values of the economic leverage coefficient are between 0 and 12. The detailed situation by company is presented as following:

- EXPR – if at the beginning of the period the level of risk was a minor one with a value close to 0 (0,46) by the end of the analyzed period the situation got worst when the operating leverage coefficient had a result of almost 12, which proves a very high level of risk;
- MOTU – present an uncertain situation during the whole analyzed period; if in the first two years of the period the level of risk is a very high one with values of leverage coefficient very high, the presented situation of this company got better towards the end of the analyzed period when the leverage coefficient had a value indicated a minor risk;
- TRVA – in the risk level analysis at this company the most interesting period is the one between 2008-2009 when the risk spectacularly evolved from a value indicating a very high risk to one eliminating the existence of risk.
- TRSO – is a company with a constant evolution on the whole analyzed period with values between 0,26 / 0-31, proving that the company's activity is marked by certainty;
- VAHO – is ranked by the resulting levels of the operating coefficient in a middle position with respect to risk situation computed through this method.

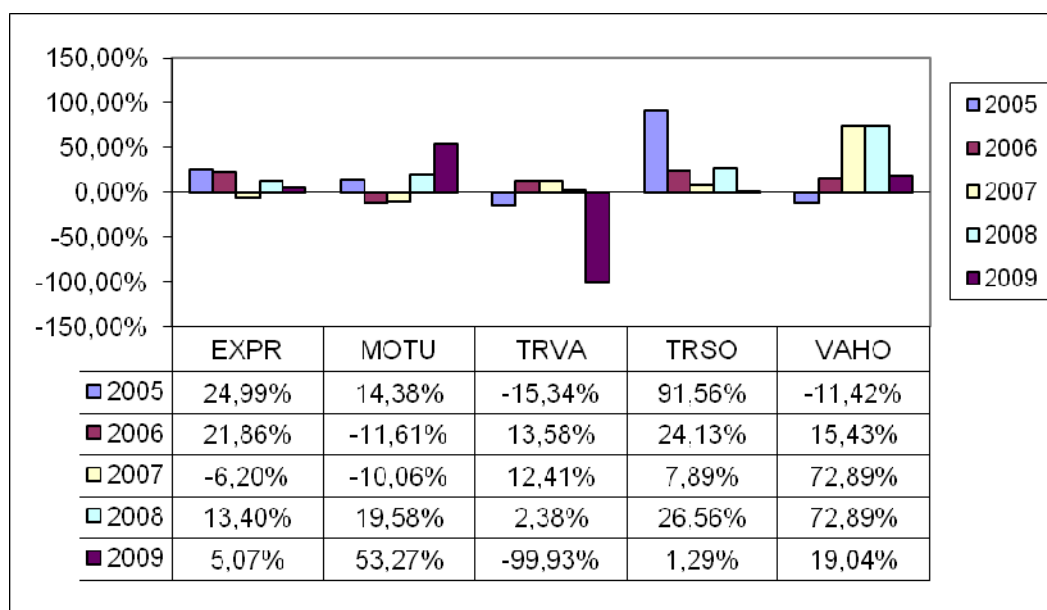
### ECONOMIC LEVERAGE EFFECT IN THE OPERATING RISK ANALISYS

The financial analysis, which is oriented towards the future, follows the quantification of chain effects of the leverage coefficients for the elaboration of result forecast:

The effect of the operating leverage (ELE) represents the modification of operating result ( $\Delta R_{exp}$ ) under the impact of increase of sales (turnover)( Silvia Petrescu, 2004):

$$ELE = CLE \cdot \Delta q(CA) = \Delta R_{expl} (\%) \quad (8)$$

As stipulated above the operating risk presents the modification of the operating result under the impact of sales increase(CA). From this perspective was approached the percentage evolution of turnover in the analyzed period for the five sampled companies and the data are briefly presented below.



**Figure 4. Evolution of percentage modification of turnover during 2005-2009**

Source: Personal computation on the basis of financial data presented by the companies at BSE

After the analysis, we can observe that there are differentiated evolution at all five companies taken in consideration.

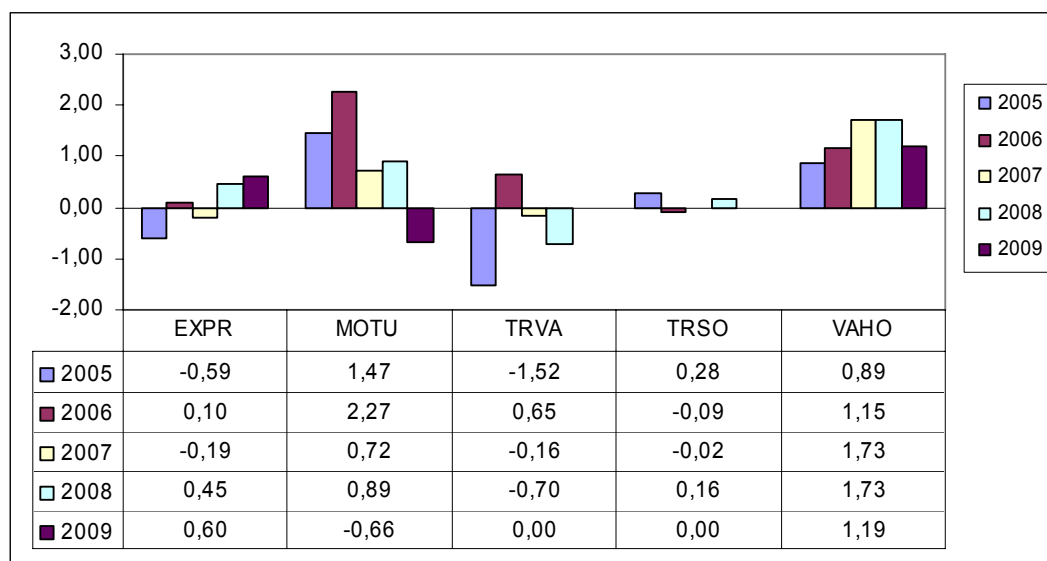
Thus, EXPR has registered during the entire period positive evolutions of the turnover, with increases between 6-25%, the maximum value being registered at the beginning of the analyzed period. The only negative evolution registered by this company is the one from 2006 when the turnover had a decrease of 6-percentage point against the previous period.

The company MOTU has registered decreases of the turnover values in the period 2006-2007, these being between 10-11 percentage points. The most spectacular evolution was registered in 2009 when the company had an increase of 50% of the turnover.

TRVA has started the analyzed period with a turnover decrease, situation that seemed to get better in the following period but the results obtained at the end of the period under analysis had shown a decrease of almost 100% of the values registered by the turnover.

TRSO is the only company that registered a positive evolution of the turnover in the entire period under consideration thus if at the beginning of the period the company registered a double value of turnover against the previous period, towards the end of the analyzed period the increase was not maintained with same spectacular values, being only of 1,3%.

VAHO presented also positive values of the turnover during 2007-2009 with values of around 73% which comes as a surprise because this period is the one in which the effects of the crisis were highly visible.



**Figure 5. Evolution of operating leverage effect during 2005-2009**

Source: Personal computation on the basis of financial data presented by the companies at BSE

The situation of economic leverage effect evolution led to the obtainment of results on the basis of which we can conclude that the level of risk computed like this presents acceptable values. Thus in the period 2005-2009 the values of economic leverage effect were between 0,10 and 2,30 situations that do not indicate a very high level of risk. The results obtained by computing the economic leverage effect are correlated with the ones computed with the economic leverage coefficient.

## CONCLUSIONS

- The problem of economic risk evaluation and mitigation has a significant importance in the area of theory and practice of managing, planning an internal control of the company.
- It must be an optimal correlation from an analytical point of view, between the level of risk and the results of activities deployed
- The estimation of the risk level becomes an integral part of the essence of managerial decision making and realization process.
- Choosing an optimal method for risk evaluation is a difficult task because there is no method with an universal character. Thus, we have to take into consideration the following factors when choosing the risk evaluation method: the character of the situation considered risky, the purpose of the evaluation, the quantity and quality of available information, the dimension of the enterprise's activities, and the existence of necessary resources for a certain type of analysis.
- The economic leverage coefficient underlines the impact that the variable and the totals expenses have over the turnover in determining the operating result<
- The financial expenses can be considered as fix expenses until a certain level of activity. For example the allocation of borrowed capital that takes under consideration the cost of debt;
- The economic leverage coefficient is a tool used by managers because is an element that helps in making decisions related to investments in new products, in modernization and development of a company;
- It offers information regarding the minimum level of activity necessary to obtain profit;
- it allows the anticipation of profit under different hypothesis;
- offers explanations regarding deviations between forecasts and realizations.

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## VALUE STREAM MAPPING - A LEAN PRODUCTION METHODOLOGY

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### Abstract:

*Our paper wishes to present a strategy used to create an image about the informational and material flows of products and services. Value Stream Mapping is not a project that covers a specific period of time; instead it is a working methodology to differentiate activities that add value compared with the non-value added, and is addressing to all employees, to the management, suppliers and customers. Many companies are using this improving method because it identifies the problems from the production process, analyze them and provide some potential solutions for a better process.*

**Keywords:** Value Stream Mapping, Lean manufacturing, waste, implement, Kanban

**JEL Classification:** L23

## INTRODUCTION

Value Stream Mapping is a Lean technique used to analyze the current material and information flow necessary to bring out the products or provide services for the customer. This technique includes all the activities that follow the product from the customer order, going through the entire production process and the finally delivery to the customer. Value Stream Mapping is the perfect argument for Lean practitioners to show where data comes into play, how it is collected quickly and efficiently, and how Lean project action plans are created from this data. Because anywhere is a process there is also waste, it is our concern to find the best solutions and techniques to reduce it or even eliminate waste at all. The advantage of using this method allows anybody to "see" both process flow and communications flow within the process or value stream [1]. Because of this ability to gather, analyze and present information in short period of time, this method has rapidly gained popularity in the process of continuous improvement. The most important goal of Value Stream Mapping method is that identifies opportunities for improvement for future periods of time.

Regarding the main domain of using the Value Stream Mapping methodology, it can be applied to direct production activities (known as: Door-to-Door method) and include all the process steps from the daily production, and non-production activities (known as: Order-to-Cash method), referring to those supporting activities or processes for daily production needed the enterprise [2] – [4].

We can use VSM as a Lean method to identify the opportunities of improvements for future periods of time.

VSM method is also associated with production activity, being used for:

- efficiency of production activities;
- logistics activities;
- supplying activities;
- software development;
- developing new products;
- industrial activities related.

Because the VSM is an analytical method, and is based on details, depending on the level of details, the VSM can address only to a process step, to one or the production lines, or to the entire factory.

## THE VALUE STREAM MAP DESCRIPTION

Henry Ford made the following statement: "Before everything else, getting ready is the secret of success". Therefore, using a method like this one requires some preparations, meaning to collect as much information possible about the company situation.

Defining the current situation and knowing the places that need and can be improved, represents the starting point for improvement process. As we show earlier, for drawing a Value Stream Map it is very important to use your observational skills and show how the company looks like by the time is documented, not to hide or neglect the real situation.

Before we use this method we need to respect a set of rules [5]:

- The map should include all actions (both value added and non-value added) currently required to make the product to cover the main processes.
- Usually, use a pencil and paper to draw the Value Stream Map. The next step refers to the analysis of current state, finding solutions to improve the current state map, to prepare and implement an action plan for improvement (with deadlines, responsibilities, required resources and clear targets).
- The time which adds value is important compared to the total time needed to achieve the product or providing a service, from customer order until delivery.
- It is usually necessary to work in a multifunctional team to understand and draw the observed situation.
- Value Stream Maps are drawn as pictures of the process and used to document both Current State Map (reality) and the Future State Map (the goal).
- The Current State Map is the baseline view of the existing process from which all improvements are measured.
- The Future State Map represents the vision of how the project team sees the value stream at a point in the future after improvements have been made.

A Value Stream Map is divided into three sections: Process or production flow, Communication or informational flow and the Timeline which are presented in figure 1.

### Material flow

For a better defining of the company value stream, the team who is responsible with the map drawing needs to identify some key elements from the production flow: the starting and ending points of the flow, description of each process step, the movement of the products, and the placement of the operators.

### Communication flow

Communication represents any kind of informational flow between all the parts involved into the process and more than that into the entire company. Because communication is crucial, by using a proper and simple way to communicate with employees, customers, suppliers and anyone else involved, the company will avoid created by excessive or ineffective communications throughout the process. Also, communications must have place at all levels of the organization, starting from operators heading to superiors and vice versa.

### Time line

The time diagram shows the disproportion between the time needed for product to pass through production and cycle time. The top line measures the process lead time ( meaning the total elapsed time from the moment raw material are received to the time the finished good are sent to the customer) and the bottom line represents total cycle time (total amount of work from each process steps).

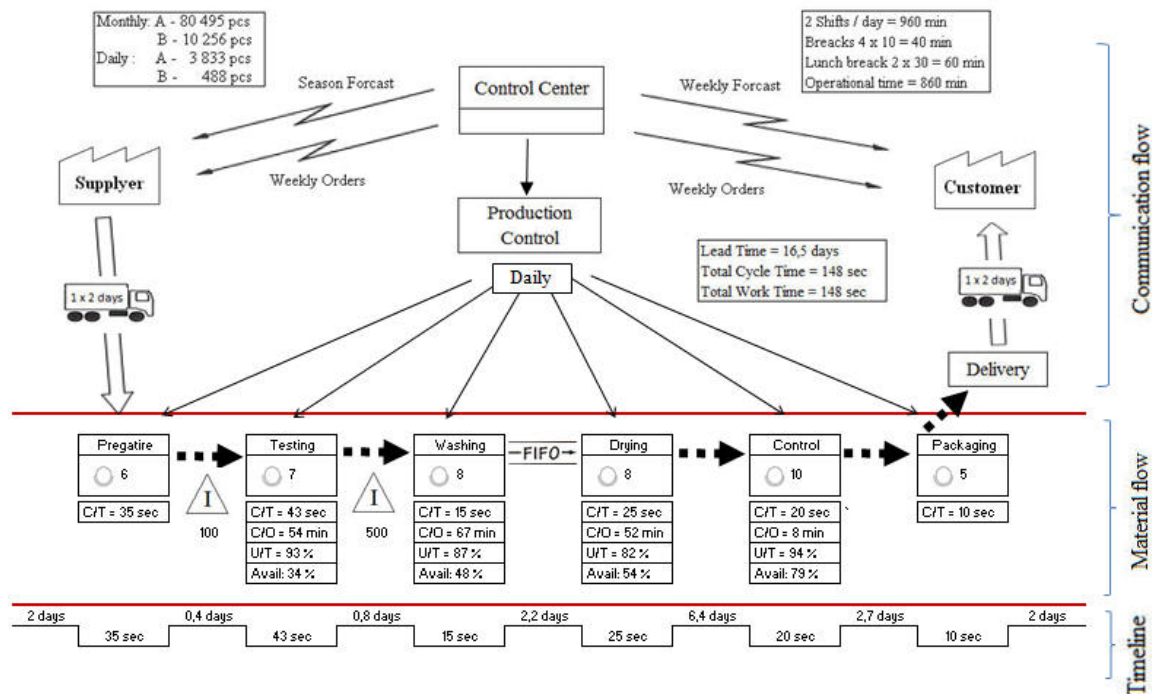


Figure 1. The structure of Value Stream Map

### Current State Map

To describe clearly the company situation at the present time and for the future, the easiest method is by using VSM as a graphic instrument representation.

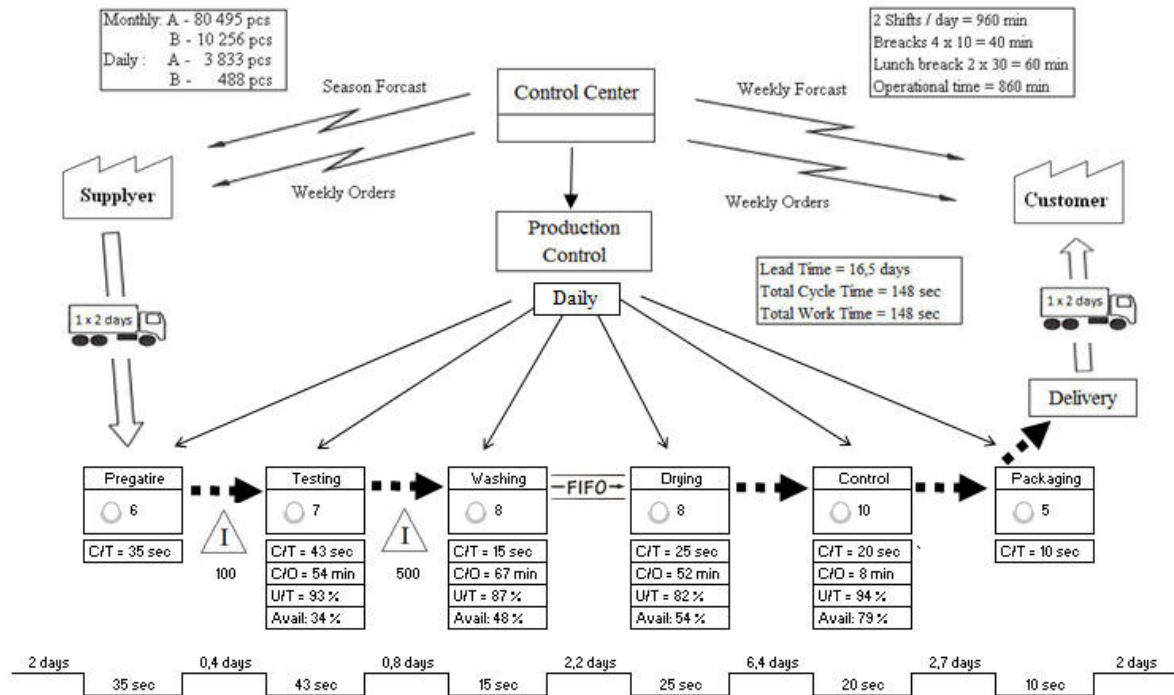
For the Current State Map this principle is based on:

- observing the process of making a particular product or providing a service
- recording specific data (performed operations, inputs, outputs, performance indicators, parameters of work, workplace organization, other necessary information)
- representation of all the results of these observations using the specific graphic symbols

### Value Stream Map drawing steps

When the project team starts to draw the current flow map it is better to have some guiding steps to make sure that the team include all the required information, presented in figure 2:

1. Draw customer, supplier and production control icons.
2. Enter customer requirements per month and per day.
3. Calculate daily and/or monthly production.
4. Draw outbound shipping icon and truck with delivery frequency.
5. Draw inbound shipping icon, truck and delivery frequency.
6. Add process boxes in sequence, left to right.
7. Add data boxes below.
8. Add communication arrows and note methods and frequencies.
9. Obtain process attributes and add to data boxes. Observe all times directly!
10. Add operator symbols and numbers.
11. Add inventory locations and levels in days of demand and graph at bottom.
12. Add push, pull and FIFO icons.
13. Add other information that may prove useful.
14. Add working hours.
15. Cycle and Lead Times.
16. Calculate Total Cycle Time and Lead Time.



**Figure 2. The Current State Map**

Is well known that the most important element from any process is the customer. He is buying the company products, and according with his demands each unit is organizing his production. That is why we have to produce the specific number of goods or provide a service, at the specific time, to the required quality and with lower costs [6].

For this reason, many companies started to use this daily demand rate, known as Takt Time. To calculate the Takt Time we can use the following formula:

$$\text{Takt Time} = \frac{\text{Net available time}}{\text{Customer demand}} \quad (\text{Eq. 1})$$

The net available time is the total operational time during a specific period of time, meaning the total amount of time which adds value to the value stream (without breaks, meetings, lunch or downtime). This customer demand can be determined on customer forecast or based on the currently customer order. Usually the Takt Time is calculated on shift or on day and it gives to the company a good opportunity to determine where the production process can be improved.

As looking to gather more data about the process flow, the easiest way to put them together is to create a data box for each process step, presented in figure 3. This contains five information that should review every process step:

- the number of operators,
- the cycle time,
- changes over time,
- uptime (reliability of the equipment),
- availability of the equipment (shared equipment).

The number of operators is depending of the company structure, of the process complexity, the number of the equipments used and the production capacity. In the data box, the number of the operators is represented with a symbol right under the process name. The cycle time – C/T – is the average elapsed time from the moment one good piece is completed until the moment the next good piece is completed. Change over time – C/O – is the elapsed time from the moment the last good

piece of one product run is completed to the moment that the first good piece of a different product is completed. Uptime – U/T - is the percentage of time that a piece of equipment works properly when the operator uses it for the prescribed task. The availability of equipment – Avail - is the percentage of time that a piece of equipment shared between two or more value streams is available for production of parts in the value stream being mapped.


Process A
 2
C/T = 43 sec
C/O = 54 min
U/T = 93 %
Avail: 48 %

Figure 3. The process data box

Depending of the company structure and process complexity, the Value Stream Map can appear simple or complex. A more diversified map can have subtasks and parallel flows, but even in this case the principals are applied exactly the same like any other map. In both cases the main target is to improve the process by eliminating errors and defects. To ensure an accurate knowledge of the current company situation, are necessary information about the customers, suppliers, about the entire production flow and the process control. Thus, about the customer you should know the customer, his demands, how often he orders, and what quantity and how often do we deliver to the customer.

Also, the information about the supplier is very important, for example: who is the supplier, how often do we order from him, how often he delivers, and if the supplier sends us the quality we required.

When we talk about a customer we do not have to think directly to the final customer, but also, the customer can be the next operation from the production flow. For the supplier is the same, a supplier can be the anterior operation or working post. On the map, the internal or external customer / supplier are represented by separate icons [7].

About the production process is important to know the daily time of work, how many breaks there are, how many stops are into the process, how long are the maintenance stops. The control data can be associated with monitoring the entire process: the control is made by a person or a department, what kind of system the company uses for production control, how the production control system operates. Working with the customer synchronized tact is based on three principles of a lean production: Pull system, Push system and Takt time.

On the **Pull** system each process drags a new order only when the old order is finished. Many companies are using this system because it has a few advantages: it produces just what was consumed, the stocks are retrieved, and the supermarket has well-defined areas for each product and ensure application of the "First In First Out" method.

The **Push** system ensures uniform outputs by a correct process succession and not through technological improvements. To obtain a flexible production it is recommended to have an interconnected flow and to process a batch of one piece per.

Working on customer **Takt time** provides to the company information about the exact number of workplaces and makes the balance between cycle time and takt time. From the data that we have gathered until now, we can start drawing the connections between the customer, supplier, control point and production scheduling [8].

## Future State Map

Once the current state map was presented, the team members can begin the real work associated with Value Stream Map, presented in figure 4.

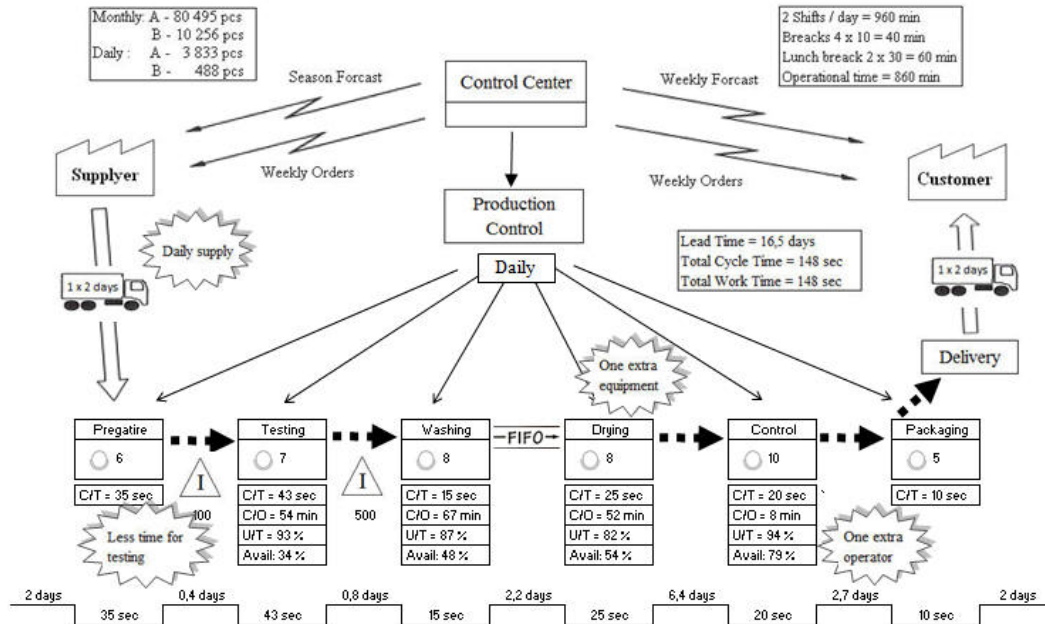


Figure 4. The Future State Map

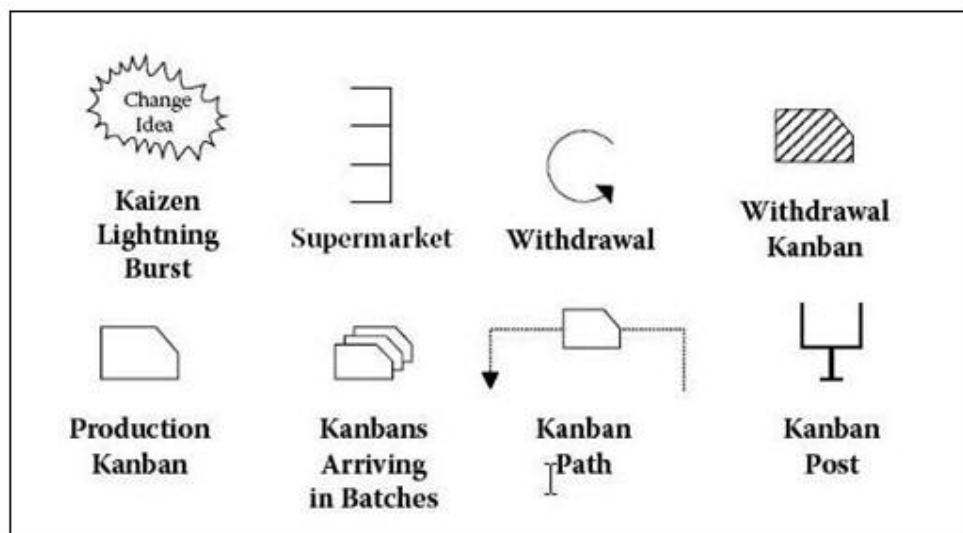
The Future State Map can be shaped to guide the positive changes that are desired for the future. The future state map includes essential actions to continuously improve the project. Lean practitioners can rely on this map because it is a process in which action plans can be created by the mapping team. In the Future State Map are also used a series of symbols to help the working team to identify elements that require some changes and how to achieve them, presented in figure 5. One of the best symbols highlighting the need for change is Kaizen Burst. This symbol is placed on the map where ever an improvement can be made along the production process. When a Pull system is used, other important icons can be used on the map, for example: Supermarket icon, Withdrawal kanban icon and Production kanban icon [9] – [10].

**Supermarkets** are a controlled inventory where maximum levels are established and replenishment is signaled through the use of kanbans.

Replenishment signals (kanbans) are used to visually inform workers within the process when replenishment is required.

A **withdrawal kanban** is used to inform an employee that raw material, WIP (work-in-process), or finished goods should be pulled from a supermarket and returned to the next step of the value stream to have value added.

**Production kanbans** are replenishment signals sent from a downstream supermarket back upstream, informing a process step to produce additional product or parts and move it into the supermarket.



**Figure 5. Future State icons**

After the Future State Map was created it needs to be presented to everybody involve into the process flow. During the presentation it is recommended to encourage the team to talk freely and maybe to show some changes or additions to the map [11] – [15].

## IMPLEMENTING

After the Future State Map developing, in most cases the map does not remain as it was drawn. The map can suffers some changes because new problems or improvements appear. Remember that the Future State Map is the starting point for a good plan of improvements. Regardless of the discipline or methodology used by each company to create her own planning and improvement program, the first step is to develop an action plan or a project outline that includes all process improvement tasks. All the actions added to the plan should be focused on improving the entire process by eliminating waste. To implement successfully, the project team should follow a standardized approach to implementation of the action plan. Lean implementation provides a great number of the tools and concepts required to make change a reality, and it implements change at the same speed as mapping the process.

For eliminating errors and defects, each company has her own quality systems for detecting and minimizing the actual problems or potential ones. These systems can be directed just for a product, a process step or for the entire flow, by checking the product at each step of the production line by implementing checking plan or placing an extra person which can supervise the stream flow. It is not everything to find and isolate the defects, but it is necessary to find the cause leading to these problems. To encourage employees to participate actively in creation and implementing VSM, the best method to gain their trust is to show them that their input is value and their ideas are appreciated [16].

## CONCLUSION

The efficiency of Value Stream Mapping is revealed when the team goes to the production process, talks to workers and observes how the product is actually made from the beginning to the end.

Value Stream Mapping must be drown in such a way that can be understood by anyone: all the operators, the management, suppliers and the customer. Only on this condition the team can discover the real problems from the current process flow and create a vision of how the process should look like by making improvements.

Value Stream Mapping methodology cannot be used by itself, that is why for obtaining this improvements are necessary other methods like Kaizen, 5 S, Total Productive Maintenance, Setup reduction and others.

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## INVESTMENTS – MAIN VECTOR OF ECONOMIC GROWTH IN THE REPUBLIC OF MOLDOVA

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### Abstract:

*The investment is an engine of economic growth and development, because it acts both on supply and aggregate demand. To invest is to create new, modern means of production, which promotes technical progress in the economy and leads to some productivity gains. Investment acts and on the labor market, permanently changing the occupational structure. So, investments can be defined as those capital expenditures that are made in order to create, build durable goods that will be the hope of getting support in the future, a profit / income expected, a value, that some useful advantages desirable, necessary. Thus, changes in investment largely explain the economic conjuncture fluctuations. The Moldovan economy, one of the reasons economic and social situations is serious in that we are insignificant volume of foreign investments. They contribute positively to economic growth and development of the country without its own financial resources for investment, with a positive correlation between the stock of FDI per capita and national economic competitiveness. Precisely because of this, world countries compete to attract direct foreign investment.*

**Key words:** foreign investments, own financial resources, means of production, economic growth, economic development, labour market.

**JEL Classification:** O11, E22, O16, R53.

## INTRODUCTION

In any economy, investment is a special phenomenon with its own characteristics, different compared to other activities. However, this phenomenon is a manifestation not automatic and is always dependent and subordinate development strategies and policies of companies, sectors, communities, etc.

Purpose of the scientific article is highlighting the importance and benefits of foreign investment in economic growth and development of the Republic of Moldova, lack of own financial resources. Research has been conducted in the study and systematic literature materials and statistical data in this field. Based on this research, the paper stated the following highlights:

1. The importance of foreign investment in the economy of a country;
2. Advantages of foreign investment;
3. Dynamics of foreign investments in Moldova;
4. Ranking of foreign investors in Moldova;
5. The measures taken by government to improve the business climate and attracting foreign investments;
6. News of foreign investment in the national economy.

## CONTENT OF THE ARTICLE

### THE IMPORTANCE OF FOREIGN INVESTMENTS IN THE ECONOMY OF A COUNTRY

Investments are needed to launch any activity of economic concepts. Deciding on optimal investment must be analyzed and considered developments following parameters:

- a) The anticipated demand
- b) Return on investments
- c) Rates of capacity of product's utilization
- d) The company's debt
- e) The relative cost of inputs

Moldova, like other countries in the early 1990s, has undergone unprecedented economic conditions. One of the most countries in South Eastern Europe and CIS as they entered the transition period without foreign investment stocks, relying only on their own resources in financing the economy. The failure to attract foreign investments in national economy in the early transition period was related to lack of natural resources, but also of inadequate or nonexistent policies in this area. Thus, it was missed the first wave of privatization has brought countries of the region close scale investment. Unfortunately, even after notification of the importance of foreign investment in transition economies by society and government, including undertaking certain measures to improve investment climate in the country still does not benefit from inflows of foreign capital compared to countries in the region. This is explained both by previous failures that worsened the country's image to investors, and the competition between the states to attract foreign capital [5]

### **ADVANTAGES OF FOREIGN INVESTMENTS**

The notion of investment is characterized as an active means of creating sustainable assets, increase, growth and development, and rehabilitation, replacement value of assets in operation, in line with strategic goals and needs of present and future undertakings.

The Moldovan economy, one of the reasons economic and social situation is serious we are insignificant volume of foreign investments. They contribute positively to economic growth and development of the country without its own financial resources for investment, with a positive correlation between the stock of FDI per capita and national economic competitiveness. Precisely because of this, world countries compete to attract direct foreign investment. A time when investors were looking past where they can place their capital, and countries receiving or not receiving these investments only. Today, states apply various methods to attract foreign capital, offering different advantages and facilities to foreign investors. This competition, even if it was not always able to attract foreign investment proportion, to help many transition countries to reform, to improve legislation in the field of entrepreneurship, a climate conducive to business brains. Thus, the flow of foreign investments in economy of a country targeted degree of development shows the degree of credibility in this state.

It can also be established a direct link between investment and innovation, as noted above, that investment is the means to disseminate technical progress, so innovation. For Joseph Schumpeter, innovation is the first function of the entrepreneur. Profit as long as competition rewards innovative advance has not recovered economically obtained. A leap in innovation may explain, in fact, a growth phase flow in the economic cycle. But invention is not only the techniques but also new products or new methods of work organization. Today, after a wave of technical modernization accelerated innovation lies in the mobilization of human capital, investment in human competence, responsibility and creativity. [6]

Thus, foreign direct investment in their lack of financial resources, offers the following advantages:

- Obtain and implement new technologies;
- Create new places of labour force;
- Development of new branches of the economy;
- Access to the new export markets.

Along with the benefits FDI does not create foreign debt and therefore to be considered very attractive economies in transition. However, there are some risks in attracting foreign financing for economies in transition, especially for governments which do not create an environment conducive to their attraction. Of these we mention:

- Competition established local companies, which often do not provide the same quality of products and services.
- Salaries offered by foreign investors might be higher than those offered by the national economy.
- Free capital transfer reduces the stability of national currency.

- High monopoly price stability by companies operating in the host country, which is not in the state.
- Even innovative large companies usually focus scientific research and technical development base in the countries and, as a result, host countries lag behind in terms of development in science and innovation.

## DYNAMICS OF FOREIGN INVESTMENTS IN THE REPUBLIC OF MOLDOVA

FDI in Moldova began to be attracted in 1992, when it was adopted the Law on foreign investment. By 1997 these flows were minimal, the government putting more emphasis on obtaining loans than on attracting outside investment.

Although after 2005 foreign investment flows have increased, they were significantly affected in 2009 by world economic crisis (Table 1).

**Table 1. Dynamics of Foreign Direct Investments (FDI) Flux, mil USD**

FDI Flux	1995-2005 (annual average)	2006	2007	2008	2009
Republic of Moldova	92	233	539	708	86
FDI Stocs	1995-2005 (annual average)	2006	2007	2008	2009
Republic of Moldova	97	449	1848	2566	2604

Source: UNCTAD, World Investment Report 2010; [www.unctad.org/wir](http://www.unctad.org/wir) or [www.unctad.org/fdistatistics](http://www.unctad.org/fdistatistics).

A major shortcoming of the Republic of Moldova during the initial transition was a lack of investment strategies. There was a deep analysis on the medium and long term, which would establish priorities, directions of development of the country and would give investors a clear picture on who could enter the market. Investment policies were not developed clear that characterize the investment priorities.

The share of foreign direct investment in fixed assets had a maximum of 13.2% in 2008, when in 2009 a slight decrease to 9.5%, but it is also about double the 2002 level (Table 2.).

**Table 2. Dynamics and structure of investments in fixed assets by ownership, mln lei, current prices**

	2002	2003	2004	2005	2006	2007	2008	2009
Investments in fixed assets – total	2804,2	3621,7	5140,0	7796,5	11012,3	15335,8	18224,8	10878,9
from which:								
Public	1090,2	1254,4	1676,1	2552,2	3702,8	3845,9	4307,1	3152,2
Private	936,8	1319,1	1655,0	2741,1	4026,2	6346,1	7899,7	4497,6
Mixed (public or private), without foreign participation	76,0	118,1	187,1	262,0	316,7	289,4	265,0	223,0
Foreign	145,6	179,2	497,2	686,4	1399,8	1957,3	2406,8	1041,8
Of mixed enterprises	555,6	750,9	1124,6	1555,0	1566,8	2897,1	3346,2	1964,4

Source: National Bureau of Statistics of Republic of Moldova

## RANKING OF FOREIGN INVESTORS IN MOLDOVA

Analyzing foreign investment in Moldova since 2001, one can mention the following: Romania ranks 8 with only 45 million invested by 2008. However, it seems amazing that the country has invested most in Moldova's economy in 2001 until 2008 the Netherlands. The top 10 investors included the following countries:

1. Netherlands-181, 82 million
2. Cyprus-125, 00 million
3. Italy-119, 32 million
4. Russia-73, 86 million
5. Germany-56, 82 million
6. Spain-56, 7 million
7. UK-52, 73 million
8. Romania-45, 7 million
9. US-43, 92 million
10. France-36, 28 euro million

According to Export Promotion Organizations and Investment (MIEPO) in late 2007, foreign investments in Moldova were in 86 countries, most coming from the European Union, followed by CIS, USA and Canada. Netherlands is the country with the largest investments in the Moldovan economy at a rate of 21.5%. Relatively large flows of foreign investment in the EU show favorable geographical position of Moldova, located near this region. EU financial resources and the Republic of Moldova should take advantage of the proximity of this to attract these resources. At the same time and within the EU there are countries that still need external resources to finance the economy. Large capital flows in the EU are directed to more distant states, but offers high reliability and greater advantages to foreign investors. This thing demonstrates the fierce competition of the Republic of Moldova to creating a favorable image to foreign investors [5].

### **THE MEASURES TAKEN BY GOVERNMENT TO IMPROVE THE BUSINESS CLIMATE AND ATTRACTING FOREIGN INVESTMENTS**

Thus, to improve the business climate and attracting foreign investment, the government has taken the following measures:

Creating the Agency in 1997 to attract foreign investment, this in 2001 became part of the Export Promotion Organization.

1. In 2001 Moldova became a member of International Trade Organization.
2. Initiate regulatory reform that aims to reduce dependence on administrative regulation of businesses, reduction of financial costs and time permits, certificates and other permissions.
3. In 2001 the first investment strategy was approved in Moldova for 2001-2005. Currently there is strategy to attract investment and promote exports for a longer period for 2006-2015 adopted by the Ministry of Economy and Trade.
4. Adoption of other national strategies and programs that provide implementation of measures that will contribute to economic growth.
5. In 2007 the National Agency for Protection of Competition as a permanent authority in the public. Administration planning is required by the Action Plan EU - Moldova.
6. Have concluded bilateral agreements with 35 countries to protect investments [5]

### **NEWS FOREIGN INVESTMENTS IN NATIONAL ECONOMY**

Despite actions by the government, foreign investment flows were reduced in Moldova, and the stock of FDI per capita remains low compared to other countries regiune.Ca Therefore, the above actions, although are welcome, did not have a significant impact on the country's investment attractiveness, or other negative factors exist which are major barriers to investment decision than shares already undertaken by the government.

So, in attracting FDI in Moldova, it was created an unfavorable situation. This is observed in comparison with the countries of South Eastern Europe and CIS, low economic performance of national economy, low level of income reinvested small number of projects.

Therefore, the need to attract investment in the national economy comes from the following reasons:

- Moldova reduced its investment potential, lack of internal resources of the private sector.
- The need for integration of Moldova into the world economy on favorable terms.
- Creation of a competitive environment with the participation of foreign investors, increasing competitiveness of national production.
- The existence of a large number of enterprises operating at public losses that highly leveraged hedge against budget. Their privatization and sale of foreign investors will bring a new business culture and the concept that a company must make money; otherwise it is not the benefit of society.
- The need of implementation, the Moldovan economy, advanced technologies and know-how's economic activity, which becomes possible with the arrival of foreign investors.

## CONCLUSIONS

Currently, Moldova is one of the most disadvantaged countries in terms of foreign direct investment flows, the main causes are the following:

- Lack of strategy for attracting investment in the initial transition period.
- Lack of natural resources.
- Missing the first wave of privatization and lack of transparency in the privatization process.
- The high degree of competition between countries in the region of Southeast Europe and the CIS to attract FDI.

However, the proximity to the EU, which is moving outward and FDI inflows demonstrate to offer advantages to be properly explored. For it is not enough there is a strong legal framework to attract investment, but important is the rule of law.

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## FOR THE SAKE OF DEVELOPMENT? MUNICIPAL GOVERNMENT AND LOCAL DEVELOPMENT IN EMILIA-ROMAGNA AND TURIN (1945-1975)

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### Abstract:

*This paper (1) examines two areas of Italy, with very different political subcultures and production systems, with the aim of making a comparative analysis of the role of local government policies in stimulating growth processes over the thirty-year post war period.*

*Historians now agree that the policies of Italian local governments were a major factor in the processes of economic growth and the spread of social services. They acted through a highly varied mix of policies, including regulatory processes (town planning, coordinated local programming, etc.), operations enabling institutions to provide the local environment with specific public goods (industrial estates, business services etc.) as well as redistribution policies (i.e. the setting up and spread of local welfare systems and local tax systems).*

*This influential steering role of local administrations, marked in some cases by the gradual inception of specific institutional authoritativeness, was not distributed uniformly over the whole of Italy and there were significant asymmetries between areas.*

*A comparative analysis is made of the "Emilia-Romagna model" of local government, controlled by an Italian Communist hegemony in a context of small and medium sized firms, and the model of the city of Turin, which was based on an industrial Ford model because of the presence of the Fiat factory. The two models are compared from the perspective of actors and their different interests. Our aim is to gauge the nature and intensity of the local institutional actions that accompanied and promoted the processes of development.*

**Key words:** development, municipal government, local development, Emilia-Romagna, Turin

**JEL Classification:** H10

## 1. THE "KIDNAPPED CITY": TURIN BETWEEN THE POST-WAR PERIOD AND ECONOMIC BOOM

### 1.1 A "VOCATION" THAT CAME FROM AFAR

After the loss of the historical role as the first capital of the Kingdom of Italy (2), Turin was required to "reinvent" itself and its future. It was the municipal authorities which found the way forward for a city that seemed destined for slow growth in population and employment through implementing policies to promote the city's new identity through science and industry. These policies created a new image of Turin as a city of production and trade and sealed its fame. They also entailed a cultural re-conversion which succeeded in taking not only the city but also the local political and administrative class from their somewhat comfortable revenues to an unprecedented industry which was expressed in planning capacity. The city's aim to adopt new economic and financial dynamism were immediately clear in the urban planning of the reconstruction of the historical city centre, which focused on hygiene, traffic and civic decorum. The determination also showed in urban planning regulations, especially that of 1912, which incorporated the inner suburbs where new industrial complexes were sited through the expansion of the city toll walls, and thus had the immediate effect of raising city revenues to be exploited for yet further re-conversion. Finally, the imprinting of the new dynamism could also be seen in the "Great Exhibitions", spectacular windows that showcased ongoing scientific and industrial developments, creating the image of fame in advance.

### 1.2 THE "FLIGHT INTO INDUSTRIALISATION" (3)

State industries were traditionally big employers in Turin. For example, Regia Manifattura Tabacchi, in the 1870s and 1880s, employed over 2,000 workers and on the eve of the First World War employed 1,500 workers. But between 1880 and 1890 the opening of new factories such as Ansaldo, Nebiolo, Ferriere Piemontesi and Elli Zerboni started a reversal of this trend. At the turn of the century, the Turin Council encouraged the development of new sectors such as the car industry (4) thanks in part to the injection of foreign capital, mainly Swiss and German. This favoured the role of Turin as *ville industrielle* (5), a role which it was to play right up to the 1970s.

The driving force of the city's industrial transformation was the hydroelectric industry (6). As early as 1906 (the year the Industrial League came into being) the metal and mechanical industries were the biggest in the secondary sector. The population of the area rose steadily in proportion with industrial development. In the first twenty years of the century, it increased by 50% mostly in the areas of the north-east of the city, those with the highest density of industries (7). Soaring demographic figures, alongside the growing influence of industry and industrialists in the political and social life of the city, gave a new role to the Council, which rapidly became a "great business at the service of the city's future" (8). Administrations from 1903 and 1909 endorsed the acceleration of infrastructure building, galvanising the new features of an industrial city. This endorsement was seen through the widespread recourse to credit, as well as freezing of debts and a financial manoeuvre aimed at increasing revenues. The central role taken at this stage by the technical offices of the Council was the sign of a dynamism in the institution underpinning the technical and prescriptive control of the city's transformation, which resulted in a greater visibility and a growing legitimisation of the administrative class.

### 1.3 FROM ONE WAR TO THE NEXT

The First World War brought big gains linked to war commissions for the textile, metal-mechanical and automobile sectors, but the Great Depression after 1929 brought about a rationalisation and caused problems for the trusts that had grown up, thanks to bold financial speculations which were disproportionate to their real development capacities. During the 1920s, there were four big industrial and financial empires that prospered – Fiat, Sip, Snia Viscosa and Italgas –, but the only one to escape unscathed from the Wall Street crash was Fiat, which reinforced its hegemony during the 1930s. In fact, the Turin Fascists, especially the Fascist appointed rector of Turin, Thaon di Revel, largely supported Fiat's demand in spite of their propaganda on breaking with the past and "anti-traditionalism" and in spite of the impracticability of their technocratic view of the city's future with a "glorious Fiat". Fiat was now well on its way to becoming the only real actor in the local context. The establishment of the car industry had, moreover, brought with it a sharp increase in the number of manual workers in the city (9). This caused housing and other social problems in the face of which the local elite and public authorities were unprepared and elusive, preferring to confine their activities more and more to administration and to pass policy issues on to central institutions (10).

The breakdown following the Armistice with the Allied Forces (8<sup>th</sup> September 1943) and the end of the Repubblica Sociale (April, 1945) only highlighted the inertia of the City authorities, which left Fiat room to exert an important role. It was able to consolidate its image as protector of citizens and emerge as a political entity with its own apparatus and own personnel. During the last years of war, in fact, the Fiat health service, run since the 1920s, took on a new role, playing for many working families an irreplaceable role in maintenance of minimum living conditions. In the spring of 1943, the range of benefits offered to employees was impressive. It included emergency medical aid after enemy raids, economic, legal and material support for victims, the supply of food and cleaning products in factory outlets and differentiated medical care for employees and workers (11). All this helped to validate the idea of the company as a part of community and transform it into a real institution which to a great extent "governed" the reconstruction of democratic Turin.

#### 1.4 THE "ONE COMPANY TOWN"

After the war, it was obvious that Turin had been hit badly: 40% of housing had been affected and many public offices, workshops and industrial plants including Westinghouse, Lancia, Spa and various Fiat plants had been damaged or destroyed (12). There was a shortage of basic goods and no electricity. The cost of living was rising and hundreds of families were homeless. The housing crisis and the urgent need for the reconstruction of housing and production units were inevitably the first issues the new town council administration had to tackle. But past legacies weighed on their operational capacities. On the one hand, there was the survival of exchange mechanisms and reciprocal legitimisation between political and administrative personnel, now firmly ensconced in parties, and the self-referential local elite. On the other hand, the city was overshadowed by the presence of Fiat. In the common imagination, Fiat was seen as the production system of Turin, its business trends exclusively responsible for city prosperity, and was identified with the very culture of the city.

Although reconstruction was undertaken with proposals for renewal and reappraisal of urban growth, the City Council, in the end, actually made provision for the needs of a city "that lived from day to day". It dealt with the demands of the emergency and was never quite able to cope with the pressure of interests of reconstruction and city expansion (13). An indicator of these weaknesses was the long and complicated process of the new General Urban Planning Regulations which, drafted in 1945 by the Council Board nominated by the National Liberation Committee under the Communist, Roveda, was adopted by the City council on 7<sup>th</sup> April 1956 and became operative in December 1959 (14). This new urban plan was simply a modification of the existing one. But during its long gestation, alongside a mass transfer of approximately 40,000 square metres of land belonging to the City to private owners, the reconstruction of the city had taken place after all. It occurred in an ad hoc fashion thanks to the building dispensations granted and continuous amendments made to the old Regulations. Private initiatives (15) were often supported and unsightly illegal "blocks" sprang up even in the historical centre, with insufficient or inexistent infrastructures, insufficient social services and suburbs that lay abandoned and isolated (16).

None of the political groupings put forward policies for management of growth and change or indeed any alternative to the utopia of the "self-propelled development" of the "metallurgic city". They were unable to meet the challenge of large-scale immigration from southern Italy (17) which inevitably brought about a drastic redefinition of the relationship between Turin and its urban area, on the one hand, and with the rest of the Italy on the other.

Totally inadequate when it came to policy planning, local authorities were reduced to being mere suppliers of bureaucratic and technical services and guarantors of social calm and order. The support of the left-wing juntas for building districts such as Mirafiori – built near the Fiat factory and aimed at solving the problems of workers because it removed travel expenses to work – posed the problem of the subordination of left-wing citizens to Fordism (18). The centre-party administrations, under Mayor Peyron, embodied the link between Fiat's economic management, in the person of Valletta, the managing director, and the political powerhouse of the local Christian Democrats, in the person of the right-wing Pella (19). The town hall was, at that time, void of real decisional powers and excluded from the power game between industry and the political and administrative class. Its task was limited to building and preserving "industrial citizenship". Evading basic political choices, it swung between services to business and representational activities. As "routine" tasks it approved compulsory spending, and as a "representational" activity it aimed to "restore an image to Turin that was worthy of its past" and at the same time, enhance its image as the "capital of labour" and a city that was the symbol of progress and development (20). The head of the Urban Planning Department, Radicioni, described the city in 1976 as "a giant infrastructure in the service of production", while Valletta's Turin (21) could be termed an "inert receptacle of company expansion" (22). The public face of Turin acted as a paradigm of the entire country, providing a focus for the optimism of the "economic miracle". During those years, Italy developed a democratic conscience still in its infancy although it was compelled to reckon with ever more critical imbalances. Poverty was systematically erased.



In the city that was "owned" by Fiat and which tended to define itself on the basis of the car factory, the "simple city" described by Bagnasco (23), the tertiary process was weak and an anomaly compared to other Italian and European cities. In fact it was the weakness of the public sector, especially in primary and secondary social services, that posed a threat to legitimatisation. Faced with the growing complexity of the demand for services and social rights, and radical changes in Fiat's production and location strategies (24), the anachronism of the administrative tools adopted in the 1950s in the era of general well-being and individual privilege, became obvious, and the town hall authorities attempted to redefine their roles.

Protagonist of the start of this new phase was the Anselmetti junta (25). It aimed at carving out a space for the planning capabilities of the public actor based on technical competence. It approved a vast programme of public works, which among other objectives also aimed at promoting private motorisation. It planned "Greater Turin", a consortium with outlying councils presented by the mayor in 1962, and in view of an inter-Council Plan which combined private and public activities began to impose limits on private initiatives harmful to collective interests. It put forward proposals for the tertiarisation of Turin, which was a decision encouraged by private industry as they searched for premises for their offices in line with those of the banks and financial institutions. Anselmetti's proposals, however, continued to be hindered by the centre party majority which claimed they were simply following the wishes of private industry. Only the start of a centre-left (1966) administration, later than in other cities in Italy, promised to rescue Turin from stagnation. Mayor Grosso (26) shifted policies and development plans towards a regional and supra-regional scale and insisted that the order of the day was to "break with isolation". Projecting Turin as an important European city, he set out a plan for a bold redefinition of the public mission. In this plan, once operations supporting and integrating private interests were completed, they would be offset by the technical upgrading of some departments and a new mediation bridging the interests of the plurality of institutional and non-institutional interlocutors. The plan, however, was destined to failure because at this stage, industry began a "progressive retreat from being a political proxy" (27). This set the scene for a "divorce" between public and private as regards the management of the crisis and the distribution of its economic and social costs that would take place in the Seventies.

## **2. THE EMILIA-ROMAGNA MODEL: FROM EMERGENCY TO POLITICAL PROGRAMMING**

### **2.1 THE EMILIA-ROMAGNA REGION: AN UNUSUAL HISTORY**

Emilia-Romagna is a region in the Po Valley in northern Italy. Its 20<sup>th</sup> century is unusual, and characterized by the hegemony of the Emilia-Romagna Communist Party, which accepts the "rules" of the capitalist market and proposes policies that openly support small and medium-sized enterprises.

This political strategy combines long-term "ritual" linked to the myth of the Soviet Union (28) with pragmatic support to companies and an equitable redistribution of wealth through the creation of a capillary network of public services. It is this unusual strategy which underlies the region's development. After World War II Emilia-Romagna was transformed in a very short time from a relatively undeveloped agricultural region to one of the most advanced areas in Italy, with standard of wealth and well-being comparable to those of Europe's most prosperous regions.

### **2.2 THE FIGHT FOR LIBERATION: A STARTING-POINT FROM THE GRASS ROOTS**

One of the main unusual elements in Emilia-Romagna was the Fight for Liberation, which opposed Fascist and Nazi occupation with a civil war, supported by Anglo-American armies. This struggle, known as the Resistance, was fought mainly by communist groups and produced – in a framework which fully confirms the thesis of Douglass North (29) – an unprecedented social, political, institutional and cultural break with the past. As has been pointed out (30), the Fight for

Liberation constituted a "break" in the traditional balance of power. It led from the war on fascism to the opening of a new historical phase, where the values expressed by partisan struggle became the basic elements of the new social and political order.

The strategy of the communist partisans moved in this direction from the start of the final phase of the struggle in April 1945. This phase was not only an important military event concentrated in time and space, but also became a political process, both *long lasting* and geographically *widespread* (31). It led to the final break up of the institutional and political structures of the defeated Fascist regime. More generally, the struggle for liberation was the final act in the long "civil class war" that raged in Emilia-Romagna in the first half of the twentieth century. This class war included the struggles of farmhands in the first two decades of the century, the reaction of landlords and the spread of Fascism, and the first post-war decade, marked by deep-seated ideological and trade union conflict (32).

The political and military experience undergone by Emilia-Romagna communism was uncommon in Italy, and it provided the basis of the local government project for local society outlined in the following years. The communists, because of their commitment in the Fight for Liberation, became the most legitimate political force to take control of local institutions at the end of the war. In this they were supported by the great electoral victory obtained in the first local elections in 1946 (33). It was at this early post-war stage that they started to build alliances with other social actors. These were necessary to gain full political legitimacy (34), and were also required by the Anglo-Americans, supervisors of the process of democracy building in Italy. It was a legitimacy that needed to look for new strategic alliances (35), but that aimed – above all – to develop a local government strategy to face the challenges of post-war recovery, and realize the transformation of economic and social relations.

### 2.3 EMERGENCY AND "LEARNING BY DOING": ACCEPTING THE CAPITALIST MARKET

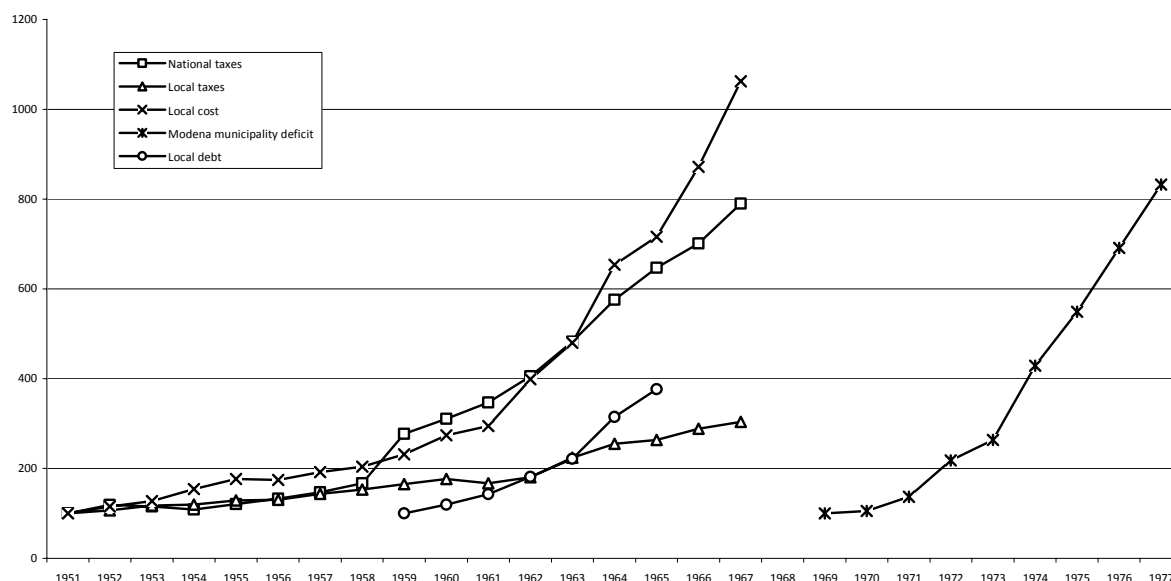
After the war in Emilia-Romagna the general situation was very difficult: houses and infrastructures had been damaged and destroyed (36), unemployment was high, food rations were low, and the critical situation was made worse by the "black market" (37). Agriculture was the most important sector of the economy, which was marked by structural backwardness and a low level of consumption. Local institutions operated in a challenging situation, characterized by poor living conditions and economic uncertainty (38).

So, during the first local government legislature (1946-1951), local administrations were unable to develop a broad strategy program. The main challenges for local institutions were to absorb unemployment, especially through public work schemes, provide subsidies and make emergency repairs to roads and buildings, as well as sewers and water pipes.

Fragmentation, weakness and delays were order of the day in local government policy. Nevertheless it was in this phase that the Emilia-Romagna communists outlined a long-term government project, which aimed at the general transformation of local society. The period 1945-1955 can thus be called a phase of "learning", in which the communists facing emergency, "learned by doing", and built the backbone of their strategy. This was thus based on both on pragmatism and ideology, without losing sight of the long-term goal: social change (39). It was an important turning-point. Over time the Communists brought out their objectives: improve the living conditions of the working class; modify the economic structures and the social dynamics; intensify their support of capitalist development. It was the *metamorphosis* of Emilia-Romagna communism, sanctioned in the first Regional Conference in 1959. In this way a party that was "against the system" turned into one that sought mediation with economic power and supported capitalist development.

The Regional Conference of the PCI (Italian Communist Party) in 1959 brought several new developments. Above all, it showed that Communist Party shared the view of the capitalist model, which was decisively supported from that time on (40). This conference was the founding act of a new political strategy that supported small and medium enterprises, and also the renewal of Italian

democracy. The report of Secretary Fanti stressed two important and complementary aspects: development and prosperity. *Development* was to be pursued by policies to support enterprises; *prosperity* was to be pursued by an "universal system" of social services, to redistribute the benefits of economic growth to the people.



**Figure 1. Modena: local and national taxes, local cost and debt, deficit, 1951-1977. Index numbers.**

Source: Our elaborations of figures from the Chamber of Commerce of Modena (various years) and the Proceedings of the Municipal Council of Modena.

The Emilia-Romagna communist plan was therefore an overall plan to govern and renew local society. It aimed to support industrial development (small and medium enterprises); create an important network of local welfare (41); and make massive investment in training (particularly technical-professional training). Moreover, it made provision to balance asymmetries between town and country by land management policies. The financial resources to support this commitment came primarily from local taxation (42), but, over time, local governments were forced to cover increasing spending by debt (Figure 1; the data concern the town of Modena, but can be taken as a general trend).

#### 2.4 THE SIXTIES: THE "EMILIA-ROMAGNA LABORATORY"

The goals of the communist strategy became clearer in this decade, when the "Emilia-Romagna laboratory" enjoyed maximum consensus and the ability to produce innovation in political technologies (43). This strategy involved the full commitment of local institutions to new economic and planning policies (44) and was based on authoritativeness facing post-war emergencies leading the transformation of the Emilia-Romagna economy (Table 1).

**Table 1. Emilia-Romagna: number of employees. Agriculture, industry and other activities, 1951-2001.**

Percentages are shown in the second line of each item

	1951	1961	1971	1981	1991	2001
Agriculture	866,000	593,000	341,000	244,000	190,000	
	100	68.5	39.4	28.2	21.9	

Industry (total)	269,129	457,997	580,067	723,127	711,301	721,301
	100	170.2	215.5	268.7	264.3	268.0
Manufacturing	208,616	355,354	463,243	586,133	582,602	571,651
	100	170.3	222.1	281.0	279.3	274.0
Trade	122,521	205,415	234,149	287,861	294,150	309,610
	100	167.7	191.1	234.9	240.1	252.7
Other activities	78,264	100,905	138,621	213,061	242,396	303,941
	100	128.9	177.1	272.2	309.7	388.4

Source: processing data Istat.

During the Seventies the "Emilia-Romagna model" reached full maturity. The economic system was highly developed, local welfare services reached maximum levels, consensus was stable, and social conflict was at its lowest, while the Communist Party enjoyed an undisputed leadership as gatherer of consensus and broker of interests. This model of government seemed to work very well, providing material and social prosperity standards which raised Emilia-Romagna to the levels of some German Länder and Scandinavian Socialdemocracies.

The experience of Emilia-Romagna communists (the Emilia-Romagna "constitutional radicals" (45)) attracted great interest in academic community. Many foreign scholars wanted to understand how institutions still linked to the Marxist paradigm and the Soviet planned model, were able to govern such a highly developed socially cohesive region in the shadow of Western capitalism. Classifying the characteristics of development policies implemented in Emilia-Romagna, they fall into four major categories:

- a) policies to create a supply system of public goods (46) (including industrial estates, business service centres, loan guarantee consortia, export consortia, etc.), to reduce entry barriers and support economic growth (47);
- b) policies to create a "coordination centre" to best manage public resources and reduce the level of uncertainty, thereby making development policies more efficacious;
- c) policies for training (elementary and technical-professional schools, universities), to raise human capital level, to support industrial development of the region (48);
- d) redistributive policies, to obtain a more equitable distribution of wealth and support demand by the working and middle classes (local welfare) (49).

An important feature in the supply of public goods to manufacturing was the setting up of industrial estates for factories and the establishment of service centres for businesses, with a focus on the processes of technical innovation (50). The creation of industrial estates in Emilia-Romagna was an important litmus test of the strategy to support development; clear empirical evidence of the leading role played by local institutions. This was an important trajectory of the economic and institutional history of Emilia-Romagna, and was found only in this region due to the peculiarities of the political-institutional model. It was not seen in Turin or other regions as described above.

To conclude, we can say that the political forces that governed Emilia-Romagna after World War Two implemented a political project intended to support economic growth. This strategy moved in two parallel and complementary directions: a) direct interventions to support enterprises; b) policies of social wealth redistribution.

It was a unique model of development, linked to the political profile of Emilia-Romagna communism. It was in fact more Keynesian than Marxist, believing that public institutions should drive market choices by specific institutional input. It was still a strategic vision that rejected the absolute autonomy of the market, and this, as part of the social system, was instead to be directed and "governed" by institutions which govern society.

### 3. EMILIA-ROMAGNA AND TURIN: TWO MODELS COMPARED

To conclude it is interesting to recall why we chose to compare the "Emilia-Romagna model" and the city of Turin.

The first aim was to compare the different styles of regulating social systems in areas marked by the presence of a deep rooted Communist Party but characterised by completely different productive structures. Emilia-Romagna was characterised by small and medium-sized enterprises; Turin by Fiat, the biggest Italian firm.

The second aim was to identify peculiarities of the "Piemonte model". In the period under observation there was in fact little similarity between the two regions. 20th century changes in economical and political physiognomy of Emilia-Romagna were linear and "harmonic", while the different areas of Piemonte, showing differences and imbalances, were closely affected by the growing importance of Fiat.

After the crisis of 1929, and even more so after the Second World War, Turin and its enterprises became the main element of the Piemonte economy and in some ways of the whole Italian economy, although without outweighing the agricultural and manufacturing vocations of other provinces. This was the result, on one hand, of a particular mix of "aggressiveness" and paternalism which characterised Fiat management, and, on the other hand of significant international aids for post-war recovery.

The Fiat model was strongly supported by institutional policies, and in the long run became closely identified with the very identity of Piemonte. Fiat had a strong influence on manufacturing in its allied industries all over the region, and overshadowed other important enterprises, such as Olivetti in Ivrea and Lavazza in Turin.

Another important point concerns the role played in our case-studies by political parties, particularly by the Communist Party.

Emilia-Romagna communist hegemony was strong and deep rooted, but dynamic at the same time, and was based on an innovative strategy of social and political alliances. In the early post-war years the local institutions governed by communists faced post-war emergencies with awareness. In the following years, the Emilia-Romagna communists "accepted" the capitalist model of development with the aim of social change, formulating a plan to drive local development. This plan contained support for small and medium-sized enterprises, the construction of an efficacious local welfare and the rebalance of asymmetries between towns and rural areas.

The case of Turin is very different. As in Emilia-Romagna, the Communist Party won the local elections in 1946. But in just five years it lost its political consensus and "delivered" the local government to the centre-right parties. From the early 1950s, the centre-right indulged private enterprise, particularly Fiat, in order to make changes in the urban fabric and build infrastructures.

The attempts to remove Turin from the influence of Fiat were few and ineffective, as were the attempts to turn Turin into a 'European' city no longer characterised only by heavy industry. Turin was almost completely taken over by the Fordist model of Fiat which dictated its rhythms, spaces and practically its identity.

The political authorities of the Province and Region followed the same policies when they openly followed the wishes of Corso Marconi (51), and when they supported the reconversion of manufacturing and diversification in order to model a polycentric area.

The communist component of Turin political authorities underlined for a long time the importance of big enterprises and employment. But there was no role for local institutions in programming, regulating and driving public policy, unlike the Emilia-Romagna model, where this role was clear. It was a role which characterised the post-war years, and which made Emilia-Romagna into an important political laboratory, known and recognised in Italy and overseas.

## ENDNOTES:

- (1) This contribution is the result of collective research carried out by the authors following a unified methodological framework. In particular, however, Daniela Adorni wrote the first section (*The "kidnapped City": Turin between the post-war period and economic boom*) and Stefano Magagnoli the second (*The Emilia-Romagna model from emergency to political programming*).

- (2) Turin was the capital of Italy 1861-1865; subsequently the capital was moved to Florence (1865-1870) and then to Rome.
- (3) F. Barbano, *Torino, una città incompleta*, ed. E. Bruzzone, Milano, Angeli, 1992, p. 31.
- (4) Fiat was in fact founded in 1899.
- (5) This was the title of Pierre Gabert's classic study of the development and issues surrounding the industrial features of Turin (P. Gabert, *Turin ville industrielle. Étude de géographie économique et humaine*, Paris, Presse Universitaires de France, 1964).
- (6) The Società Anonima Elettività Alta Italia (1896), the biggest joint-stock company in Italy which held the monopoly for the production and distribution of energy in Piemonte until 1907, was particularly important.
- (7) To satisfy the growing demand for affordable housing, in 1907, a consortium comprising the Council, the Cassa di Risparmio and the Istituto S. Paolo founded the Istituto Autonomo Case Popolari.
- (8) U. Levra, *Dalla città "decapitalizzata" alla città del Novecento*, in *Storia di Torino*, vol. 7, *Da capitale politica a capitale industriale (1864-1915)*, ed. U. Levra, Torino, Einaudi, 1999, p. CXLVII. This highlights how the composition of the town Council had changed reflecting access by the industrial and business middle class and of the organisational structure of new political protagonists, the Catholics and Socialists, which between 1895 and 1899 had taken Council seats.
- (9) The number of inhabitants rose from 415,667 in 1911 to 499,823 in 1921 and, despite the Fascist government's measures restricting urbanisation and migration, rose from 590,753 in 1931 to 715,674 in 1941.
- (10) V. Comoli Mandracci, *Torino*, Roma-Bari, Laterza, 2003.
- (11) S. Musso, *La Fiat di Valletta. Impresa e lavoratori nella più grande concentrazione industriale d'Italia*, in *Storia di Torino*, vol. IX, *Gli anni della Repubblica*, ed. N. Tranfaglia, Torino, Einaudi, 1999, pp. 241-285. "The health service provided free medical and specialist assistance, even at home, emergency medical and obstetric services, hospital admittance, convalescent accommodation, medical equipment, pharmaceutical services [...]. Alongside health services, aid included economic support with health benefits in compliance with contract norms, benefits for births (for housewives), funeral benefits and economic aid for special cases" (ivi. p. 245). Health services also included five holiday camps for children, as well as nursery schools, training courses for youngsters between 15 and 17 and technical and pre-military preparation courses for various employees up to the age of 20.
- (12) Precisely, 231,591 private rooms in private houses and 10,363 premises used for industrial purposes were destroyed or damaged.
- (13) A. Sistri, *Dalla ricostruzione al "miracolo economico", cultura urbanistica e immagine della città*, in AA.VV., *Torino città viva: da capitale a metropoli, 1880-1980. Cento anni di vita cittadina: politica, economia, società, cultura*, vol. I, Torino, Centro Studi Piemontesi, 1980, pp. 355-371; A. Castagnoli, *Torino dalla ricostruzione agli anni Settanta*, Milano, Angeli, 1995.
- (14) The Council Board nominated by the National Liberation Committee was dissolved and in the local elections of November 1946 the left-wing alliance was victorious. A junta led by Negarville until 1948 and then by Coggiola, both exponents of the Communist party, was formed. In 1950, the Coggiola junta was brought down by a construction scandal involving the socialist councillor of public works, Casalini. The elections of 1951 saw the City government pass into the hands of the "democratic block" and, until 1962, the Christian Democrat mayor, Amedeo Peyron followed a policy of adherence to Fiat's dictates or wishes.
- (15) Big companies, especially Fiat, took part in the meetings of the urban planning executive committee often as a formality. But they often had planning departments incorporated into their organisational structure. An example was the Servizio di costruzioni Fiat or Fiat Construction Service (founded by the engineer, Vittorio Bonadé Bottino in 1937 when the main Mirafiori factory was built), later to become Construction and Plants Division, (today Fiat Engineering), whose activities went beyond production to include a real culture of project management capable of appreciably affecting the whole company. For details see Alessandro De Magistris, *L'urbanistica della grande trasformazione (1945-1980)* in *Storia di Torino*, vol. IX, *Gli anni della Repubblica*, Torino, Einaudi, 1999, pp. 191-238; D. Adorni, P. Soddu, *Una difficile ricostruzione: la vicenda del nuovo piano regolatore*, in *La città e lo sviluppo. Crescita e disordine a Torino (1945-1970)*, eds. F. Levi, B. Maida, Milano, Angeli, 2002, pp. 295-394).
- (16) See *Inchiesta sullo sviluppo della città* (An inquiry into the city's development) carried out by the "Gazzetta del Popolo" in May 1954 (cfr. D. Adorni, P. Soddu, *Una difficile ricostruzione*, cit., pp. 345 ss.).
- (17) The migrants came mostly from the south of Italy and, between 1951 to 1957, Turin grew from a population of 719,000 to 1,125,000, to become the third biggest 'southern' city of Italy, after Naples and Palermo (G. Fofi, *L'immigrazione meridionale a Torino*, Milano, Feltrinelli, 1964).
- (18) See D. Adorni, *Due passi avanti e uno indietro: la formazione di una cultura amministrativa nel Pci torinese (1945-1965)*, in *Alla ricerca della simmetria. Il Pci a Torino (1945/1991)*, ed. B. Maida, Torino, Rosenberg & Sellier, 2004, pp. 167-214. Note the longstanding administrative culture of the Turin Communist Party, which for a long time was entrenched in the interpretation of Turin as an "industrialist" city and the deep-rooted conviction of being able to govern the city by making the factory its base. This ideological conservatism was a serious encumbrance on the local communist leaders in their capacity to understand the causes and effects of the Italian "economic miracle" as well as the changes taking place in the profile of the Turin working class.

- (19) Amedeo Peyron was mayor of Turin from 1951 to 1962. For more on his work see D. Adorni, *Il ruolo dell'amministrazione locale*, in *Torino da capitale politica a capitale dell'industria. Il miracolo economico (1950-1970)*, ed.s F. Levi, S. Musso, Torino, Archivio storico della Città di Torino, 2004, pp. 145-158.
- (20) An example was *Italia 61*, the national exhibition that took place in Turin in 1961 to celebrate the first one hundred years of Italian unification.
- (21) Vittorio Valletta, ousted in 1945 from Fiat management by the National Liberation Committee's Commission for Purging, which tracked those having past connections with the Fascist regime, returned to the company in 1946 as managing director and chairman, an appointment he held until 1966. Valletta's Fiat tended to occupy as much "social space" as was possible, and finally incorporated "all the work, social and reproductive roles it succeeded in absorbing within its own structures" (G. Berta, S. Chiamparino, *Lavoro industriale e azione politica*, in "Sisifo", 1986, n. 7, p. 18).
- (22) P. Bairati, *Valletta*, Torino, Utet, 1983, p. 362.
- (23) A. Bagnasco, *Torino. Un profilo sociologico*, Torino, Einaudi, 1986. The "simplicity" of the city lay in a social stratification which reflected the organisational model of Fiat. The structure was based not on the market but on the synoptic-rational logic of the car giant, and politics was not independent of economic powers.
- (24) In response to a return of the cycle of workers' demands and protests and, more especially, given the end of the favourable economic cycle towards the middle of the 1960s, Fiat reformulated its industrial plan. Due to the crisis of *gigantismo*, Fiat favoured a progressive process of organisational and territorial decentralisation to the Council areas surrounding the city, which included a downsizing of production sites.
- (25) For a bibliography on Giovanni Anselmetti, Mayor of Turin from 1962 to 1964, and a clear example of the overlaying of public and private interests, see F. Borio, *Gian Carlo Anselmetti*, in *I Sindaci della libertà. Torino dal 1945 ad oggi*, Torino, Eda, 1980, pp. 167-173.
- (26) On the work of Giuseppe Grosso see A. Castagnoli, *Le istituzioni locali e le classi dirigenti dal dopoguerra alla metà degli anni Ottanta*, in *Storia di Torino*, vol. IX, cit., pp. 115 ss.
- (27) M. Olagnero, *Il terziario tra risorse e progetti. Indicazioni e materiali per uno schema interpretativo ed una periodizzazione. Il caso di Torino*, in F. Barbano, F. Garelli, N. Negro, M. Olagnero, *Strutture della trasformazione. Torino 1945-1975*, Torino, Cassa di Risparmio di Torino, 1980, p. 467.
- (28) P.P. D'Attorre, *Nemici per la pelle: sogno americano e mito sovietico nell'Italia contemporanea*, Milano, Angeli, 1991.
- (29) D.C. North, *Istituzioni, cambiamento istituzionale, evoluzione dell'economia*, Bologna, il Mulino, 1994 (original edition *Institutions, Institutional Change and Economic Performance*, Cambridge, Cambridge University Press, 1990).
- (30) G. Quazza, *Resistenza e storia d'Italia. Problemi e ipotesi di ricerca*, Milano, Feltrinelli, 1976; C. Pavone, *Una guerra civile. Saggio storico sulla moralità nella Resistenza*, Torino, Bollati Boringhieri, 1991.
- (31) G. De Luna, *L'insurrezione nella Resistenza italiana*, in *L'insurrezione in Piemonte*, Milano, Angeli, 1987, pp. 67-68.
- (32) G. Crainz, *Padania. Il mondo dei braccianti dall'Ottocento alla fuga delle campagne*, Roma, Donzelli, 1994.
- (33) *Amministratori di provincia. Consiglieri, Assessori e Sindaci bolognesi dal 1946 al 1970: riflessioni e materiali*, eds. L. Baldissara, S. Magagnoli, Bologna, Istituto storico provinciale della Resistenza, 1992.
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- (35) See the speech by Palmiro Togliatti in Reggio Emilia in 1946: P. Togliatti, *Ceto medio e Emilia rossa*, in *Politica nazionale e Emilia rossa*, ed. L. Arbizzani, Roma, Editori Riuniti, 1974.
- (36) Bologna and Modena were the most badly affected cities; L. Baldissara, *Per una città più bella e più grande. Il governo municipale di Bologna negli anni della Ricostruzione (1945-1956)*, Bologna, il Mulino, 1994; S. Magagnoli, *Tra dopoguerra e ricostruzione. Le politiche amministrative del comune di Castel Maggiore (1946-1956)*, Modena, Mucchi, 1994; G. Muzzioli, *Modena*, Roma-Bari, Laterza, 1993.
- (37) M. Legnani, *Guerra e governo delle risorse. Strategie economiche e soggetti sociali nell'Italia 1940-1943*, in "Annali della Fondazione Luigi Micheletti", *L'Italia in guerra*, 1990-1991, n. 5.
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- (40) *1ª Conferenza regionale del PCI*, Bologna 27-29 June 1959, Introduction and report by Guido Fanti, in *I comunisti in Emilia-Romagna*, cit., p. 133.
- (41) *Democrazia, cittadinanza e sviluppo economico. La costruzione del welfare state a Modena negli anni della Repubblica*, eds. S. Magagnoli, N.L. Sigman, P. Trionfini, Roma, Carocci, 2003.
- (42) Note that local institutions in Italy until 1972 could impose their own taxes; direct, indirect and property taxes. See S. Magagnoli, *La triangolazione della storia locale. Storia amministrativa, storia delle élites, storia urbana nell'Italia del Novecento*, in "Annali di storia moderna e contemporanea dell'Università Cattolica del Sacro Cuore di Milano", 1998, 4, pp. 537-592.

- (43) On political innovation see M. Cammelli, *L'innovazione tra centro e periferia. Il caso di Bologna*, Bologna, il Mulino, 2004.
- (44) Comitato Regionale Emilia-Romagna del PCI, *Linee per una politica di programmazione*, cit., p. 173.
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- (46) A definition of public good is found in L. Boggio, G. Seravalli, *Lo sviluppo economico. Fatti, teorie, politiche*, Bologna, il Mulino, pp. 323-324.
- (47) These are policies which act on enterprises' structural weaknesses produced by their size, making explicit the benefits of agglomeration economies.
- (48) Many efforts were made to promote the spread of technical-professional schools in the leading sectors of the regional economy, and to create new university "poles".
- (49) These are policies which act on external factors to enterprises, which impact positively on production processes.
- (50) S. Magagnoli, *Arcipelaghi industriali. Le aree industriali attrezzate in Italia*, Torino, Rosenberg & Sellier, 2007.
- (51) Corso Marconi 10 was the official address of Fiat for 43 years, from 1954 to 1997.

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## **SECTION 3**

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### **ACCOUNTING - FINANCES**



## CRITICAL ANALYSIS OF CURRENT NATIONAL ACCOUNTING REGULATIONS - COMPLIANCE OR NON-COMPLIANCE WITH EUROPEAN DIRECTIVES

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### Abstract:

*In the past five years, the basic national accounting rules (in addition to accounting law) bear the title phrase "in accordance with European Directives". In a careful analysis of both sets of regulations - National and European - may find that many concepts, definitions, structure, classification and details are entered in the national legislation of international regulations and not European ones. It is the international accounting rules, known by the acronym IAS/IFRS. In addition, in the meanwhile, the European Directives have been amended, but were not taken all the updates made in national regulations. In this study, we plan to analyze in a critical manner, the three sets of regulations - National, European and International - to highlight the compliance or non-compliance with EU rules and interpret option for the European version or internationally.*

**Key words:** The National Accounting Rules, European Directives, IAS/IFRS, The Compliance or Non-Compliance.

**JEL Classification:** M40, M41, M48

## INTRODUCTION

The accounting system of a country is influenced by economic, political, legal and cultural characterizes. Long time, the action of these factors resulted in the shaping of *accounting systems differ from country to country*. In our country, changing the political system led to *a reform of the accounting system*, meaning that the monist system was replaced with a two-tier system (double entry). We know that the accounting model that inspired us then was that of France, which in turn relying on the provisions of European Directives, in accounting. Later, with the globalization of economies and globalization of financial markets, there was *needed to harmonize accounting*.

The purpose and motivation of this paper aims to analyze the accounting rules currently existing international, European and national level, as trying to justify why we chose either nationally for the European version, either or both international version. The approach takes into account the critical analysis of the three sets of regulations for compliance or noncompliance highlight between them.

## GENERAL CONSIDERATIONS ON CURRENT ACCOUNTING RULES IN ROMANIA

*At European level*, the main focus and has had regard to the harmonization of European accounting regulations with International Financial Reporting Standards (IFRS). In this context, the European Directives have been modified under the influence of harmonizing international accounting. IAS/IFRS is mandatory for listed companies (only for consolidated accounts) of the Member States since the 2005 financial year. European Union strategy to turn to international accounting standards has been determined, first, the obligation imposed on European companies listed on international capital markets to publish financial statements in accordance with the requirements of these markets, and secondly, IAS/IFRS and U.S. being recognized (as a result of collaboration IASB - IOSCO in improving IAS/IFRS), the European Union considered this move towards a solution.

However, some Europeans have been quite reserved in this regard, saying that international accounting rules are Anglo-Saxon origin and reflect a particular way of doing business. French professor of accounting, Jacques Richard believes that the adoption of IFRS in Europe could be a *European accounting fiasco*, Europe no longer than a product of Anglo-Saxon accounting [Istrate, 2004]. However, the steps on line assimilation of international accounting standards at European level have been for some time (knowing that in 2002 it was decided the mandatory application of International Financial Reporting Standards (IFRS) by their firms operating in European Union countries [Règlement (CE) n°1606/2002]).

The objective of EU membership has led aspirant countries (including Romania) to adopt accounting rules that make possible to interpret relevant information on the companies by various users in Member States. At national level, as I mentioned before, immediately after 1990, the accounting system by which we were guided to a continental accounting system that the French considered it was one that "*provides the most useful features for a country like Romania with cultural traditions and their own political and economic modernization needs*". [Roberts, 2002]. The strategic objective pursued by Romania, the reform of the accounting system - fully adopting the French model - aimed at creating a harmonized company law compatible with European Union Directives. This accounting system was, on the one hand, sustained while on the other hand, fought by different specialists. Whatever criticisms have been adopted accounting system, it still constituted an important step in the development of accounting, given that it has moved from a tier system to a two-tier system, as directed by various user accounts and, in addition to appeal to a large extent to the settlement of *the accounting system on a conceptual*. We can say that the legal basis of accounting throughout this period (1991-1999) was composed of European Directives, such as the source of the accounting sector in CEE and thus also in France (country from which I "borrowed" the accounting model).

Year 1999 was the year of change in accounting. Anticipating the EU will be changes in the sense that it "will be at the negotiating table with the Anglo-Saxons" and the future is the international accounting standards (IAS/IFRS), and Romania, aspiring to integration among the Member States shall international standards soon enough. Consequently, the Ministry of Finance issued an Order (403/1999) replaced in 2001 with another of the same name, namely: OMF no. 94/2001 on "accounting regulations harmonized with the Fourth EEC and the International Accounting Standards". Given the name of the law, it is clear that a compromise was made in connection with the legal basis of our accounting system. On the one hand, have adopted international accounting standards, and on the other hand, have been preserved and European Directives. Moving towards the Anglo-Saxon accounting after 1999 was due to the importance began to have foreign investments in Romania. Then, the force required to international accounting regulatory body (IASB) exceeded the European Union Directives. This new reform of the Romanian accounting system has been supported by advisers from the United Kingdom, that a team of specialists from the Institute of Chartered Accountants of Scotland (ICAS), funded by the Know How Fund. Accounting domain specialists say that "regulatory factor in our country ahead of EU measures on standards IAS/IFRS, because in Romania there was a process begun under the guidance and funding requirement for British and international bodies for the grant financing (IMF and WB) and the widespread adoption of international standards as a prerequisite for creating an environment conducive to foreign direct investment and privatization" [Ionașcu, 2006].

Subsequently, the universal validity of the law (for both large enterprises and small and medium enterprises) was OMFP no. 1752 of 17/11/2005 *for approval of accounting regulations in accordance with EU Directives*. This was the basic regulation for all businesses. In other words, they created a mixture of accounting regulations (OMF no. OMF 94/2001 and 306/2002 - regulations applicable accounting by SMEs at the time), giving rise to the Order no. 1752/2005, with effect from January 1, 2006. In Official Gazette no. 1752/2005 to provide that legal persons at the balance sheet exceed two of three criteria (turnover - over 7.3 million, total assets - over 3.65 million euro, the average number of employees - over 50) preparers' financial statements consisting of: *balance sheet, income statement, statement of changes in equity, cash flow statement and notes*.

The same legislation stated that legal persons shall not exceed two of the criteria for simplified annual financial statements prepared, consisting of: *abbreviated balance sheet, income statement and notes*. In addition, they were included in the first category *and companies whose securities were admitted to trading on a regulated market*, whether or not the size criteria met.

Now, instead of the 1752 OMPF 11/17/2005 3055 OMPF is taken from 29.10.2009, with the same title that apply from 1 January 2010. The new law, although maintaining the format of annual financial statements of the old order, make a number of **changes** and **additions**.

The main **changes** concern a new accounting regulatory: monthly assessment of monetary items in foreign currencies and assets and liabilities whose settlement is made according to the rate of one currency and keeping of the accounts of the exchange differences arising; correction, the result of annual earnings, but significant errors, related to previous years; accounting treatment of trade discounts given / received and the addition of new accounts for these operations; accounting for finance leases, under the law, only certain entities may capacity a lessor; principle over form and materiality principle can be applied to all categories of entities.

The main **additions** to the accounting rules: supplementing and amending the General Plan of Accounts; listing of general purpose financial statement users; list of qualitative characteristics of financial statements; accounting method change treatment indicating the difference between the accounting method change and change in accounting estimate; exchange of assets accounting; explicit indication of items to be included in the cost of acquisition; evaluation rules, the financial statement; elements and factors that indicate the existence of depreciation of fixed assets; for recognition as intangible exploration and evaluation expenditure of mining resources; accounting for property, plant and purchased inventories, but supplies are being; change of destination assets held, according to their possession; representing the accounting treatment of profit sharing bonuses, granted under the law; benefits, as the company's own shares or equity instruments; unit contribution pension schemes and voluntary health insurance premiums, the public goods nature of heritage, customer loyalty programs, the costs of development of installations for providing utilities, as well as the joint venture accounts, review the terms of the duration of the depreciation of tangible assets, the accounting treatment of land and buildings, according to construction or acquisition, the financial capital of the concept, in preparing financial aspects of the entity's internal control etc.

Therefore, the amendments introduced provisions aimed to transpose Directive 2009/49/CE of the European Parliament and the Council of 18 June 2009 amending Directives 78/660/EEC and 83/349/EEC relating to the requirement of medium-sized companies and the information required to prepare consolidated accounts in national legislation.

## SHORT COMPARATIVE ANALYSIS OF REGULATORY NATIONAL, EUROPEAN AND INTERNATIONAL FINANCIAL REPORTING

In terms of form and content of financial statements, the problem is resolved in a manner somewhat different in the IAS/IFRS to the European Directives. If vision is the concept of international standards "deregulated financial statements", with a non-standard form, the European system is "the financial statements regulated" by European Directives, which propose schemes and standard models of financial statements. What is the option of Romania in this direction?

During all the 90 Romanian companies were reported to consist of accounting referential Accounting Law and Regulation on the implementation of its financial statements. International harmonization of accounting has led our country to take measures on normalization accounting.

Since 2000, the Romanian accounting system has followed a dual optical architecture and models on the financial statements, meaning that their preparation was based on different referential. As large firms (those meeting at least two of three criteria) pertained to international referential, imposed by national legislation, namely the Official Gazette no. 94/2001 on the harmonization of Romanian accounting regulations with the provisions of the Fourth Directive of

the EEC and the International Accounting Standards, and small and medium firms were still as referential accounting Law no. 82/1991 and its implementing regulation.

In 2002 he was issued a new regulation to micro, small and medium, respectively Gazette No 306/2002 for the approval of accounting regulations harmonized with European Directives Implementing Regulations repeal the Law on Accounting and brought changes in the patterns and structure financial statements for companies mentioned.

The latest phase of Romanian accounting reform in 2005 involved the issue of Gazette No 1752 for approval of accounting regulations with European directives which carried a mixture of the above regulations. In 2009 (29/10/2009) was issued in Official Gazette No. 3055, with the same title as the 1752 Official Gazette, make rules repealed but which, in our view, is also a mixture of European and international regulations (despite the fact that the name includes the phrase: "... *in accordance with European directives*").

Among the components of financial statements, **a balance sheet** has significant importance, through *the financial position* which he plays. Balance sheet presentation options are diverse, so we still try to take a look at various stages of the normalization.

**The international standardization** body (IASB) wants to ensure comparability of financial statements, as it seeks to reduce the number of options under the same rules, but not the aim to develop specific models and standardized presentation. IAS 1 "*Presentation of Financial Statements*" is the international standard dealing with issues concerning *the form and content of financial statements*. Standard, as revised, prescribes the basis for presenting financial statements so that comparability can be ensured both in time and space. In other words, the standard provides *general considerations, recommendations and minimum requirements* for the content of financial statements, without imposing any binding model presentation. Characterized by flexibility, this rule leaves firms free to choose a specific model adapted their balance, but nevertheless provides a minimum list of items that are to be included in this part of the financial statements. In addition, the financial statements should present true and fair view the financial position, financial performance and cash flows of an entity requires fair presentation and *additional information* when a specific compliance requirements in IFRS is insufficient to enable users to understand the impact of certain transactions and events on the financial position and business performance [IFRS, 2009].

As mentioned above, a format for the balance sheet (statement of financial position) is not prescribed by IAS 1 and any order of the items, only a list of them, as having separate criteria: the nature and liquidity of assets, the function of assets within the entity, such as the nature, size and demarcation of the debt while.

**At the European level** is reference of the Accounting Directives EEC Member States on the financial statements, namely the Fourth Council Directive of July 1978 for individual accounts and the Seventh Directive of June 1983 in respect of consolidated accounts. They apply *only to companies*, while the IASB *Conceptual Framework* applies to all enterprises, including those belonging to public sector. It is noted that the Fourth Directive of the EEC in July 1978 operating with a smaller number of consolidated accounting documents, namely: *the balance sheet, income statement and notes*. Optionally, other components can be prepared the financial statements. We recall that the Fourth Directive of the EEC as *the annual accounts* for kept the records summary.

In preparing the balance sheet of the Fourth Directive provides for two different schemes, which may be retained by Member States, a form of *account (as bilateral balance sheet)* and the other as *a list*. These models are available for individual accounts. For consolidated accounts at European level, Directive VII prescribes possible models.

**In our country**, architecture, models and structure changes in the financial statements have experienced several stages since the early 90s. In the first stage, with the approval of the Accounting Law no. 82/1991, the model which was inspired by our legislators at the French, so it's no wonder that **balance sheet** scheme followed a *patrimonial vision*, specific countries in continental Europe, the prevailing ownership. The balance sheet itself out in the Implementing Regulations of the Accounting Law, approved by H.G. 704/1993 a structure very similar to the model presented in the form of account in accordance with the Fourth Directive; the assets were

classified and structured as their destination and increasing liquidity, and liabilities, depending on the origin and increasing chargeability, verifiability balance sheet being ensured by the equality: active = passive (equity and debt).

After ten years, Romanian accounting enters a vast program of harmonization, scored from a legal perspective the Official Gazette no. 94/2001 on the harmonization of Romanian accounting regulations with the provisions of the Fourth Directive of the EEC and the International Accounting Standards. For the balance sheet, the legislation adopted vertical format (list), inspired more by the practice of Anglo-Saxon. This model is closer to the format recommended list of the Fourth Directive, pointing out the passage from the vision of a balance sheet asset to the economic vision. Companies that do not fall within the scope of the order that fell under other regulations, or in Official Gazette no. 306/2002 for approval of accounting regulations harmonized with European Directives and provided simplified balance sheet, all in list format.

Starting with 2006, is repealed two orders above mentioned, all enterprises having as referential Gazette No 1752/2005 for the approval of accounting regulations with European Directives [OMFP 1752, 2005]. At year-end 2009, new legislation makes his appearance, which repealed the latter which applies from 1 January 2010, Official Gazette No. 3055/2009 with the same title [OMFP 3055, 2009]. This last regulation (as previously) provides models for both individual accounts and consolidated accounts.

IAS 1 "*Presentation of Financial Statements*" requires that financial statements should be clearly separated from other information presented in the annual report, and each component within it will be clearly identified. In this context, with the balance sheet, *income* formation is of particular significance. **On the international stage normalization accounting** issues relating to the income statement are treated the same rule book, that IAS 1 "*Presentation of Financial Statements*". If the company's financial position is presented for balance sheet, aspects of *performance* are tracked through the income statement (IAS 1 "*Presentation of Financial Statements*", as amended, called the situation as a case of *comprehensive performance*). Revised International Standard prescribes the minimum list of items to be provided by this component of the financial statements. In addition, the rule states that for the fair presentation of financial performance, other elements may be added, as some can be aggregated. Factors that must be taken to the separate elements or income statement relates to *materiality* and *the nature and function* of various components of income and expenditure.

In the classification of expenditure and revenue presented in the income statement activities, there are only costs and revenues of operating and financial activities, any item as extraordinary income or expense will be presented either in the income statement or in notes to financial statements [IAS 1, 2009]. The resulting models account recommended by IAS 1 provides the classification of expenditure or by type or by their function or purpose.

**At European level**, referential underlying financial disclosures in the income statement includes the European Directives on accounting. For *the income statement*, the Fourth Directive of the EEC has provided four schemes that may be retained by Member States, namely as *a list or account*, with expenditure grouped by their *nature, origin or destination or their function* as. The flexibility that gives direct Fourth Directive is determined by cultural differences of the Member States and entities of different objectives. Thus, Anglo-Saxon culture in the book would like to present a income statement with their classification of expenses by function, as it would be preferred by investors. Instead, states "continental" rather opt for an income statement classification of expenditure by type of ground that could lead to some indicators of financial easier.

**The Romanian** who inspired normalizers 90 and immediately after that is maintained as a list, the classification of expenses by nature. In the first stage of the Romanian accounting reform, the income model was presented in the Implementing Regulations of the Accounting Law, being a single model for all firms, and later, to be separate accounting rules on business categories - large, small and medium and micro enterprises - the income statement formats, somewhat different.

At present, the mixture created as a result of issuing OMPF 1752/2005 and recently, the OMPF 3055/2009, the income model is presented in these regulations (Official Gazette 1752 / 2005



- Repealed) in two variants: a model simplified for individual businesses and a more detailed model for groups of companies.

Of course it would be useful in the comparison and other components of financial statements, namely: the state of equity, cash flow statement and statement of explanatory notes, but given the size of the present study, we confine ourselves to the most important components of reports financial: balance sheet and income statement.

### COMPLIANCE OF INTERPRETATIONS AT THE THREE SETS OF RULES

The comparative analysis between the international accounting rules, national, European and realize, of course, that national accounting regulations issued bearing the title phrase "in accordance with European Directives" have taken a series of concepts, principles and models of both standards International Financial Reporting and the accounting conceptual framework that precedes. Still trying to present a summary of the issues taken up in national accounting of international accounting standards, European Directives and changes in accounting that have been taken at national level.

Among *the issues taken from IAS/IFRS* and are not included in the EU Directives, we find: name of financial statements (in the direction still appears as the annual accounts); qualitative characteristics of accounting information; listing information disclosed by users of financial statements; definitions Structured financial statements: assets, liabilities, equity, revenues and expenses; the recognition and measurement issues taken stock of IAS 2 "Inventories"; issues on exchange of assets, review the term of depreciation of fixed assets, change their destination taken from IAS 16 "Plant and propriety" and IFRS 5 "Assets Held for Sale and Discontinued Operations"; extended over form principle in all categories of entities, factors that indicate the existence of impairment of fixed assets taken from IAS 36 "Impairment of Assets"; applying the financial concept capital, in preparing financial models and details of cash flow statements and statement of equity etc.

Then, there *are changes in the European Directives* have not been taken into national accounting rules, as: size thresholds for total assets (EUR 4.4 million) and the amount of turnover (EUR 8.8 million) to determine which companies are exempt from certain disclosure obligations (amendment introduced by Directive 2006/46/EC); confirmation detailing the issues of collective responsibility of directors, increasing the transparency of related party transactions and off-balance sheet transactions and improve information on applied corporate governance practices in companies; 24 September 2004, the Commission adopted a Communication entitled "Preventing and combating financial fraud and illegal practices of companies", announcing the Commission's initiatives on the Company's internal control and accountability of members of the ADMINISTRATIVE (amendment introduced by Directive 2006/46/EC); companies whose securities are admitted to trading on a regulated market shall include information disclosed in a statement on corporate governance with reference to corporate governance code by which the company or corporate governance code which the company may decide it voluntarily apply etc.

After this presentation, the question we seek the answer is: *Why accounting rules adopted at national level (corresponding to entities other than those applying IAS / IFRS) represents a mixture of European Directives and IAS / IFRS, although the title refers only to European Directives?* The answer can be given accurately, given the "quality" of issuers (legislators) in our country during the current. However, we believe that some changes were not taken from European Directives, as members of the Directive itself leaves some provisions, and takeovers of IAS/IFRS accounting regulations applicable to covered entities not subject to binding their anticipated probably applicable IFRS SME. It remains to be seen what will be their adoption situation in Romania, since July 2009 has issued International Financial Reporting Standard for Small and Medium Enterprises (SMEs IFRS).

## CONCLUSIONS

In conclusion, the Romanian accounting reform followed a route that went through the European Directives, by assimilating French accounting model, and later to guide the directions to Anglo-Saxon model in accounting. Currently we are dealing with a combination of accounting rules and their compatibility or not remains an issue that we face continue. Compatibility and comparability of national referential international one for our country, as is, for all developing countries, is nevertheless a guarantee of economic and financial integration in the world, so that efforts are not neglected. We should mention that too frequent changes certainly affect the stability of the rules and accounting practices, which will take effect on accounting objectives. Devising a national accounting system should take into account geography of international accounting and private interests of various countries, a process complex politico-strategic. The solution might result in finding a balance between the components of the report: national - European - International. Welcome here is a great teacher advocacy [Ristea, 2000] for consistency: *"No accounting system is very good and all are infinitely variable. Those who have courage, humor and energy to take, to build and operate an accounting system, have only one chance: «to choose it and not allow it to change too often».* Also, the system chosen should be neither too flexible nor too stiff, and the respite between the two extremes should be encouraged in decision-making professional reasoning in detail the accounting treatment of economic transactions and events". In summary, transformations and changes in the Romanian accounting followed (and still is) a route that was aimed, firstly, the harmonization with the EU accounting directives and International Accounting Standards (previously) and, subsequently, compliance with European directives (present) and International Financial Reporting Standards (future) [Săcărin, 2006].

It appears, therefore, that the goal of normalization and harmonization of accounting in a market economy is the organization of the market operation rules of accounting information in such a way that will lead to *optimizing financial communication*. In fact, *accounting has become normalized* as a practical necessity for a certain stage of economic and social development, aiming to coordinate work on the basis of uniform accounting and to achieve a compromise between producers and recipients of financial statements. To some extent, it provides social validation of accounting information, also contributed to the recognition of accounting as *a means of communication*.

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## CORPORATE GOVERNANCE AND BANK PERFORMANCE IN ROMANIAN BANKING SYSTEM

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### Abstract:

*The article aims to provide an analysis of Romanian bank performance in the context of corporate governance. In order to complete the research the authors used financial indicators such as ROA, ROE and others for 2003-2009 period and each financial institute's status regarding good governance practices. The study consists in establishing an econometric correlation between the appliance of sound corporate governance principles and economic performance. We consider the comparative analysis of Romanian banking system performance a secondary result of the research.*

**Keywords:** bank performance, corporate governance, Romanian banking system

**JEL Classification:** G21

### INTRODUCTORY NOTIONS

The main supplier of financial services in Eastern European countries is considered to be the banking system (European Commission [EC], 2004). This fact is possible due to the underdevelopment of the capital markets and national culture. Romania is no different; the economy bears the burden of over 40 years of communism and its centralized system.

The goal of this research is to study bank performance in Romanian banking system in the context of corporate governance. Profitability can be considered an important indicator of a financial system's stability and the quality of bank management. A healthy economy it's based on profitable banks adequately capitalized. [Hennie van Greuning, Sonja Brajovic Bratanovic Analyzing Banking Risk]

Banking activity has a number of features which differentiate it from enterprises which operate in other areas of business. The most important characteristic of financial institutions is the extreme volatility of the majority of services and products, fact that determines economists to consider very important the link between profitability and risk behavior. The specific activity of banks, credits, implies prudential risk attitude. Like any commercial enterprise financial institutions pursue financial profitability; in order to obtain a high level of remuneration bank executives must manage specific risks. Literature review classifies financial risks in three categories credit risk, operational risk and market risk.

Given the special nature of banking, bank performance is a term which includes diagnosis of profitability as well as diagnosis of risk.

Nowadays, during the economic crises authorities pay even higher attention to prudential regulation and the adequate capital. Economists have studied for over 30 years how corporate governance mechanisms influence risk decision.

The bank governance process is a very complex activity which implies a high degree of efficiency. For a better understanding of the bank management we

## CORPORATE GOVERNANCE PRINCIPLES IN BANKING ORGANIZATION

The reason for which banking institutions are subject of analysis for corporate governance is the fact that banks are corporations and function in the same manner as societies which activate in different areas of business. Banks have

- shareholders,
- debt holders,
- boards of directors,
- competitors

Banking corporations are characterized by a number of special features such as opaqueness and high regulation. These features have strong impact on bank management strategies and on corporate governance codes.

**Table 1. Corporate governance in banking**

Table 1: Corporate governance in banking			
Key players	Responsibility for risk management	Importance	
		Policy level	Operational level
Systemic			
Legal and Regulatory Authorities	Optimize	Critical	n/a
Bank supervision	Monitor	Indirect monitoring	Indirect
Institutional			
Shareholders	Appoint key players	Indirect	Indirect
Board of directors	Set policy	Critical implementation	Critical
Executive management	Test compliance with board policies and provide assurance regarding corporate governance, control systems and risk management process	Indirect compliance	
Internal audit	Evaluate	Indirect	
External audit	Evaluate and express opinion	Indirect	
Consumer			
Public	Act responsibly	n/a	Indirect

Source: Hennie van Greuning, Sonja Brajovic Bratanovic Analyzing Banking Risk

“Corporate governance relates to the manner in which the business of the bank is governed. It is defined by a set of relationships between the bank’s management, its board, its shareholders, and other stakeholders.

This includes:

- setting corporate objectives and a bank’s risk profile,
- aligning corporate activities and behaviors with the expectation that management will operate the bank in a safe and sound manner,
- running day-to-day operations within an established risk profile and in compliance with applicable laws and regulations, while protecting the interests of depositors and other stakeholders”.[Hennie van Greuning, Sonja Brajovic Bratanovic Analyzing Banking Risk]

Corporate governance in transition economies is of even greater importance given the dominant position of banks as suppliers of credit. In spite of this aspect, little attentions was paid to

the research of corporate governance in less developed economies. Economist Ross Levine analyzed the appliance of corporate governance in banking in developed economies such as the United States and Western Europe.

This situation can be explained through difficult access at actual databases and the lack of detailed mandatory reports.

In this article we try to fill this gap and analyze corporate governance in Romanian banking system in the context of corporate governance.

The fact that the Romanian banking system has a number of weak points such as a high degree of foreign exposure makes our study of even greater importance. During the present crisis the government tried to minimize the possibility of withdrawing foreign capital and imposed restrictive regulatory measures.

## BANK PROFITABILITY

Bank profitability lies at the base of a healthy economic system; it usually constitutes the most important modality of capital formation. A sound financial system is based on profitable and adequate capitalized banks. Profitability can be considered a quality management index. The traditional role of banks, credit supplier, has suffered important mutations, in the era of globalization, the banking sector is considered to be both consolidating and diversifying.

The diversifications of services lead to increase volatility and changes in bank income structure. For example incomes from capital investments and commissions represent more than 50% of total income.

As we noted above, banks are special institutions highly regulated and opaque, reason for which their profitability is strongly affected by monetary policy decisions. The government, by implementing different taxations for each category of income, determines bank managers to invest in the most rentable actives and/or activities.

Many factors can influence profitability; the most actual one is competition: many banks have invested in informational technologies, fact that influenced their profitability indexes.

As we can see in table 1 corporate governance must address a large range of activities within a financial institution.

As we stated above profitability represents the main purpose of any business, banking corporations are no exception. Its values are the reflection of good both operational and political strategies.

The most used profitability indexes are ROA and ROE.

ROA measures the profitability of a firm's assets.

$$ROA = \frac{Net\_income}{Total\_assets}$$

ROE measures the net income returned as a percentage of shareholders equity, more precisely much profit a company generates with the money shareholders have invested.

$$ROE = \frac{Net\_income}{Shareholder's\_Equity}$$

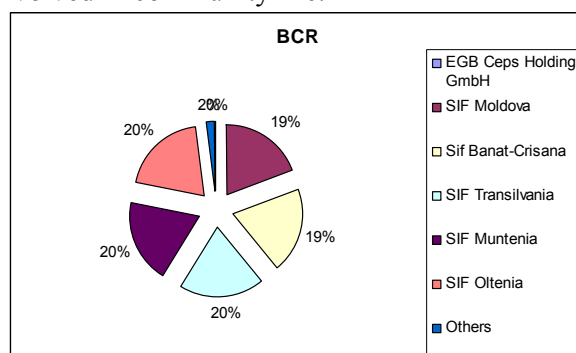
## CHARACTERISTICS OF SAMPLE BANKS

### *Romanian Commercial Bank*

Romanian Commercial Bank was founded in 1990 having over 5000 employees; nowadays it's the largest Romanian bank and the most responsible one according to international ratings.

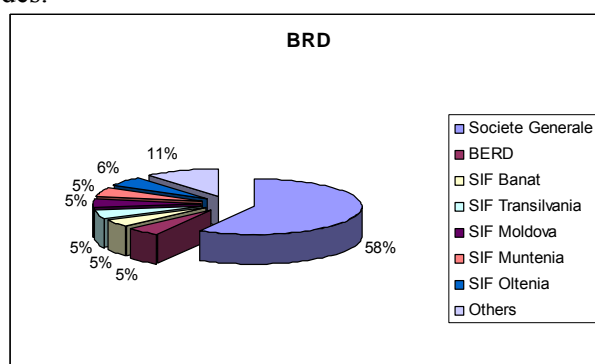
Braun Partners Network awarded the Romanian Commercial Bank for the best short corporate social responsibility report in 2009; the prize was based on 28 indexes GRI (Global

Reporting Initiative). The jury considered that BCR has transparent corporate social responsibility practices and is actively involved in community life.



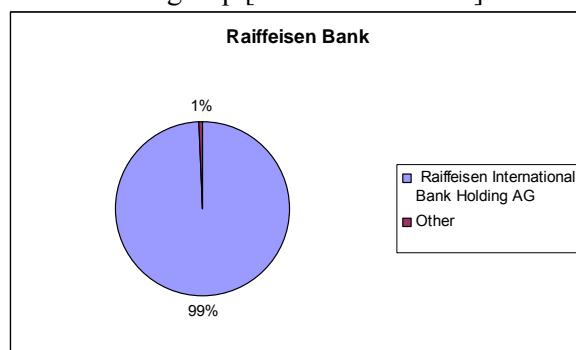
### *BRD- Groupe Société Générale*

BRD - Groupe Société Générale is the second bank in terms of banking assets in Romania. This financial institution is very involved in corporate social responsibility projects and uses corporate governance codes.



### *Raiffeisen Bank Romania*

Raiffeisen Bank Romania is one of the largest banks that operate in Romania; it has resulted from the merger in June 2002 of the two banks held by Raiffeisen Group on the local market: Raiffeisenbank (Romania) S.A., established in 1998 as a subsidiary of RZB Austria, and Banca Agricol' Raiffeisen S.A., established in April 2001 after the takeover of the Romanian state-owned Banca Agricol' by the Austrian group.[[www.raiffeisen.ro](http://www.raiffeisen.ro)]



### *Emporiki Bank Romania*

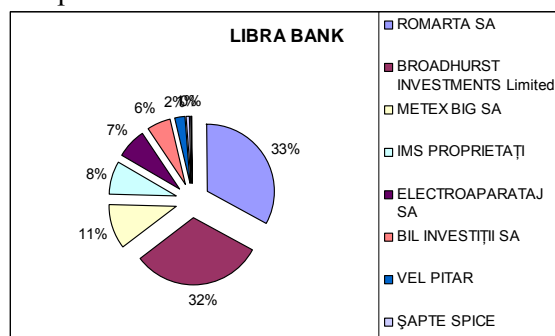
Emporiki Bank entered on the Romanian market in 1996, owning 99,54 of Emporiki Bank Romania. Starting with august 2006 Credit Agricole Group is the main shareholder of Emporiki Bank with 82,48% auction share.

Even though the most important shareholder of Emporiki Bank is a very well known financial institution for corporate governance practices, we don't consider that the Emporiki Bank

Romania 2009 financial report provides enough corporate governance information. [[http://www.emporiki.ro/FinancialStatements/IFRS%20Finacial%20Statements\\_31.12.2009.pdf](http://www.emporiki.ro/FinancialStatements/IFRS%20Finacial%20Statements_31.12.2009.pdf)]

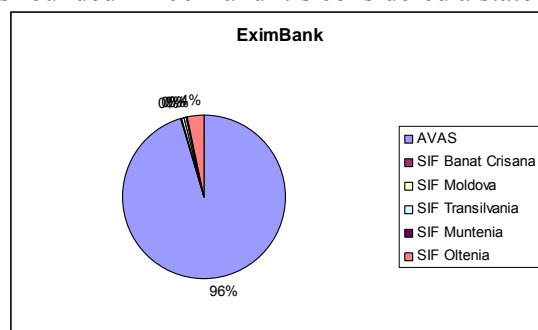
### *Libra bank*

Libra Bank was founded in 1996 and from mai 2003 is member of New Century Holding; it is considered to be the “liberal profession bank”.



### *Eximbank*

EximBank S.A. was founded in 1992 and it's considered a state owned bank.



## DESCRIPTIVE STATISTICS

For the econometric study we considered two categories of financial institutions: that implement strong governance codes and those that play less attention to corporate social responsibility. In order to obtain the classification we analyzed each bank's financial reports, corporate governance codes and international awards. We used the financial results published on Bankscope database for 2005-2009 periods.

The sample includes both well known banks as well as banks with small market share. We can draw the conclusion that larger banks had the means for investing more in corporate governance, meanwhile high costs act as an impediment in implementing corporate governance in banks that are not characterized by large market share.

<i>Sound corporate governance practices</i>	<i>Less developed corporate governance mechanisms</i>
Romanian Commercial Bank	Emporiki Bank Romania
BRD- Groupe Société Générale	Eximbank



Raiffeisen Bank Romania	Libra bank
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**NIM \* CG****NIM**

CG	Mean	N	Std. Deviation
weak corporate govnrance	6,1660	15	2,34948
good corporate governance	6,3953	15	1,56507
Total	6,2807	30	1,96493

**NIM**

Year	Mean	N	Std. Deviation
2005	7,1717	6	3,10600
2006	6,0867	6	2,66570
2007	5,9333	6	1,01882
2008	6,3450	6	,89261
2009	5,8667	6	1,56600
Total	6,2807	30	1,96493

**ROAA \* CG****ROAA**

CG	Mean	N	Std. Deviation
weak corporate govnrance	-1,8687	15	5,21302
good corporate governance	2,3280	15	,75368
Total	,2297	30	4,23654

**ROAE**

Year	Mean	N	Std. Deviation
2005	4,2900	6	28,09825
2006	11,3617	6	16,46002
2007	10,6717	6	18,13259
2008	9,3633	6	30,47583
2009	4,3700	6	34,60123
Total	8,0113	30	24,81636

**ROAE \* CG****ROAE**

CG	Mean	N	Std. Deviation
weak corporate govnrance	-9,5607	15	22,93698
good corporate governance	25,5833	15	9,37695
Total	8,0113	30	24,81636

The statistical correlations reveals the fact that our sample banks which have implemented corporate governance principles have better financial results than the ones which are less preoccupied with this aspect of the activity.

**Report**

ROAA

Year	Mean	N	Std. Deviation
2005	-1,1933	6	7,17980
2006	,7783	6	2,35500
2007	1,0267	6	2,13523
2008	,4033	6	3,60709
2009	,1333	6	5,08266
Total	,2297	30	4,23654

**Correlations**

	ROAE	ROAA	NIM	CG
ROAE Pearson Correlation	1	,904**	-,062	,720**
Sig. (2-tailed)		,000	,743	,000
N	30	30	30	30
ROAA Pearson Correlation	,904**	1	-,271	,504**
Sig. (2-tailed)	,000		,148	,005
N	30	30	30	30
NIM Pearson Correlation	-,062	-,271	1	,059
Sig. (2-tailed)	,743	,148		,755
N	30	30	30	30
CG Pearson Correlation	,720**	,504**	,059	1
Sig. (2-tailed)	,000	,005	,755	
N	30	30	30	30

\*\*.Correlation is significant at the 0.01 level (2-tailed).

**CONCLUDING REMARKS**

As we can see above there are significant differences between the financial results of banks that have implemented sound principles of corporate governance and the rest of the sample used in the present research; therefore we encourage banking activism regarding social responsibility. We consider a vicious circle between the appliance of corporate governance and profitability: high cost of good management constitute an impediment for smaller banks and the lack of sound corporate governance principles may lead to lower profitability.

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## ACCOUNTING TREATMENT FOR R&D ACTIVITIES IN ACCORDANCE WITH IFRS AND ROMANIAN LEGISLATION

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### Abstract:

*In this paper, we will consider the accounting treatment of research and development expenses as operating expenses or intangible assets. The treatment of R&D activities has been a subject of particular controversy internationally. While there is general (but not universal) agreement that research does not give rise to intangible values that can be recognized as assets, there still a disagreement as to whether development may do so subject of to certain criteria. IFRS/IAS does not contain any specific regulations for the accounting treatment of R&D activities. Instead, the general regulations relating to reporting intangible assets are to be applied in this case. The ways of reporting intangible assets are dealt with in particular in the following standards: IAS 38 Intangible assets, IFRS 3 Business combinations, IAS 36 Impairment of assets.*

**Keywords:** intangible assets, accounting treatment, recognition, amortization, IFRS

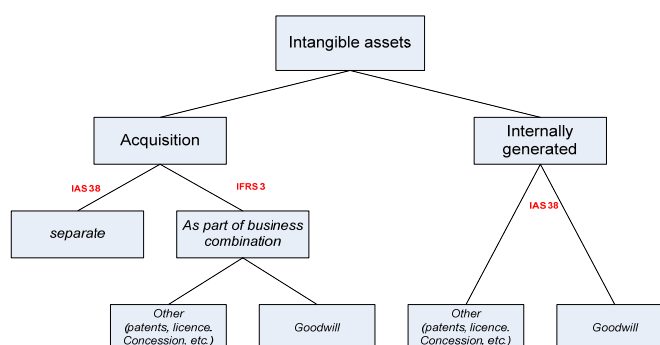
**JEL Classification:** M49

## INTRODUCTION

IFRS/IAS does not contain any specific rules for the accounting treatment of R&D activities. The general regulations relating to reporting intangible assets can be applied in this case. The ways of reporting intangible assets are treated in the following standards: IAS 38 "Intangible assets", IFRS 3 "Business combinations", IAS 36 "Impairment of assets". When reporting them in balance sheets – according to general accounting principles, a clear distinction has to be made between recognition of the asset and its measurement. In approaching the subject, the aim is to establish whether an item can or must be included on the asset side of the balance sheet or as equity or debt on the liability side or rather has to be shown as an expense or income in the profit and loss statement. This has to be determined independently of the allocation of a value to the item. This allocation then follows in a separate step, the measurement.

## RECOGNITION OF INTANGIBLE ASSETS ACCORDING TO IAS/IFRS

The conditions for recognition of intangible assets are presented by IAS 38. In addition, IAS 38 and IFRS 3 include regulations which deal with the application of recognition criteria in certain cases (Alexander D., 2009). The standards make a clear distinction between internally generated and the acquisition of intangible assets. In the case of acquisition, there is a supplementary distinction between the case of separate acquisition and acquisition in the context of a business combination. Finally IAS 38 includes prohibitions on recognition certain intangible assets (Fig. no. 1).



**Figure 1. Recognition of intangible assets under IFRS/IAS**

Recognition of an intangible asset in accordance with IAS 38 assumes that the item meets the definition of an intangible asset and satisfies the recognition criteria in accordance with IAS 38.

The term “intangible asset” is defined in IAS 38 as “***an identifiable nonmonetary asset without physical substance***”. Because of the reference to assets, the definition of that term, which is similarly included in IAS 38, also has to be taken into consideration: it is “a resource which is controlled by an entity as a result of past events and from which economic benefits are expected to flow in future”.

The existence of an intangible asset therefore supposes – apart from its lack of substance and its non-monetary nature – the possibility of identifying and controlling it and also the expected future economic benefit.

The recognition criteria which have to be met, in addition to the existence of an intangible asset as a precondition for recognizing it on the asset side of the balance sheet in accordance with IAS 38, aim to show that:

- it is probable that the expected future economic benefits that are attributable to the asset will flow to the entity; and
- the cost of acquiring or producing the asset can be measured reliably.

This being said the recognition of an intangible asset presupposes the existence of the following criteria: identifiability, non-monetary nature, lack of substance, control, future economic benefits, probability of expected future economic benefit flow, reliable measurability (Moser, 2010).

**Identifiability** aims to show that an intangible asset has to be distinguishable from goodwill in the form of a business or company value. In accordance with IAS 38 this is true in two cases: when the asset is “*separable*” and when the asset arises “*from contractual or other legal rights*”.

**The criterion non-monetary nature** is only applied indirectly, when IAS 38 defines the expression “monetary assets”. According to this definition, monetary assets are “money held and assets to be received in fixed or determinable amounts of money”.

**The element of control** of an intangible asset is present if “the entity has the power to obtain the future economic benefits ... and to restrict the access of others to those benefits”. This precondition does not create any problems in the case of legally enforceable claims. Control may however also exist without legal enforceability. This precondition is important for assessing the relevance of an entity’s values connected to human resources or those of a client portfolio, which is not based on contractual relations.

With regard to the **future economic benefits**, IAS 38 explains that this can include: “revenue from the sale of products or services, cost savings, or other benefits resulting from the use of the entity”.

The assessment of the **degree of certainty attached to the flow of future economic benefits** has to be based on “reasonable and acceptable” assumptions that represent the “management’s best estimate”. External rather than internal evidence is of greater importance in this connection.

The assessment of the criterion of **reliable measurability** depends above all on whether the intangible asset was acquired separately or in the context of a business combination or was self-created. This will be expanded upon in the following.

The definition and recognition criteria for intangible assets are presented in Fig. no. 2.

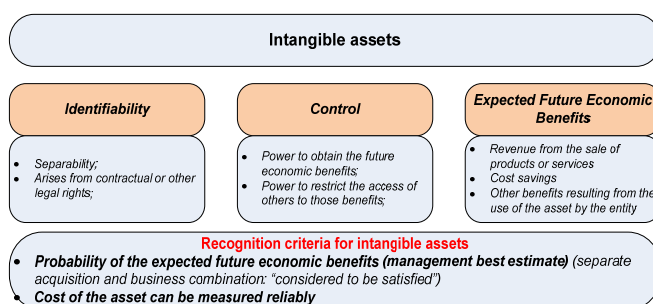


Figure 2. Recognition of an intangible assets - details

## SPECIFICATION OF RECOGNITION CRITERIA IN CERTAIN CASES

The particular cases (Moser, 2010) we will refer next are: internally generated intangible assets, separate acquisition of intangible assets and acquisition of intangible assets through business combination.

In the case of internally generated intangible assets IAS 38 recognizes difficulties in assessing whether the recognition criteria actually exist when: identifying whether and when there is an identifiable asset that will generate expected future economic benefits and

## RELIABLY DETERMINING THE COST OF THE ASSET.

This will become particularly clear when we look at internally created products or the development of a client portfolio. This can cause enormous expenses, with no guarantee that the measures taken will be successful or that it will be possible to attribute the success achieved to the measures taken. The same is of course also the case with the development of technologies.

To assess operationally whether the recognition criteria have been met, IAS 38 classifies the asset generation process into a research phase and a development phase and lays down special regulations or criteria for them. The definitions of the terms "research" and "development" in accordance with IAS 38 and the examples which IAS 38 quotes for research activities and for development activities are presented in Fig. no. 3.

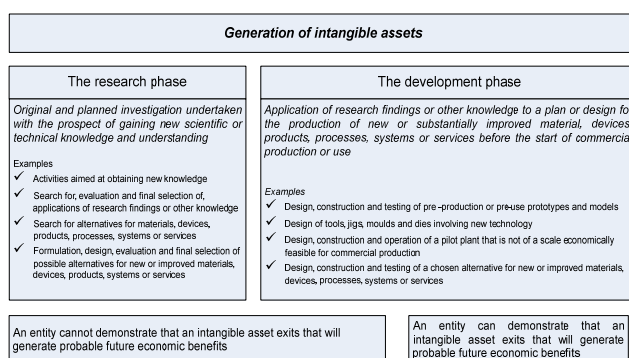
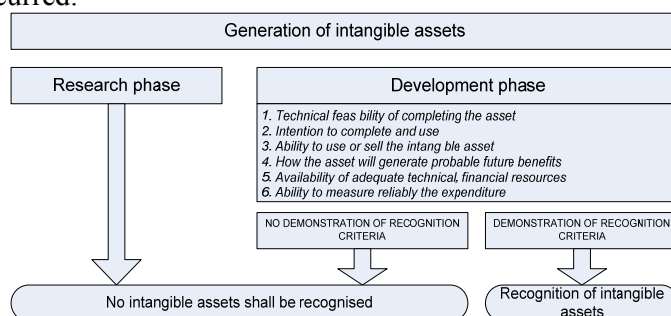


Figure 3. Assessment of the recognition criteria regarding internally generated intangible assets

The compilation process on which IAS 38 is based is designed – through the reference to research and development – especially for the development of technologies. Since this model does not necessarily suit the generation of all other categories of intangible assets, the expressions “research phase” and “development phase” in accordance with IAS 38 have a broader meaning and may, where suitable, be applied to other types of intangible assets. As the question of the recognition of self-generated R&D activities is the subject of our examination here, the following remarks are restricted to a consideration of the development of technologies.

In a project’s research phase the recognition of an intangible asset is not permitted. IAS 38 states that no proof of the existence of an intangible asset capable of generating probable future economic benefits can be demonstrated. Research expenditure therefore has to be treated as an expense when it is incurred.



**Figure 4. Recognition criteria regarding internally generated intangible assets**

In a project’s development phase, on the other hand, the recognition of an intangible asset is mandatory if the entity can prove the fulfillments of all 6 further criteria listed in Fig. 4. Otherwise, development expenditure has to be treated as an expense when it is incurred. First five criteria validate the recognition criterion “degree of certainty attached to the flow of future economic benefits”, whereas the 6<sup>th</sup> criteria merely transfer the recognition criterion of “reliable valuability” to the development phase of intangible assets. Comments on criteria first five criteria are summarized in Fig. 5.

<b>1. Technical feasibility of completing the asset</b>
✓ Demonstration of prototype, models, version of software
✓ Determination of the date the intangible asset first meets the recognition criteria
<b>2. Intention to complete and use</b>
✓ Criteria is not necessary: General Principle
<b>3. Ability to use or sell the intangible asset</b>
✓ General principle: Nobody will develop without expectation of use or sell
✓ Relevant if an official approval is necessary (e.g. Drug approval of EMEA or FDA)
✓ More relevant: Intention to use/sell
<b>4. How the asset will generate probable future benefits</b>
✓ More than the recognition criteria "Probability of the expected future economic benefits.
✓ Application of principles in IAS 36 (Impairment Test): Value in Use
✓ Internal use: Demonstrating using internal accounting (Controlling)
✓ External sell: Demonstrating on basis of an existing market for products or services
<b>5. Availability of adequate technical, financial resources</b>
✓ Business plan demonstrating the technical, financial and other resources

**Figure 5. Summary of criteria**

Overall, it can be stated that the criteria illustrated offer to the accountant considerable scope for interpretation and discretion. When assessing the reporting of patents issued to the entity itself, it is necessary to take into consideration the fact that results of R&D activity are technologies, which can, but do not have to, be protected by patents. Consequently it is worth assessing the criteria mentioned for R&D activities irrespective of whether they have been patented or not. A separate examination of patents is therefore not necessary.

For research-intensive entities, the balance sheet treatment of development expenditure can be of considerable importance. This can include a proportionate amount of administrative expenses. In order to contain this, it is particularly important to recognize the point in time at which

development expenditure has to be accounted for and therefore listed separately without a specific examination of the individual case in question, in other words more or less on an automatic basis.

The point in time for the initial recognition of development expenditure is – as just explained – typically determined by proof of the technical feasibility of the intangible asset's completion. The R&D process can help to provide this proof. The process is often characterized by various phases, whose successful completion is documented by milestones. It therefore has to be decided whether the necessary proof of technical feasibility can be linked to existing milestones. If this cannot be done, the possibility of modifying processes, including the milestone model, should be examined.

In the case of *separate Acquisition of Intangible Assets*, IAS 38 assumes that in the case of the separate acquisition of an intangible asset, the recognition criterion of the probability of expected future economic benefit flow is always satisfied, while that of reliable valuation is normally met. By way of justification of the first recognition criterion, the regulation points out that the price paid on acquisition normally reflects the expectations of the probability that the prospective future benefit will flow. The second criterion results from acquisition costs actually incurred. There are no special considerations with regard to R&D activities.

In the case of *acquisition of Intangible Assets through Business Combinations*, IFRS 3 specifies that business combinations should be accounted for by applying the purchase method. The business combination is seen from the acquirer's point of view: the acquirer "purchases net assets and recognizes the assets acquired and liabilities and contingent liabilities". In doing so, all the identifiable assets, liabilities and contingent liabilities of the acquired entity that satisfy the recognition criteria are included, irrespective of whether they were applied by the acquired entity before the business combination. These assets, liabilities and contingent liabilities are accounted for by their fair value at the acquisition date. This results in the closing balance of the acquired entity being transformed into a revaluation balance (fair value status). Goodwill applies in cases where the acquisition costs paid by the acquiring entity exceed the net assets in the revaluation balance of the acquired entity.

The recognition criteria laid down in IAS 38 require special treatment in the case of business combinations:

- the probability that expected future economic benefits will flow is always considered to be satisfied.
- with regard to the reliable measurement of acquisition or manufacturing costs, IAS 38 assumes that the fair value of intangible assets can "normally be measured with sufficient reliability"; in the case of intangible assets with a finite useful life, there is a rebuttable assumption that its fair value can be measured reliably.

In justifying the satisfaction of the first recognition criterion, IAS 38 states that the fair value of an intangible asset reflects "market expectations about the probability that the future economic benefits .... will flow". IAS 38 states that the uncertainty in measuring the asset's fair value arising out of a range of possible outcomes is included in the measurement of fair value rather than demonstrating an inability to measure fair value reliably. To that effect, an intangible asset can only be accounted for separately in accordance with IFRS 3 if:

- the asset corresponds to the definition of an intangible asset defined in IAS 38 – IFRS 3 explains this and also the identifiability criteria once again – and
- the fair value can be reliably measured, which – as just explained – is normally the case in accordance with IAS 38

It can therefore be stated that, in the case of business combinations, in recognizing intangible assets it is only the identifiability criterion that has to be examined in addition to the definition attributes, particularly that of control. Basically, no particular difficulties are expected in the assessment of recognition criteria for patents acquired through business combinations.

In-Process Research and Development Projects (IP R&D) the requirements listed in section "Recognition Criteria for Intangible Assets in Business Combinations" for the recognition of

intangible assets also have to be applied to in-process research and development projects as part of a business combination.

This is the case irrespective of how they were treated by the acquired entity prior to the business combination. A decision regarding their compulsory recognition therefore depends on the definition attributes of intangible assets and the reliable valuation of the fair value.

If the acquirer incurs research and development expense after the acquisition of a research and development project, this has to be treated in accordance with the principles of the recognition of self-generated intangible assets.

## **PROHIBITION OF THE RECOGNITION OF INTANGIBLE ASSETS**

Prohibitions of the recognition of intangible assets arise from the application of the IAS 38 recognition criteria. In this context, IAS 38 includes a number of examples of prohibitions of recognition. These include in particular internally generated goodwill, internally generated brands, mastheads, publishing titles, customer lists and items similar in substance, including subsequent expenditures for such items, start-up costs, expenditure on training activities, expenditure on advertising and promotional activities, expenditure on relocating or reorganising part or all of an entity.

## **MEASUREMENT OF INTANGIBLE ASSETS**

When we are measuring assets and liabilities, there has to be made a distinction between the measurement at the time of the initial recognition, and the measurement in subsequent years.

IAS 38 states the general principle that "an intangible asset shall be measured initially at cost". This is defined as "the amount of cash or cash equivalents paid or the fair value of other consideration given to acquire an asset at the time of its acquisition or construction"

Internally generated intangible assets are measured by their production costs. As to their accrual, IAS 38 refers to the date on which the recognition criteria are met. Production costs amount to the total costs incurred from that date on. Costs recorded as expenses prior to that date may not be recognized as an asset at a later date. In accordance with IAS 38, the construction costs of intangible assets comprise "all directly attributable costs necessary to create, produce and prepare the asset to be capable of operating in the manner intended by the management".

IAS 38 lists the individual items attributable to production costs; IAS 38 lists items which are not cost components. The components listed do, however, include not only "directly attributable costs", i.e. individual costs, but also production-related general expenses.

Separately acquired intangible assets are to be valued at their cost of acquisition. This comprises the purchase price and other supplementary acquisition costs (e.g. import duties, non-refundable purchase taxes) after deduction of trade discounts, rebates and allowances. The inclusion of interest resulting from the utilisation of a deferred payment period is in line with the principles of IAS 23.

Supplementary acquisition costs include above all "costs directly attributable to preparing the asset for its intended use". As examples of this, IAS 38 lists costs of employment benefits, professional fees, costs of testing whether the asset is functioning properly.

The acquisition process is completed when the asset is in the condition necessary for it to be capable of operating in the manner intended by the management. Costs incurred after this date may not therefore be included in the acquisition costs.

Examples of expenditures which are not part of the cost of an intangible asset are the costs of introducing a new product, administrative and other general overhead expenses, and start-up losses.

Intangible assets are to be measured initially at cost. A business combination is, however, characterized by the fact that costs are incurred for the combination itself but not for the individual assets, liabilities or contingent liabilities acquired. IFRS 3 consequently states that these items – and



therefore also intangible assets – are to be measured at their fair value, provided that they have to be included at all in accordance with the observations under IAS 38 goes on to remark that the acquisition costs of intangible assets amount to their respective fair value.

The expression “fair value” is defined as “the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm’s length transaction”. In determining the fair value, it is the perspective of a hypothetical and not that of an actual acquirer: the intention for use of the actual acquirer is subordinate to the opinion of the hypothetical acquirer. The fair value reflects “the knowledge and the expectations of the market participants”.

IFRS 3 expands on measures to be treated as fair value. In the case of intangible assets, reference is firstly made to an active market, whereas IAS 38 assumes that such a market does not normally exist for intangible assets. In accordance with IAS 38, the current bid price is the appropriate market price or – if this is not available – the price of the most recent similar transaction may provide a basis, provided that there has not been any significant change in economic circumstances in the meantime.

If no active market exists, the fair value is determined on a basis which reflects the amounts the acquirer would have paid for the assets in arm’s length transactions between knowledgeable, willing and independent parties whereby “recent transactions ... for similar assets have to be taken into consideration”. IAS 38, finally, refers to multipliers, the relief-from-royalty method and the discounting of future net cash flows.

## **MEASUREMENT AFTER RECOGNITION**

IAS 38 allows in principle two possible accounting and measurement methods for measurement after recognition (Alexander D. , 2010).

- the cost model and
- the revaluation model.

In applying either model, impairment losses and amortization charges have, if necessary, to be taken into consideration. This results in the carrying amount which IAS 38 defines as “the amount at which an asset is recognized in the balance sheet after deducting any accumulated amortization and accumulated impairment losses thereon”.

According to the cost model, intangible assets should be carried at cost less any accumulated amortization and accumulated impairment losses.

The revaluation model assumes that the asset will be carried forward at the revalued amount. This is the result of the fair value at the date of revaluation less any accumulated amortization and accumulated impairment losses, where fair value is to be determined by reference to an active market.

In view of the requirements which have to be met for the existence of an active market there are considerable restrictions on the application of the revaluation model. This is what IAS 38 also assumes: “under normal circumstances ..... there is no active market for an intangible asset”, patents, brands and trade marks, inter alia, being listed as examples of these.

The application of the revaluation model also requires that this is in principle also applied to all other assets “of a similar nature and use within an entity”. IAS 38 also describes such a grouping of assets as a class of intangible assets.

Revaluations have to be carried out regularly, although an annual review is not compulsory. Rather, the guiding principle is that “the carrying amount of the asset does not differ materially from its fair value”.

## **AMORTISATION**

In the measurement after recognition of intangible assets, IAS 38 distinguishes between those having a finite useful life and those having an indefinite one. In the case of a finite useful life,

the asset has to be amortized (systematically), but not in the other case. Under these circumstances and in accordance with IAS 38, it is necessary to examine which of the two cases applies.

An indefinite useful life is to be assumed, "if, based on an analysis of all the relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate net cash flows for the entity"

IAS 38 lists various factors which have to be considered in determining the useful life.

A further significant factor in determining the useful life is the level of future maintenance expenditure. This has to be measured at the level necessary to maintain the asset at its standard of performance assessed at the time of estimating the asset's useful life. A conclusion that the useful life is indefinite should not depend on planned future expenditure in excess of this level.

The useful life of intangible assets resulting from contractual or other legal rights can be determined by economic and legal factors. The former determine the period of the flow of future economic benefits, the latter determine the period over which the entity controls access to these benefits. The useful life of these intangible assets is consequently limited by the legal background. In determining the useful life of patents, their legal limitation to 20 years has to be taken into consideration.

A possible extension of the legal rights can be considered in determining the useful life if the entity can demonstrate that an extension can be achieved without significant costs. In delivering this proof, various factors can be relied upon, such as experience or evidence that the legal requirements for a renewal to be granted will be met, as well as the fact that the extension costs will not differ significantly from the flow of future economic benefits. Should the renewal depend on consent from third parties, such evidence is also required.

In the case of patents a renewal of the legal period can only be considered in exceptional cases, for example when granting "orphan drug status".

Intangible Assets with finite useful lives As already stated in section "Finite and Indefinite Useful Life", intangible assets with finite useful lives have to be amortized. This means that the depreciable amount is "to be allocated on a systematic basis over its useful life". This happens on the basis of an amortization method. The depreciable amount is defined in IAS 38 as "the difference between the cost of an asset, or other amount substituted for cost, less its residual value".

The depreciable amount is therefore determined on the basis of the following factors: Cost of an asset or revaluation amount, Useful life, Amortisation method, Residual value.

As the first two factors have already been discussed at length, the following comments are restricted to the treatment of the two remaining factors.

The choice of *amortisation method* must reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity and is in principle to be applied consistently from period to period. In accordance with IAS 38 the straight-line and declining balance methods as well as the unit of production method are possible, the straight-line method always being applied if the amortisation pattern cannot be determined reliably. In addition, IAS 38 assumes that there is very rarely persuasive evidence to support an amortisation method that results in a lower amount of accumulated amortization than under the straight-line method.

A *residual value* greater than zero can only be applied under exceptional circumstances. This is the case when there is a commitment by a third party to purchase the asset at the end of its useful life or when the residual value, on the assumption that there is an active market, can be determined and it is probable that the active market will exist at the end of the asset's useful life.

The amortisation period, the amortisation method and the residual value must be reviewed at least at the end of each financial year. If necessary, the appropriate modifications have to be made. In the case of intangible assets with finite useful lives, IAS 36 has to be applied to determine whether they are impaired, if there is appropriate evidence.

Intangible assets with indefinite useful lives cannot be amortised systematically. They in fact have to be tested annually or whenever there is an appropriate indication of impairment. The assessment of the useful life of an intangible asset as "indeterminable" has to be reviewed in each

reporting period. Should a change in the classification to intangible assets with finite useful lives take place, an impairment test has to be carried out.

### **IMPAIRMENT LOSSES**

In the measurement after recognition of intangible assets, impairment losses have to be taken into consideration – as already explained. The relevant directives are to be found not in IAS 38 and IFRS 3 but in IAS 36.

The scope of application of these directives is not restricted to the treatment of impairment of intangible assets. Rather, IAS 36 can in principle be applied to all assets, though IAS 36 defines important exceptions. (inventories, construction contracts and of deferred tax assets). The scope of application of the directives does, however, include fixed assets. IAS 36 also has to be applied to goodwill, which cannot be amortized systematically.

An asset is amortized in accordance with IAS 36 if the recoverable amount is less than the carrying amount. On this condition, the asset's carrying amount has to be exceptionally amortized, i.e. has to be reduced to its recoverable amount. In those cases in which the recoverable amount for an individual asset cannot be assessed, the so-called cash-generating units have to be used as a basis for determining the impairment loss on classes of assets in accordance with IAS 36. This procedure also applies to impairments on goodwill.

IAS 36 also regulates the extent to which, in those cases where an impairment loss recorded in an earlier financial period no longer exists in part or in full, a reversal has to take place.

### **ACCOUNTING TREATMENT OF R&D ACTIVITIES ACCORDING TO ROMANIAN ACCOUNTING LEGISLATION**

According to Romanian accounting legislation, only development expenses are treated as intangible assets and they are generated by the application of research results or other knowledge into a plan or project aimed to produce materials, devices, products, processes, systems or services substantially improved before the start of production or commercial use.

An intangible asset generated by the development (or development phase of an internal project) is recognized if and only if, an entity can demonstrate all of the following:

- technical feasibility for completing the intangible asset so that it is available for use or sale;
- its intention to complete the intangible asset and use or sell;
- ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits. Among other things, the entity can demonstrate that a market for production or for generation of intangible asset intangible asset itself or, if they are to be used internally, the usefulness of the intangible asset;
- availability of technical resources, financial and other resources adequate to complete the development and use or sell the intangible asset;
- its ability to assess reliably the expenditure attributable to the intangible asset during its development.

Development costs are amortized over the life of the contract or, where appropriate. If the contract duration or duration of use exceeding five years, it must be presented in the notes, together with the reasons behind it. Where development costs have been fully amortized, there is no distribution of profits, unless the amount of reserves available for distribution and profits brought forward is at least equal to the undepreciated costs.

Examples of development activities given in legislation refer to: designing, building and testing the use of intermediate or intermediate production of prototypes and models; design tools and dies involving new technology; designing, building and operating a pilot plant is not economically feasible for mass production; the design, construction and testing of a chosen alternative for devices, products, processes, systems or new or improved services.

## THE FISCAL TREATMENT FOR R&D ACTIVITIES IN ROMANIAN LEGISLATION

According to Romanian Fiscal Code, in computing taxable profit, for R&D activities the following encouragements are granted:

- a. Additional deduction from taxable profits for 20% of eligible expenses for these activities, additional deduction is calculated quarterly / yearly.
- b. the application of accelerated depreciation for equipment and equipment used.

Tax incentives for R&D activities is the reduction the taxable income of eligible taxpayers with an additional deduction in 20% of the costs incurred by them in the fiscal year for research and development activities, and by the method accelerated depreciation for equipment and equipment for research and development activities. Tax incentives are granted for research and development activities leading to research results, to be capitalized by the taxpayers for their own benefit in order to increase revenue.

Eligible expenses taken into account in granting additional deduction in determining taxable income are as follows:

- amortization of tangible assets created or acquired by taxpayers as new and used in research and development;
- expenditure on staff salaries directly engaged in research and development activities;
- costs of maintenance and repair of tangible assets referred to in point. a) made by third parties;
- amortization of intangibles, acquired by the taxpayer, used in R&D activities;
- operating costs, including costs of consumables, expenses for materials in the inventory, raw materials costs, expenditure on experimental animals, and similar products used in research and development;
- overhead expenses, which may be allocated directly to research results or proportional distribution by using a key, key distribution is used by taxpayers to allocate common costs.

In the category of overhead expenses directly allocated costs can be included: rent, premises where the research and development activities, provide utilities, such as running water, sewerage, sanitation, electricity, gas used appropriate surface research and development activities and expenditures and office supplies, copying and photocopying, postal and courier, telephone, facsimile, Internet, relating to research and development necessary to achieve research results.

In the category of overhead allocated to the key distribution may include costs for: administrative and accounting services, postal and telephone services, IT equipment maintenance services, copying and photocopying, and office supplies, rent location where activities are project, providing utilities, such as running water, sewerage, sanitation, electricity, gas and other expenses necessary for the project.

Eligible expenses are only those recorded in the accounts based on documentary evidence, according to applicable accounting rules. To be eligible for tax incentives, R&D costs must be done in order to achieve revenues. Additional deduction is calculated quarterly / annually as appropriate. In determining the additional deduction in computing taxable profit, eligible expenses will be aggregated and included in the tax register.

Accelerated amortization for equipment and equipment for research and development activities are carried out according to Fiscal Code. Appliances and equipment should be listed in the Catalogue of subgroups 2.1 and 2.2 on the classification and the useful life of fixed assets.

## CONCLUSION

This paper included a series of details about intangible assets. These arise primarily from IAS 38. Details on business combinations result from IFRS 3, on asset impairments and reversal of impairment losses from IAS 36. Given the scope available here, a review of these disclosure requirements has been given out. The accounting treatment of intangible assets has caused great

difficulties and confusion over the years. Much of the confusion has been removed by recent international developments, but the future treatment of intangible assets is under active considerations and discussion, as international professional organizations move towards an acceptance of the use of fair value.

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## QUICK DETERMINATION MODEL OF INSOLVENCY FOR A COMPANY

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### Abstract:

*Under conditions of crisis, suppliers are faced with situations where a decision must be taken quickly if they supply or provide services for a company which they don't know if it can honor invoices or not. In this research we propose a model for rapid determination of bankruptcy, which should lead the provider, in the short term, to the decision of cooperating or not with a company.*

*The model was tested on financial statements from Arabesque Company and is based on a function of "scoring". Period considered was 2004-2009, during this period were analyzed five indicators: gross result, the period of debt repayment, period of the receivable debts, degree of indebtedness and patrimonial liquidity. Outcome research for ARABESQUE Company was as follows:*

YEAR	CATEGORY	RISK TYPE
2004	D	Low risk of bankruptcy
2005	D	Low risk of bankruptcy
2006	D	Low risk of bankruptcy
2007	D	Low risk of bankruptcy
2008	C	Moderate risk of bankruptcy
2009	B	Major risk of bankruptcy

*Especially during the financial crisis, economic agents have so much need of liquidity. Relaxation process of lending by the banking system becomes a necessity. To believe, however, that whatever the results that there are there banks which give loans under stress conditions, would be a mistake. For that, careful monitoring, continuous and perseverance of bankruptcy risk, could ensure liquidity needs and the survival of society in times of crisis.*

**Keywords:** bankruptcy, liquidity, receivable debts, debts, scoring, insolvency.

**JEL Classification:** M21

## INTRODUCTION

Evolution of any business takes place in conditions of technological change. Making technical progress implies a massive infusion of capital, next to management performance. Risk is the possibility of a loss, of the emergence of disadvantages, of some disturbance or even of destruction of the organization.

Risk of bankruptcy has been watching closely by managers. They are interested in the smooth running of the production cycle, and the investors' interest is in credit recovery. Many researchers and financial institutions were concerned with developing methods for predicting the risk of bankruptcy. The method used is the statistical technique for analyzing the financial characteristics of companies with normal functioning and those with difficulties in economic and financial management. The main problem is, usually, represented by the risk anticipation, and, in case of it's appearance, by minimizing its occurrence and control.

## 1. BACKRUPTCY SITUATION IN ROMANIA

Our country does not succeed in absorbing European funds, which seem to be the only solution to the existing economic crisis, especially because in the direct foreign investments a half cut was noticed in 2009 compared to 2008 while the state drastically reduced the investments in infrastructure.

Unfortunately, Romania together with Greece did not know how to use this opportunity and it is among the last countries on the list as far as the absorbing of the EU funds is concerned regarding domains such as energy, infrastructure and human resources development. The explanations of the Romanian authorities concerning this aspect would be: the long period of time necessary for evaluation and selection, delays in launching the finance process, insufficiency of the financing sources in some fields and the lack of national strategies in some domains. In full economic crisis, European funds would be a real "gold mine" for the Romanian economy. However, Romania is, as we have already mentioned above, among the last countries to absorb EU funds, and for the last three and a half years it has selected projects which amount only to a percentage of 14% out of the total sum of 19.6 billion euros allocated.

The data presented by the Ministry of Public Finance, included in the balance regarding the absorbing rate of the EU funds, indicate that on March 31, 2010, this rate increased with 3%, the value of the sums received by the funds beneficiaries being of about 3 billion lei.

As a whole, from January 2007 to March 31, 2010, 16,000 projects were presented out of which 7,000 were rejected, over 4,000 were accepted while about 5,000 are still being evaluated.

As far as the effects of the economic crisis on the Romanian companies are concerned, it has become obvious that they have severely been affected by the measures imposed such as: the introduction of the "forfetar" tax, VTA increase, which meant that many firms suspended their activities while some others simply went bankrupt or faced the insolvency process and/or the reorganization procedures. Other effects were: the voluntary closing of the firms, high rate of unemployment, lower standard of living, decrease in supply and demand as well as in consumer market, low people's confidence in the anti-crisis measures proposed and approved by the government and lower economic productivity.

The global economic recession has affected all the Romanian companies, from the biggest to the smallest ones. Even more, the access to the financing which the banks might have offered to the Romanian businesses was blocked by the state. Practically, through the Ministry of Public Finance which borrowed from the private banks almost the entire monetary mass existing on the market in order to be able to pay the pensions and the budgetary salaries, the Government blocked indirectly the national economy.

Thousands of firms throughout the country have waited an exaggerated amount of time for VAT refunds to which they were entitled and which the fisc delayed to make, deadlines being exceeded many months. Instead, for every invoice issued, but not received, state required further requires for firms to pay VAT decapitalizing them and pushing them towards bankruptcy. Establish flat tax to be paid even by companies not registered corporation has determined that in 2009, 120,509 companies to suspend their work.

Therefore, Romania is under the impact of the international financial and economic crisis and we must resist with the weapons we have and to overcome a phenomenon which was triggered not by the less developed countries, but by developed ones. We fully feel the strategies adopted by the government to combat the current economic crisis, which seems to be not at all suitable in the current context, but fight for strategies to attract foreign investors, which means lower taxes and stifling taxes, and easing the financial year, we fight for the promotion of Romanian industry and SMEs supporting, which can create new jobs. This type of strategy can boost the economy, not on short-term methods, to collect money from the budget for urgent debt, while the future is obscure on the lack of long-term strategies, which should provide the country situation on a lighter background.

## **2. FINANCIAL FORECAST OF THE MAIN INDICES OF PROFIT AND LOSS ACCOUNT - THE FORECAST OF TURNOVER**

Correct prediction of turnover is a significant milestone in the evolution of the company's financial forecast.

- Factors to be considered in estimating sales volumes are:

- The economic crisis which will occur in Romania in the next three years, at least;
- The Romanian economy oriented on consumer is crossing the recession period in which is suffering strong contractions;
- It is expected that after the economic downturn (which will last at least three years), the Romanian economy will turn to the productive sector. Is expected a period of slow growth amid economic on the background of globalization process and economic recovery;
- Policy measures planned by the company for 2010 (including: the initiation and development of a guidelines for electronic commerce; opening new service centers and technical advice to customers – businesses; targeting towards the direct imports of China; Stopping for 2010, of related investments on horizontal development (enlargement) of the business and reduce direct and indirect costs to achieve a rate of return for 2010 of 11.23% and profit recovery of economic activity).

Is very important turnover's value rate to a sustainable growth rate. Predicting growth and performance of turnover superior to sustainable level will generate insufficiency of funds, so the company will rely on funding through loans, amendment of the indebtedness, which will generate increasing costs of higher interest.

Moreover, achieving a turnover below the sustainable level is a waste of available resources, creating an opportunity cost.

### 3. CASE STUDY

The purpose of this research is to analyze the impact of globalization on economic performance highlighted by financial indicators for SC ARABESQUE SA. The research uses a number of financial indicators to quantify the effects of globalization on economic performance analysis method of input and output quantification. The following information was collected for this:

- General data about the company;
- Financial information taken from the annual financial situations (Balance Sheet, Profit and Loss in the period 2004-2009);
- Conditions to be satisfied by a company to be listed on BSM;

#### 3.1. OVERVIEW OF THE COMPANY

ARABESQUE is a limited liability company with Romanian capital, of 14.005.000 lei. Company's headquarters is located in Galati, Str. Timis No.1, registered at the Trade Register under the no. J17/666/1994, Fiscal Code: RO 5340801.

ARABESQUE Company was founded in 1994 and it's active in the trade with building materials. During these years it won the trust of customers through a mix of its products and services. All effort is focused towards continuing improving of this investment mix.

#### 3.2. MODEL PROPOSAL FOR THE TREATMENT OF BANKRUPTCY RISK

In terms of financial crisis is a greater likelihood that a company should enter into default of paying and to present an increased bankruptcy risk. I propose a model for treatment of bankruptcy risk in three phases:

- Phase I: Finding the status of entry in default;
- Phase II: Evaluation of skills for group of executive managers of the company;
- Phase III: Proposals to restructure the company through division, merger or capital infusion.

##### **Phase I:** Finding the status of the default entry

For finding the probable entry of the company's in default, we propose to achieve the following simplified model for determining the risk of bankruptcy:

##### *1. Finding that the company is recorded a loss:*

- In the last semester of activity: 5 points



- In the last two semesters of work: 10 points
  - In the last three semesters of work: 15 points
- Indicator calculation: "Debt repayment period" based on the relation, for the last financial year:*

$$T_D = \frac{\text{Total Debts}}{\text{Turnover}} \cdot 365 \quad [1]$$

- If  $T_D < 60 \text{ days} \rightarrow$  0 points
- If  $T_D \in [60 - 120] \text{ days} \rightarrow$  5 points
- If  $T_D \in [120 - 360] \text{ days} \rightarrow$  10 points
- If  $T_D > 360 \text{ days} \rightarrow$  15 points

3. *Indicator calculation: „recovery period of the receivable debts” based on relation:*

$$T_{Rd} = \frac{\text{Receivable Debts}}{\text{Turnover}} \cdot 365 \quad [2]$$

- If  $T_{Rd} < 45 \text{ days} \rightarrow$  0 points
- If  $T_{Rd} \in [45 - 90] \text{ days} \rightarrow$  5 points
- If  $T_{Rd} \in [90 - 270] \text{ days} \rightarrow$  10 points
- If  $T_{Rd} > 270 \text{ days} \rightarrow$  15 points

4. *Indicator calculation: „degree of indebtedness” based on relation:*

$$DI = \frac{\text{Total Debts}}{\text{Turnover}} \cdot 100 \quad [3]$$

- If  $DI < 10\% \rightarrow$  0 points
- If  $DI \in [10\%, 30\%] \rightarrow$  5 points
- If  $DI \in (30\%, 50\%]$  10 points
- If  $DI > 50\% \rightarrow$  15 points

5. *Indicator calculation: „patrimonial liquidity” based on relation:*

$$PI = \frac{Fl - Lo - Swsp}{Dst} \times 100 \quad [4]$$

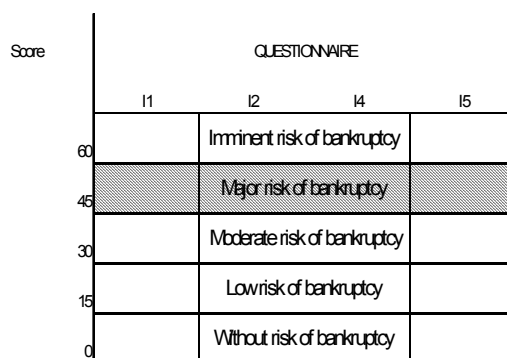
Where:

- Fl – Floating;
- Lo – Loss in the last financial period;
- $S_{wsp}$  – Stocks without sells possibility;
- $D_{st}$  – Debts on short terms (smaller than a year);

- If  $PI > 160\% \rightarrow$  0 points
- If  $PI \in [130\%, 160\%] \rightarrow$  5 points
- If  $PI \in [100\%, 130\%) \rightarrow$  10 points
- If  $PI < 100\% \rightarrow$  15 points

Interpretation of simplified model for determining the risk of bankruptcy, based on adding the points by proposed score function, is the following:

- A Category: Imminent risk of bankruptcy 60p.
- B Category: Major risk of bankruptcy [45 – 60 p.)
- C Category: Moderate risk of bankruptcy [30 – 45 p.)
- D Category: Low risk of bankruptcy [15 – 30 p.)
- E Category: Without risk of bankruptcy < 15 p.



**Figure 1. Graphical representation of simplified model for determining the risk of bankruptcy interpretation**

Source: Own contribution

**Phase II:** Evaluation of skills for executive managers of the company group

After finding a likelihood of bankruptcy, we proceed to assess skills for executive managers of the company group, based on computer application TopProfilGrup. Evaluation will be based on technical skills questionnaire. The application will centralize data and will generate a summary report of assessment for each member of the management team and for the whole group. In this report are made also recommendations on what should be changed to reach level V of proficiency (excellence), based on the principles of excellence and professional skills, developed by Jim Collins [1].

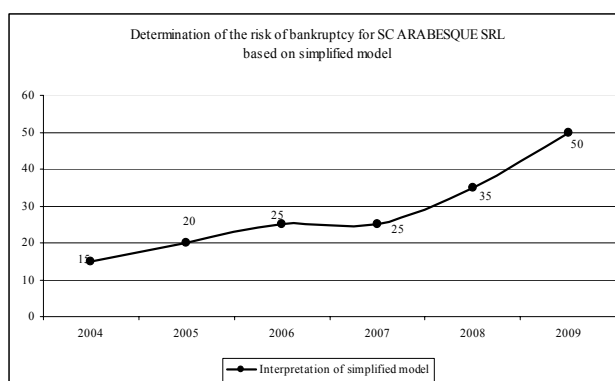
**Phase III:** Proposals to restructure the company through division, merger or capital infusion

In the third phase of the model for handling bankruptcy risk are made specific proposals to restructure the company and management team preparing to promote new principles and competences of professional excellence. These proposals lead eventually, to outsourcing of the activities with loss through division, merger or capital infusion.

**Table no. 1. SC ARABESQUE SRL - simplified model for determining the risk of bankruptcy**

Nr. Crt.	Indicator	2004	2005	2006
1	Number of consecutive semesters in which the society	0	0	0
2	$X_1$	0	0	0
3	Total debts	147.799.262,00	223.990.476,00	323.099.868,00
4	Turnover	513.626.985,00	734.484.100,00	1.014.508.826,00
5	Recovery period of the debts	105,03	111,31	116,24
6	$X_2$	5	5	5
7	Receivable debts	55.965.906,00	78.072.977,00	110.858.291,00
8	Turnover	513.626.985,00	734.484.100,00	1.014.508.826,00
9	Recovery period of the receivable debts	39,77	38,80	39,88
10	$X_3$	0	0	0
11	Total debts	147.799.262,00	223.990.476,00	323.099.868,00
12	Turnover	513.626.985,00	734.484.100,00	1.014.508.826,00
13	Degree of indebtedness	28,78%	30,50%	31,85%
14	$X_4$	5	10	10
15	Floating	124.738.472,00	164.837.349,00	209.153.636,00
16	Loss in the last financial period	0,00	0,00	0,00
17	Stocks without sells possibility	47.939.054,00	61.051.191,00	69.584.404,00
18	Debts on short terms	55.965.906,00	78.072.977,00	110.858.291,00
19	Patrimonial liquidity	137,23%	132,93%	125,90%
20	$X_5$	5	5	10
21	$Z$	15	20	25
22	Interpretation of simplified model	D	D	D

2007	2008	2009
0	1	3
0	5	15
653.003.248,00	757.756.347,00	640.453.931,00
1.362.083.765,00	1.742.169.392,00	1.303.311.899,00
174,99	158,76	179,36
10	10	10
149.446.060,00	160.700.001,00	148.202.268,00
1.362.083.765,00	1.742.169.392,00	1.303.311.899,00
40,05	33,67	41,50
0	0	0
653.003.248,00	757.756.347,00	640.453.931,00
1.362.083.765,00	1.742.169.392,00	1.303.311.899,00
47,94%	43,49%	49,14%
10	10	10
351.042.223,00	346.471.595,00	10.792.641,00
0,00	6.229.671,00	13.050.151,00
152.446.538,00	132.658.702,00	67.878.425,00
149.446.060,00	160.700.001,00	148.202.268,00
132,89%	129,17%	-47,32%
5	10	15
25	35	50
D	C	B



**Figure 2. Determination of the risk of bankruptcy for SC ARABESQUE SRL based on simplified model**

Source: Own contribution

#### 4. CONCLUSIONS

The financial crisis in Romania has been obvious and, accordingly, it has brought about serious negative consequences such as the external factors generated by the beginning of the financial crisis in Romania in October 2008 and the internal factors for the society which fundamentally influenced the finance reductions in 2009-2010.

In this article we described a model for determining the risk of bankruptcy in which we applied a case study of a big company of building materials distribution on the Romanian market, SC ARABESQUE SRL. For this company it was determine the risk of bankruptcy during the period 2004-2009, and it was proved that the risk of bankruptcy has been increased, even to its maximum, the imminence.

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## EFFECTS OF THE ROMANIAN ECONOMIC CRISIS UPON THE BANKING SYSTEM

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### Abstract:

*The Romanian economic crisis manifests in all fields of activity. One of the affected sectors is the banking system. The studies performed so far, the official press releases of the government and of the National Bank of Romania show that the Romanian banking system has been only slightly affected. The objective of this study is to identify whether the economic crisis has really affected the Romanian banking system in a slight or deeper manner. Meanwhile, we tried to study which are the medium and long-term implications upon the economic environment of the fact that the banking system as a whole or only some banks suffer from the economic crisis. The research starts from determining the economic crisis size based on the macroeconomic indicators published in different studies. We hereby identify the main social-economic factors that could create difficulties in the banks' activity. Then we determine their effects upon the banking system by analyzing specific bank indicators as they were published by the National Bank of Romania and by other banks. The performed study shows that the Romanian banking system, in spite of the reassuring press releases given by different public authorities, is deeply affected by the economic crisis. It is a matter of time until the banks report serious difficulties in their activities. While the exit from crisis is moving further and further away, the existing problems will amplify because the clients' trust in banks deteriorates in a rapid manner. There are big risks that the economic recovery will be aggravated by the banking system that is only now entering the crisis.*

**Key words:** economic crisis, banking system, austerity measures, saving rate, bad loan, non-governmental loan.

**JEL Classification:** E31, G01, G217

## 1. INTRODUCTION

The external vulnerabilities induced by the fiscal policies and the pro-cyclic incomes allowed the effects of the international crisis to affect Romania also.

The Romanian banking system succeeded in avoiding the initial phase of the economic crisis in the second half of 2007. Starting with the last trimester of 2008 the outcomes of the international depression got more and more noticed in the Romanian economy, therefore in the banking system.

The soothing news and the fade and powerless press releases coming from the banks and the National Romanian Bank (NRB/BNR) determined me to study the official data concerning the Romanian banking system. My premisis started from that fact that it is such a miracle that the banking system would run as well as the press releases are presenting it, taking into consideration the deep drop-off in which the Romanian economy encounters itself. Last year's cutting back on government spending and incomes of the public employees is affecting even more the banking system.

As the recession results in a progressive high number of insolvencies and bankruptcies among the local businesses and firms, the credit risk is becoming a major concern for the Romanian banks. The banks anticipate that the quality of the credit portfolio will continue to deteriorate and they raise provisions for bad loans, fact which could conclude into important losses for the creditors. This tendency will make credits harder to obtain because the banks will invest in available assets, delaying the economic recovery. This paper has as a mean to investigate the impact of the economic depression on the economy. Afterwards, there will be a study on how the banking system fostered the spreading of the crisis.

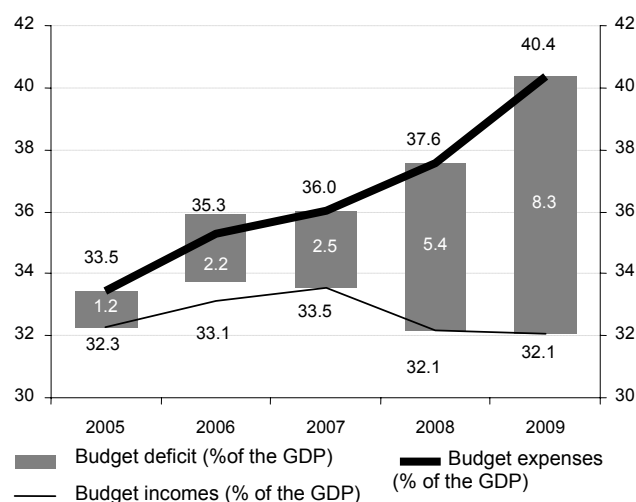
The actions taken in order to put an end to the negative economic effects and their consequences on the banking system represent the core of the study.

Finally, based on the information that was available we will try to forshadow the short-time evolution of the banking system and the impact on the economic activity.

## 2. THE ECONOMIC DEPRESSION – THE IMPACT ON THE ROMANIAN ECONOMY

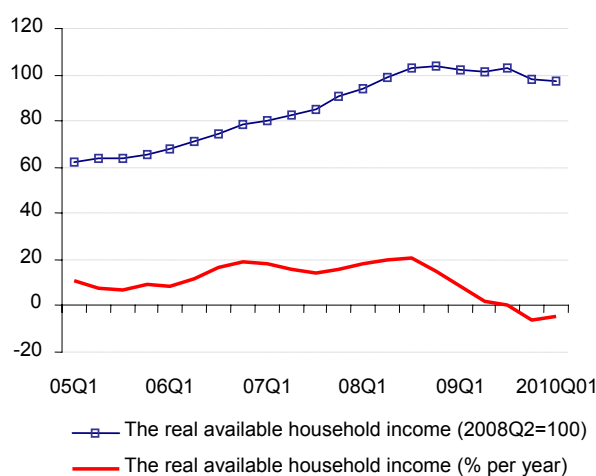
In the year 2009, the economy suffered a major drop-off, fact certified by the 7,1% decrease of the Gross Domestic Product (GDP) by comparison to the previous year. The first trimester of the year 2010 underlines the progressive decline of the Romanian economy, with 1,5% less than the first trimester of 2009. The main crisis displays can be analyzed through the evolution of the macroeconomic indicators like:

The budget deficit has significantly increased in 2009, reaching 8.3% of the GDP, as resulting from the following: chart no.1.



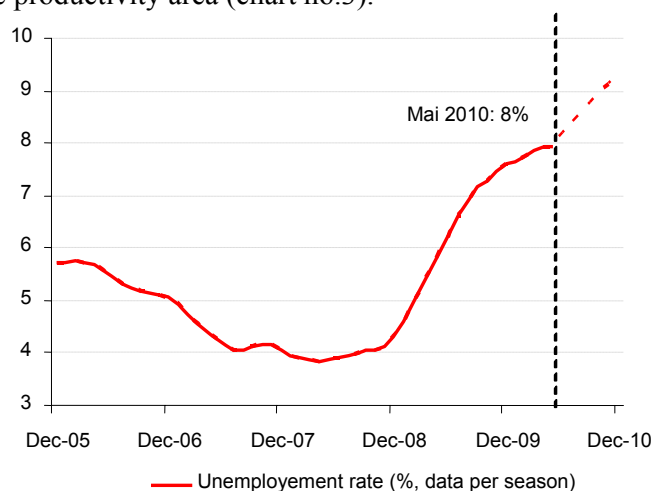
**Chart 1. The evolution of the budget deficit between 2005-2009**

Household income statistics showed a real decline as it can be observed in chart no. 2 and the expectation of economic growth in 2011-2012 remain inconspicuous. The taxes increase leaves a negative impact on the potential economic upbringing on the medium and long-term as well as the inflation rate.



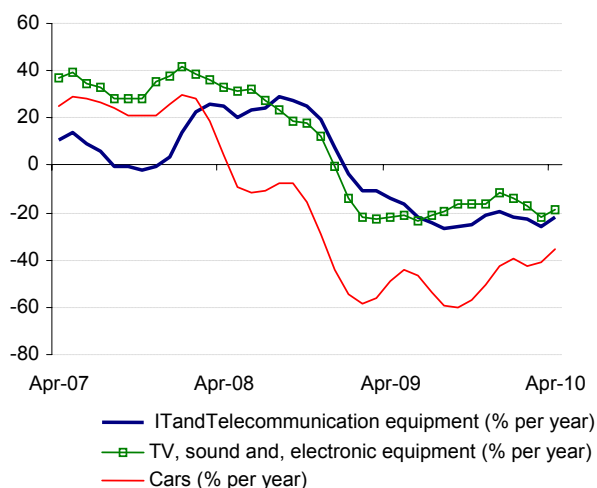
**Chart 2. The real household income**

The unemployment rate recorded a growth and it will continue to rise as an effect of the economic activity decreasing due to demand (expenses) decrease as well as an effect of the pressure increase on costs in the productivity area (chart no.3).



**Chart 3. The evolution of the unemployment rate during 2005-2009 and the outlook for 2010**

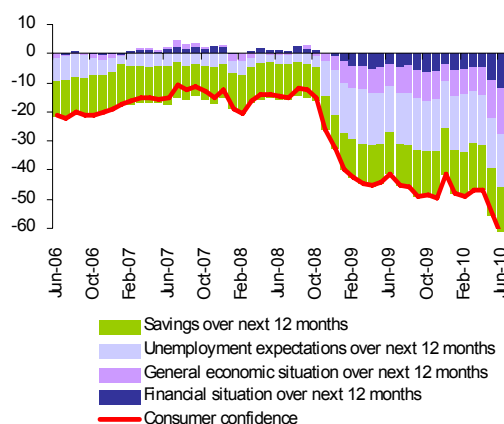
A high sales drop-off of the long-term usable goods is taking place. (Chart no. 4)



**Chart 4. The evolution of long-term usable goods sales**

The trust of consumers and business environment concerning the economic perspectives is low and keeps on dropping off. (Figure no.1)





**Figure 1. The degree of confidence of the consumers and of the business environment concerning economic perspectives**

Romania's perspectives of economic growth for 2010 remain on the negative side[1], as a consequence of a low domestic demand, but also because of the fact that Romanian exports grow at a slow pace. Therefore, there are great risks for the exchange rate to devalue as a consequence of the inflation and the persistence of uncertainties in economy.

### 3. THE CRISIS' SPREAD THROUGHOUT THE BANKING SYSTEM

The banking system determined the propagation of the crisis from abroad using the following methods:

The high price raising of loans during 2004-2007, mainly towards the population, from want of boosting domestic production emphasized the economy's extreme vulnerability, by augmenting the external debt. The main reasons of this phenomenon are:

- the positive expectations of the loan institutions regarding the evolution of the economy against the background of Romania's Treaty of Accession to the European Union (EU) and the improvement of the country risk rating at the "investment grade".
- the dismissals of the Romanian workers from abroad increased four times during 2005-2008 (20,8 billion Euros) by comparison to 2001-2004 (5,1 billion Euros)
- the received net funds from the European Union encountered a noticeable increase a year after acceding, evolution which, however, stopped to grow.

The excessive debt, mainly of the population's, contributed among other factors, to the advent of the subprime crisis.

The most holy principle that the classic banking system is following –"deposits make loans"- was not succeeded anymore in Romania. From the money deposits of approximately 35 billion Euros, the Romanian banking system gave loans of 42 billion Euros. The difference stands in loans given from money coming from abroad. This turned out to be a high vulnerability which created alterations in economy. The loans given way over the productive possibilities of the economy represents the main deficit source of the external current account, one of the worst issues of Romania. Due to the fact that domestic production could not keep up with the speed of giving loans, everything focused on imported consumption. All these overlap with the fact that foreign investments, from which it was expected a production growth, were not interested in production, but in service lines (retail, finance, real estate) which amplified the tendency.

The trade and external current account deficit represents the surface of the things. On a deeper level, we can talk about an induced economic growth, which is unhealthy and unsustainable, because is wrongly based on imported consumption.

The once abundant financial resources are getting more and more rare and expensive because Romania has a relatively high risk rate. The banks, after October 2008, because of the lack

of the liquidities on the money market, offered a very high interest rate (by comparison to the interest rate of monetary policy) to domestic economies, therefore the price of loans increased emphasizing the crisis.

#### **4. THE CONSEQUENCES OF THE SUBPRIME CRISIS – AUSTERITY MEASURES**

The economic situation presented above shows an economy in recession. The main risk is the increase of the budget deficit to 9-10% from the GDP, an unacceptable and nonfinanceable level.

A high deficit determines investors to have an antipathy towards the countries with a high budget deficit and do not take measures to improve the situation. Controlling the budget deficit is a condition of the agreement made with the International Monetary Fund and the European Commission (deficit shown by the 6.8% of the GDP in 2010 and 4.4% of the GDP in 2011).

That is why the following measures have been adopted in order to correct the deficit:

- the drop-off of budget salaries with 25%;
- the increase of VAT from 19% to 24%
- the decrease of social transfers with 15% (the cut-off of pensions was considerate unconstitutional)
- the taxation of incomes from interests with 16% (0% before)
- the taxation of meal vouchers with 16% (0% before)
- the taxation of capital gain for the bonds owned for more than a year with 16% (1% before)
- the cutting down of expenses of goods and services in the public administration and companies belonging to the state with 20% (except for the basic expenses, like the ones in the health department)
- the cutting down the government's employees as well as government agencies with 25%
- the cutting down of the total number of the all public administration employees.

The direct consequences of these measures over the economic life are:

The cutting down of the population's net income as a consequence of the public administration's salaries drop off with 25%, more taxes (incomes based on interest, meal vouchers) and the cutting down of tax deduction of some expenses for certain income categories (copyright)

- the increase of inflation and of population's consumption expenses as a consequence of VAT.
- the cutting down of firm's profits that trade goods with a elastic demand at price and which will not be able to transfer the total growth of VAT to the consumers
- the deterioration of the trust of firms and population considering the raise of uncertainties regarding the financial and economic situation on a short-term
- the decreasing of economic activity as a consequence of the consumption demand decrease
- the increase of unemployment in the private field too because of the increase of pressure on charges in the real sector.

#### **5. THE EFFECTS OF THE AUSTERITY MEASURES OVER THE BANKING SYSTEM**

All these measures have a powerful direct and indirect effect on the Romanian banks.

A great part of the characteristics of the banking system until 2008, are no longer applicable nowadays. Mainly, there have been affected the profit and the growth rhythm of the nongovernmental loan bulk.

For the banking system the effects of economic crisis are the following:

- The increase of interests on the monetary market and pressures of devaluation of the exchange rate as a consequence of the inflation increase and the persistence of economic uncertainties
- The loans have reduced dramatically, the growth pace and the amount of individual loans has diminished the most.

**Table no. 1. The evolution of nongovernmental loan between 2006-2009**

Explanations	2006	2007	2008	2009
Annual percentage variation	47,3	50.5	25,7	-3,6

The year 2009 was denoted by the calming of the banking activity, evolution which reflected itself in the increase with only 5,0 % of the net assets at a system level, from 314 441,5 million lei to 31.12.2008 to 330 183,5 million lei to 31.12.2009. In Euros, the net asset has been easily reduced (with 1,0%), from 78.902,3 million Euros to 78 090,8 million Euros.[2]

- The increase of the loan expense is a consequence of more factors:
  - The growth of Romania's country risk, determined by the drop off of the economic activities and by the lack of precise plan to overcome the crisis, substituted with a long number of proposals and political/fiscal measures that have a doubtful efficiency, is generating the foreign investors disbelief in the yield of their initiatives in Romania.
  - A certain lack of productivity of the Romanian banking system;
  - The rush for "no matter what it takes" profit of the shareholders;
- The amount of governmental loan started to grow again [3], its assets share increasing with another 4.2% by comparison to the year 2009 reaching 12.2 % of the total assets [4]. As a consequence of the more and more visible budget deficit, the banks preferred to loan the state, therefore the risk of loan was reduced but the resources for loaning the real economy diminished.
- The amount of bad loans has increased from 0.14% in 2006 to 1.39% in the first trimester of 2010. Although they produced noticeable effects on a short-term, the cautious measures have lost their efficiency over the time. The quality of bank assets suffered deteriorations, the credit risk remaining the major vulnerability of the banking system. The increase of the amount of bad loans has as a cause the cutting down of net incomes of the population and of the firms that cannot refund the payable debts.

**Table no. 2. The evolution of bad loans during 2006-2010**

Explanations	2006	2007	2008	2009	2010*
Provisions (billion lei)	1,3	3,6	7,6	15,0	16,9
The weight of bad and doubtful measured in terms of total assets (%)	0,14	0,17	0,29	1,01	1,39

\* 31 of March 2010

- There has been an increase in the provisions need with an effect on profit and banking gains, the net spending with provisions increased in real terms with 65% in 2008, taking into consideration the deterioration of credit portfolio, as a consequence of successive increases of loan interests and the devaluation of the national currency. The year 2009 was also denoted by the increase of provisions in the entire banking system. The reports published by the National Bank of Romania show the fact that money set aside for the bad loans for a period longer than 61 days have increased with 130% during the last year, reaching almost 30 billion lei. From an individual point of view, some credit institutions had their share of increases, sometimes even four times the bad loans.
- The increase of interest rates for the term deposits as an effect of the lack of liquidities from the first part of the year 2008 determined the saving growth. By comparison to September, at the end of December 2008 the medium rates of the interests at the population's remaining deposits have increased with 2.3%, and the new deposits grew with 4.1% (with 3.9% and 4% when it comes to nonfinancial companies)

**Table no. 3. The evolution of the saving rate and the investment rate (% in GDP)[5]**

<b>Explanations</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Saving rate	14,4	17,1	18,8	19,1
Investment rate	25,6	30,2	33,3	25,6
RE-RI	-11,2	-13,1	-14,5	-6,5
Current account balance	-10,4	-13,4	-11,8	-4,4
Fiscal deficit	-2,2	-2,5	-5,5	-7,9

• In the year 2009, the profit of the entire banking system was of only 200 million Euros, being affected by the formed provisions. Many of the credit institutions have ended the year with losses due to these expenses made for provisions.

The financial results of the banking system were positives, however modest along the year 2009. In the first months of the year, the increase of spending with the specific risk provisions had an important impact over the profit of the credit institutions, however many of them managing to recover in the second semester.

The first half of the year 2010 marked the negative course of the profit, due to necessary increase with the spending for provisions. [6].

• The development pace determined by the increase of the number of banking institutions not only slowed down but we witness the bankruptcy of some which turned out to be unprofitable. 265 of shut down unities represents the outcome of the banking system's adaptation to the decline of the credit market in the year 2009.[7]

• As a consequence of this fact the number of bank employess diminished with 2.068 persons in the year 2009.[8]

• And in the first three months of this year 84 unities have been closed and over 500 employees left the banking system.[9]

## **6. MEASURES INITIATED BY NBR IN ORDER TO DIMINISH THE IMPACT OF THE FINANCIAL CRISIS**

The main measures initiated by the National Bank of Romania in order to limit and diminish the effects of the crisis over the banking system were:

• It was settled that it was needed the appeal to external financing from international financial institutions

• The resulting „Vienna Initiative” - In a meeting in Vienna of the European Bank Coordination Initiative the parent banks of the nine largest foreign banks active in Romania(70% of the active banking) settled to maintain during the IFM programme (May 2009-May 2010) their commitments to Romania, which was respected

• The drop off of monetary policy interest from 10.25% (July 2009) to 6.25 % (May 2010)

• Cutting down of the minimum reserve requirements rates:

- from 40% to 25% for the resources in foreign currency, in three stages, each of 0,5 % (July, August and November 2009)

- from 18% to 15% for the resources in national currency (July 2009)

• Flexibility measures for loaning households (January, July 2009)

• The convergence of the conditions for provisions towards the International Standards of Financial Report (the cut of the amount of provisions with 25% to the loans with overdue of over 91 days, April 2009)

• In 2008, demands to improve the quality of risk management have been introduced:

- the imposition of using tax file in the process of income validations (August 2008)

- determining the maximum grade of debt on client categories based on the analysis of stress testing (August 2008)

- establishing the initial reimbursement graph considering the grade of maximum debt on the entire maturity of the loan in which it is situated (August 2008)
- the introduction of some stricter requirements of provisions for the foreign currency loans given to clients exposed to the currency risk (February 2008)
- the potential systemic risk associated to the foreign currency loans that are being under bank authority surveillance and also under central banks from states that are EU members and also under European Central Bank (ECB) surveillance was discussed and analyzed with the commercial banks. The level of debt in foreign currency represents a permanent care for the authorities, from a prudent management point of view and also from the perspective of preventing, using the right settlement coordinated by the EU in order to revive the increase of foreign currency loans, and not the national currency one, especially the unprotected debtors facing the currency risk. In this matter, ECB brought into discussion a series of pieces of advice regarding the prudent policy in order to maintain the foreign currency loans in limits that do not induce a high risk to the financial markets, including by sustaining the concept of responsible loan, as it follows:
  - implementing some eligibility criteria for debtors
  - implementing restrictions regarding the level of debt
  - the limitation of the maximum sum of the loan given at the value of the property which is to be purchased (LTV),
  - the settlement of a adequate level of awareness for the debtor to take to knowledge of the risk they take by purchasing a foreign currency loan
- better treatment for the rescheduled loans (September 2009),
- the improvement of the structure and of the own funds level, by taking into account the interim profit (September 2009)
- the reinforcement of the corporate governance rules by adopting in September 2009 the new laws in the corporate management field of the credit institutions:
  - principles regarding the best practices in the pay field
  - the regulation of the conformity function inside the internal control mechanisms
  - principles for evaluating the unsettled risks (concentration risk, the interest risk outside the trade portfolio, liquidity risk)
  - requests regarding the introduction of crisis simulations in the process of risk
  - the adequate accountability of the shareholding of the credit institutions by giving more power to NBR, starting with March 2009, in the process of resolving the situation of the credit institutions that are having difficulties
  - the possibility of soliciting from the important shareholder from a credit institutions that is being in difficulty, to supply for it the necessary financial support
  - the possibility of forbidding or limiting the distribution of profit of the credit institutions with difficulties until its financial situations has been resolved.

## 7. WHAT TO EXPECT

Short-term prospects of the banking system in Romania depend largely on rebuilding the trust in the economy, on sustainable recovery of economic growth, and also on the international developments.

It is noted as a pro-cyclical tightening of lending standards, in conjunction with increased international reserves and the trend of reduction in this period of bank intermediation, and some signs of recovery in lending, particularly non-financial firms of important dimensions, and less in the real estate loans for individuals. The new economic environment less favorable is increasing the pressure for restructuring as for each bank, but also for the entire banking system. There is already the problem of restructuring the banking branch network by closing unprofitable ones.

The banking industry being a business that relies heavily on trust, it appears that banks refrain from violent gestures to reduce the number of establishments and employees for not giving signals to the risky market.

The pressures for a better cost control are increasing staff costs are important, banks have initiated measures to control costs by scaling both the branch network and through non-partisanship, or dismissal of employees. Considering the crisis, there will be an increased number of cases of theft, fraud and money laundering. [10]

Nowadays (and also in the future) investments will be selected very carefully, but also ***delaying and reducing investment programs will happen.***

Perhaps the market consolidation process will be at one point through mergers and acquisitions, because it is clear that for a market that no longer increases the number of banks is too high.

It is therefore a favorable period of mergers and consolidation of the banking system, most experts expecting such a step.

The main short-term measures to improve the financial situation have been the increasing of interest margins on national and foreign currency, sale of fixed assets and purchase of government bonds. These measures are unusual but necessary because the situations in the first quarter of 2010 have recorded falls in income from fees, leaving banks to rely on earnings from interest margins. In the current global crisis, sophisticated methods of bank risk management, promoted by Basel II, have shown their limits. Basel III is preparing to rebuild the entire regulatory and supervisory framework for banking activity, with emphasis on early warning component of the risk of escalation.

In this way regulatory risk will increase, an example being Ordinance 50/2010 which created tensions between banks and customers, with repercussions that cannot be calculated at this time.

Loans and mortgages were granted, in general, with real-estate collateral guarantees and the price of this guarantees decreased ***At this time banks record losses from enforcement of these guarantees.***

***Therefore the banks' large exposure to mortgage loans on real estate prices fall conditions strongly affected the profitability of current and future lending volume.***

## 8. CONCLUSION

Despite claims, the banking industry in Romania is not the only one (and not the most) responsible for the economic crisis we are going through.

No doubt there are mistakes that banks should not repeat in the future, but responsibility of the precarious economic situation is shared between different industries (which knew how to manage the consumption and grew because of it), politicians (who encouraged savings and less credit), supervisory/regulatory institutions (which didn't have effective tools to correct trends), and the mass of consumers / customers which are ***synchronized to be all optimistic before crisis and pessimistic now.***

***You can hardly see in the Romanian bank system, the effects of the subprime crisis, because banks*** refrain from taking drastic measures not to give signals of risk in the market.

Not even available data from the banking system can't show us the true extent of the crisis faced by the banks because they are not transparent.

Nonperforming is a taboo subject for many bankers. ***Of the 42 credit institutions present in our country outstanding credit data can be found at only a quarter of institutions.*** We are unable to compare data from different banks. For example, some institutions show debts greater than 90 days ***others on those late payments over 60 days.***

***Released data by National Bank of Romania represents most of the time average results which can hide serious situations of*** underperforming in some big banks for the banking system.

All this leads us to the conclusion that the Romanian banking system is in crisis.

Because of this even the economic recovery is threatened, as loaning can provide an important impulse for boosting economic life.

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## COLLATERAL IN SMES' LENDING: BANKS' REQUIREMENTS VS CUSTOMERS' EXPECTATIONS

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### Abstract:

*SMEs' support and importance in developing economies should not be only declarative. Searching for funding, managers encounter various obstacles arising from information asymmetry, lack of experience, severe market conditions, and insufficient or unsatisfactory collaterals for banks (OECD 2006; Badulescu and Badulescu 2010; OECD 2000 and 2004; Lin and Sun 2006; Toivanen and Cresy, 2000). The collateral issue is extensively discussed in literature – preventing moral hazard, the alignment the interests (Stiglitz and Weiss 1981:393-410; Chan and Thakor 1987:345-363; Jiménez and Saurina 2004), a means to discipline the borrowers behavior (ex post) given the existence of a credible threat (Aghion and Bolton 1992:473-494), or even banking behavior on the market (Manove et al. 2001:726-744, Argentiero 2009). In the same time we find that the perception of firms, revealed by European Central Bank (ECB 2009, 2010), shows that banks still use the collateral as a measure of pressure, in special in crisis times. For an important part of managers, the bank increased the level of required collateral for existing, renewing or new credits, asking for new covenants, revealing a paradox of crisis time: while the bank loans remained the favorite method of external financing needs of business, the banks often reduce their availability. Although the bank loan remains the favorite mean to support the growth ambitions, the higher level of collateral or lending costs are seen as principal obstacles by the majority of manager in EU. Furthermore, the seeking for higher percentage of coverage with real estate collaterals, paradoxically, makes banks more vulnerable, given their pro-cyclical behavior, feeding the real estate market crisis, as the theory of collateral as a signal of banking behavior "lazy banks vs. diligent banks", gains a new understanding.*

**Keywords:** SMEs lending, collateral, credit standards

**JEL Classification:** G21

## INTRODUCTION

Small and medium-sized enterprises (SMEs) are engines of growth in developing economies; the role and the future of SMEs tend to be a major concern of economic policy, given their strategic importance in reshaping the productive sectors, in employment and innovation. We have to recognize, however, that the fulfillment of these objectives is not simple, and one of the biggest problems facing SMEs is the lack of adequate funding, the reluctance of financial institutions or private capital regarding the finance requirements of SMEs.

This paper aims to emphasize the importance of collateral in credit risk management, how collateral influences market behavior of banks and customers selection, but also the excessive focus on collateral coverage during crises times. Based on specific studies of European Commission, European Central Bank for EU, and National Bank of Romania for Romania, we will show the major gap between SMEs' managers' expectations concerning the bank loans, on one hand, and the restrictive practice and limited vision of banks, on the other hand, particularly in last three years.

In the first part, we will review the main theoretical approaches regarding the collateral and its importance for the credit risk management. In the second part we will emphasize the importance that SMEs give to the relationship with financing institutions, and the expectations and obstacles in credit use as important mean for growth. On the other hand, we will prove that the negative European SMEs' managers perception regarding the tighten credit requirements is real, and banks hardly succeed (or even they are not interested) in satisfying SMEs needs. Finally, we conclude on the banks' behavior and responses and on the consequences of this attitude on the economy.



## FINANCING RESTRICTIONS FACING SMES

Banks, like other businesses, focus on value creation, based on accepted and controlled risks, (OECD 2006; Pathrose 2005). Banks are reluctant to grant loans to SMEs, due to a number of reasons, such as:

- informational asymmetry, resulting from the lack of standardized financial information and statements provided by SMEs, adding the bank's limited knowledge about the company seeking a loan (Badulescu and Badulescu 2010). The quantity and quality of information held by the entrepreneur in respect of its business activities can not be accessed in the same measure by the potential creditor. Thus, the creditors, the banks, are unable to make an effective discrimination between good projects, "bankable", and doubtful projects, and in this case, the price (here, for example, loan interest) will not be an efficient selection (discriminate), but rather will lead to a portfolio with many risky loans: some of them with interesting perspective, others - safe failures (the phenomenon of adverse selection). A second problem is moral hazard: once the loan granted, the control of using in accordance with the original application (risk and opportunity assessment) would be facing serious difficulties, and the loan could be used - in whole or in part - for other purposes. To reduce this risk, the creditor will demand security: company assets, receivables, personal assets, land or buildings, or will ask repayment of the loan, or, if possible, will try to restrict the access to the unused rest of the loan;
- higher risks associated with SMEs lending, due to limited assets that can be used as collateral, low capitalization and vulnerability to market risks. Lending institutions consider the environment of SMEs as highly competitive and uncertain (compared with large enterprises), which implies a considerable variability of results for similar SMEs working in the same sector and, finally, a high default rate. Limited market power, the high percentage of intangible assets, lack of relevant records of historical financial results and business, insufficient fixed or current assets, tend to create a higher risk profile of SMEs for potential investors, (OECD 2000 and 2004; Lin and Sun 2006; Toivanen and Cresy 2000). Insufficient collateral for creditors in order to overcome moral hazard risks are, probably, the most often invoked explanation regarding the difficulties accessing a loan. Insufficient collaterals can be also an expression of an early stage of the business, unconsolidated yet, or even an excessive demand for credit, away from the real capacity of the company engaged in the proposed project;
- besides the fact that small enterprise cannot provide adequate collaterals, they hardly convince the banks about their managerial and marketing abilities or technical skills, that are essential to generate adequate cash flows and a proper debt service. Often, SMEs are characterized by poor technical equipment, difficulties in ensuring qualified technical staff and an experienced management (human capital in general), to adapt to multiple and rapid changes of today's economic realities. Finally, the accuracy of the reports, insufficient legal business protection are barriers for financial institutions to determine the real profitability of the company, repayment ability, or the strength of guarantees. In developing economies, the risk profile is marked, additional, by unstable legislative environment, with negative consequences on transactions security.

On a first sight, the financing provided to SMEs – various, in small amounts and in a reduce typology compared to large companies – could involve lower cost of transactions; however, the situation is, in fact, different. The costs involved by the analysis of the application and disbursement of a loan are generally independent of the requested amount and usually comprises other fixed costs as legal taxes, costs to obtain risk information from specialized agency etc. (OECD 2006). In the case of small amounts, it is very difficult to recover a total cost, and the unique solution could be a strict control of them by standardizing the credit types, reducing the processing time etc. Implementing a scoring system can be a way to consistently reduce and uniform the transaction cost, but this step involves an important database for calibrating, major changes in borrower and

lender mentality, and it shows real efficiency only for credit institutions with lots of loan application from SMEs.

The Credit Bureaus' creation can be a significant step forward in solving these difficulties (OECD 2004), but a consistent number and volume of independent cost remains, as related to: site visits for collaterals reviewing and general survey of the borrower, loan administration cost, etc. For developing countries, the problems are even more extended, due to: insufficient performance of evaluators, lack in IT reports, legal problems in registration of collaterals and enforcement sale of collaterals etc. Finally, an increase in the general level of fees and interests is predictable, but also tempered by competition, acceptance from SMEs etc.

For developing countries, the restrictive factors already mentioned fill out with institutional and legal factors. First, we refer to the features of the banking system, which, if concentrated and uncompetitive, will restrain the expansion of SMEs sectors, both through conservative policy of customer evaluation, and through high rate of interest. All of these represent factors reducing the incentive of the banks to renew the products, to be closer to SMEs sector, to take and assume the risks related to innovative and new economic fields. Furthermore, developing countries have an unconsolidated stock market, so the interest of institutional investors is diminished, they haven't a pragmatic and transparent method to enter and exit from the capital of selected business. At institutional level, we can speak about the rather discordant measures taken by the authorities: guarantee funds, state aid, fiscal facilities, consulting etc. in order to support the SMEs in accessing finance and developing their businesses.

The behavior of lenders invoking informational asymmetry, risk profile related to SMEs or insufficient legislative and organizational framework is only one side of the explanation of the financial gap in the case of SMEs. To support their arguments, banks or other investors, pointed the relative reduce number of "bankable" companies, or reliable to invest in them, so called "the demand side constraints".

From this point of view, often the lenders deal with a considerable number of projects that don't comply to the minimum requirements in order to be taken into consideration for financing. The reason for the rejection of these projects is often controversial, but the dispute between the banker conservatism and the poor quality of presented projects can be solved referring to neutral, good reputation institutions: experts, academics, scientists, who often admit that the number of real good, innovating and well sustained (in terms of financing needs and repayment capacity) applications is very short. This is the case both in traditional both in innovative industries: IT, micro-technologies, where the number of puerile, incomprehensible, unsustainable projects is extremely high and the pipeline of valuable and valid project is limited. Before being a competition issue, the poor quality of projects is a problem of perception, and the entrepreneurs should be aware that it matters in the same weight for lenders.

The second restriction consists in the incapacity of the managers to take advantage of all the opportunities occurred in the search for financing sources, regardless of the inner quality of the project proposal. It is about the inability to convince and argue through valuable ideas, about the low availability to allocate sufficient time to build a solid and based on trust and closeness relationship with the credit institution, in order to compensate the lack of other resources, and this issue is valid for all categories of lenders or investors: institutional investors or angels investors. Often, the manager have little patient to cover all mandatory stages, considering it as a waste of time, which unfit him from the attention to the technical aspects of the project. They ignore, voluntarily or not, the financial aspects of the project, foreign trade procedures, encashment risks, insurance, very important for the safety and continuity of their business and well appreciated by investors, too.

The third aspect of demand side restrictions is related to the venture capital financing and express the opposition of the owning manager to give up the control of the business, in favor of outside person, the so call "control aversion", extremely outspread in many countries, no matter the financial market development. Some researches (Cressy and Olofsson 1997; Berggren, Olofsson and Silver 2000) show that the rejection occurrence is more widespread among the companies in

early stages of development, when the investor has more self confidence in his personal abilities and the prospective of the business, and it is more temperate at the maturity stage, when the owner intimately knows the reality of the entrepreneur life.

## COLLATERAL, CREDIT RISK AND BANK BEHAVIOUR

Collateral impact on credit risk, and, in a macroeconomic perspective, on the supply of credit to the companies, in special for SMEs, is a topic attracting a constant and increasing concern in recent years. From the theoretical point of view, we find two alternative interpretations that lead, empirically, to different predictions. On the one hand, is the adverse selection problem faced by a bank in financing activity, and therefore, the security offered by debtors can help alleviate this problem (Stiglitz and Weiss 1981:393-410; Chan and Thakor 1987:345-363). Thus, low-risk borrowers are willing to offer a better guarantee, considering their lower risk as a signal for their capabilities fulfil its obligations under the credit agreement and, therefore, are less probability to lose the guarantee. The guarantee is interpreted as a signal that allows the bank to reduce or eliminate the adverse selection problem caused by the existence of informational asymmetries between the bank and borrower, when the loan was approved, (Jiménez and Saurina 2004).

On the other hand, is the opinion, that even there is a *ex ante* symmetry between debtor and creditor (for example, the bank knows the quality of the debtor and correctly predicts the role of loan), guarantees are designed to mitigate the moral hazard problem once the loan was granted. In this respect, the security engaged helps to align the interests of both, creditors and debtors, thereby avoiding a situation where the borrower makes less effort to ensure the success of the project for which funding was granted. Security becomes a means to discipline the borrowers' behaviour (*ex post*) given the existence of a credible threat (Aghion and Bolton 1992:473-494).

Starting from this view, we can expect to find a direct relationship between loan quality and/or the borrower, and the size of collateral, i.e. the assumption that the guarantee is a signal of high quality borrowers. However, this hypothesis is not agreed by the bankers, who tend to establish a direct relation between the level of credit risk and the volume of collateral.

For other scholars, (Manove et al. 2001:726-744; Argentiero 2009), the size and quality of collateral is linked to the banks behavior on the market. This dichotomy speaks about *lazy banks* vs. *diligent banks*. "Lazy banks "are defined as those banks that prefer to substitute a careful and efficient screening of projects with a high concern for the size and quality of proposed collaterals. In such framework, safer borrowers offer more guarantees compared with risky borrowers, primarily to give a signal about themselves when they are evaluated by a bank, and secondly, to avoid the implications of carefully credit analyzing and screening, as for risky borrowers. Banks, in turn, will adapt to this process and, gradually, will reduce their analysis and monitoring activities for borrowers with substantial collateral. Therefore, risky but innovative projects tend not to be financed, thereby reducing the social welfare.

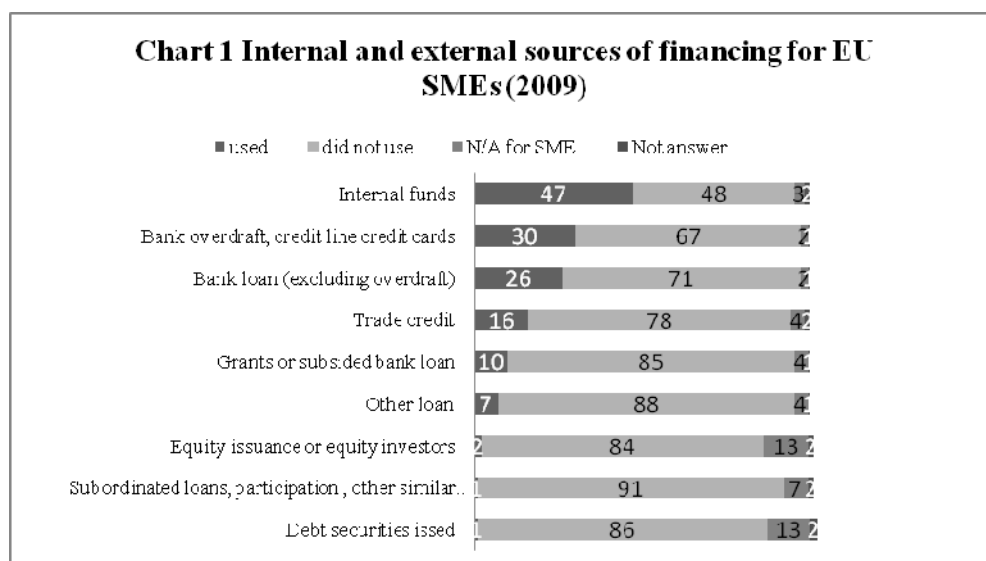
Although interesting, and certainly based on some market behaviors, a model of "*lazy bank* vs. *diligent bank*" does not seem to be confirmed by statistical data; the results suggest a rather different kind of diligent behavior of these banks (Argentiero 2009). In addition, research has shown that the presence of collateral is not able to reduce credit risk (default risk) *ex post*, these results are consistent with the theory that understands the collateral as a credible commitment against informational asymmetries, and not as convenient coverage against credit risk *ex-post*.

In addition, there are significant differences in banks' policy on the role of collateral required in long-term loans (compared with the short term), because this collateral is a part of a risk, but also it may increase coverage as the borrower made systematic repayments. Finally, we haven't ignore the influence of the regulatory environment, the possibility of applying the law on forced execution of collateral, that may influence the type and size of committed collateral, as the other non-price covenants asked in credit agreements.

## BANKS' REQUIREMENTS VS CUSTOMERS' EXPECTATIONS REGARDING SMES FINANCING. THE EU CASE

Our analysis aims to reiterate those assertions by comparing two complementary, but suggestive, points of view: some information revealed by the Flash Eurobarometer Access to finance No 271, conducted for the European Commission (Directorate General for Enterprise and Industry) in collaboration with the European Central Bank, a survey on the access to finance of small and medium-sized enterprises in the euro area, and National Bank of Romania quarterly surveys on lending of non financial sector and population (February and August 2010).

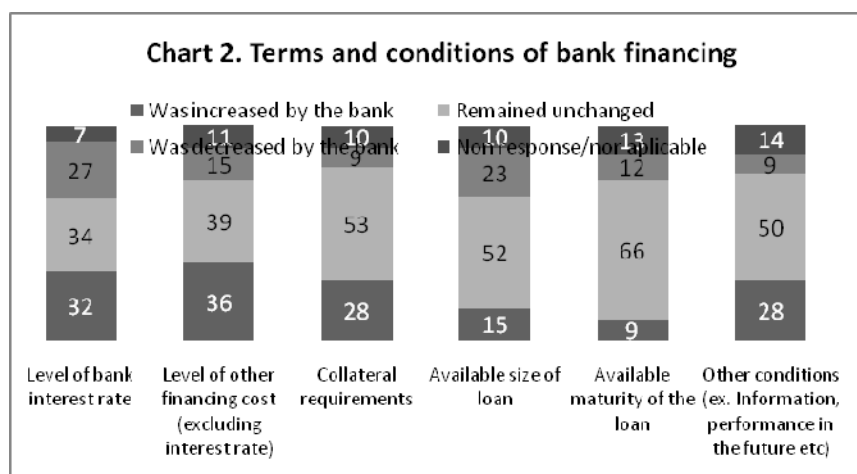
Thus, according to the Flash Eurobarometer Access to finance No 271 (ECB, 2009), one of the most important concerns for managers of SMEs in the EU is access to finance, this problem was mentioned by more than 16% of respondents (just following "finding customers", but more important comparing with the "competition" or "availability of qualified staff"). Regarding sources of funding, almost half (47%) of managers in the EU responded that the company used its own funds in the last six months to finance its operations (some have only used their own funds, while others used a combination of equity to external financing). The most common forms of external financing (resources) were bank loans, about 30% of companies using at least one overdrafts (overdraft) or line of credit, and 26% have taken a traditional bank loan, with fixed maturities, a smaller proportion using public financing, friends or family, or other forms of financing - leasing, factoring or hire-purchase.



Source: European Central Bank, (2009) Survey on the Access to finance of small and medium-sized enterprises in the euro area: second half of 2009,

<http://www.ecb.europa.eu/pub/pdf/other/accesstofinancesmallmediumsizedenterprises201002en.pdf>

According to the above mentioned survey, managers of companies that have applied for a bank loan in the last six months were asked to assess changes in the terms and conditions of the bank financing for their company. Approximately one third (32%) of managers said that interest rates were raised by the bank during this period and a somewhat lower proportion (27%) responded that their bank has decreased these rates in the last six months. Similar results to the question of changing interest rates on loans, show the SME managers opinion on changing non-price related terms of funding, about 36% of the respondents said that non-price terms (such as guarantees, loan maturity, size of the bank approved the credit application, etc...) have been increased / strengthened by their bank in the last six months and a smaller proportion (15%) said these costs have declined, while 39% saw no change.



Source: the same as Chart 1

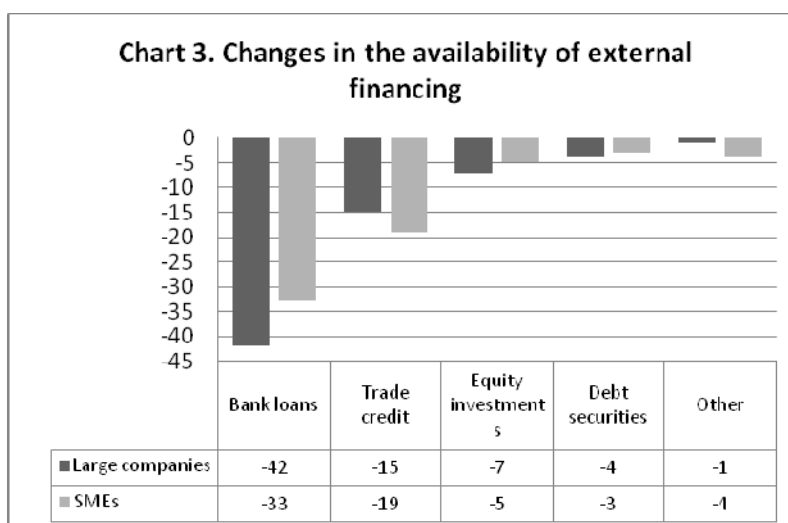
On the other hand, for the majority of managers, the changes imposed by banks in connection with non-price terms and conditions known significant differences, for example, a significant proportion of managers consider that the bank tightened credit agreement, including the size / the quality of the guarantees.

In a general view, grouping the responses in two category of "increased" or "decreased", is more likely to say that the terms and conditions of the financing banks have deteriorated rather than improved. For example, 28% of managers believed that collateral requirements have been increased by their bank in the last six months, while only 9% said they decreased.

Regarding the characteristics of companies affected by these changes in bank loans conditions, it is estimated that large companies with at least 250 employees and / or with an annual turnover of between 10 and 50 million €, which have applied for a bank loan found that collateral requirements or other non-price terms have deteriorated during that period, and the same opinion was recorded from companies with five and nine years on market. Surprisingly, companies with fewer than 10 employees, start-up companies, or less than two years existing on market, did not consider that the bank has increased interest rates or non-price conditions (including collateral), but we consider this neutral to positive response of small businesses and start-up managers is given by the relatively limited access to bank loans of this type of company, and their modest relevance in banks' loan portfolio, covered by collateral.

In terms of sectoral point of view, the majority of managers in construction sector (46%), considered that the terms and conditions of bank financing, required size of collateral, were deteriorated in 2009, compared with only 19% responses from managers of firms working in industry. Also, managers of innovative companies share the pessimism saw in construction sector.

Businesses characterized by stationary or decreasing turnover reported generally tightening of a non-price terms (collateral, commitments, etc.) requested by the bank, and, last but not least, the increase of price conditions. For example, while 42% of company managers showed a deterioration in the situation of their company in the last six months have said that banks have asked for a higher collateral for renewing the existing credit lines, for the managers of companies who experienced an improvement of their financial situation, that percentage is about at half (24%).

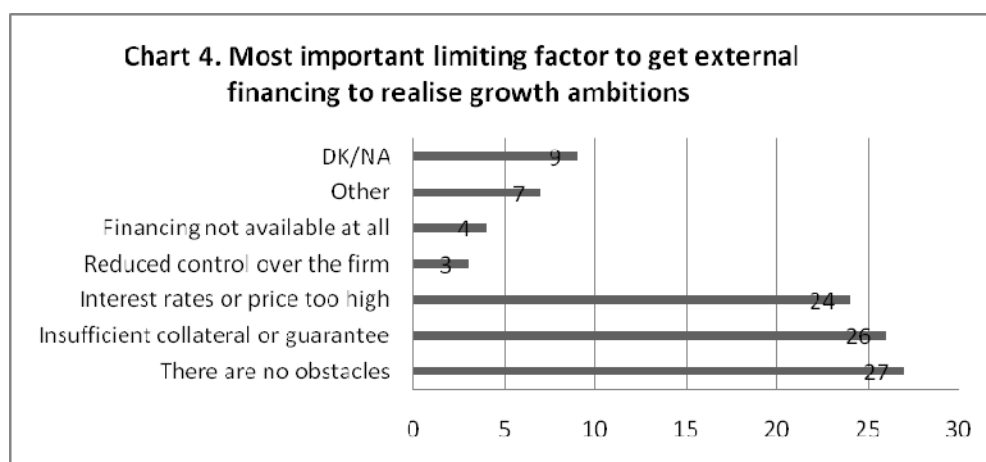


Source: European Central Bank, (2009) Survey on the Access to finance of small and medium-sized enterprises in the euro area: second half of 2009,

<http://www.ecb.europa.eu/pub/pdf/other/accesstofinancesmallmediumsizedenterprises201002en.pdf>

The trends analyzed above explains, at least in part, the paradox of the bank credit in the current period of crisis: while the bank loans has remained the favorite method of external financing needs of business, he recorded the steepest drop in their availability; more than 40% decreasing for large firms, and about 33% decreasing for SMEs (Chart 3).

According to that above mentioned research, where the SME managers see the bank loan as the preferred form to achieve growth ambitions, however, they believe there are important restriction in using these financing form: first, the insufficient collateral required by lenders; this view grouping about 26% of all responses, second- the cost of financing, with 24%. Significant at lower importance (3-7%) was mentioned other restrictions, such as loss of control over their companies if the bank would grant credit.



Source: European Central Bank, (2009) Survey on the Access to finance of small and medium-sized enterprises in the euro area: second half of 2009,

<http://www.ecb.europa.eu/pub/pdf/other/accesstofinancesmallmediumsizedenterprises201002en.pdf>

Analyzing variations from one country to another, within the same options for bank credit, we see a significant distance between the views of managers in Germany, which, in a significant proportion (53%) foresee no significant obstacles in achieving growth targets, and Romanian managers, the most pessimistic in this regard - they see all sorts of obstacles - the proportion of over 82%. In this pessimism, Bulgarian and Romanian managers indicate the high cost of bank financing

(58% for Bulgaria or 41% for Romania), but the SMEs managers from Spain and Italy see the insufficient collateral for bank loans as the main obstacle to further development of business (36% and 34%).

From this point of view of collateral, the prospect of SMEs in Romania appears, in a European context, as acceptable, with only 18% versus 26% EU average.

**Table 1. Most important limiting factor to get a loan (%)**

Country	There are no obstacles	Insufficient collateral or guarantee	Financing not available at all	Interest rates or price too high	Reduced control over the firm	Other	DK/NA
Germany	53	26	6	6	0	7	2
Belgium	49	2	4	12	4	9	20
Austria	37	33	1	10	3	7	9
France	37	31	1	7	5	10	8
Netherlands	34	9	3	19	9	12	4
Denmark	31	12	6	12	14	5	20
Portugal	31	13	1	33	11	5	6
United Kingdom	30	15	8	23	11	1	13
Sweden	29	20	19	0	1	11	20
EU27	27	26	3	24	4	7	9
Bulgaria	24	8	2	58	0	4	5
Poland	19	31	5	35	3	2	6
Spain	18	36	2	23	0	7	7
Italy	12	34	3	32	0	2	11
Romania	8	18	8	41	4	12	10

Source: European Central Bank, (2009) Survey on the Access to finance of small and medium-sized enterprises in the euro area: second half of 2009,

<http://www.ecb.europa.eu/pub/pdf/other/accesstofinancesmallmediumsizedenterprises201002en.pdf>

## CONCLUSIONS

What does emerge from these data and theoretical assertions, about the banks behavior in relation to the required loans collateral? First, we consider the bank behavior still striving to avoid moral hazard in the relationship with borrowers SME for example, as that moral hazard can increase in crisis period. Banks appear to show a secondary interest to the problems of informational asymmetry. However, these surveys have a considerable generalization effect, referring mostly to existing credit relationships, and less to the new loans to new customers, so the banks are, in general, aware about the deterioration of economic data parameters - financial or business, of the company. Secondly, we perceive the tightening of non-price conditions - here, relating to collateral – as a recovery practice of a less "creative" bankers diligence, in order to cover the macroeconomic or specific sectors risks (e.g. construction, new technology, etc.) increasing the size of collateral, often unrelated to individual performance of the companies. Moreover, increased propensity for real estate collateral, accompanied now by more pessimistic assessment of market value (see LTV development, specified above) seems to indicate an emphasis on limited perspective, only seeking for an extended credit risk coverage, but ignoring the emergence of a new risk, the risk of collateral. It seems that the link between the bank propensity for fixed collateral and cyclicity of real estate market (see Kim, Y.-J., Lee, J.-W 1999, FDIC, 1998) is not yet seen by the banks as a valid threat. The supervisory authorities' efforts to mitigate this pro-cyclical behavior haven't got the desired effect. From this perspective, we believe that the named theory "*lazy banks vs. diligent banks*" gain a new understanding and applicability.

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## THE CONSEQUENCES OF FRAUDULENT FINANCIAL REPORTING

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### Abstract:

*Financial reporting frauds are a serious threat for the investor's confidence in the financial information. The side effects of the financial frauds are affecting the integrity, quality and confidence in published financial reporting. Criminals who carry out such fraud, from management to employees, must understand that the interference of records is a crime that will be judged. Qualitative financial reporting, including reliable financial statements without mistakes, can be made when there is well planned corporate governance. Although participants in corporate governance responsibilities vary depending on their level of preparation and on the presentation form of financial reporting, a well-defined working relationship among these participants should reduce the probability of financial fraud.*

**Keywords:** financial reporting frauds, frauds, financial reporting

**JEL Classification:** M10, G21, G24, G32

## 1. FRAUD AND FRAUDULENT FINANCIAL STATEMENTS

Broadly speaking, fraud may be defined as an intentional act to gain an advantage by an unfair or unlawful gain. It may include: (Rubin G. A., 2007) fraudulent financial reporting; misappropriation of assets (inside or outside the system, such as: embezzlement, payroll fraud and theft); revenue or assets acquired from illegal or unethical activities (excessive customer billing or fraudulent sales practices); costs for illicit purposes (commercial and public bribery as well as other improper payment systems); income received fraudulently or intentionally avoided costs (systems in which an entity commits fraud against its employees or to third parties, or when an entity intentionally avoided costs such as income taxes and sales taxes); fraud against the company (e.g. counterfeit producers knowingly violates intellectual property rights). The Department for Institutional Integrity, which investigates allegations of fraud and corruption within the World Bank Group and the Bank's financed projects, specifies the actions that might be considered fraud or corruption in the banking system: (Banca Mondială, 2009) auction fraud, understandings among participants in the auction, fraud during the execution of the contract, audit avoidance, setting inappropriate prices and partnerships, miscalculation of costs and work, acceptance of gifts or bribes, soliciting or receiving bribes, incorrectly using the World Bank funds or its positions, fraud in the case of movements, theft and deception. Although all categories of fraud are major and worthy to be debated, only fraudulent financial reporting is handled in the following sections. (Rubin G. A., 2007)

Fraud in financial reporting is based on conscious intent of the perpetrator (directors, auditors, employees, etc.) to wrongfully present the reality. But the intended act to wrongfully presenting the reality may be the cause of either fraudulent financial reporting either of undue assets reclaims. Therefore, "fraudulent reporting only refers to intentional misrepresentation, including omissions of amounts designed to mislead the users of the financial statements" can be translated as (Popa I., Man Al. Rus A., 2009): manipulation, forgery, counterfeit or alteration of records or supporting documentation, misstatements/omissions regarding events/transactions/information, intentional misapplication of accounting principles related to values/classification/manner of presentation/delivery of information, fictitious entries records (towards the end of the year) to

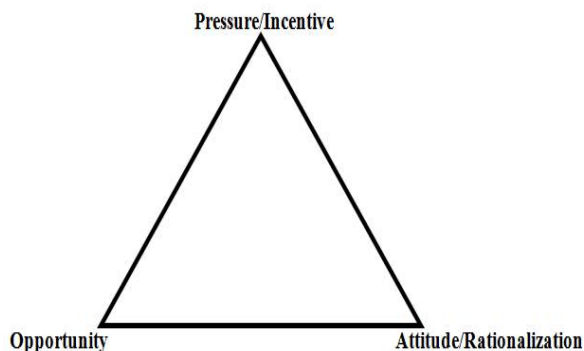
manipulate operating results or achieve other objectives, improper adjustments of the assumptions and changing in judgments used to estimate account balances, omissions/advances/delays in recognition of events/transactions that occurred during the reporting period, concealment or non-disclosure of facts that could affect the amounts recorded in the financial statements, engaging in complex transactions designed to distort the entity's financial position or performance; changing the records or conditions of significant transactions. Opposed to fraudulent financial reporting, an undue asset reclaims concern (Popa I., Man Al. Rus A., 2009): revenue dilapidation (revenue coming from unwarranted claims / diverting income), theft of physical assets or intellectual property, payments to fictitious suppliers, without the entry of goods / services, use of assets in personal interest (including also personal loan guarantees), false records to cover the deficit. These abuses are often minor and are usually committed by employees, although sometimes, the managers themselves are involved in such activities. Misappropriation of assets may also include expenses incurred for illicit purposes, in the form of bribery, whether for commercial or official purposes. Although improperly acquiring assets often is not significant for financial statements, „it may continue to result in substantial losses for the organization. (Soltani B., 2008)

## 2. FACTORS THAT ENHANCED FRAUDULENT FINANCIAL REPORTING

According to studies conducted by the National Commission on Reporting Financial Fraudster in America (or Treadway Commission) fraudulent financial reporting usually occurs as a result of certain environmental forces and opportunities, institutional or individual. These forces and opportunities add pressures and incentives that encourage individuals and companies to engage in fraudulent financial reporting. When the right mix of forces and opportunities is reached, it can produce fraudulent financial reporting (*Report of the National Commission on Fraudulent Financial Reporting*, 1987). Ever since 1950, Professor Donald R. Cressey, has studied the factors that lead to committing fraudulent acts. According to his studies, he concluded that when fraud does occur, there are three factors that act together: intent (premeditation), opportunity and pressure, known as the „fraud triangle” (see Figure 1).

Although the factors above are forming the "fraud triangle", it's sufficient that one to take place at a time, for fraud to occur. The sequence steps in order to exercise the act of fraud are recounted below (Soltani B., 2008)

*Incentives or pressures* are the first factors that influence individuals to commit fraud and it refers to excessive pressure to achieve financial targets, to induce optimistic and unrealistic messages in annual reports. In addition, a firm may be threatened and pressured also by intense competition, by market saturation or sudden changes, acquisitions (mergers), the financing need or cash flow problems. Even otherwise honest individuals can commit fraud in an environment that imposes such threats.



**Figure 1. Fraud risk**

Source: Dent P., *Beware of fraudulent financial reporting*, 2009, available <http://www.deloitte.com/view/en>

*Opportunity* refers to those factors that enable "fraud to be more easily committed and detection less probable (Hooper J. M., Forneli C. M, 2010). Therefore, ineffective controls or absence of control favors fraud intentions. These factors can be related directly to inadequate monitoring by management or the ineffectiveness of the board of directors or of the audit committee to oversee the reporting and the internal control.

*Attitude or premeditation* is the trigger factor of the fraud act and refers to the fact that the perpetrator must have a mindset that would justify or premeditate the act of fraud. Detection of risk factors that determine board members, management, employees to be predisposed to such intent may be quite difficult. So when a company monitors people and processes to discourage and detect fraud, it must follow the three aspects, because fraud involves incentives or pressure to commit a fraudulent act, a perceived opportunity to do so, and some reasoning. (Soltani B., 2008)

### 3. WHO AND HOW COMMITS FRAUDULENT FINANCIAL STATEMENTS

According to the Report of the USA National Commission on Fraudster Financial Reporting in the majority of the studied cases, the company's management, such as chief executive, president and chief financial officer, were the fraudulent perpetrators. In some cases, it was found that there were made intentional false disclosures from the accountant throughout falsified documents and records. Furthermore, the committee studies have shown that while the authors of fraudulent financial reporting have used different means, the effect of their actions is almost always consist of overestimating or smoothing earnings in order to exaggerate the company or its assets. In addition, fraudulent financial reporting does not always begin with an openly recognizable act of distortion of the financial statements. In many cases, fraudulent financial reporting is the peak point of a number of acts intended to address operational difficulties. Initially, the activities may not be fraudulent, but in time they may become probable, especially when the tone set by management permits or encourages such activities in order to have fraudulent financial reporting. Thus, we can say that potential criminals involved in fraudulent financial reporting can be both in senior management and among mid-level employees, but we can think also on organized criminal organizations for this purpose. To describe ways in which fraud is committed on the financial statements, the literature (Zabihollah R., 2005) uses the term „fraudulent financial reporting schemes” or „earnings management” (Nguyen K., 2008). However the term “earnings management” does not always refer to an illegitimate action. The accounting policies (U.S. GAAP) or other accounting standards (IFRS) make the difference between legitimate and illegitimate gains. When companies engage in legitimate administration of earnings management within their financial statements, they are submitted as true and are treated in accordance with applicable accounting standards. We can say that earnings management is a fraud when it “involves gains arising from improper revenue recognition, overstating of assets or undervaluation of liabilities” (Zabihollah R., 2005). In order to manipulate the earnings, managers use different aggressive accounting techniques, which have as effect the artificially increase or decrease in revenues, profits, or earnings per share. They use these tactics, hoping to cope with the pressures that are on the market. In general, companies that are traded most often feel the pressure, either from securities analysts who expect them to disclose as much information as possible, either from shareholders who expect, based on their investments, for companies to obtain bigger profits in a short period of time. Failure to obtain expected dividends by investors and hence earnings per share can cause a significant decline in the capitalization of a company. Therefore „earnings management” may be motivated by the pressure or the desire to maximize performance based payments. However, managers do not always aim for the purpose of overestimating management earnings. They are also interested in the opposite situation, to reduce these gains, especially when the intention is that of evading the payment of fees.

A practical case of committing fraud in financial statements is „time uniformization of revenue”(Alexander D., 2007). This technique is used by managers to hide some bad periods and involve a manipulation of earnings to show that there was a steady increase over time, although not stated by facts. Given the fact that investors react negatively to the earnings of companies which

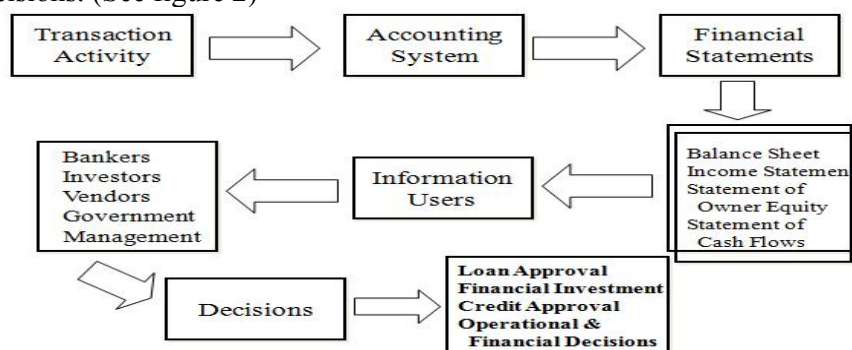
they perceive as unsafe and risky, standardization of revenue finally meets the satisfaction of investors and maintains a high price of the shares.

Another form of fraud known as „big bath behavior” (Hooper J. M., Forneli C. M, 2010), occurs when companies manipulate the profit and loss account, to make the years in which the situation has been very good to seem worse than it really is. Therefore, taking into account the significant losses, they hope to consolidate and to wipe them all at once. As a result of this action, future costs are reduced and natural profits implicitly increased. In other words, the company takes a „big bath” in one year so it can show that the profit will be increasing in the future. Handling can cause either an increase in the prices of stocks or an increase in performance bonuses for management.

Zabihollah Rezaee studied in 2005 which are the most common methods of fraudulent financial statements and found that "the majority of fraudulent financial statements are caused by overstated revenues and assets while 20% were due to underestimation of liabilities and expenses.

#### 4. VICTIMS OF FRAUDULENT REPORTING

Financial statements are prepared and presented at least once a year and aim to meet the information needs common to a number of potential users. Many visitors take the financial statements presented as the main source of financial information and therefore a misrepresentation may affect decisions. (See figure 2)



**Figure 2. Users of Financial Statements**

Source: Hanna C Quffa , *Financial Statement Fraud*

Investors are of course the first victims of fraudulent financial reporting. If company earnings are overstated, investors who buy are deceived and if earnings are understated, the buyers are those who will lose. However they are not the only ones that bear the immediate and harmful effects. The victim list includes others who rely on information from the company's financial reports: banks and other financial institutions lend funds to the company, suppliers, customers seeking to make performance on the company's contracts, partners, financial analysts providing investment advice about the issuer and its securities, lawyers for the issuer and probably for the issued insurance companies issuing insurance for directors and officers trust and then large claims. To avoid the victim position of fraudulent financial reporting, any user, whether a financier, a borrower, an insurer, investor or shareholder, can make a fraudulent statement when one asks himself around the possibility of achieving or identification of one of the following situations (Weir J.,2009): company reported profit but is not very good on cash flows; gross profit levels remain high, even if the company faces pressure from the market to stabilize prices; receivable accounts, debt and inventory accounts levels are rising, while sales are steady or declining; the company is close to breaching banking pacts; there is a significant year-end adjustments; there is substantial bonuses for top executives.

## CONCLUSIONS

Although the achievement of financial reporting by so-called "fraudulent scheme" refers to short-term achievement of "management earnings", they may draw the following consequences in time: undermines the credibility, quality, transparency and integrity of financial reporting process; endangers the integrity and objectivity of the auditing profession, especially auditors and audit firms; diminishes the confidence in the capital markets, as well as in market participants and in the reliability of financial information; makes capital markets less efficient; adversely affects economic growth; huge lawsuit costs; destroys the careers of people involved in fraudulent financial statements; they cause bankruptcy or substantial economic losses for companies involved in financial statement fraud; encourages regulatory intervention; erodes public confidence and trust in accounting and auditing profession.

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## FROM TOTAL TO STRUCTURAL HARMONIZATION IN THE FIELD OF EUROPEAN DIRECT TAXATION

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### Abstract:

*Among economic policy questions remaining without a definitive response perhaps none are as contentious as the future of direct taxation within the European Union. In this paper I intend to express my opinion regarding the issue of Tax Harmonization versus Tax Competition which has been globally debated over the last decades and which is still considered extremely controversial at the European level. Studying the researches in the specified area corroborated with empirical evidence I summarized myself some key questions: Has indeed national tax systems a negative effect on EU market integration? Is indeed tax harmonization critical to the operation of the Single Market so that goods, services, people and capital can move freely around the EU? There are some questions appreciated as very important which I try to answer in this paper. Specifically, this paper encourages the Commission and member states to accept the beneficial role of tax competition in limiting the over-expansion of EU jurisdictions. Given that tax harmonization is an almost impossible goal for European Union, and on the other hand so many national different tax regulations pose problems for all companies doing business abroad, the solution would be consolidation of the tax rules.*

**Keywords:** European Fiscal policy, Tax sovereignty, Tax competition, Tax harmonization

**JEL Classification:** F36, F42, G18

### INTRODUCTION

The debate over taxation within the European Union (EU) is a heated one. The literature on the subject is fueled by one central question: Is regulated tax harmonization or is market driven tax competition the best solution to the awkward state of asymmetric tax rates that currently exists in the EU? Not surprisingly, the existing viewpoints run the gamut from entirely pro-harmonization to pure pro-competition stances. As a whole however, the literature simply reveals the ambiguity of the issue, as reflected by its increasingly complex attempts to convey the reality of the European situation.

Tax harmonization consists in coordinating the taxation systems of the European countries to avoid non-concerted and competing changes in national fiscal policies, which could have an adverse effect on the internal market. Full tax harmonization covering 27 countries is a difficult undertaking, since this area remains largely the prerogative of the Member States. However, a minimum degree of harmonization has been achieved, in the field of indirect taxation, e.g. VAT, excise and custom duties. In this paper I express my opinion regarding the issue of tax harmonization in the field of direct taxation.

Total tax harmonization is defined by the tax theory as the result of the structural harmonization and harmonization of the tax rates. The structural harmonization is defined by the tax theory as the result of the harmonization of the structure of taxes. Tax harmonization can also be understood as the process, the tools for reaching the selected aim and the result, harmonization of tax legislation itself together (Nerudova, 2008).

Based on a number of empirical studies from the literature, I have investigated several attitudes to direct tax competition and direct tax harmonization including the tax competition theories.

Perhaps the most important argument revealed by this paper is that fiscal policy is a discretionary instrument used by national authorities for influencing the macroeconomic indicators being the main reason for which the member states will not renounce its use. Harmonization efforts failed because the member state perceived them as the effort to restrict their fiscal sovereignty.

Specifically, this paper encourages the Commission and member states to accept the beneficial role of tax competition in limiting the over-expansion of European Union jurisdictions

and not try to achieve the tax rates harmonization anymore but only the harmonization of the tax basis. The aim in this field must be only the structural harmonization.

The rest of the paper is divided in four sections. In the first section I will present a review of existing arguments pro tax harmonization. In the second section I will synthesize the successes and failures in the area of direct tax harmonization. In the third section I will present the main part of this paper, followed by arguments for fiscal competition. Based on my research I will present the solution I found for the controversial problem which is the aim of this paper. In the final section I will present some conclusions.

## **ARGUMENTS PRO TAX HARMONIZATION**

The harmonization of taxation in the Community, an omnipresent issue within the European Commission, specifically provisioned in the European Community Treaty (TCE) is frequently brought in the attention of expert groups in the member states, in the context of the permanent enlargement of the community space, through the adherence of new states. If regarding indirect tax, the harmonization is the competence of the European Union, being imposed by the necessity of reducing disparities at the level of free circulation of goods and services, thus easing the functioning of the internal market, direct taxation is, in principle, the competence of the member states. Generally, states are reluctant regarding harmonization, but the European Community Court of Justice (CJCE) admits that the community law maker intervenes in the issue of direct taxation on the juridical base of Article 94 TCE, when there is a direct incidence on the functioning of the common market.

European Commission, with respect to the difference in the methods of national tax base construction, was focusing during the harmonization mainly on those types of the direct taxes, where at least the partial harmonization is considered to be the necessary condition for eliminating the obstacles to the smooth functioning of internal market. Especially corporate income tax is considered to be this type of tax. The integration of the financial markets made capital highly mobile factor, which can quickly move to the states with more advantageous tax regimes.

In the area of taxation policy, the Community is pursuing a number of objectives:

1. In the field of direct taxation, where the existing legal framework mostly takes the form of bilateral agreements between Member States, the primary objective of Community action has been to close the loopholes which permit tax evasion; and to prevent double taxation.
2. The objective of more recent moves towards a general taxation policy has been to prevent the harmful effects of tax competition, notably the migration of national tax bases as firms move between Member States in search of the most favorable tax regime. Though such competition can have the beneficial effect of limiting government's ability to "tax and spend", it can also distort tax structures. In recent years the proportion of total taxation accounted for by taxes on relatively mobile factors like capital (interest, dividends, corporate tax) has fallen, while that on less mobile factors, notably labor – for example social charges - has risen.
3. The Maastricht Treaty provisions on Economic and Monetary Union introduced a new dimension to general taxation policy by severely limiting government's ability to finance public expenditure out of borrowing. Under the Stability and Growth Pact, UE Member States must not at any time run budget deficits at a level above 3% of GDP. The general aim of the Pact is for Member States budgets to be roughly in balance over the economic cycle. Higher public spending can therefore be financed only out of higher revenues.

The Commission in its Communication "Tax Policy in the European Union - Priorities for the years ahead" of 23 May 2001 stated its belief that taxes on personal income may be left to Member States even when the European Union achieves a higher level of integration than at present. (European Commission, 2001) At the same time the Commission acknowledged that coordination at European Union level is in some cases necessary to safeguard the application of the Treaty freedoms and to eliminate tax obstacles to cross-border activities. The Commission also

referred to the need to coordinate personal income taxes to prevent double taxation or unintentional non-taxation in cross-border situations, or to tackle cross-border tax evasion.

The European Court of Justice has consistently held that, in the absence of harmonization, taxes on personal income fall within the competence of the Member States but they must respect the fundamental Treaty principles on the free movement of workers, services and capital and the freedom of establishment. In particular, there must not be any direct or indirect discrimination on the basis of nationality, nor may there be any unjustified restrictions to the four freedoms.

In the frame of practical harmonization the European Commission decided for the structural harmonization at first and then successively for the harmonization of the tax rates.

## **SUCSESSES AND FAILURES IN THE AREA OF DIRECT TAX HARMONIZATION**

The fundamental directive in the field of direct taxes is Council Directive 77/799/EEC of 19th December 1977 concerning mutual assistance by the competent authorities of the Member States in the field of direct taxation for the reasons of controlling the multinational companies' activities. In 1997 the validity of this directive was extended and includes the indirect taxes too, especially value added tax.

In connection with the establishment of the internal market two very important directives were adopted in 1990 concerning the corporate taxation. Both of these directives are in force since 1993. The first Council directive no. 90/434/EEC from 23rd July 1990 is known as The Merger Directive. It regulates deferment of the tax liability resulting from capital yield during merger, business divisions, transfer of assets and cross-border shares exchange within the European Union. The aim of the directive is to avoid taxation of the profit, which can arise during the merger from the difference between value of the transfer of assets and liabilities and their accounting carrying value. The Merger Directive was amended by the directive no. 2005/19/EC, which was adopted particularly in connection with the establishment of the statute of the European company. This directive extends existing competence of The Merger Directive to European company and European cooperative society as well. Directive particularly enables transfer of the seats and reorganization of the European company and European cooperative society within the European Union without any tax obstacles; ensures that transformation of the branch to the subsidiary will not have any tax consequences and includes a new type of transaction – so called split off.

The second directive no. 90/435/EEC from 23rd July 1990 known as The Parent-Subsidiary Directive regulates the system of the taxation of the group of companies, which operate on the national level and companies, which operate within the European Union. The aims of the directive are to ensure that member state of the parent company either does not tax the incomes of the subsidiary with the seat in other member state or if these incomes are taxed, it enables parent company to deduct the income tax paid by subsidiary in other member state from the tax base; to exempt the distribution of the net profit of the subsidiary from the withholding tax.

In 2003 was adopted the directive no. 2003/123/EC, which amends the original Parent-Subsidiary Directive and extends the competence of directive to distribution of profits obtained from the permanent establishment located in one member state from the subsidiary, which is resident in other member state; distribution of profit of the company to permanent establishments, which are located in other member state than companies and subsidiaries; new types of the companies – to the European company and European cooperative society.

The Arbitration Convention no. 90/436/EEC is valid in the European Union since 1995 for the period of five years and its aim is to eliminate double taxation which could arise in the case of different interpretation of principle of the transfer pricing in different countries. Until now the validity of the convention has been always extended by other five years. Nowadays it is valid until 2015.

The Savings Directive no. 2003/48/EEC was adopted to enable the taxation of the incomes in the form of interests payments resulting from the member state to persons, who are trying



through their residency to decrease or eliminate taxation. The Directive has entered into force since 1st July 2005. The member states are obliged to provide other member states with information about interests, which were paid off to the individual savers.

The uniform system of the interest payments and royalties taxation between associated companies is set in Interest and Royalties Directive no. 2003/49/EC, which has entered into force since 1st January 2004. Directive eliminates withholding tax in case of interests and royalties cross-border payments.

In the field of direct business taxation the main measure was to introduce a Common Consolidated Corporate Tax Base for European business, a strategy the Commission has been working towards since 2001. A second series of measures is aimed at removing cross-border tax barriers faced by EU businesses. The third measure is aimed at creating a new car taxation strategy to replace Member State registration taxes. The fourth measure concerns a new policy to combat distortions due to fraud and tax evasion (European Commission, 1997).

All the successes I enumerated above represent only minor steps in the field of structural harmonization. In the matter of tax rates, harmonization efforts failed as nowadays tax rates differ very substantially within European Union, ranging from a minimum of 10 % in Bulgaria and Cyprus to a maximum of 59 % in Denmark. (Tabel no.1)

Generally, the new Member States have a different structure compared with the old Member States; in particular, while most old Member States raise roughly equal shares of revenues from direct taxes, indirect taxes, and social contributions, the new Member States often display a substantially lower share of direct taxes in the total. The lowest shares of direct taxes are recorded in Slovakia (only 20.8 % of the total), Bulgaria (20.9 %) and Romania (23.0 %). (Eurostat, 2011). One of the reasons for the low direct tax revenue can be found in the generally more moderate tax rates applied in the new Member States to the corporate income tax and the personal income tax. Several of these countries have adopted flat rate systems, which typically induce a stronger reduction in direct than indirect tax rates. Also among the old Member States (EU-15) there are some noticeable differences. The Nordic countries as well as the United Kingdom and Ireland have relatively high shares of direct taxes in total tax revenues. In Denmark and, to a lesser extent, also in Ireland and the United Kingdom the shares of social contributions to total tax revenues are low. There is a specific reason for the extremely low share of social contributions in Denmark: most welfare spending is financed out of general taxation. This requires high direct tax levels and indeed the share of direct taxation to total tax revenues in Denmark is by far the highest in the Union. Among the old Member States, Germany's system represents in a sense the opposite of Denmark's; Germany shows the highest share of social contributions in the total tax revenues, while its share of direct tax revenues in the total is among the lowest in the EU-15. (Eurostat, 2011).

As a rule, the new Member States display lower top rates, while the highest rates are typical of Member States with the most elevated overall tax ratios, such as the Nordic countries, although the Netherlands show the fourth highest top personal income tax rate while ranking 15th in terms of the tax ratio. The lowest rates are found in Bulgaria and Cyprus, where the tax ratio is respectively the lowest and the second lowest in the Union (Table no. 1).

**Tabel 1. Different direct taxes rates within European Union, 2010 Income, in %**

Member State	Corporate Income Tax	Top Personal Income Tax
Austria	25	50
Belgium	33.99	50
Bulgaria	10	10
Cyprus	10	30
Czech Republic	21	15
Denmark	25	58
Estonia	20	21
Finland	26	53
France	33.33	41

<b>Germany</b>	15.825 federal plus 14.35-17.5 local	45
<b>Greece</b>	25	40
<b>Hungary</b>	10-16	36
<b>Ireland</b>	12.50	41
<b>Italy</b>	31.40	45
<b>Latvia</b>	15	23
<b>Lithuania</b>	20	21
<b>Luxembourg</b>	28.59	38.95
<b>Malta</b>	35	35
<b>Netherlands</b>	25	34.40
<b>Poland</b>	19	32
<b>Portugal</b>	27.50	42
<b>Romania</b>	16	16
<b>Slovakia</b>	19	19
<b>Slovenia</b>	20	41
<b>Spain</b>	4-30	45
<b>Sweden</b>	26.3	55
<b>United Kingdom</b>	21-28	50

Made by author using data from following sources: (European Commission, 2009), (European Parliament, 2010), (Taxes in Europe database, 2010), (Eurostat, 2011)

In the field of direct taxation, harmonization efforts failed because the member state perceived them as the effort to restrict their fiscal sovereignty. The reason of the failure is also the fact that harmonization measures of the European Commission have to be introduced in the form of directives to be obligatory for all member states. The adoption of directive expects unanimity. It very often happens that the harmonization measure is blocked by one or two member states.

### **FISCAL POLICY, A DISCRETIONARY INSTRUMENT FOR INFLUENCING THE MACROECONOMIC INDICATORS**

The role and the dimension of the state involvement in the economy depends on the way the state use as an instrument the fiscal policy. In the context of analyzing the impact of fiscal policy on economic growth it must be taken into consideration that fiscal policy is an instrument for reducing the short-term fluctuations, taxes and budgetary expenses are being used for influencing the aggregate demand in order to direct the economy to the potential GDP. (Brașoveanu și alții, 2009)

According (Fabrizio și Mody, 2006), fiscal policy represents more a political priority than an economical one. The results of the estimated regression of his econometrical study for 1997-2003 period, using data for Romania, Bulgaria, Lithuania, Latvia, Estonia, Poland, Hungary, Czech Republic, Slovakia and Slovenia show that not even 50% of the changes in fiscal revenues could be explained through the macroeconomic variables' changes.

The estimated regression:

$$y_{it} = \alpha + v_i + \beta t ut + \delta x_{it} + \phi w_{it} + \gamma s_{it} + \varepsilon_{it}, \quad (1)$$

$y_{it}$  – fiscal revenues on GDP in country  $i$  in year  $t$ ;

$v_i$  – a set of specific effects for the country  $i$ , in this model considered exogenous;

$ut$  – common effects for all the countries in the year  $t$ ;

$x_{it}$  – economical variables;

$w_{it}$  – political variables;

$s_{it}$  – fiscal institutions index.

According (Brașoveanu și alții, 2009), 1% change of fiscal revenues corresponds to a change of Economic Growth in the opposite direction by 1.5533%, a change of Public Debt in the opposite direction by 2.1336%, a change of Unemployment in the opposite direction by 0.5362% and a change of Inflation Rate in the same direction by 11.053%. As quotes (Brașoveanu și alții, 2009), 39.47% of the variance of economic growth rate's change is explained by the change of

overall tax burden, 46.26% of the variation in public debt over GDP is explained by the change of overall tax burden, 20.17% of the variance of the unemployment rate is explained by the change of overall tax burden and 12.22% of the variance of the inflation rate is explained also by the change of overall tax burden. The correlations between these variables were tested by applying the regression technique, Granger causality and interval analysis on the data base contains annual values of the indicators in the period 1990-2007, in Romania.

Starting with the Fabrizio's conclusion and continuing with Brașoveanu's research results, I conclude that Fiscal policy is used by political and executive authority as a discretionary instrument for influencing the macroeconomic indicators.

As quotes (Smith, 1999), the declaration that the tax harmonization is needed due to the internal market or monetary union, is incorrect. The above mentioned supports by the example of the U.S.A., where there are remarkable differences in taxation, even though it is the area with higher economic and political integration than European Union. The fears from spillover effects to the low tax jurisdictions are according to the author not just. Higher tax jurisdiction in the EU offer qualified labor force and stable business environment. On the contrary, low tax jurisdictions try to establish on the internal market. The author adds, that in case that the process would be stopped by the tax harmonization, the European Union would be less converged than ever before.

According to (Mitchell, 2001) tax competition generates responsible tax policy. Lower tax burden of business subjects creates the fertile soil for higher economic growth. Without the tax competition the governments could behave as the monopoly – to levy the excessive taxes. As the mention (Mitchell, 2002), the tax competition always results in decrease in the statutory tax rates. The increased capital mobility results in situation, when the taxpayer can move the capital in the low tax jurisdictions very easily. From that reason the tax competition can be considered as very important factor supporting the liberalization of the world economics, for it creates the pressure on decrease in tax rates and in budget expenditures.

Based on the above stated literature review, following conclusions can be done: Tax competition cannot be considered as the competition in real sense. Therefore it is not possible to search for the parallels between the market competition and tax competition. While in market competition, the law of supply and demand dominates, the tax competition is the play of political and economic interests. Therefore fiscal policy could help to increase the national competitiveness and the competitiveness of the EU as a whole. The declaration that the tax harmonization is needed due to the internal market or monetary union is incorrect. Moreover, considering the introduction of European Monetary Union and the "Europeanization" of monetary policy, fiscal policy remains one of the few tools at the disposal of national governments in their effort to influence their own economies, making taxation perhaps the final component with which individual countries can deal with asymmetric shocks.

## **ARGUMENTS FOR FISCAL COMPETITION**

The presence of supranational international organizations led to flourishing of multinationals corporations and the pursuing cross border investments. In this scenario, capital tax policies gained a significant role also due to the lack of other means of competition such as interest rates and currency fluctuations. The effort of jurisdictions to attract capital and foreign investment will induce them to lower the direct tax burden and gain a higher share in the international division of capital.

The competition between different fiscal systems can lead to the diminishing of some public expenditure or to the rethinking of the fiscal pressure. This way every country will re-examine its one fiscal system and will try by cutting off the fiscal pressure on the mobile factors, labor and capital, to increase the foreign investments or just to sustain the cost and the development of the present ones.

The migration of national tax bases as firms move between Member States in search of the most favorable tax regime must not be seen like harmful effect of tax competition, but contrary like

an objective of the fiscal policy for each member state. Having this goal, governments have to make their economy more attractive for all categories of mobile factors like capital and labor. Seeing like this, the fiscal competition represents a positive effect on EU market integration denying that tax harmonization is critical to the operation of the Single Market so that goods, services, people and capital can move freely around the EU

Being able to move across the European Union everybody can establish the residence in that state that will offer the optimal combination between the fiscal pressure to be felt and public goods received. The brain drain phenomenon is influenced by both the citizen and central authority according to their choices. If education is a public service and the states are not efficiently administrating their public financial resources and at the same time the public expenditures used to cover the demand of public goods and services it can easily appear the negative externalities. This means that in the source country the lower public revenues will generate a decrease in expenditures a lower redistribution of revenues and all these will have as consequence a lower economic growth. Only using the fiscal policy into a real and transparent fiscal competition process, the national authorities can efficiently administrate their public financial resources and at the same time their the public expenditures in order to avoid the appearance of the negative externalities and to attract the mobile factors like capital and labor from all over the world. More attracted labor and capital are, more performing national fiscal policy is!

### **FROM TOTAL HARMONIZATION TO COORDINATION**

EC Treaty in Art 93 and 94 considers as the aim of the harmonization process the establishment and smooth functioning of the internal market. If we consider the tax harmonization as the tool for reaching of smooth functioning of the internal market, then we can divide tax harmonization further on positive and negative. Positive tax harmonization represents the process of the convergence of the national tax systems of EU member states by the implementation of directives, regulation and other legislative tools. The result of positive harmonization is the same rules in all member states. On the contrary, negative harmonization is the result of the activity of the European Court of Justice (hereinafter as ECJ). Negative tax harmonization cannot be considered as the harmonization in real sense, for it does not provide the set of common rules, binding for all EU member states. The ECJ case law is binding for the parties involved in the case. ECJ case law does not comprise the means of remedies. That is the reason why the result of the negative tax harmonization cannot be the situation when there will be the same rules in all EU member states.

In comparison with the initial aims of the European Commission in the field of the direct taxes it is necessary to highlight, that the European Commission is not trying to achieve the tax rates harmonization anymore but only the harmonization of the tax basis. The aim in this field is only the structural harmonization. In the situation, when the tax basis is defined uniformly, companies themselves are able to identify the tax burden in individual states that opens the space in the field of the tax rates for the fair tax competition.

### **SOLUTION: CONSOLIDATION OF THE TAX RULES**

Given that tax harmonization is an almost impossible goal for European Union, and on the other hand so many national different tax regulations pose problems for all companies doing business abroad, the solution would be consolidation of the tax rules.

Already in 2001, the European Commission, in the Communication COM (2001) 582, presented its view on a Common Consolidated Corporate Tax Base CCCTB, considering that it is the only way of eliminating obstacles from the cross-border activities of the European Union companies (International Chamber of Commerce, 2007). The idea of a common tax base for the European Union companies was accepted neither by all Member States nor by the whole business area. 20 countries out of 25 supported the idea. Germany and France have largely supported the implementation of a common corporate tax base given that this would end "tax dumping" of

Member States with very low company taxes The small and medium entrepreneurs Union, (SME Union), oppose tax harmonization, saying that it would have negative impact on tax competition. (Parker, 2005).

Today a common consolidated corporate tax base seems to be the only solution for the simplification of the complex and different national tax regulations. There are still some obstacles: First, the unanimity vote of the Council of Ministers could be an obstacle, but would possibly be resolved by closer cooperation of Member States in form of enhanced cooperation. Second, complicated technical implementation of the Common Consolidated Tax Base made the Member States' governments more reluctant. Moreover, some Member States fear that a common corporate tax base could imply harmonization of tax rates. For many countries the competitive tax policy is a comparative advantage. A competitive European tax policy is beneficial to the SMEs which are considered as the biggest growth and employment creators (SME Union of the European People's Party, 2010).

The priority must be given to the problem of reducing compliance costs and the problems with cross-border loss-offset which are due to the divergence of corporate tax systems between the Member States. These problems are more significant in the small and medium-sized enterprises' activities.

Some of the important benefits of the implementation of a common corporate tax base are: reducing the number of associated cross border disputes, enhancing economic efficiency of cross-border activities and reducing the risk of double taxation.

To overcome the reluctance of some member states, it should be underlined that the objective is not to harmonize tax rates, but the tax base and rules in order to obtain uniform tax regulation, simplicity and transparency of national tax systems. On the contrary, tax sovereignty with respect to tax rates is instrumental to ensure sound tax competition among Member States and thus to promote efficiency. The objective is, rather, to create a more efficient market and tax system for companies operating within the European Union by providing for a common and competitive tax base.

Also to overcome the reluctance of some national governments, it is better that only some Member States in the EU will initially introduce the common tax base. Other Member States can then join the regime at a later stage. Anyway, Member States control the European Union tax legislation because the Treaty requires unanimity vote and because the principle of subsidiary allows Member States keeping taxation under national legislation.

## CONCLUSIONS

Based on my research I conclude that tax competition cannot be considered as the competition in real sense. Therefore it is not possible to search for the parallels between the market competition and tax competition. While in market competition, the law of supply and demand dominates, the tax competition is the play of political and economic interests. The migration of national tax bases as firms move between Member States in search of the most favorable tax regime must not be seen like harmful effect of tax competition, but contrary like an objective of the fiscal policy for each member state. More attracted labor and capital are, more performing national fiscal policy is! Therefore fiscal policy could help to increase the national competitiveness and the competitiveness of the EU as a whole.

I also came to the conclusion the declaration that the tax harmonization is needed due to the internal market or monetary union is incorrect. Moreover, considering the introduction of European Monetary Union and the "Europeanization" of monetary policy, fiscal policy remains one of the few tools at the disposal of national governments in their effort to influence their own economies, making taxation perhaps the final component with which individual countries can deal with asymmetric shocks. Fiscal Policy became a very special tool for the economic development of each state and in this context national governments have been reluctant to make any major steps towards

the harmonization of taxation within the Community, and to adopt the tax harmonization measures by unanimity in Council, as is required.

It is true that international trade and capital mobility will lead to tax competition on mobile factors, but it is not true that the tax competition will harm the efficient supply of public goods, and should therefore lead to total tax harmonization. Although tax harmonization might reduce transaction costs and remove internal barriers within the EU, such measures might increase the negative aspects of tax competition and impede the creation of a level playing field in the Continent. Moreover, the European Commission abandoned most of its past efforts at creating full harmonization through legislation and focus on minimum coordination instead.

Tax coordination under the principle of subsidiary refers to the compatibility of national legislation with treaties. The tax consolidation rules must be based on mutual recognition of the Member States' tax rules. This is the only solution to more harmonize measures on direct taxation in the EU, without affecting tax rates.

Specifically, this paper encourages the Commission and member states to accept the beneficial role of tax competition in limiting the over-expansion of EU jurisdictions and to focus their efforts mainly on tax base uniformity rather than rate harmonization, thus leaving member states with full discretion in setting their direct tax rates.

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## THE MONETARY TERMINOLOGY IN NATIONAL FINANCIAL SYSTEM

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### Abstract:

*The presence in Romanian Vocabulary of several monetary terms is the expression of historical circumstances and geographical context in which the Romanian Countries evolved. Their use on a large scale and the feature of being exchanged in every good work or service made them a symbol of wealth. From a chronological point of view, most of the lexical Slavonic monetary borrowings got into the Romanian language before the Phanariot Age, that is before the beginning of the 17<sup>th</sup> century. The terms „come from the name of goddess Junon Moneta, when in her temple, in Rome, the state established workshops of making first coins. The term „ban” means monetary unit and coining equals with a hundred part of a leu, monetary change.*

**Key-words:** monetary terminology, financial system, the term „ban”, the term „money”, most of the lexical monetary

**JEL Classification:** B 26

## 1. INTRODUCTION

The banking-financial system is one of the main pillars on which every developed economy is based having a very important role in economic life on the other hand, in Romania this system being „the most important financial intermediary (1). This is organized on the state of economic and politic development and the link with the systems of other state or the normatives established in international scene.

In the monetary sphere a very important role have the central banks, treasuries, and governments and because of that is compulsory to know the changes in this domain, determining the state of the currency.

The national monetary system comprises the juridical rules that „determine the process of issue, circuit and rejection of money from circuit and institutions that organize and survey the monetary relationships in a country” (2). These rules and institutions serve to the making of aims of economic, social, and financial policies followed by each state. Through this system is studied the own economic increase, development of national competitiveness in foreign exchanges the maturing of condition for getting a better place in international economic circuit.

The unitary feature of money functions in its forms (numeral and writing) „determine the monetary system content which comprises the limits of way of making the monetary means and getting of their functions” (3).

Through the general term of „money” is understood a large diversity of tools that are used to get a some power of buying, a potential right to obtain the necessary goods. The making of these means determined a progress, a step forward that stimulated „the development of goods production, and the market which spreads larger and larger” (4). So, the money has an absolutely power „money is power”, almost everything being buying. The term „ban” means „monetary unit and coining equals with a hundred part of a leu, monetary change” (5) and is larger than the term „coin” that means „metal piece that circulate legally on the territory of a state” (6).

The term „money” was born before of that of „coin” the second one appeared suddenly as a mean of good exchanges.

The coin is „a kind of money in the shape of metal pieces having an own value, structural diversity, ways of circuit, and several names” (7).



It appeared because in the ancient society, in the Mediterranean world was the alternative: „good exchange or monetary exchange” (8). As term, the coin introduce a similarity between „existent form and the abstract expression of value” (9) it is considered „standard of value a mean of pay, a mean of treasury, and a value reserve” (10).

*La Grande Encyclopédie* has its own definition of the word coin: „the coin is a good having its own value is a little volume, relatively homogenous with the possibility of being easily divided without of losing the value easy to identify and destined to serve in the exchange of opposition with the other goods and finally to serve as standard and unit of showing the figure value of these goods” (11).

In the last decades this term knew a deep technological change that means the use of electronic informatics in the stock of payment system, being today more and more changeable.

Considered as an „object which can be kept changed, borrowed and written” (12). It appeared simultaneously in the beginning of human kind while the money „appeared with the writing in the Iron Age” (13). At that time appeared complicated systems of writing such as hieroglyphs, Sumerian writing system and finally the simplified alphabet known as Phoenician.

## 2. MONETARY TERMINOLOGY

The Lexicon of present day Romanian Language keeps only the terms „ban” and „leu”. The terms „moneda” and „bancnota” belong especially to the language used in financial-banking system, although they are used sometimes in common language.

The terms „come from the name of goddess Juno Moneta, when in her temple, in Rome, the state established workshops of making first coins. The term has its origin in Latin, being used in France „monnaie”, England „money” and Italy „moneda” and shows the material from the money is made.

The term „pecunia” has also a Latin origin and means sum of money, „pecus” was an animal offered for exchange and from that derived the term „pecuniar” and „peculium” that means a smaller herd, in time having the meaning of Unique-Latin economy.

From Latin „capita” derives the term „capital” meaning cattle counting, today having the meaning „wealth in the form of value, goods and great amount of money put in a business” (14).

In the financial literature were used both „moneta” from Latin and „moneda” from Neogreek. Both terms are considered correct showing the same term.

The idea „change divisionary is in Romanian”. The term „ban” etymologically has its origin in the privilege of Romanian money in 13<sup>th</sup> and 15<sup>th</sup> centuries when was issued a silver coin, the name being used in time to show a weight and quality no matter the origin” (15).

In the contemporary monetary terminology are used two terms alternatively: one which shows in general the unit of value as the French term „argent”, English „money” or the nom „bani” in Romanian and another one which shows the national form such as „monnaie” (French), „currency” (English), „moneta” (Romanian), in time both terms being synonyms. Another definition of currency is the following: „currency is a good having its own value in a little volume, relatively homogenous with the possibility of being easily divided without of losing the value, easy to identify and destined to serve in the exchange of opposition with the other goods and finally to serve as standard and unit of showing the figure value of these goods” (16).

A long period of time the material civilization was dominated by natural economy, but the exchange economy got then an important role. Money „determined in this way the development of economic civilization and the progress of society” (17). While the money has the role of impulsing the society development the appearing of currency as a result of goods production was conditioned by the first economic works of humankind living in communities based on private property, social division of work and the exchange of goods and services.

„Finance Publique” considers that the moment of appearing of money is in the period when the state as sovereign political power, got the control on it, and after that the making of monetary

sign („between 8th and 7 th centuries BC when is considered that first monetary signs were made and issued by the sovereign power of state”) (18).

Referring to the origin of money a lot of theories were made, sometimes even contradictory. The real moment of its appearing was the aim of many researches made by archeologists and economists, ethnologists and monetary researchers having as a beginning the works of ancient historians.

Some of them consider that the metal coin appeared in China, the researches in Archeology confirmed the appearing of first coins on the territory of Lydia, but they gave the paternal ownership of first issues to Cressus (who had the pride of first monetary issue).

In the dispute between Greeks and Lydians the winner were Lydians their invention being „one of the fundamental institutions of civilisation” (19).

The art of money, the skill to accumulate and to make money was named „chremastics” by Platon who said about the monetary economy that it is „the art which save the man poverty” (20).

In the Persian Empire the development of coin determined the beginning of banking trade and in the pasture economy of Latin community the cattle and sheep were used as mean of exchange (a cow equals ten sheep) Italians used in the beginning as mean of exchange the cattle and copper and then they passed from goods exchange to monetary exchange.

The issue of notes was made in China in 1206, and first Romanian coins appeared later in the 14th century in Arges, when was established first mint, in the common speech the mints was named haraghie or herghie meaning workshop of cutting money and the workers were named heregari.

As Karl Marx asserts ”in the circulation of value sums, all the laws of the real pecuniary circulation, are inverted. While the gold circulates because it has value, money has value because it circulates” (21).

Speaking about money, we can say that over the time, different words had been used in order to express this notion. The Romanian monetary nomenclature is formed by borrowings coming from the language of different nations which came into contact with the Romanian provinces over the time.

Among the borrowings, the oldest and the most numerous terms which got into Romanian language, are the names of Slavonic coins. In accordance with the first linguistic attestation, they are followed by elements borrowed from Hungarian, German, Turkish, Greek etc.

The Slavonic monetary vocabulary best represented in the Romanian language, is a consequence of strong political, cultural and economical relations between the Romanian provinces and the Slav population. Hence terms like: coarse, perper, hryvnia, peanig, zloty, talent, dinar, ughi, ruble, potor, dutca, fathing, timf, kopeck perch, caragros, penny, sorovcovat, pole.

We must emphasize the fact the name of Slavonic coins had been known especially by the inhabitants from the princedoms. But words like coin, coarse, zloty had also circulated in Transylvania.

From a chronological point of view, most of the lexical Slavonic monetary borrowings got into the Romanian language before the Phanariot Age, that is before the beginning of the 17<sup>th</sup> century. After this period, the borrowed terms have Russian, Polish, Ukrainian and Bulgarian origins. The presence of Russian coin names in the Romanian vocabulary, is due to the contact of Romanians with Russian troops and officials temporary staying in the principalities.

The names of Slavonic coins which got into the Romanian language with the meaning of money (also asprisor, Ruble, dutcuta, stilpar, monetary names created in Romania from originally Slavonic terms) disappeared from the current vocabulary after 1867 when the base of national monetary system was created. In the present-day Romanian only a few terms were preserved having the general meaning of “small value money”: „lescaie” (from the familiar language), kopeck and farthing (found in Moldavia), pole „twenty lei” (from the popular language).

Hungarian language also had an influence over the Romanian monetary terminology. We borrowed from it words like: Horgos, succession, marias, batca, farthing, husas, pitula, krona, the names of Hungarian coins being well known throughout the whole Romanian territory. The

circulation of Hungarian coins beyond the Carpathian line was prevented by the inferior quality of the metal.

The Hungarian monetary terminology belongs to the "geographical region of most Hungarian elements which got into the Romanian language as borrowings with an historical and cultural character, regionally extended" (22). From the German language we borrowed words like pan, gros, shortcut, sfant, mark, shilling, bill this being possible due to the strong economical relations between the Romanian provinces and the German speaking regions. In Moldavia, the German monetary terms came both from Transylvania and Bukovina which was temporarily under Habsburg occupation the same as Banat and Oltenia.

Although the names of coins disappeared from the Romanian commercial usage after 1867 when they founded the national monetary system, a considerable part of German monetary terms are still used in the present-day Romania.

The Turkish influence is also very considerable. Chronologically speaking, most of the Turkish words denoting names of coins, got into the Romanian language during the Phanariot reigns. Terms like: para, tunus, misir, mahmudea, beslic, cercliu. The names of Turkish coins appeared in the Romanian language in the 16<sup>th</sup> century. The small number from the beginning increases a lot during the Phanariot reigns. Due to their special character, the names of Turkish coins disappeared because of the abolishing of the Phanariot reigns and the creation of the national monetary system in 1867.

During the Phanariot reigns, Greek influences appeared in the financial language: Veneto, left, coin, etc, the last one being also used in the present day language.

Terms like leu, centimes and franc are Latin-Romanic, and are very few because in the same time when Romania was establishing economical relations with Occidental Europe, a national monetary system was getting into usage, the first one being gone through in 1867. Nowadays, The Romanian National Bank represents the emission bank meaning "the pivoting plate of the banking system forming the vital center of financial-monetary structures of an economy" (23).

At the beginning was a difference between both terms, „moneda” and „bani” but in our present day Market Economy all types of coins and value signs receive the general term that of money this word meaning notes and metal coins which are in the possession of physical and juridical persons or in their bank accounts (franc, deutsche mark, rubla, leu etc.).

### 3. CONCLUSIONS

The presence in Romanian Vocabulary of several monetary terms is the expression of historical circumstances and geographical context in which the Romanian Countries evolved. To this explanation is added the fact of a general feature „of feudal economy in which many types of coins were diffused, bath local authorized issues and foreign issues, sometimes these coins come from remote mints”. (24)

Their use on a large scale and the feature of being exchanged in every good work or service made them a symbol of wealth money giving to the owner a such of economic power, for thios reason load Condor said that money „blood which flows through economic sistem” (25) and monetary system evolves simultaneously with social-economic development of a state.

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## REFERENCES OF CONNECTING SOME FISCAL SUBSYSTEMS WITH OBJECTIVES OF ECONOMIC AND SOCIAL DEVELOPMENT

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### Abstract:

*Regarding the extensive evolutionary process of human society, especially in the contemporary society context, there are revealed new issues related to the development of social and economic systems, and also the existence of some objective interrelations between them. In particular, we notice the interrelations between the economic growth and the human development, with the highlighting of some objective connections, such as those between the GDP amount, and the magnitude of distribution and redistribution processes in monetary form of GDP (both in the private and the public sectors) and the objective connections between the size of previously mentioned processes and the human development level. At the same time, in the same societal context, constituted as an integral part of the social and economic system, the fiscal subsystem, through its own complex content, needs to be adapted to the requirements of social and economic development, which also implies connecting it with objectives of this evolutionary and embracing process. Based on the previous objective connections, this approach needs to be distinctively conceived and differentiated applied, both in relation to the main structure elements of the fiscal subsystems and the features of social and economic systems. Mostly, in the countries seen as being on the first step of human development level hierarchy, the connecting of fiscal subsystems with the economic and social development goals, is a matter of high interest.*

**Keywords:** fiscal system, public expenditure, economic and social development, human development, economic growth

**JEL Classification:** E 62, H 51, H 52

## 1 INTRODUCTION

This paper, aims as main objective, the highlighting and the delineation of some markers of connecting fiscal subsystems with targets of economic and social development, both in normative approach (in the first part), and empirical approach (in the second part). Especially, below the last part, the analysis matrix circumscribes to the experience of the countries located on the first step of human development level hierarchy.

The motivation for choosing this topic, resides on one side, in the fact that in the contemporary society, the development of social and economic systems involves all the aspects of human activity, and between the dimensions of this evolutionary and embracing process, there are several interrelations, of which the most representative are those between the economic growth and human development. On the other side, but in the same context, the fiscal systems, as subsystems of the social and economic advanced systems, need to be connected with the different goals underlying the development of the social and economic systems.

In this context, we set as goals, based on the analysis of relevant statistical data for this matter, to highlight an aggregation of *poles*, underlying such a complex adaptation approach.

## 2 NORMATIVE ORDER REFERENCES

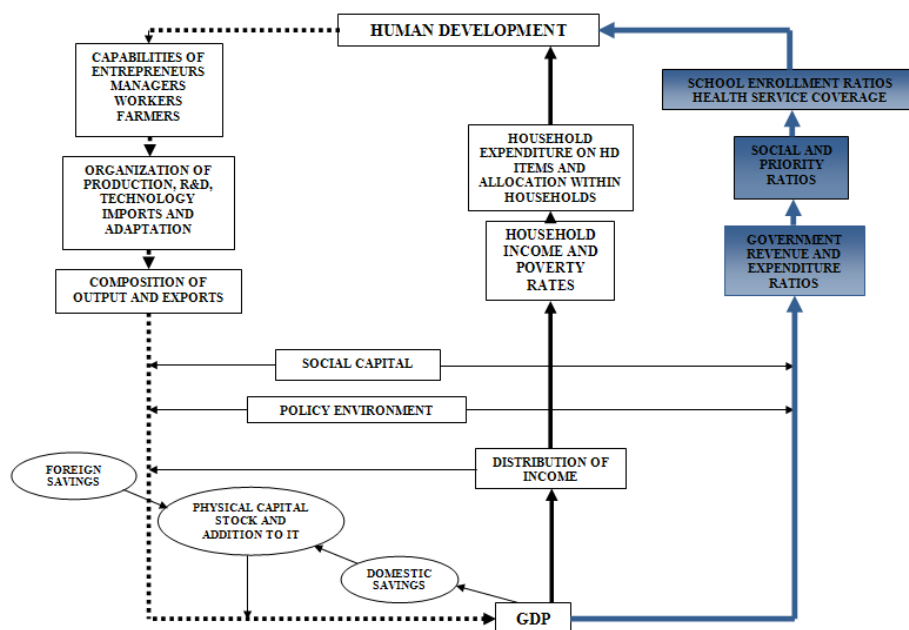
Created as a main part of the social and economic system, in the ample evolutionary process of the human society, the fiscal subsystem has a complex content, that resides in an assembly of social and economic interrelations in monetary form, generated by the mobilization and use of the fiscal resources, organized and run through a system of specific social and economic institutions, including the ones specialized in the administration of fiscal resources. This is because the formation, respectively the use of financial resources (by default of those fiscal ones too) refers to

“two different moments of the same process, with close ties between them, of interacting”. The purchase of cash resources (including the fiscal ones) to the public financial funds “is justified only through their guidance for meeting certain defined public needs”, and the use of these resources can be complete “only if, previously, there were constituted the appropriate funds” (see Filip, 2002, p. 61). Reporting also to the side referring to the use of fiscal resources through public expenditure, and not only to their mobilization side, is a rational support for formulating realistic assessments regarding not only the notion of fiscal system or its content and structural elements, but also regarding its adaptability to the requirements of economic and social development.

About this last aspect, it is required to mention that the development of social and economic systems, corresponding to each stage of human society evolution, especially in the modern society, was and still is marked by some references (markers), which play the part of milestones in the contemporary economic theory and practice. They have an influence both on the conceiving and the perception of the economic and social development, detaching this way, a series of steps (see Ionciță and Petrescu, 2005, pp. 62-63), each one of them revealing new aspects or dimensions of this complex process, according to the various angles and approach perspectives. Synthesized, we notice the creation and the approach of the economic and social development, initially in the terms of economic growth, and then in the terms of the structural changes of production and use of workforce, in order to afterwards redefine the concept through taking into consideration of the social aspects linked to the poverty, unemployment and inequitable distribution of income reduction, but also to aspects tied to saving natural resources and environmental protection. In time, it evolved to a new approach of this concept, by referring to its durable aspects, located at the confluence of three large sets of targets: economic, social and environmental (see Adams, 2006, p. 2). It is admitted that related to such considerations, the fact that economic and social development is a progressive and embracing concept that involves all sides of human activities. Through reference to the “human” dimension of the economic and social development, stands up the frequent use of the human development (HD) concept, defined as the “human flourishing in its fullest sense - in matters public and private, economic and social and political and spiritual” (see Alkire, 2002, p. 182), with the emphasis on the acquisition of capabilities.

In relation to such a systemic optics on economic and social development, it is admitted the existence of some interrelations between the dimensions of this process. From them it is noticed, in forefront, through its proportions and showing areas, the interrelations between economic growth and human development (see Ranis, 2000, pp. 198-203), each one of them playing both the part of determinant and of determined factor.

This way, it is admitted the fact that higher gross domestic product (GDP) levels, through its destinations, creates the premises for improving the human development level. At the same time, an improved level of human development, through the acquisitioned capabilities (at different levels - entrepreneurs, managers, workers, farmers) creates the premises for economic growth at high levels (through organization of production, research-development (R&D), technology imports and adaptation). By reference to the first of these interrelations, it delineates, a first section, the objective chaining between GDP levels and the dimensions of its distribution and redistribution processes in monetary form (both in the private and public sectors). On a second section, it delineates the objective chaining between the dimensions of the previous mentioned processes and the human development level. Especially, in the public sector, the global and structural dimensions of the redistribution processes in monetary form, find a correspondent in synthesis indicators, used for the quantification of the human development level (see **Figure no. 1**).



**Figure no. 1. The interrelations between economic growth and human development**

Source: Ranis, 2000, p. 199.

Based on these objective connections and considering the place of fiscal subsystems within the advanced social and economic systems, connecting the first category to the targets of the development of the second category, finds itself a proper rational support, imposing itself as distinctively conceived and differentiated applied. This, on one side, in relation to the main structural elements of the fiscal subsystems (by reference to subsystems of taxes, respectively, by reference to the public expenditure, financed from the assembly of fiscal resources), and on the other side, related to the main types and defining elements of the social and economic systems.

### 3 EMPIRIC ORDER REFERENCES

In an empirical approach, it is allowable that the methodology and the quantification indicators of economic and social development, have evolved with the changes in approaching and defining this concept, also being perfectible under the aspect of their sides and size. Even if there are some shortcomings, a representative indicator for this analysis, is the *human development index (HDI)*, that uses four variables (life expectancy at birth, mean years of schooling, expected years of schooling, gross national income per capita), and three coordinates of economic and social development (health, education and living standards) (see UNDP, 2010, p. 13). At the same time in the recent concerns it is to be noticed the use of a hybrid version of this indicator, that aims the same coordinates of economic and social development, also using four variables that are slightly different (life expectancy, literacy rate, gross enrollment and gross domestic product per capita). From the data availability point of view, this method is more appropriate to explore the long term tendencies (see UNDP, 2010, p. 26).

In such a perspective, the world countries seem to be grouped in five large groups: very highly human developed countries, highly human developed countries, medium human developed countries, low human developed countries, other countries and territories. This paper aims only countries belonging in the first group, looking to highlight the main references of connecting their fiscal subsystems with their own goals of economic and social development.

At this point, we must stress that in this case, *GDP adjusted for purchasing power parity (GDP, PPP)*, has showed during 1990-2010, a considerable growth trend, more or less sustained. By far, we notice the evolution in the United States, and in the second plan, in Japan, in the other countries (United Kingdom, France, Italy, Spain, Canada, Australia, Netherlands, Poland, Belgium,



Sweden, Austria, Greece, Switzerland, Norway, Portugal, Czech Republic, Denmark, Israel, Hungary, Finland, Ireland, New Zealand, Slovenia, Luxembourg, Estonia, Cyprus, Iceland) the evolution of this indicator was a natural one.

Also regarding *GDP per capita adjusted for purchasing power parity (GDP per capita, PPP\$)*, for the same period of time (1990-2010), it is to be mentioned that it has showed a considerable growth trend, more or less sustained and with significant differences, for the last years. In a first group, we notice three countries: Luxembourg (between 70,001\$ and 80,000\$), Norway (between 50,001\$ and 60,000\$) and the United States (between 40,001\$ and 50,000\$). A second group, and the most numerous one, contains countries with GDP per capita adjusted for purchasing power parity between 30,001\$ and 40,000\$ (Australia, Ireland, Netherlands, Canada, Sweden, Japan, Switzerland, France, Finland, Iceland, Belgium, Denmark, Spain, Italy, Austria and United Kingdom), and a third group contains countries with GDP per capita adjusted for purchasing power parity between 20,001\$ and 30,000\$ (New Zealand, Israel, Greece, Czech Republic, Slovenia, Cyprus and Portugal). Finally, a fourth group contains countries with this indicator levels between 10,001\$ and 20,000\$ (Estonia, Hungary and Poland).

*In the context given by the values of such as these indicators, a first step in the current analysis is the highlighting of the chains between their levels and the global quantum of redistributions of monetary resources made through these fiscal subsystems.*

Reporting to **public expenditure** and **tax revenue** (excluding social security contributions), the current analysis highlighted the existence of some significant differentiations, for the period between 2000 and 2008, both regarding *their relatively level* (as weight in GDP) and *its dynamics* (see **Table no. 1** and **Figure no. 2**). Wanting to capture the essential aspects, we considered that the interpretation of these indicators needs to be made in the appropriate context, because they cover a long period of time, highlighting at the same time the performances of these countries in the field of human development.

Forefront, we have the countries where the public expenditure for the analyzed period was *over 40% of GDP*, these countries generally have a GDP per capita adjusted for purchasing power parity between 30,001\$ and 40,000\$ (France, Belgium, Austria and United Kingdom), between 20,001\$ and 30,000\$ (Israel, Greece and Portugal), except for Hungary. In all of these countries the tax revenue were for the analyzed period between 20% and 30% of GDP. Also it is to be mentioned that all of these countries had poor performance in the field of human development, including 2010. Even more, we see that the dynamics of the relative level of public expenditure was either dropping (also accompanied by the dropping of the relative level of tax revenue - France, Belgium, Austria and Israel) or growth (accompanied by a constant relative level of tax revenue - United Kingdom and Hungary - or also by the growth of the relative level of tax revenue - Portugal).

In the background, the current analysis puts the countries with public expenditure for the given period, *between 30% and 40% of GDP*, these countries generally have a GDP per capita adjusted for purchasing power parity between 30,001\$ and 40,000\$ (Ireland, Netherlands, Sweden, Finland, Denmark and Italy), between 20,001\$ and 30,000\$ (New Zealand, Czech Republic, Slovenia and Cyprus), except for Luxembourg, Norway and Poland. In most of these countries, the tax revenue were, for the given period of time between 20% and 30% of GDP, except for Denmark and New Zealand (with tax revenue between 30% and 40% of GDP), the Czech Republic and Poland (with tax revenue between 10% and 20% of GDP). At the same time, related to their position in the hierarchy of human development, we notice that some of these countries had significant performances, including the year 2010 (Norway, Ireland, Netherlands, New Zealand, Finland, Luxembourg and Denmark), the dynamics of the relative level of public expenditure is a lot scratchy (un homogeneous) than for the countries in the first group. Unlike these, other countries in the same group, registered regarding the same indicator, performances that are equally modest or even poorer than of those in the previous group (Italy, Slovenia, Cyprus, Czech Republic and Poland), the dynamics of the relative level of public expenditure being pretty scratchy.

**Table 1. Public expenditure (G) and tax revenue<sup>a)</sup> (T) in a series of very highly human developed countries, as a % of GDP**

Country	2000		2001		2002		2003		2004		2005		2006		2007		2008	
	G	T	G	T	G	T	G	T	G	T	G	T	G	T	G	T	G	T
Norway	32.6	27.4	33.3	26.9	38.2	27.9	37.5	26.3	35.6	28.0	33.3	28.9	31.8	29.7	31.8	29.2	30.7	28.2
Australia	24.0	23.0	26.2	24.7	26.3	23.4	25.7	24.2	25.6	24.2	25.7	24.7	25.0	24.5	24.5	24.0	24.4	24.2
New Zealand	n/a	n/a	32.6	29.5	31.7	29.1	32.2	30.2	31.4	30.2	32.0	31.3	32.5	33.2	32.9	31.7	n/a	n/a
United States	n/a	n/a	19.9	12.7	20.7	10.5	21.3	10.0	20.9	10.0	21.2	11.2	21.1	11.9	21.4	11.9	23.0	10.1
Ireland	27.8	26.0	29.4	24.2	29.7	23.2	29.8	23.7	29.9	24.8	30.7	25.1	30.9	26.5	32.1	25.5	37.2	22.9
Netherlands	39.3	22.3	39.7	22.6	40.1	22.5	41.1	21.6	40.4	21.6	39.3	22.6	40.4	23.2	40.2	23.5	40.5	22.8
Canada	19.0	15.3	18.8	14.3	18.2	13.8	18.4	13.9	18.4	14.1	18.0	13.8	17.6	13.9	17.8	14.0	17.7	12.9
Sweden	36.5	23.1	35.5	20.3	36.1	18.5	36.3	18.9	34.7	19.3	35.1	20.3	33.9	20.6	32.3	19.8	31.8	19.0
Japan	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Switzerland	25.5	11.1	18.6	10.0	19.0	10.0	19.6	10.0	19.4	10.0	19.1	10.3	18.3	10.4	17.3	10.0	n/a	n/a
France	44.8	23.2	45.0	23.0	46.0	22.4	46.3	22.0	45.8	22.2	45.8	22.3	45.1	22.4	44.4	21.8	44.7	21.4
Israel	44.2	28.7	46.8	28.4	47.7	27.6	47.1	26.7	44.7	26.6	43.0	26.9	42.4	27.6	41.6	27.8	40.7	25.3
Finland	34.9	24.6	34.1	22.3	35.3	22.9	36.1	22.7	36.0	22.6	36.2	22.6	35.6	22.1	33.8	21.7	35.1	21.4
Iceland	30.5	26.1	30.7	23.7	31.8	23.6	33.3	24.7	31.9	25.9	30.7	28.1	29.4	28.1	29.7	27.3	44.4	24.4
Belgium	43.1	27.4	43.8	27.0	42.1	26.0	43.4	25.4	41.6	25.9	44.4	26.1	41.1	25.8	41.0	25.1	42.5	25.6
Denmark	34.8	30.8	34.5	29.5	34.4	29.4	35.0	29.5	34.5	30.8	32.7	32.6	32.0	31.6	35.9	35.8	36.7	35.0
Spain	31.3	16.2	30.5	15.8	26.7	12.8	25.6	12.2	26.0	11.8	25.0	12.6	24.9	13.2	25.1	13.9	26.4	10.7
Greece	44.3	23.3	43.6	21.8	42.9	21.4	42.2	19.9	42.6	19.5	41.8	20.1	40.8	20.0	42.4	20.1	46.4	19.8
Italy	39.2	23.2	39.9	22.8	39.3	22.1	39.5	22.1	38.7	21.6	39.2	21.2	39.6	22.7	39.3	23.0	40.3	22.6
Luxembourg	33.8	26.4	35.4	25.9	36.3	25.4	37.0	24.6	38.3	24.4	37.0	25.2	34.5	24.0	33.1	24.1	34.3	23.8
Austria	40.6	19.9	41.1	21.7	40.8	21.1	41.1	21.2	44.1	21.0	40.2	20.2	39.7	19.9	38.8	20.2	38.4	20.2
United Kingdom	36.2	28.4	36.7	28.2	37.6	27.1	38.8	26.3	39.1	26.6	41.2	27.2	40.3	28.0	40.1	27.8	42.7	28.5
Czech Republic	33.4	15.4	35.4	15.9	37.3	15.8	37.3	16.1	35.3	15.7	35.7	15.6	35.6	14.7	33.7	15.2	34.1	14.8
Slovenia	39.0	20.6	39.9	20.5	39.1	18.9	39.5	20.8	39.3	20.6	39.6	20.5	38.6	21.0	35.7	19.6	37.4	20.0
Estonia	29.5	15.8	27.7	15.5	27.6	16.0	27.5	16.2	27.4	16.0	26.7	16.1	26.9	16.4	27.1	16.8	31.1	15.1
Cyprus	36.1	23.0	37.3	23.7	39.0	24.1	43.2	25.6	41.0	25.1	42.3	26.6	41.8	27.9	41.5	33.2	42.2	31.3
Hungary	40.7	21.9	41.2	21.5	43.6	21.1	43.1	20.9	42.3	20.7	42.7	20.3	44.1	20.1	42.9	21.4	45.0	23.6
Portugal	38.7	21.3	39.6	21.0	40.1	21.5	41.2	21.5	42.1	20.6	43.3	21.3	42.2	22.0	41.6	22.4	42.9	22.1
Poland	n/a	n/a	35.6	16.0	35.3	17.0	38.7	17.0	36.9	15.7	36.3	16.7	35.9	17.4	34.2	18.3	35.3	18.3

Source: <http://data.worldbank.org/indicator>.**Note:** <sup>a)</sup> excluding social security contributions.

		G			
		> 40%	30%-40%	20%-30%	< 20%
T	> 30%		Denmark (10, 12) New Zealand (9, 7)		
	20%-30%	France (15, 13) Belgium (17, 17) Austria (18, 19) United Kingdom (22, 22) Israel (23, 23) Greece (21, 21) Portugal (28, 28) Hungary (36, 37)	Luxembourg (11, 11) Norway (2, 2) Ireland (3, 4) Netherlands (4, 3) Sweden (14, 14) Finland (6, 8) Italy (19, 20) Slovenia (25, 25) Cyprus (29, 29)	Australia (1, 1) Iceland (5, 9)	
	< 20%		Czech Republic (32, 32) Poland (37, 35)	United States (8, 6) Spain (13, 15) Estonia (35, 38)	Canada (7, 5) Switzerland (12, 10)

		trend of G		
		downward	constant	ascending
trend of T	ascending	Norway (2, 2) Australia (1, 1)	Denmark (10, 12)	Netherlands (4, 3) Iceland (5, 9) New Zealand (9, 7) Cyprus (29, 29) Portugal (28, 28)
	constant	Slovenia (25, 25)	Italy (19, 20) Estonia (35, 38)	United States (8, 6) Ireland (3, 4) United Kingdom (22, 22) Hungary (36, 37)
	downward	Luxembourg (11, 11) Canada (7, 5) Sweden (14, 14) Switzerland (12, 10) France (15, 13) Belgium (17, 17) Spain (13, 15) Austria (18, 19) Israel (23, 23) Czech Republic (32, 32) Poland (37, 35)	Finland (6, 8) Greece (21, 21)	

**Figure 2. The relatively level (as a % of GDP) and its dynamics (trend) for public expenditure (G) and tax revenue (T) in a series of very highly human developed countries between 2000 and 2008**

Source: own calculations, based on statistical data available at the following web address:  
<http://data.worldbank.org/indicator>.

**Note:** the numbers in parentheses denotes the position in the ranking of human development in 2008 and 2010 respectively.

On a third plan, the current analysis places the countries with public expenditure for the given period, *between 20% and 30% of GDP*, being countries with a GDP per capita adjusted for purchasing power parity between 30,001\$ and 40,000\$ (Austria, Iceland and Spain) except for the United States and Estonia. In most of these countries, the tax revenue was between 10% and 20% of GDP, except for Australia and Iceland (with tax revenue between 20% and 30% of GDP). Related to their position in the hierarchy of human development, we notice that some of these countries had significant performances, including the year 2010 (Australia, United States and Iceland), the dynamics of the relative level of public expenditure in these countries being equally scratchy.

However Australia stands up through the dropping, for the analyzed period, of the relative level of public expenditure and the growth of tax revenue. Unlike it, other countries from the same group have registered regarding that same indicator, performances that were equally modest or even poorer than those in the previous groups (Spain and Estonia), the dynamics of the relative level of public expenditure being either dropping (accompanied by the dropping of the relative level of tax revenue - Spain), or maintaining relatively constant (accompanied by the maintaining approximate constant of the relative level of tax revenue - Estonia).

On a fourth plan, there are countries with public expenditure for the analyzed period *under 20% of GDP*, these countries have a GDP per capita adjusted for purchasing power parity between 30,001\$ and 40,000\$ (Canada and Switzerland), tax revenue between 10% and 20% of GDP, and regarding their position in the hierarchy of human development, they have significant performances including the year 2010. About the dynamics of the relative level of public expenditure, we can say that it was dropping, accompanied by the dropping of the relative level of tax revenue.

*After the first part of this analysis, the second step in this direction is the highlighting of the chains between the structural coordinates of the redistribution of fiscal resources, mediated by these fiscal subsystems and the level of human development in afferent countries.*

In this respect, related to **public expenditure on education** and **public health expenditure**, the analysis showed the existence of significant differences, regarding the period between 2000 and 2007 and between 2003 and 2007, both regarding *their relative level* (as share in the total of public expenditure), and in *its dynamics* (see **Table no. 2** and **Figure no. 3**). Analogous, looking to capture the essential aspects, we considered that the interpretation of these indicators needs to be made in the appropriate context, because they cover a long period of time, highlighting the correlations between these public expenditures and the positions of the related countries in the hierarchy based on the values of the hybrid human development index.

Regarding *the relative level* of these two types of public expenditures, the current analysis distinguishes between three large groups of countries. First, there are countries where both types of public expenditures represented over 15% of all public expenditures (Norway, United States, Iceland, Denmark and New Zealand). Second, there are countries where public expenditure on education represented between 10% and 15% of all public expenditures, and the public health expenditure represented over 15 % (Australia, Ireland, Switzerland, France, Spain, Austria and United Kingdom). In a third group, we notice that both types of public expenditures represented between 10% and 15% of all public expenditures (Netherlands, Sweden, Finland, Belgium, Slovenia, Portugal, Hungary and Poland). At the same time, we notice that some of these countries registered, related to their position in the hierarchy of human development, significant performance, including the year 2010 (Australia, Norway, Netherlands, Ireland, United States, New Zealand, Iceland, Switzerland and Denmark).

**Table 2. Public expenditure on education ( $G_E$ ) and public health expenditure ( $G_H$ ) in a series of very highly human developed countries, as a % of GDP, as a % of G**

Country	2000	2001	2002	2003		2004		2005		2006		2007	
	$G_E$	$G_E$	$G_E$	$G_E$	$G_H$	$G_E$	$G_H$	$G_E$	$G_H$	$G_E$	$G_H$	$G_E$	$G_H$
Norway	16.2	n/a	16.1	15.7	17.4	16.6	17.8	16.7	18.0	16.2	17.9	16.5	18.3
Australia	13.3	n/a	n/a	14.4	16.2	14.2	16.7	14.0	16.8	14.0	17.1	n/a	17.6
New Zealand	n/a	16.1	16.2	20.9	16.6	n/a	17.4	15.5	17.5	19.7	18.2	n/a	18.0
United States	n/a	17.1	n/a	15.2	18.6	14.4	18.9	13.7	18.9	14.7	19.6	14.1	19.5
Ireland	13.5	n/a	12.8	13.2	17.0	14.0	17.4	13.9	16.8	14.0	16.3	13.8	17.1
Netherlands	11.4	11.3	n/a	11.5	12.4	11.8	12.6	12.2	13.2	12.0	16.1	n/a	16.2
Canada	n/a	12.5	n/a	n/a	16.7	n/a	17.3	n/a	17.7	n/a	17.8	n/a	18.1
Sweden	13.4	12.8	n/a	12.8	13.6	12.9	13.5	n/a	13.5	12.7	13.7	12.7	14.1
Japan	10.5	10.5	10.6	9.7	17.1	9.8	17.8	9.5	17.7	9.5	17.9	9.4	17.9
Switzerland	15.1	n/a	n/a	13.0	18.0	n/a	18.4	n/a	18.4	16.3	19.0	n/a	19.8
France	11.4	n/a	n/a	11.0	16.2	10.9	16.4	10.6	16.5	10.6	16.6	n/a	16.6
Israel	13.8	13.8	13.7	13.7	9.9	n/a	9.9	n/a	10.2	13.3	9.9	13.8	10.1
Finland	12.2	12.7	12.7	12.8	11.8	12.8	12.0	12.5	12.4	12.6	12.7	12.5	12.9
Iceland	n/a	n/a	16.5	16.8	18.6	16.6	18.2	18.0	18.2	18.1	18.0	17.4	17.8
Belgium	n/a	12.4	n/a	11.8	13.1	12.2	14.1	12.1	14.1	12.4	14.7	12.4	14.4
Denmark	15.3	15.4	n/a	15.1	14.0	15.3	14.4	15.5	14.9	15.5	15.7	n/a	16.2
Spain	11.2	11.3	n/a	11.2	14.9	11.0	14.9	11.0	15.2	11.1	15.5	11.1	15.6
Greece	n/a	7.7	7.9	8.0	11.9	8.5	11.3	9.2	13.1	n/a	14.0	n/a	13.2
Italy	8.9	9.9	9.2	9.8	12.9	9.6	13.8	9.2	14.1	9.7	14.2	9.0	13.9
Luxembourg	n/a	9.8	n/a	n/a	16.2	n/a	17.3	n/a	16.5	n/a	17.1	n/a	17.3
Austria	11.0	11.1	n/a	10.8	15.1	10.8	14.6	10.9	15.8	11.0	15.7	11.1	15.9
United Kingdom	11.4	11.4	n/a	12.0	14.8	11.7	15.3	12.5	15.3	11.9	15.7	11.7	15.6
Czech Republic	9.7	9.6	n/a	9.5	14.1	10.0	14.4	9.5	14.1	10.5	13.8	n/a	13.5
Slovenia	n/a	n/a	12.5	12.6	13.4	12.6	13.4	12.6	13.5	12.8	13.5	n/a	13.2
Estonia	13.4	15.1	15.5	15.4	3.8	14.9	3.9	14.6	3.9	n/a	3.7	13.9	4.0
Cyprus	n/a	n/a	15.0	16.2	6.8	14.4	6.5	14.5	6.1	9.5	6.4	9.6	7.0
Hungary	14.1	n/a	10.3	11.9	12.3	11.1	11.9	10.9	12.0	10.4	11.3	n/a	10.5
Portugal	12.7	12.7	n/a	12.2	15.6	11.5	15.4	11.3	15.3	11.3	15.3	n/a	15.4
Poland	12.7	n/a	12.3	12.0	9.8	12.7	10.0	n/a	9.9	12.0	9.9	11.7	10.8

Source: <http://data.worldbank.org/indicator>.

Simultaneously, *the dynamics of the relative level* of these two types of public expenditures, for most of these countries, transposed in a growth of the relative level of the public health expenditure, often accompanied by the growth of the relative level of public expenditure on education, notable exceptions being the United States and Finland. All of the other countries, with one or both types of public expenditures through their relative level under 10% or even 5% of the total public expenditure, and the dynamics of this level wasn't sustainable, registered poor performances regarding their position in the hierarchy of human development.

		$G_E$		
		> 15%	10%-15%	5%-10%
$G_H$	> 15%	Norway (2, 2) United States (8, 6) Iceland (5, 9) Denmark (10, 12) New Zealand (9, 7)	Australia (1, 1) Ireland (3, 4) Switzerland (12, 10) France (15, 13) Spain (13, 15) Austria (18, 19) United Kingdom (22, 22)	Japan (16, 16)
	10%-15%		Netherlands (4, 3) Sweden (14, 14) Finland (6, 8) Belgium (17, 17) Slovenia (25, 25) Portugal (28, 28) Hungary (36, 37) Poland (37, 35)	Italy (19, 20) Greece (21, 21) Czech Republic (32, 32)
	5%-10%		Israel (23, 23) Estonia (35, 38)	
	< 5%		Cyprus (29, 29)	

		trend of $G_E$		
		downward	constant	ascending
trend of $G_H$	ascending	United States (8, 6) Sweden (14, 14) Japan (16, 16) France (15, 13) Spain (13, 15) Israel (23, 23) Poland (37, 35)	Finland (6, 8) Italy (19, 20) Austria (18, 19)	Norway (2, 2) Australia (1, 1) Netherlands (4, 3) Switzerland (12, 10) Belgium (17, 17) Denmark (10, 12) United Kingdom (22, 22) New Zealand (9, 7) Greece (21, 21)
	constant	Cyprus (29, 29) Portugal (28, 28)	Estonia (35, 38)	
	downward	Hungary (36, 37)		Ireland (3, 4) Iceland (5, 9) Czech Republic (32, 32) Slovenia (25, 25)

**Figure 3. The relatively level (as a % of  $G$ ) and its dynamics (trend) for public expenditure on education ( $G_E$ ) and public health expenditure ( $G_H$ ) in a series of very highly human developed countries between 2000 and 2007, respectively between 2003 and 2007**

Source: own calculations, based on statistical data available at the following web address:

<http://data.worldbank.org/indicator>.

**Note:** the numbers in parentheses denotes the position in the ranking of human development in 2008 and 2010 respectively.

With reference to **the correlation between public expenditure on education and the position occupied by those countries in the hierarchy based on the values of the hybrid human development index**, the current analysis revealed in this case also, significant differentiations.

Especially for the countries with the highest performances, it was found that the maintaining of their constant position (Australia and Norway) was possible on the background of some expenditures of this type between 10% and 15%, respectively over 15%, but also thanks to the growth of their level as share in all public expenditures. Instead, the maintaining of a relatively constant position of other countries in this group (United States) was possible on the background of this type of expenditures at over 15%, but also on the dropping of their level as share in all public expenditures (see **Figure no. 4**).

$G_E$			trend of hybrid HDI position	trend of $G_E$		
> 15%	10%-15%	5%-10%		downward	constant	ascending
	Sweden (14, 14) Belgium (17, 17) Austria (18, 19) United Kingdom (22, 22) Israel (23, 23) Portugal (28, 28) Poland (37, 35)	Japan (16, 16)	ascending	Sweden (14, 14) Japan (16, 16) Israel (23, 23) Portugal (28, 28) Poland (37, 35)	Austria (18, 19)	Belgium (17, 17) United Kingdom (22, 22)
Norway (2, 2) United States (8, 6) Denmark (10, 12)	Australia (1, 1) Switzerland (12, 10) France (15, 13) Finland (6, 8) Hungary (36, 37)	Italy (19, 20)	constant	United States (8, 6) France (15, 13) Hungary (36, 37)	Finland (6, 8) Italy (19, 20)	Norway (2, 2) Australia (1, 1) Switzerland (12, 10) Denmark (10, 12)
Iceland (5, 9) New Zealand (9, 7)	Ireland (3, 4) Netherlands (4, 3) Spain (13, 15) Slovenia (25, 25) Cyprus (29, 29) Estonia (35, 38)	Greece (21, 21) Czech Republic (32, 32)	downward	Spain (13, 15) Cyprus (29, 29)	Estonia (35, 38)	Ireland (3, 4) Netherlands (4, 3) Iceland (5, 9) New Zealand (9, 7) Greece (21, 21) Czech Republic (32, 32) Slovenia (25, 25)

**Figure 4. The correlation between public expenditure on education ( $G_E$ ) and the trend of hybrid HDI position for a series of very highly human developed countries between 2000 and 2007**

Source: own calculations, based on statistical data available at the following web address:

<http://data.worldbank.org/indicator>.

**Note:** the numbers in parentheses denotes the position in the ranking of human development in 2008 and 2010 respectively.

At the same time, it was noticed that the improving of other countries positions, with higher performances, was possible on the background of shares over 15% of these expenditures or between 10% and 15% in all public expenditures and on the growth of these shares (Iceland and New Zealand, respectively Ireland, Netherlands and Slovenia). Nevertheless, the maintaining of a relatively constant position, for some countries in this group, occurred on the background of shares of these expenditures of over 15% or between 10% and 15% of the total public expenditure and of the growth of these shares (Denmark and Switzerland).

As regards to the countries with lower performances, in some cases, the improvement of their positions occurred on the background of shares of these expenditures between 5% and 10% of all public expenditures and of their growth (Greece and Czech Republic), for other countries, that same thing happened on the background of shares of these expenditures between 10% and 15% of all public expenditures and the maintaining of relatively constant level for these shares (Estonia) or their dropping (Spain and Cyprus).

Finally, we notice that the deteriorating of the position, usually noticeable about the countries with poor performances, occurred on the background of shares of these expenditures in all public expenditures between 10% and 15% or even under 10%, mainly following an unsustainable dynamics.

Regarding the correlation between the public health expenditure and the position occupied by those countries in the hierarchy based on the values of the hybrid human development index, the current analysis, revealed in this case also, the existence of some significant differences.

In the case of some high performance countries, it was concluded that the maintaining of a constant position occurred on the background of this type of expenditures at over 15% of all public expenditures, but also on the growth of their relative level (Australia, Norway, Canada, United States, Switzerland, Denmark, France). The improvement of the position in the case of other countries in the same group, occurred on the background of over 15% of all public expenditures and of the growth of these shares (Spain, New Zealand), respectively of their dropping (Ireland and Iceland), or even on the background of shares between 10% and 15% of all public expenditures and of the growth of these shares (Netherlands and Greece) (see **Figure no. 5**).

$G_H$				trend of hybrid HDI position	trend of $G_H$		
> 15%	10%-15%	5%-10%	< 5%		Downward	Constant	Ascending
Luxembourg (11, 11) Japan (16, 16) Austria (18, 19) United Kingdom (22, 22)	Sweden (14, 14) Belgium (17, 17) Portugal (28, 28) Poland (37, 35)	Israel (23, 23)		ascending		Portugal (28, 28)	Luxembourg (11, 11) Sweden (14, 14) Japan (16, 16) Belgium (17, 17) Austria (18, 19) United Kingdom (22, 22) Israel (23, 23) Poland (37, 35)
Norway (2, 2) United States (8, 6) Australia (1, 1) Canada (7, 5) Switzerland (12, 10) France (15, 13) Denmark (10, 12)	Finland (6, 8) Italy (19, 20) Hungary (36, 37)			constant	Hungary (36, 37)		Norway (2, 2) United States (8, 6) Australia (1, 1) Canada (7, 5) Switzerland (12, 10) France (15, 13) Finland (6, 8) Denmark (10, 12) Italy (19, 20)
Ireland (3, 4) Iceland (5, 9) Spain (13, 15) New Zealand (9, 7)	Netherlands (4, 3) Greece (21, 21) Czech Republic (32, 32) Slovenia (25, 25)	Estonia (35, 38)	Cyprus (29, 29)	downward	Ireland (3, 4) Iceland (5, 9) Czech Republic (32, 32) Slovenia (25, 25)	Cyprus (29, 29) Estonia (35, 38)	Netherlands (4, 3) Spain (13, 15) New Zealand (9, 7) Greece (21, 21)

**Figure 5. The correlation between public health expenditure ( $G_H$ ) and the trend of hybrid HDI position for a series of very highly human developed countries between 2003 and 2007**

Source: own calculations, based on statistical data available at the following web address:

<http://data.worldbank.org/indicator>.

**Note:** the numbers in parentheses denotes the position in the ranking of human development in 2008 and 2010 respectively.

It was also found that for some of the countries with poor performances, the improvement of their position occurred on shares of these expenditures between 10% and 15% of all public expenditures and of the dropping of these shares (Czech Republic and Slovenia). Instead, for



another part of that same group of countries, the improvement of their position occurred on the background shares for these expenditures between 5% and 10%, or even under 5% in the total public expenditure, but also of maintaining relatively constant of these share (Estonia and Cyprus).

It finally stands that the deteriorating of their position, usually noticeable for the countries with low performances, occurred on the background of some shares of these expenditures in the total public expenditure between 10% and 15% or even below 10%, in spite of the growth trend of these shares.

#### 4. CONCLUSIONS

Having them as subsystems of the national social and economic systems, the fiscal systems are required to be adapted to the requirements of the development of the first category, this process also involves, especially on empirical level, connecting actions placed under the political factors in that society.

In the case of the analyzed countries, the analysis revealed under all targeted aspects, the existence of some significant differentiations, but this doesn't exclude the possibility to refer and punctually formulate certain similarities between the experiences of these countries, regarding the connecting of their fiscal subsystems with their goals of economic and social development.

As a general observable trend, it is necessary that, although there is a strong correlation between economic growth and the human development level in the analyzed countries, still the positive performances regarding the last aspect are based on the global moderate dimensions in conjunction with structural dimensions (regarding education and health), significant and growing of the processes of redistribution of monetary resources mediated by their own fiscal subsystems.

In the plan of extending research, we consider reporting to be useful, in the same frame, of connecting fiscal subsystems with the targets of economic and social development, and the experiences of other groups of countries with lower levels of human development degrees. At the same time, we consider to be useful, regarding future research, taking into consideration of other aspects or dimensions of economic and social development, such as those related to the environment.

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## **SECTION 4**

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### **STATISTICS, DATA PROCESSING (INFORMATICS) AND MATHEMATICS**





## A COMPARATIVE ANALYSIS OF THE ROMANIAN DEVELOPEMENT REGIONS, IN TERMS OF ECONOMIC AND TOURISM INDICATORS

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### Abstract:

*The present paper aims to achieve a comparative analysis of the development regions of Romania from the perspective of some relevant indicators from the economic and tourism field. The used statistical method is the one of variance analysis of some quantitative numeric variables, which, in our case, are the economic indicators of tourism, under the influence of a qualitative variable (the region), that permits the sharing of the population into categories. The study is achieved with the help of ANOVA process, using the SPSS program.*

**Key words:** regional development, regions, tourism, analysis of variances,

**JEL Classification:** L83, C10

## 1. INTRODUCTION

The general objective of the study is the identification of some possible differences between the tourist activity of the 8 development regions of Romania, basing on some tourist indicators. The statistical analysis method of data is the Anova procedure, with the help of which we will follow the effect of an independent qualitative variable, which has several levels (in our case, the development region with 8 levels, corresponding to the 8 regions), on a quantitative, numeric variable. In this study, we will consider at a time, the relevant tourism indicators as dependent variables.

This paper includes a theoretical part which describes the mathematical system we use and general concepts regarding regional development and tourism, a practical part that includes an empirical research on the influence of the region factor on some tourism indicators and is finishing with some conclusions based on the research results.

## 2. THE STATISTICAL INSTRUMENT

In the first step we apply the statistical Levene test to study the homogeneity of the variance. If the significance level is less or equal to 0.05, meaning that the probability of the null hypothesis is less than 5%, we have to reject the null hypothesis, meaning that the variances of the regions are not equal (the variance is not homogeneous). In this situation we need to use the Tamhane statistical test to determine the presence of some significant differences between the average values of the variables.

If we have the opposite situation, that is the significance of the Levene statistical test is greater than 0.05, then the variance of the regions is homogeneous. In this case, we can make the analysis of variance by the Fisher coefficient, calculated as follows:

$$F = \frac{S_E^2}{S_R^2}$$

where

-  $S_E^2$  is the estimator of the inter-groups variance which is calculated as the square value of the deviation of each group from the average value of the statistical population, and shows the fluctuation generated by the grouping factor;

-  $S_R^2$  is the estimator of the average value of the group variances and shows the fluctuation inside each group, generated by random factors.

If the value of  $F$  is large enough then there are significant differences between groups. The significance level of  $F$  is established depending on the number of degrees of freedom inter-groups (number of groups minus one) and the number of degrees of freedom intra-group (number of values minus number of groups) and is computed with SPSS.

We shall also use the Bonferroni test in order to compare each two groups, with a different significance level.

### 3. THE REGIONAL DEVELOPMENT AND THE TOURISM

Considering necessary to shortly present the frame in which our research will take place, the regional one, we will summarize some aspects regarding the region, regional development and the role of tourism in the regional development policy.

The concept of region appeared at geographers at the beginning of the 20th century, and at the moment, there are a few of accepted definitions in the specialty literature. Different senses can be associated to the term *region*. So, one can consider that *the region* (1) have a *material* component, the territorial cutting, on which *the relational component* is projected, these two being in an indissoluble association.

The definition adopted by The Europe Regions Meeting in The Declaration on the Regionalism in Europe in 1996 considers *the region* as being *the territorial public entity corresponding to the immediate inferior level compared to the state one, and endowed with a government that disposes of own politics powers* (2).

There is no definition to contain all the aspects that characterize a region. Common to all definitions given to the region is the idea of space as entity, so the most significant statement that can be made about it, is that it represents *a unit, which includes a limited number of zones, of medium size and territorially adjacent*.

Regarding the context in which the regions appeared in the E.U., it must be mentioned that **Nomenclature of Territorial Units for Statistics (NUTS)** was created by Eurostat (The E.U. Statistics Office) in 1981 with the purpose of having a unique and coherent scheme of the territorial repartitions for the unification of the regional statistics and for the application of the E.U. regional policies.

So, in the E.U., there have been created territorial units of medium size called regions, which besides the role of handle regional statistics, have also the purpose of efficiently absorbing the funds from the E.U. for regional development. In the same time, the actual tendency in the E.U. is the one of decision decentralization.

Regionalization became in this way a common tendency of the territorial organization of European states evolution, besides the one of decisions decentralization, the regions being the responsible structures for institutional convergence ensuring of the E.U. member states. Although the regions apparition is not necessarily a consequence of the E.U. regional development policy, the high level of funds for the achievement of its general objective (obtaining economical and social cohesion) had an important contribution on regionalization, as well as on the establishing of strategies, plans and programs of regional development which can efficiently assure the repartition and use of resources.

In Romania there have been created *8 development regions*, by the reunion of several counties. They are not administrative territorial units, they have not juridical personality, being the result of a free agreement between the councils of the counties and the local ones, having the same function as in the other E.U. countries.

*The regional development* (3) is a quite new concept, meaning not only the boost and the diversification of the economic activities, the private sector investments boost, the contribution at unemployment decrease and living improvement, but a whole environment of supporting and adaptation of the durable actions that converge with the competence domains of the region.

Since 1998, we can talk about regional development in Romania, too; its purpose, like in the E.U., is to reduce the disparities of development between the regions of the country, improving in this way the life quality, in general, by stimulating and diversifying the economic activities and the investments in the private sector.

**The regional development policy** strengthens the role and the responsibilities of the local public administration and of the regional organisms in the economical and social development of each settlement and of the development regions, in the same time with the reduction of government institutions involvement in such activities. One of the objectives is the reduction of the economical and social disparities existing among diverse E.U. regions, focusing on the balanced development stimulation and the disadvantaged zones revitalization; it stimulates the economic growth and the SME sector development acting on some significant fields for development such as: transports, agriculture, urban development, environment protection, employment and professional training, education, chance equality, etc.

One of the ways which E.U. uses for the achievement of these objectives is the creation of *The Structural and Cohesion Funds* (especially The European Fund Regional Development), which are the financial instruments that E.U. uses to eliminate the economical and social disparities among regions, with the goal of economical and social cohesion achievement.

The policies and plans of regional development in the last years take into account more and more the tourist sector, as a strategic sector for providing a dynamic and durable economic growth, of certain regions with an important tourist potential.

The Regional Development Agencies existent in every development region have an important role in the implementation of the Regional Operational Program 2007-2013 (Regio), which is one of the Romanian Operational Programs agreed with the E.U., financed by The European Regional Development Fund (ERDF), constituting itself as an important instrument to implement The National Development Strategy and policies for regional development. The program is accessible for the 8 development regions of Romania.

It has 6 priority axes, and the presence of tourism in the frame of the Priority Axis 5 of Regio, reveals the fact that tourism has an important place and must know a better development in every region.

By achieving the targets of tourism development, we will get to the tourism multiplier. The benefic effects will be observed on the population incomes level and on some other fields, extern from tourism. The tourism multiplier (4) is represented by the fact that an initial expenditure made by a tourist, in an area or country, is successively converted into revenue for other areas of the economy (agriculture, manufacturing industry of consumer goods, construction and materials of construction industry, trade, services), directly or indirectly related to tourism, until the funds in question leave the country, the zone or the economic sphere, in general by the payment of taxes, savings (hoarding), imports, etc. called leaks from the system.

The context in which we develop our research being established, the next parts will reveal and analyze, with the help of some specific means the differences between the actual status and the difference between the regions from the tourist activity point of view.

#### **4. STATISTICAL ANALYSIS ON THE INFLUENCE OF REGION ON ESSENTIAL INDEXES IN TOURISM**

The scientific study of tourism activity need appropriate dates, methods and instruments that allow quantification. In the present paper we considered adequate economic indicators such as GDP (gross domestic product), turnover (for hotels and restaurants), and value of investments, accommodation capacity, and index of utilization for tourism resources, and number of overnight stays in hotels.

The purpose of this work is to study if there are significant differences concerning those indicators, between the 8 development regions.

## The influence of development region on the gross domestic product (GDP)

The GDP is an essential economical indicator for the socio-economical development level and is given as RON / inhabitant / year, for each development. In this work we study the influence of the development regions in Romania on the corresponding, for the period 2000-2005.

We shall consider that we have a significant difference between the 8 regions if there are statistically significant differences between the average levels of the GDP during the 6 years we considered.

The average values are presented in the following figure:

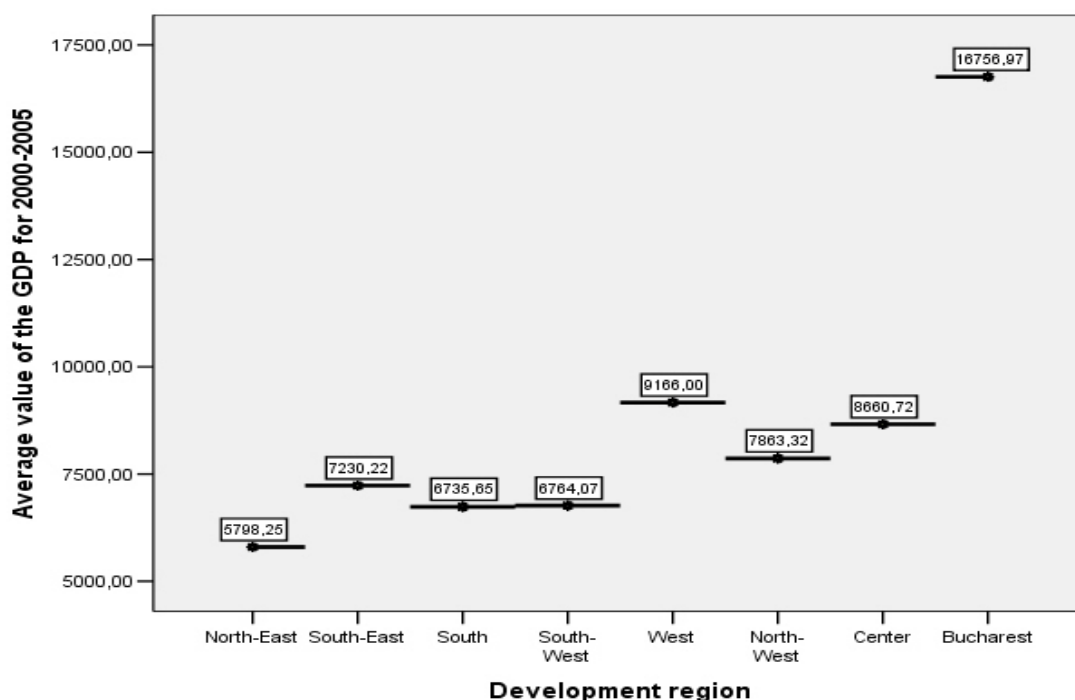


Figure no. 1. The average values of the regional GDP, 2000-2005

By using the Levene test in SPSS we obtained a significance level of Sig. = 0,08 > 0,05, proving that the variance corresponding to the 8 regions are homogeneous:

### Test of the homogeneity of variance

Levene Statistic	df1	df2	Sig.
1,991	7	40	,080

Consequently we shall apply the ANOVA procedure in order to determine the presence of significant differences between groups and the Bonferroni test for each possible pair of regions.

### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Inter-group	503829452,808	7	71975636,115	4,150	,002
Intra-group	693781143,042	40	17344528,576		
Total	1197610595,850	47			

The Fisher coefficient with 7 and 40 degrees of freedom is  $F = 4.15$  and the significance level is  $\text{Sig.} = 0.002 < 0.05$ , proving that there are significant differences between the levels of GDP corresponding to different regions.

We can easily see from the Bonferroni test that the average value of the GDP in the region Bucharest-Ilfov is significantly different from the average value in every other region, except for the West region.

Comparing the Bucharest-Ilfov region to the West region we can see that the average value of GDP for the first one is larger, but the difference is not statistically significant.

### The influence of the development region on the total turnover in tourism

The turnover we shall use in this work is considered for the all the hotels and restaurants in the region, between 2000 and 2005 and is expressed in thousands of RON.

We shall consider that there are significant differences between regions if the average values of this variable, for the six years, are statistically different.

The average values are presented in the following figure:

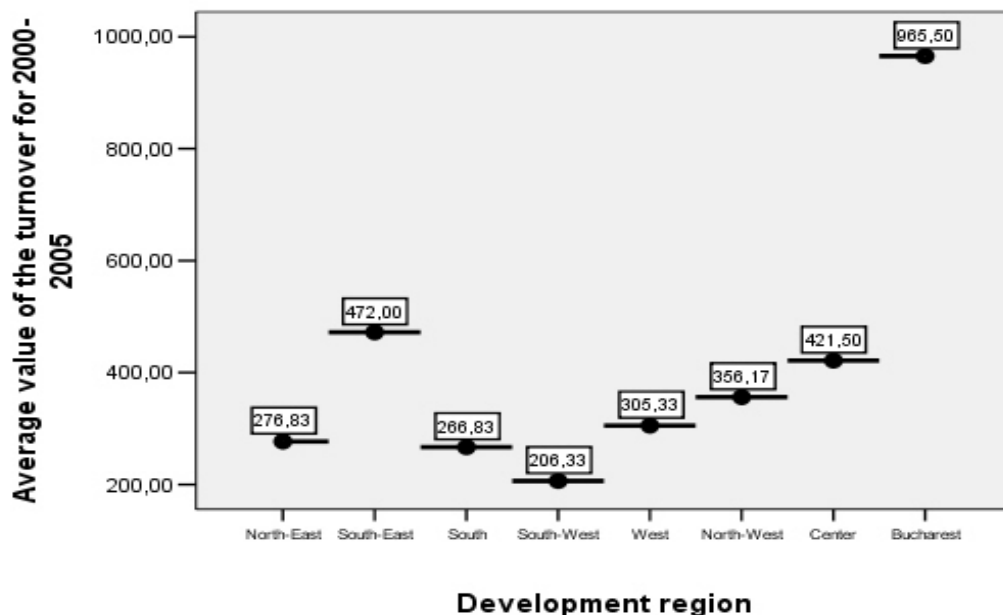


Figure no. 2. The average value of the regional hotel-restaurant turnover, 2000-2005

Using the Levene test with SPSS we obtain a significance level of  $\text{Sig.} = 0.007 < 0.05$  proving that the variances corresponding to the 8 development regions are not homogeneous:

#### Test of the homogeneity of variance

Levene Statistic	df1	df2	Sig.
3,329	7	40	,007

This situation does not allow us to use the ANOVA procedure. Even if in the figure above we can see that the average value of the turnover of the region Bucharest-Ilfov is larger than those corresponding to others regions, by using the Tamhane test with SPSS we can see that there are not statistically significant differences between development regions.

### The influence of the development regions on the value of investments in tourism

In this paper the value of investments in tourism is expressed in RON and we are essentially interested on the period between 2000 and 2005. We shall consider that there are differences among regions, on the level of this variable, if the statistical analysis shows significant differences on their average values for the six years we considered.

The average values are presented in the following figure:

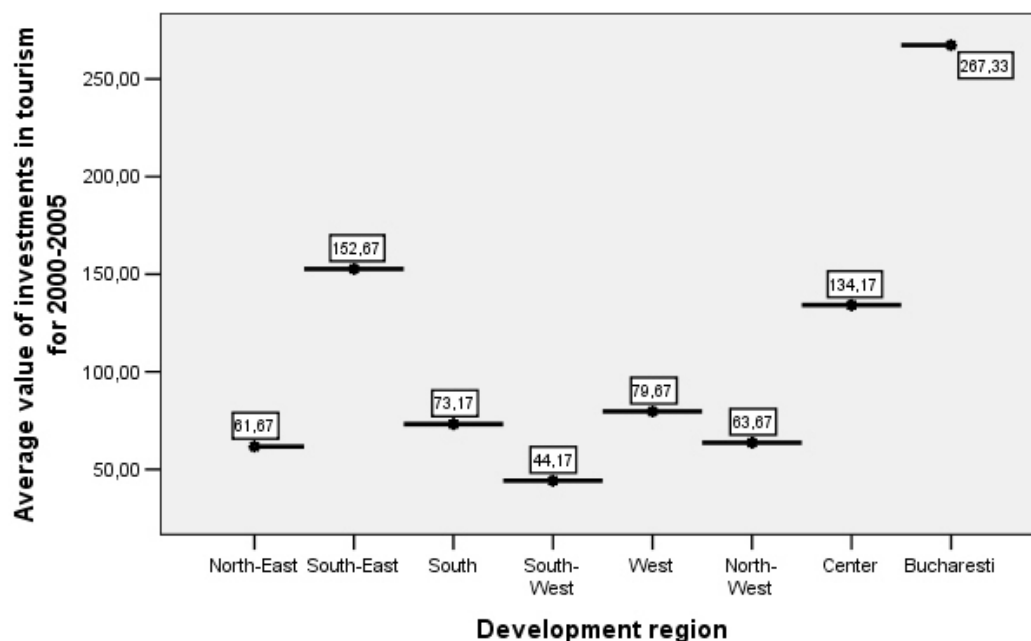


Figure no. 3. The average value of the regional hotel-restaurant investments, 2000-2005

By using the Levene test with SPSS we obtained a significance level of  $\text{Sig.} = 0.34 > 0.05$  proving that the variances of the eight statistical subpopulations corresponding to the development regions are homogeneous:

#### Test of the homogeneity of variance

Levene Statistic	df1	df2	Sig.
1,172	7	40	,340

Consequently we may continue with the ANOVA procedure, in order to determine the presence of significant differences between groups corresponding to development regions and with the Bonferroni test that compare every region to the others.

#### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Inter-group	229502,646	7	32786,092	5,008	,000
Intra-group	261875,167	40	6546,879		
Total	491377,813	47			

The Fisher coefficient with 7 and 40 degrees of freedom is  $F = 5$  and the significance level is  $\text{Sig.} = 0 < 0.05$ , proving that there are significant differences between regions on the level of investments in tourism.

Finally, by using the Bonferroni test we can see that the value of investments in Bucharest-Ilfov region is significantly larger than the values corresponding to all other regions, except for the South-East region and the Center region. Comparing the Bucharest-Ilfov region to those other development regions we can easily see that the value of investments is always larger, but the difference is not statistically significant.

### The influence of the development region on the accommodation capacity

In this work the variable accommodation capacity is expressed number of accommodation places in hotels and we shall consider it for the period 1991 – 2005.

The average values are presented in the following figure:

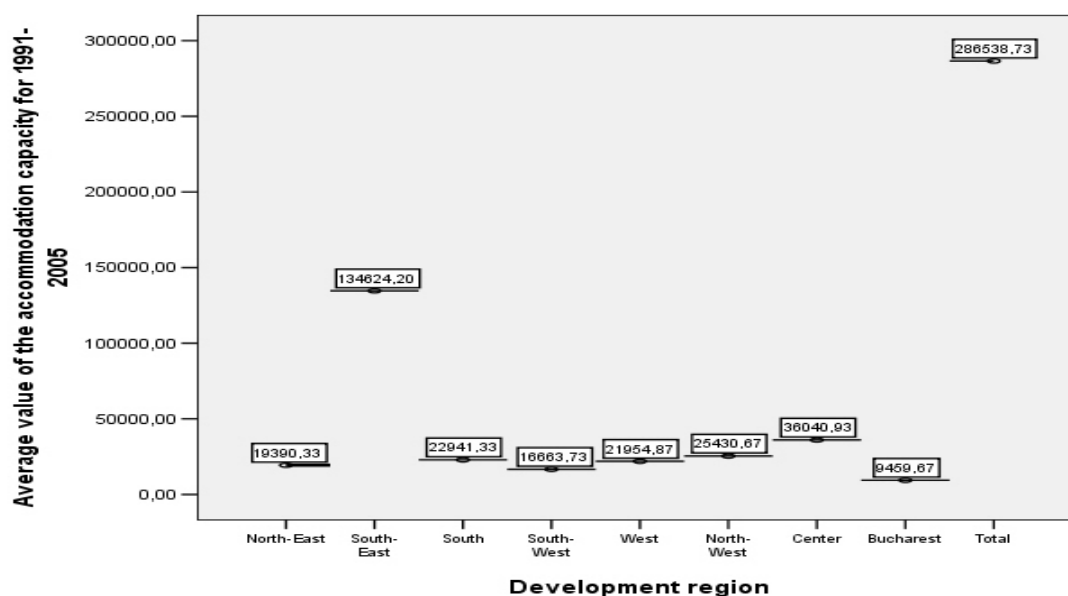


Figure no. 4. The average value of the regional accommodation capacity, 1991-2005

Applying the Levene test with SPSS we find a significance level  $\text{Sig.} = 0 < 0,05$  proving that the variances of the eight statistical subpopulations are not homogeneous.

### Test of the homogeneity of variance

Levene Statistic	df1	df2	Sig.
5,076	7	112	,000

At this point we can use the Tamhane test with SPSS and that shows the following differences between the average value corresponding to each region on the first column minus the average values corresponding to regions from the first row.



**Table no. 1.**

	N-E	S-E	S	S-V	V	N-V	Center	Bucharest-Ilfov
N-E		-115233*	-3551*	2726*	-2564*	-6040*	-16650*	9930*
S-E	115233*		111682*	117960*	112669*	109193*	98583*	125164*
S	3551*	-111682*		6277*	986	-2489*	-13099*	13481*
S-V	-2726*	-117960*	-6277*		-5291*	-8766*	-19377*	7204*
V	2564*	-112669*	-986	5291*		-3475*	-14086*	12495*
N-V	6040*	-109193*	2489*	8766*	3475*		-10610*	15971*
Center	16650*	-98583*	13099*	19377*	14086*	10610*		26581*
Bucharest-Ilfov	-9930*	-125164*	-13481*	-7204*	-12495*	-15971*	-26581*	

\*The difference is considered to be significant if the significance level is  $< 0.05$ .

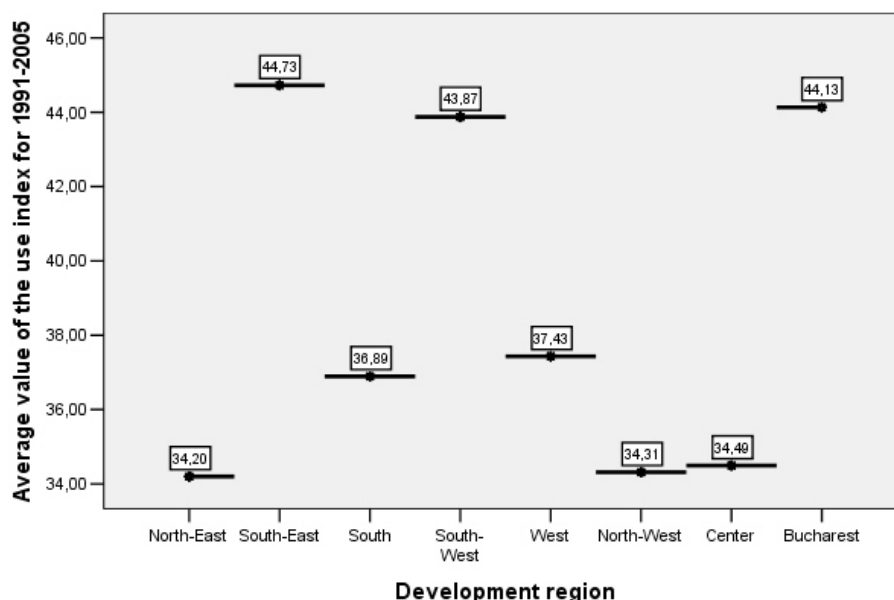
From the results in the table above we find the following conclusions:

- The South-East region has an accommodation capacity significantly larger then the others Romanian development regions, and that can be explained by the touristy potential of the Black See.
- The North-West and Center region have an accommodation capacity significantly larger then all the other regions, except for the South-East region.
- The South-West and Bucharest-Ilfov development regions have accommodation capacity significantly smaller then all others development regions.

### The influence of the development region on the use index of the touristic capacity

We state, from the start, that the variable index of use refers to the percentage of the accommodation capacity provided by the tourist units for the period 1991-2005. We will consider that the level of this variable varies between the eight regions, if, statistically, we will notice the presence of some significant differences between the means of their values, for the 15 years taken into account.

These average values are presented in the following figure:



**Figure no. 5. The average value of the regional use index of accommodation capacity, 1991-2005**

After applying the Levene test using SPSS, we obtained a significance level  $\text{Sig} = 0 < 0.05$ , showing that the variances of the 8 statistical subpopulations, corresponding to the regions, are not homogeneous.

#### Test of the homogeneity of variance

Levene Statistic	df1	df2	Sig.
9,128	7	112	,000

Applying Tamhane test with SPSS, the following differences are obtained between the use index values in the regions on the first column minus the one from the regions form the first line.

**Table no. 2.**

	N-E	S-E	S	S-V	V	N-V	Center	Bucharest-Ilfov
N-E		-10,52*	-2,69	-9,67*	-3,23	-0,11	-0,29	-0,93
S-E	10,52*		7,83	0,85	7,29*	10,41*	10,23*	0,59
S	2,69	-7,83		-6,98	-0,54	2,58	2,40	-7,24
S-V	9,67*	-0,85	6,98		6,44*	9,56*	9,38*	-0,26
V	3,23	-7,29*	0,54	-6,44*		3,12	2,94	-6,70
N-V	0,11	-10,41*	-2,58	-9,56*	-3,12		-0,18	-9,82
Center	0,29	-10,23*	-2,40	-9,38*	-2,94	0,18		-9,64
Bucharest-Ilfov	9,93	-0,59	7,24	0,26	6,70	9,82	9,64	

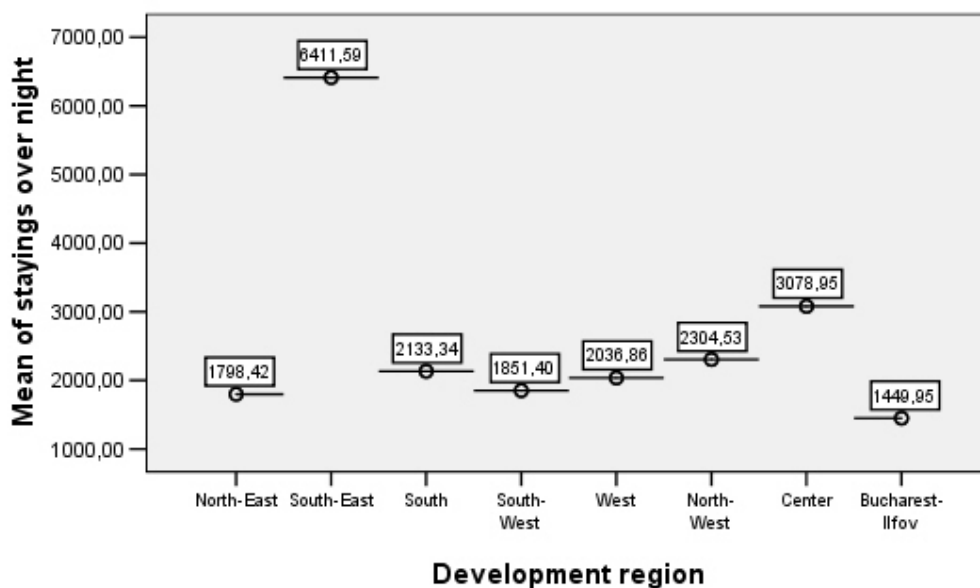
\*The difference is considered to be significant if the significance level is  $< 0.05$ .

Based on the above table, one can draw the conclusion that in South-East and South-West regions, the use index level is significantly higher than in the North-East, North-West, West and Center.

Regarding other regions, there are no significant differences.

#### The influence of the development region on the number of overnight stays in tourist units

The variable number of overnight stays in tourist units is considered for the period 1991-2005, the average being among the values corresponding to these 15 years. The values of these means are presented in the following figure.



**Figure no. 6. The average value of the regional overnight stays, 1991-2005**

After applying the Levene test using SPSS, we obtained a significance level  $\text{Sig} = 0 < 0.05$ , proving that the variances of the 8 statistical subpopulations, corresponding to the regions, are not homogeneous.

### Test of homogeneity of variances

Levene Statistic	df1	df2	Sig.
22,724	8	126	,000

Applying Tamhane test, the following differences are obtained between the overnight stays value in the regions on the first column minus the one from the regions form the first line.

**Table no.3.**

	N-E	S-E	S	S-V	V	N-V	Center	Bucharest-Ilfov
N-E		-4613*	-334	-52	-238	-506	-1280*	348
S-E	4613*		4278*	4560*	4374*	4107*	3332*	4961*
S	334	-4278*		281	96	-171	-945*	683*
S-V	52	-4560*	-281		-185	-453*	-1227*	401
V	238	-4374*	-96	185		-267	-1042*	586*
N-V	506	-4107*	171	453*	267		-774*	854*
Center	1280*	-3332*	945*	1227*	1042*	774*		1628*
Bucharest-Ilfov	-346	-4961*	-683*	-401	-586*	-854*	-1628*	

\*The difference is considered to be significant if the significance level is  $< 0.05$ .

From the above table we can notice to the following:

- South-East region differs significantly from all other regions of Romania, in the sense that the number of overnight stays is significantly higher;
- in the Center region, there has been recorded a number of overnight stays significantly higher than in all other regions, except South-East region;
- there are no significant differences among the North-West, North-East, South and West regions; North-West region recorded a number of overnight stays significantly higher than the South-West and Bucharest-Ilfov regions;
- the number of overnight stays corresponding to Bucharest-Ilfov region is significantly lower than in all other regions, except the North-East and South-West regions.

## CONCLUSIONS

1. It is to be noticed that, regarding the investments, the regions with high potential (Center and South-East) record a significantly higher level compared to the other regions, being able to be compared only with the region of Bucharest-Ilfov.
2. Regarding the accommodation capacity, one can notice that, the regions with high tourist potential, benefiting of high investments, have the biggest number of places compared to the other regions.
3. The region Bucharest-Ilfov, although benefits of high investments, have a smaller accommodation capacity than all the other regions (investments in quality, luxury, business tourism). The utilization index is also higher in the Bucharest-Ilfov area.
4. Another fact to be noticed is that, the utilization index in the South-East region (including the Black Seaside) is higher than in the other region with great tourist potential (including Prahova Valley).

## ENDNOTES

- (1) Pușcașu Violeta – *Dezvoltarea regională*, Ed. Economică, 2000, p.10
- (2) \*\*\* Declarația asupra Regionalismului în Europa, Adunarea Regiunilor Europei, 1996, art. 1
- (3) Pușcașu Violeta – *Dezvoltarea regională*, Ed. Economică, 2000, p.10
- (4) \*\*\* Declarația asupra Regionalismului în Europa, Adunarea Regiunilor Europei, 1996, art. 1

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## THE ROLE OF VENDOR IN SOFTWARE PROJECTS

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### Abstract:

*The software product development involves different stakeholders such as suppliers, vendors, customers, project development team, senior management and functional managers. The project manager is very much dependent on external stakeholders such as vendors. Vendor selection, contract preparation, different types of contracts, monitoring the progress, contract closure and the role of vendor in the entire project life cycle are discussed in this paper. The steps in vendor management process are clearly explained. The advantages and disadvantages of different types of contracts are discussed. The questions arise when a project manager chooses a vendor are specified. Overall the importance of vendor management and the role of vendors in software projects have been discussed based on the literature review of the project management standards and related literature. The lack of vendor support may lead to project failure. This is evident from the project management literature.*

**Key words:** Vendor, Vendor management, Vendor selection, Contracts, Vendor role, Contract closure

**JEL Classification:** M15

## INTRODUCTION

*Software development can not be done alone. It should be a team effort.* According to Standish Group CHAOS report 2009, only 32% of the software projects are successful. 44% of the projects are challenged by time and cost overruns and 24% of the projects are failed. What could be the reason for this much less percentage of success in this advanced technological era. There are many reasons for software projects failure.

The reasons can be lack of technical knowledge, lack of skilled man power, lack of supporting infrastructure, lack of hardware, software resources, the unskilled project manager, lack of knowledge of project management in the team, serious communication problems in the team, unrealistic deadlines, unrealistic expectations from the top, senior management and other stakeholders, customer pressure, lack of commitment from top management, lack of vision in the team, lack of team orientation, task orientation, wrong selection of vendor, lack of funds, no communications management plan, no proper risk management plan, coding was started immediately without design and architecture, etc. Like this there are many reasons for software projects failure.

The lack of project management skills of the project manager is identified as key reason for software projects failure. Vendor selection, contract preparation, negotiation are part of project management in software projects (PMI, 2008). The role of vendor or supplier is the topic of discussion in this paper.

## VENDORS OR SUPPLIERS

Any organization can not develop a product or service without the help of vendors, suppliers, contractors and sub-contractors. We have seen many computer manufacturers, mobile phone manufactures, and electronic devices manufacturers developing products by integrating components supplied by different vendors. The final success of the project is dependent on the integration of these components supplied by different vendors. Even if a single vendor supplies a wrong component or an error prone component, the entire project product is going to be a failure. Hence, there is lot of importance and necessity for the selection of proper vendor in getting needed

components for the project. This paper expresses the importance of vendor selection, key areas to concentrate in vendor selection, and points to discuss when making contracts with vendors.

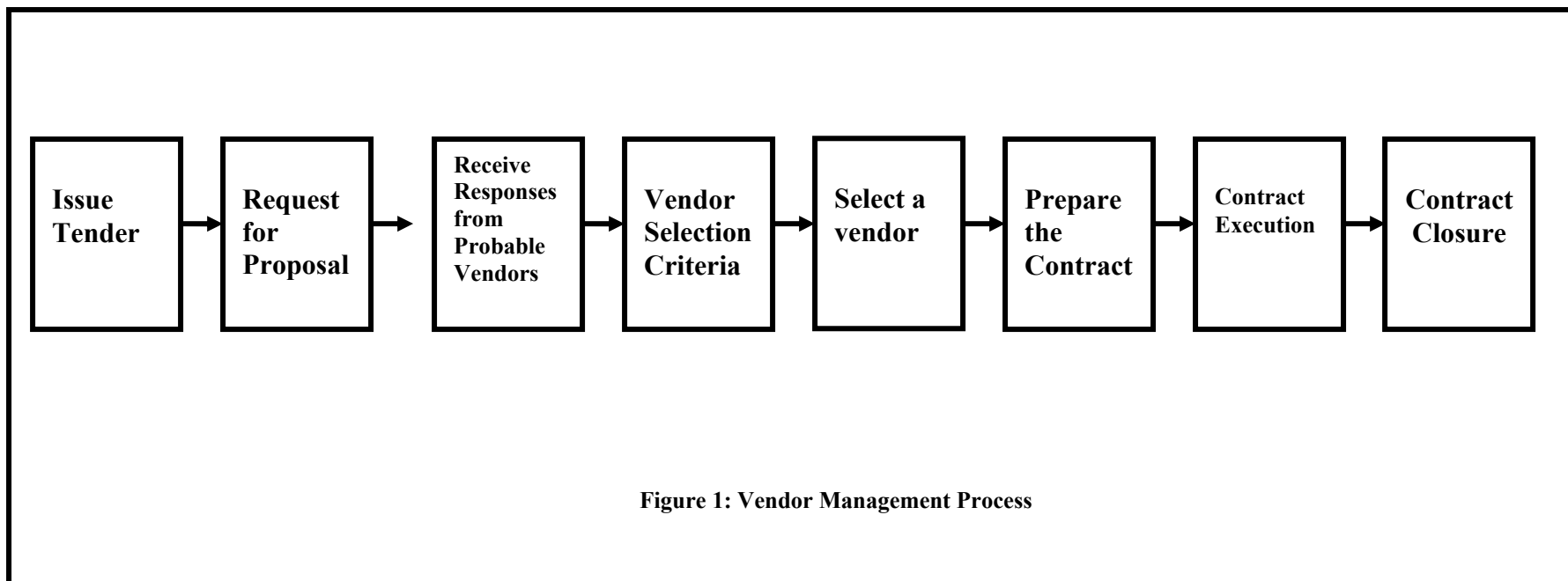
For example, any software product development involves usage of compilers, development tools, debugging tools, linkers, version control tools, bug tracking tools, and integrated development environments. All these tools are from different vendors and manufacturers. All these tools work on project source code and help in developing and building the product. Sometimes, the output of one tool becomes input to another tool. All these tools work on some input and work together to give us a product. If the work flow is defined like this, there should be clear defined requirements and defined role and responsibility to each tool in the environment. This is possible with the clear standards and requirements definition for the tool, the scope and functionality of the tool. The boundaries for each tool should be defined and clear. Then only one can use multiple tools together and get the required project product. Hence, the vendor product meeting the project functionality and requirements should be selected and used for the project.

Similarly for any other industry as well, the organization developing a product must be aware of the different components they are using and their clear functionality. Otherwise it will be a bottle neck at the time of integration. The product development organization should make sure that the vendor's product has been based on the specified standards and interfaces. Otherwise it is not going to work at the time of assembly. Hence, the project manager should make sure that the vendors' products and components are based on certain industry standards.

One should also look at the usability of the vendor's product in the current environment. This should be tested in pilot study and test results should be generated. The project manager should also investigate whether this component or product has been used in another product development by other companies or not. What is the reputation of the vendor in the market? What are the offered vendor prices to compare with other vendors? What is the reliability and safety of the vendor products are to be concentrated.

One important thing is the project manager should communicate the project timelines to the vendors as well. The delay in supply of the components from vendors will delay the entire project. The component requirements, specifications, delivery timelines, acceptable quality limits are to be communicated to the vendor at the time of project planning and this needs to be tracked as well. It is better to get the same component from multiple vendors before making the final order to specific vendor. This gives project manager the choice to choose whatever he wants from the different vendors. Otherwise the project manager should be vigilant from the vendor delaying the components supply and finally making the project manager to accept whatever he supplies at the last minute. This is where the project manager has to be very careful in dealing with the vendor if he is dependent on single vendor. If this specific vendor makes delay in the delivery of the specific component, the project manager is left with nothing but to accept whatever the vendor brings at the last minute. Usually because of the pressure from his customers, the project manager ends up in accepting whatever the vendor brings at the last minute and compromising to the quality of the deliverables.

That is the reason, the vendor should be given specific deadlines and there should be some buffer time for the project manager if the vendor did not meet the specified timelines. Also, it is quite common that there is possibility for making iterations in accepting the specified components from vendors because of the deviations in the deliverables and quality aspects. It is the best practice to have a list of proven and trusted vendors for an organization. The technical capabilities of the vendors are also to be assessed and documented in project documents. The general vendor management process is as shown in the Fig. 1.



## VENDOR SELECTION CRITERIA

The project manager has to have clear vendor selection criteria when selecting a vendor for his or her project. Usually reputation of vendor, since how many years he is in business, who are his customers, who are his suppliers, did he supply components earlier to our organization, what is his company's financial situation, is it a loss making or profit making division, what are their human resources practices and people practices, are there any law suits against this vendor, what is their environment such as political, economic, social, technical and legal environment.

When a project manager is working on international projects or global projects, the project manager has to decide whether he is taking foreign vendors or only domestic vendors. If he is thinking about taking foreign vendors, he or she has to check whether they have presence in performing organization's country. How are the components going to be shipped? How to deal with customs duty and import expenses? How does it impact the performing organizations customers if the project manager chooses a specific vendor from specific country? Does the vendor know the culture of the performing organization and its national culture to deal with foreign partner? How does the cultural differences and barriers going to impact the contract in future? How does it going to impact our own country's economy and the g? The project manager has to think in all these angles while working on international projects.

The project manager has to short list some of the vendors from the respondents to request for proposal. From this short listed vendors, project manager has to select one vendor based on the financial, legal, return on investment, technical compatibility, interface issues, technology transfer and intellectual property issues.

## CONTRACT PREPARATION

Once vendor selection is over, formal well written contract will be made between both the organizations binding to their organizational and national legal environments and frameworks. Broadly, there are 3 types of contracts possible between the performing organization and vendor organization (see Fig. 2). They are

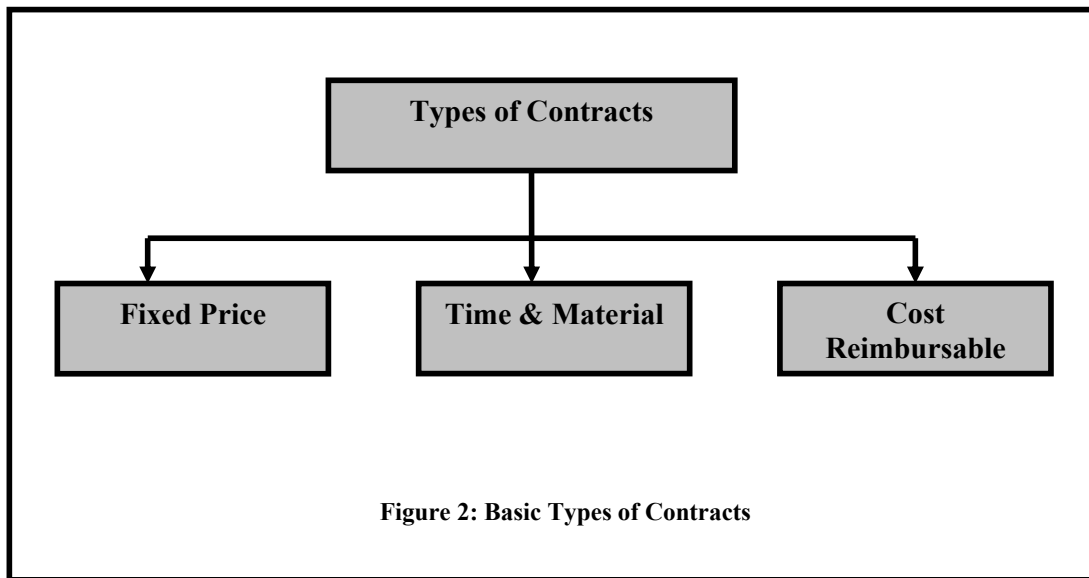
- i. Fixed Price Contracts
- ii. Time and Material contracts
- iii. Cost reimbursable contracts

In *fixed price contracts*, the customer organization knows how much money they need to spend on the project and the vendor also knows how much money he will be getting from the customer organization before completion of the project. This type of contracts is suitable for short term small projects.

Time and Material contracts are recommended, if the project duration is more than an year and long term and the customer has plans to give the maintenance of the product also the same vendor after product development is over. Usually vendors get an hourly or daily rate per person and the hardware and software costs.

If the customer organization is not in an position to estimate or if it is a research based project, then they go for cost reimbursable contracts. In this the actual costs of the vendor can be reimbursable by the customer organization. Unless the organization knows the vendor for long term, this type of contracts is not recommended.





These days there are many variants within these contract types such as cost plus incentive type contracts, fixed price plus bonus, cost plus fixed fee contract, etc. Based on the customer organization situation, the project manager can decide which type of contract he has to make.

### **MONITORING THE PROGRESS**

Usually based on the progress of work, the project manager has to make payments to the vendor organizations. This happens in installments may not be one time payment based on the type of contract the project manager enters into with the vendor. The best tool for evaluating the project progress is to use earned value technique and find out the work completed. Based on that the project manager can make payment to the vendor organization.

The best practice is to have periodic reviews with the vendors about work products and their functionality. The project manager has to make sure that the vendor is developing the right component with the given quality parameters. If this monitoring is not there, the project manager is going to face problems during the product integration time. Based on the project progress and work products, the project manager has to take corrective actions for the project along with the vendor. Sometimes, project reviews may lead to changes in contracts as well. If this situation arises, the project manager has to make formal changes to the contracts with the acceptance of vendor or supplier organization.

### **CONTRACT CLOSURE**

Once the project manager receives the work products from the vendor, he has to certify and accept the deliverables after testing. Usually acceptance test should be done at the customer organization. After accepting the work products, the project manager formally closes the contract by paying the rest of the amount and dues to the vendor organization.

Usually contract closure happens during the project closure time. The project manager has to document the lessons learned and he or she has to prepare contract closure statement. Based on the project need, or organizational need, the project manager sometimes renews or extends the contract. If he renews, or extends the contract, again the billing rates may change and again the project manager has to negotiate with the vendor or supplier organization.

## VENDOR ROLE

The vendor has got lot of importance in software development projects. Some of the projects even scrapped because of non-availability or non supply of components, tools and environments at the right time from the vendor. The project manager has to keep the vendors or suppliers informed right from the project inception phase. They are to be included in the project communications management plan and timely needed information should flow to vendors and suppliers according to the communications management plan. They should be informed ahead about the risks in which they are involved by the project manager.

The project plans and schedules are also to be shared with the vendors and suppliers. To avoid the demarcation or too much gap between performing organization and the vendors, majority of the Fortune 500 organizations are calling the vendors as vendor partners, solution partners, channel partners and consultants. This modern terminology removes the barriers between the project team and the vendors or suppliers and the team can work effectively with the vendor partners in meeting the project objective.

## CONCLUSION

The vendor plays very important role in the entire project management life cycle. He or she has to be involved right from the beginning. His/Her work has to be monitored and tracked. Regular feedback needs to be given to vendor. The current day technology products are the results of the integration of components from different vendors. The successful vendor management can lead to successful project management and successful integrated product at the end of the project life cycle.

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## **SECTION 5**

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# **LAW AND PUBLIC ADMINISTRATION**



## OVERVIEW OF HUMAN RESOURCE MANAGEMENT IN LOCAL PUBLIC ADMINISTRATION \*\*\*

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### Abstract:

*In Romania and other Eastern European countries, the administrative reform was often understood just as the adoption of new laws and regulations; the only instrument of administrative changes being located in the legislation. There were taken ideas, policies, procedures, laws, without properly articulated prior studies and without adaptation to the Romanian reality. Different administrative systems, different cultures, practices and different legal systems have created or create different conditions compared with other countries of the world, the more so as the functions of public management (forecasting, organization-coordination, management, motivation and evaluation and control), have been years in a row ineffective or some of them were entirely lacking.*

*On the development level of public function in Romania and the impact of Romanian economic news impact on the field, we identify the main existing problems.*

*Current status and the European integration means the adaptation of Romania to the requirements regarding the level of training and development of human resources required at international level.*

**Keywords:** civil servant, Human Resource Management, Local Public Administration.

**JEL Classification:** H83, M12, O15

Human Resource Management in Public Administration in Romania is much less visible in public institutions and to the National Agency of Civil Servants (NACS) (1) there is a MANUAL OF HUMAN RESOURCES, with a guideline for these institutions. The manual, which we refer to, provides information on the principles and practices governing the human resources management in public administration in Romania, management mainly based on existing legal norms (rules that often create difficulties in their application). Given the set, and the characteristics of personnel management face to face with those of the human resources management in the public institutions, we rather identify the staff management characterized by (Stanciu, 2001):

- strategies developed in the short or medium term compared with those on long term, specific to the human resource management
- acceptance of subordination, and not a psychological motivation based on occupational dedication
- identification at the organizational level of some bureaucratic structures and not of some organic ties
- an unconditional subordination criterion of integration and not of integrative participation
- a vision by which the staff is included in labor costs, which is not seen as investment, etc.

A modern public service requires a change in the organizational culture, making the transition from personnel management to human resources management with strategic modernization of the first. On the other hand, the issue of leadership in public administration has given rise to numerous and profound debates in the specific literature; very often the public institutions were perceived as unable (compared to private organizations) to implement and promote a successful leadership style (Hintea, 2007). Leadership and organizational development must be in the spotlight in public administration in Romania. As an example, among the tools that could show efficacy in this regard is found Blake Mouton Managerial Grid, a two-dimensional model of leadership styles, in the sense that it uses both the personal concern and the concern for tasks in order to identify the leadership style practiced by a person in a position of leadership. (Mora, 2008).

On the development level of public function in Romania and the impact of Romanian economic news impact on the field, we identify the main existing problems, thus:

1. Numerical reduction of human resources and of those of financial nature in the budget sector, as the main effect of the economic crisis is one of the problems faced by the local public administration in Romania, at this moment. The efficient use of public funds on the basis of a sound public financial management application but also the employment incurred as a result of the actual analysis of staffing needs (2) reported to the organizational and divided strategic objectives (Siugzdinienė, 2009) would have not led to the necessity of such measures (3).

2. The poor application or the corresponding inapplicability of motivation levers, implicitly of the unitary salary system (4) (Profiroiu, Andrei, Profiroiu, 2009), relating to the human resources performance. The lack of transparency of pay, motivation, generally correlated with the absence of effective human resources policies, increase the degree of demotivation of personnel and thus the stagnation and/or drop of their professional performance.

As an example: Although we need an assessment of the way in which public officers discharge their duties and the level of professional training, especially given the fact that we are trying to create a professional corps of public servants, the question is: Does this assessment reflect the reality? Even if clear criteria are set for each category of civil servants, the evaluator's subjectivity can be hardly removed, at least for now. Public officials must be motivated, according to the established criteria and not on the basis of the evaluator's subjectivity or of the halo effect. The correct evaluation of human resources brings performance in the organization and indirectly the recognition of human capital (Alberti and Bertucci, 2005).

We estimate that, under these circumstances, the analysis and the review of the applicability of the performance evaluation system for civil servants and contractual staff of local public administration is/will be imperative. Thus, human resource motivation has to be made strictly on skills and real professional results that lead to the achievement of the objectives of the project or of the organizational ones on the whole, by meeting the defined performance criteria.

The systems of public sector performance measurement are still in a transition phase, transition identified (in a later stage) even in countries where these systems are used at all levels of government. However, procedures and performance measurement tools suffer further transformations, these ones being nor exhaustive, neither really systematic. (Androniceanu, 2005)

3. The poor development of human resources departments of the public authorities and institutions or their inexistence in some public organizations (such as city halls in rural areas). The responsibilities of such a compartment, usually belong to one of the civil servants, who is not always professionally trained to exercise such powers. A first result of this problem is the unitary non-application and/or the breach of legislation relating to public function; a second effect is the poor capacity of human resources management; and, last but not least, the inexistence or where they are formulated, the faulty application of human resource management strategies. In order to solve this problem, we think it useful to examine each entity in which to identify these weaknesses and to develop an action plan related to the complexity of each situation.

4. The deficitary system of continuous learning. In this case, we identified the improvement of public administration staff without always considering its deficit or training related to the objectives and powers of the position held and the existence of a small number of trainers who can bring additional theoretical and practical knowledge in the areas of specialization required of public institutions. Until these weaknesses will be resolved, we think it useful to develop a working environment to facilitate learning, with a continuous evaluation of the results.

5. The damaged image of public servants (and of the contractual staff) is another weaknesses of these. The image of civil servants and public administration is determined by the perception of citizens about the evolution of corruption, as well as of the connectivity of public servants to it. Also, reducing the quality, efficiency and timeliness of service delivery to citizens reflect in their opinion the less favorable image, which is associated to the employees of public institutions. (Aguilar, Galíndez and Velasco, 2005)

6. The reduced or indistinguishable direct collaboration of the National Agency of Civil Servants (NACS/ANFP) with the local authorities and public institutions limits the role of the NACS in the civil service management. We also mention the insufficient institutional capacity of NACS, reported to the nature and volume of tasks that must be fulfilled.

On the other hand, NACS does not manage the contractual staff or the staff with special status in public institutions. We consider it necessary to have an agency to manage both civil servants and other staff that I have referred to.

7. The need

- a. to obtain some structural and process improvements of public policy management cycle in the central and local public administration,
- and
- b. to improve the quality and efficiency of public service delivery, with emphasis on decentralization.

Through the Administrative Capacity Development Operational Program, public institutions and authorities and the stakeholders in this area of interest, can access various funds in order to diminish/eliminate the weaknesses presented.

The Administrative Capacity Development/ the modernization of the Romanian public administration is an approach which aims to create a more efficient and effective public administration, with a body of competent civil servants, to the socio-economic benefit of the Romanian society. This is another lever of solving current problems of public administration amid European concerns administrative cooperation under the Treaty of Lisbon (5).

The issues presented in sections 2-3 and 5-6 are recognized by the National Agency of Civil Servants, in greater or lesser extent, as the problems faced by public administration (6).

On the other hand, since the entry into force of Resolution No. 699 of 2004 for approving the updated strategy of the Romanian Government regarding the acceleration of public administration reform, 2004-2006, we know no other strategy that had the same status and the same legal value. The only exceptions are:

1. The National Reform Plan 2007-2010 (7), a document that shows a reduced concern for the actions of the human resource in public administration, according to Public Administration section;

2. The strategy for a better regulation in the central public administration 2008-2013 (8), which the executive would take a bit later, obviously, does not include the local government and neither concerns on the human component which should offer performance on the ground of the decentralization of public administration.

Surely, the local government autonomy may allow to a certain extent the formulation of strategies to a local institutional level in absence of a framework strategy for Romania.

Also, at the local public administration level we identify a poor financial decentralization, in many cases being made only the transfer of tasks of organization and management of public services from central level to the territory, without an appropriate financial support.

3. The Government Program 2009-2012, in Chapter 19 - Public Administration Reform, includes The human resources management section, which aims to implement the law regarding the unitary payment, the review of the evaluation procedures and the continuous training of the staff, but it also aims at the issue of Increase of efficiency and transparency in the activity of institutions of public administration, Administrative decentralization and increase of efficiency of local public

administration (section that brings the novelty of developing a project on administrative-territorial reorganization of Romania), Financial decentralization.

In addition, according to the latest studies of sounding public institutions, the public servant in Romania is perceived in an almost negative manner. Thus, among the negative aspects were identified:

- The high enough score obtained by human relationships and attention paid to the chief show the application of the promotion practice based on relations (preferences, nepotism), although such persons are not competent enough
- The perception of the degree of corruption at the level of the direct chief - only 55.4% believe their boss is correct
- Discontent manifested towards earned income - 48% of respondents said they are dissatisfied enough or profoundly dissatisfied, and for 67% it meets the minimum requirements
- In terms of initiatives deterrence, only 51.8% believe that their ideas are promoted by the management of the organization they work for
- Public functions management instability under the influence of changes in the political sphere - 48 % of respondents indicate the change of the management device as a consequence of the inter-changement of governing political parties
- Public's behaviour (the rules of conduct are not followed in public or seizures of physical and verbal violence);
- Less annoying is the lack of information (on certain issues, the overall level of training or lack of civic culture).

Yet, after years of accelerated reforms in public administration, public servants' perceptions and values reflect some positive effects in the modernizing process (Mazurencu Marinescu, Niculescu-Aron, Mihaescu, 2007), but it is at a considerable distance from the public's requirements, compared to best practices standards of developed countries and to the theoretical and practical studies of the international literature in the field. (Chlivickas, 2007, Auluck, 2006)

Finally, the formulation and implementation of HR strategies in APL and hence the identification of the opportunities to improve the employees' performance is a bottom-up approach, which seeks to involve all employees and to identify the main training needs. (Osoianu-Lazar-Zaharie-Gavrea, 2008)

In conclusion, the European integration means the adaptation of Romania to the requirements regarding the level of training and development of human resources required at international level.

Amid the identified problems, we encourage and sustain the comparative theoretical and practical scientific research of human resource issues of local public administration in Romania and other states is necessary to identify and review some successful recipes, in the context of similar or different administrative structures with those of Romania.

Most, we consider an interdisciplinary approach is useful through the presented issues and the impact that each of these dimensions has on public servants (human resources – in the local public environment – on the whole) in the process of orientating the activities on customers (citizens) and increasing the quality level of offered services by techniques of improving services as TQM - Total Quality Management. (Pollitt, 2007)

In Romania, in the context of EU integration, the administrative reform can not be achieved without major changes of concept in terms of public management, its values and its fundamental principles. The administrative system and managerial practices in Romania can not stay out of major transformations in administrative systems of the Member States. Human resource management in public administration, identified as, at present, personnel management in public institutions in Romania, part of public management, has to configure and develop like the developed Member States (Androniceanu, 2008) and, why not, receive the mark of successful strategies and performances obtained by leading companies in European and international private environment.



A major role, in addition to the interdisciplinarity we referred to might have the Public financial management. The comparative studies prove that individual approaches differ greatly. This applies both to international comparisons, as well as to the intranational ones. (Schaefer, 2006) In this case, we identify a strong connection between human resources management in public administration and public financial management, the more as the successful application of strategies for public financial management is also conditioned by (or especially by) the human resources which have responsibilities in the sphere of this management area amid decentralization of public services with specific reference to financial decentralization. On the other hand, human resources development and their motivation is conditioned by what and especially how many financial resources exist in the organization.

Viewed from the perspective of the Romanian administrative reform, the decentralization technique, on the whole, implicitly the financial decentralization, requires to the local government the ability to take new skills and responsibilities. This is a major priority for local and central public administration, but a lack of proper regulation, the inconsistency between the legislative and the status quo, the lack of a process monitoring, as well as the fact that local authorities were not prepared enough caused in some cases the transmission of responsibilities without funding sources.

The local public communities can reach their decentralized powers effectively only if they have the necessary financial resources, whether derived locally or transferred from the core, determining autonomy in the decisions of public financial management through the income and expenditure budgets. (Stoian and Muntean, 2005)

A depth study of theories and administrative functions, along with the analysis from the managerial perspective do not lead directly and immediately to the creation of loyal, efficient, well trained civil servants, but represents an important step in achieving this goal. (Matei, 2006)

There are no organisations with performance management without human resources management, and if there is no performance management, there is no even management

## ENDNOTES:

1. Body set up in order to manage the public functions and the civil servants; The Mission of the National Agency of Civil Servants is to develop of a body consisting of professional, well prepared, politically neutral civil servants, who must also be able to assimilate and acquire the standards the performance of the EU, in order to efficient the public administration and to improve the relations between the administration and its main beneficiaries, the citizens.
2. We also refer to the development and implementation of a system of recruitment and promotion based on merit and competence.
3. Government policies, in this regard, are formulated both on the background of the crisis and on the contractual provisions concluded with the International Monetary Fund, World Bank and EU-European Central Bank, in the context of the loan accessed by Romania in 2009. Under these circumstances, Romania must reduce its budget deficit and implicitly reduce budget expenditures.
4. Framework Law no. 330/2009 or 284/2010 on unitary wages paid to staff from public funds.
5. The provisions of the Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed in Lisbon, December 13, 2007 – which took effect on December 1, 2009. [Title XXIII - Administrative cooperation, Article 176 D (2) and 254<sup>a</sup> (1)].
6. [http://www.anfp.gov.ro/oip/doc/publicare/ghiduri%20si%20broșuri/59706ABCDEFMRU\\_final\\_fara\\_anexe.pdf](http://www.anfp.gov.ro/oip/doc/publicare/ghiduri%20si%20broșuri/59706ABCDEFMRU_final_fara_anexe.pdf)  
f The National Agency of Civil Servants (NACS) assumes the responsibility for updating and maintenance of the manual which we refer to in light of changes occurring.
7. [http://www.gov.ro/aplicarea-planului-national-de-reforme-monitorizata-trimestrial\\_11a102938.html](http://www.gov.ro/aplicarea-planului-national-de-reforme-monitorizata-trimestrial_11a102938.html)
8. The strategy was adopted to support the actions initiated by the European Commission in early 2007, Communication COM (2007) 23 – The Program of Action for Reducing Administrative Burdens in the European Union.

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#### NOTĂ:

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## MANAGING EMPLOYEES GRIEVANCES BY EMPLOYERS

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### Abstract:

*As explained in the specialty doctrine, procedures form the set of principles and rules from and with the help of which, employment relations should be conducted, but they also represent operational mechanisms used by the parties in treating various problems that arise every day.*

*It is common that large organizations have a set of procedures which draw most, if not, all areas of interest for both parties, such as: union recognition, individual representation, negotiation and dispute settling procedures, consulting procedures, settling grievances procedures, dismissal procedures, disciplinary procedures, performance appraisal procedures, promotion and transfer procedures, aso.*

*In many countries there are laws that require the existence of such procedures, although it is unlikely that the law will apply in all cases mentioned above.*

*This material addresses only one of these procedures and that is forming and solving employee complaints procedure and a practical review for this procedure applied in some Romanian organizations.*

**Key words:** employer, employees, procedures, grievance,

**JEL Classification:** J51, J52, J53

## INTRODUCTION

One of the many problems most organizations are facing today is that of collective labor conflicts and individual conflicts that arise between individual employees and their managers, the latter being known collectively as labor complaint.

If we consider that in a year one in ten employers is faced with collective conflicts, when talking about complaints the situation is different in the sense that almost no employer is free of such disputes during the 12 months (Cole, 1997).

Formulation and resolution of the complaint procedure, taking into account the existing legislation and agreements developed jointly by management and employees on this form of individual conflict is summarized throughout this material.

## 1. THE NOTION AND IMPORTANCE OF PROCEDURES IN MANAGING EMPLOYEE RELATIONS

### 1.1. NOTION

Procedures are defined as "deliberate official statements" that support organizational goals. They are the official way in which companies spread their methods as a motif of acceptable practices (Sisson and Storey 2000).

Some specialist authors (Armstrong, 2001) define the procedures used in human resource management as how executives and managers should act when they apply certain measures affecting the company's employees. They actually make up the methodology as applied in solving specific problems, related to policy and practice on human resources.

Procedures emphasize details regarding the way to enact a policy. For example, having a policy of "rewarding those who get good results", requires a direction in policy implementation by managers, such as criteria for promotion or how much they can reward a person (Marchington and Wilkinson, 2005).

Procedures form the set of principles and rules from which and through which employment relationship should be conducted, but they are also the operational mechanisms used by the parties in treating various problems arising day by day. For example, complaints procedure should inform

and guide the parties regarding the rights and obligations of both the employee and management, should inform employees of the competent person to resolve the complaint, the response time of communication from the employer, a.s.o.

Hawkins (1979) claimed that the procedures in the agreement could be regarded as a voluntary code of conduct that imposes restrictions on the use of power by the parties, although it should be noted that the parties may have already used this power to reach an agreement regarding procedures.

Procedures are often seen as a product of labor relations environment in the 60s and 70s when there was a more explicit struggle for control in the workplace. This had two main effects. First, it produced the need for clear procedures so that all employees knew the rules of work and actions that could be taken against them if these rules were violated. Secondly, it led to greater clarity and consistency of management actions (Marchington and Wilkinson, 2005).

In contrast, the influence of trade unions is currently weak and managers have greater freedom in avoiding the so-called rules of "bureaucracy" that is supposed to constrain their ability to manage. Moreover, as the main activities of most HR practitioners have moved from employee relations to employee development, financing and rewarding the employee, the main directions to management actions are seen as a business need, flexibility and commitment, rather than joining the rules and procedures (Storey 2001). Prior applications for consistency, compromise and regulations have been replaced by a new language of customers' competitiveness and commitment.

It is common that large organizations have a set of procedures that draws the majority, if not even all areas and circumstances described below (Leat, 2007):

- Recognition of the union, individual representation, negotiation and settling conflict procedures;

- Procedures for consultation and joint/collective agreements
- Procedures for settling grievances
- Dismissal procedures
- Disciplinary procedures and/or dismissal procedures
- Performance appraisal procedures
- Implementation and operation of pay systems
- Job evaluation procedures
- Promotion and transfer procedures
- Objectivity in the treatment of employees, access and harassment
- Procedures governing the introduction of new technologies and work practices.

Small firms are less likely to have formal policies and procedures. Owners seldom have specialized knowledge necessary to build these rules or the inspiration/resources to hire professionals for this. The owner will probably work with or in close proximity to the employee in the same manner that he will deal with the management itself and labor relations (Ram 1994). This creates the advantage of obtaining a level of "teamwork" (Goss 1991) but team's analogy is vulnerable when the owner authority must be reinforced. Evidence will show that, instead of the risk to stop "team's" environment, small business owners resist using the official policies or practices, preferring instead a negotiated solution to the problems of employment, which avoids the obvious conflict or disagreement at work (Marlow 2002). This unofficiality is now being tested by European Directives and recent legislation relating to employment which stipulates how the typical small business managers work (Marlow 2002).

Also, many countries have laws which require the existence of these procedures, although it is unlikely that the law should apply in all cases mentioned above. In some cases, the law clearly states which procedures should be minimal. EU member states, for example, are challenged by law at European level to ensure that organizations that are hiring have clear procedures regarding:

- Establishing health and safety committees and procedural and consulting rights of labor protection representative;
- Consultation of employee representative in the case of collective redundancies and/or transfer of tasks;

- Information and consultation of employee representatives at European and national level to treat a wide range of organizational issues and specific circumstances;
- Preventing discrimination on various factors including gender, nationality, race or ethnicity, religion, sexual orientation and age.

In all these cases, parties are encouraged to reach their own procedural agreements and to introduce and implement procedures to comply with their own conditions and preferences, as long as the minimal conditions imposed by legal provisions are respected.

## **1.2. IMPORTANCE AND JUSTIFICATION OF PROCEDURES**

Marchington and Wilkinson (1996) identified a number of reasons employers implement procedures in relations with employees:

1. They help to clarify relations between the parties within the organization.
2. Procedures focus conflict within predetermined mechanisms and thus help in solving them, creating a framework for good relations between employees. Notice that there are similarities here with the pluralistic approach in regard to the question "what is good industrial relations or between employees"
3. They provide mechanisms for settling conflicts by identifying the position or the person having the responsibility to solve the problem at first instance and also clarify the order of steps to be taken further: who is responsible for challenging the decisions of first instance? How many steps are there?
4. Procedures act as a safety valve, earning time when a part of a situation's tension can dissipate.
5. They ensure that employees are treated properly throughout the organization, no matter who is their direct boss or the department they work.
6. Procedures tend to lead to a more accurate record of events, because of their formality and because parties know that their performance will be assessed regarding the requirements of this procedure and thus there is a greater concern for the accuracy of those records.
7. Procedures that are discussed and agreed with the agreement of the parties can bring benefit in terms of workplace relations between sides in a negotiation; this also can be seen from the fact that this process may take the form of a collective settlement of the problem and has a cooperative nature, impartiality and fairness in the treatment of employees and it is interesting that Marchington and Wilkinson (1996) do not include impartiality as a specific "reason" in the list provided above. Consistency may be more important for management and it can be said that fairness/impartiality is achieved through the consistent treatment of problems.

Some managers criticized the procedures because they drag on the decision-making process, which is not desirable, but sometimes decisions must be taken and must be taken quickly if survival and prosperity of the organization are desired. The existence of employees' rights to appeal or to lodge complaints against direct supervisor is perceived as a direct threat to the autonomy of the latter and is often seen as a weakening of the support from top management level. The department of human relationships often involved in tracing and establishing procedures are often subject to criticism from management, especially for their role in the development and nature of these rules (Leat, 2007).

## **2. GRIEVANCE PROCEDURE (INDIVIDUAL COMPLAINTS)**

### **2.1. THE CONCEPT OF „LABOUR COMPLAINT” AND DISTINGUISHING FEATURES**

Labour complaint is an individual conflict arose between an employee and his employer (Cole, 1997).

A complaint is an expression of dissatisfaction or a grievance of an employee and who usually deal with the application, interpretation, implementation or changing a statutory right or a procedure, law, custom, working practice or existing agreement (Leat, 2007).

We can define the term petition as being the individual requests or complaints addressed by an employee to company's management, under the law and internal regulations.

In terms of characteristics of individual employment complaint we can include:

- generally it is an individual action, but it is possible to belong to a group, but this is a less common situation, not meeting the elements of a dispute which is a collective labor conflict;
- is often against a member of management, most often against direct supervisor with an official character;
- is often a discontent of the employee regarding the failure or improper fulfillment of contractual obligations by the employer;
- to resolve it, it involves going through certain stages.

## **2.2. JUSTIFICATION FOR INDIVIDUAL COMPLAINTS**

In general, employees argue that managers treat them unfairly, that they are not sufficiently remunerated or that they have been victims of discrimination of any sort or another, often making a comparison with how superiors treated someone else. Complaint process does not renegotiate the contract terms (Lewis and others, 2003).

The purpose of individual complaints is to clarify what these terms really mean in the context of addressing grievances regarding issues such as free time, disciplinary action and payment.

The potential of grievances is always present at work. Employees will use any issue including wages, hours or conditions of employment as a basis for their discontent. Cases of discipline and seniority issues (including promotions, transfers) would probably be in the top of the list. Others would consider as sources of dissatisfaction the evaluations of their work, workload, overtime, vacation and holidays, awards and other incentives.

Whatever the source of discontent may be, many companies today (and unionized ones) provide (or should provide) employees with ways to establish their grievances. Complaint procedures are invariably part of a labor agreement. But even in unionized companies such procedures can help ensuring that peaceful labor management prevails.

Complaints must be analyzed by management in a fair, fast and constructive manner. Management can easily become defensive in terms of complaints since they are often the expression of employee's dissatisfaction about something management said, did or did not.

## **2.3. THE OBJECTIVES OF PROCEDURES FOR SETTLING GRIEVANCES**

G.A.Cole believes that since there are procedures in writing for collective problems, they should exist also for resolving complaints. The same author believes that "individual disputes neglected and left to bake can easily be transformed into collective disputes".

Other authors (Hawkins, 1979) reminds of the preventive nature of the grievance procedure.

The objectives for grievances procedures should be the following (Leat, 2007):

- to provide to employees a mechanism for forming and solving a injustice
- to ensure that this will be made in a prompt and constructive way
- to ensure that employees are treated fairly and dignified
- to reduce the possibility of an unforeseen event and degeneration of a complaint into a dispute
- to maintain a quiet work environment without internal friction.

## **2.4. STAGES OF INDIVIDUAL COMPLAINTS PROCEDURES**

Prompt, fair and constructive solving of complaints is in the benefit of management and employees, and these procedures are often established and jointly discussed. Management has also the advantage of involving employees and/or their representatives in this process, since the procedures will have a legitimacy in the organization, which would not happen in another situation.

A typical procedure for resolving complaints must include the following stages (Cole, 1997):

1. the employee notifies his immediately seniority chief about his dissatisfaction. This step depends on the degree of authority granted by management.

2. if the problem is still not resolved at this level, the complaint is forwarded to the next higher management level, the employee may be accompanied by a colleague or representative of employees. The role of accompaniment is that others to see that justice was done and help respecting the spirit of fair play.

3. if the complaint is still not resolved, it is sent to the senior management level and the employee may also be accompanied here. At this stage the complaint is highly official.

4. If it is still not satisfied, he can appeal to the Executive Director.

The above steps can be structured in a simplified manner as follows:

*Step 1: Declare the complaint.* The employee must express his dissatisfaction with the employer in writing

*Step 2: Meeting.* The employer must invite the employee to at least one meeting to discuss their discontent. The employee must take all reasonable steps to attend the meeting.

After the meeting, the employer must inform the employee about the answer to his discontent and advise him on whether he can appeal against the decision.

*Step 3: Appeal.* If the employee wishes to appeal, he must announce it to the employer.

If the employee informs his employer about his desire to appeal, the employer must invite him to a subsequent meeting. The employee must take all reasonable steps to attend the meeting

After the appeal meeting, the employer must inform the employee about its final decision, of justified accept or reject of the application.

## **2.5. THE PROCEDURE FOR RESOLVING INDIVIDUAL COMPLAINTS OF EMPLOYEES COVERED BY THE INTERNAL RULES OF A PRIVATE COMPANY IN ROMANIA.**

In Romania individual complaints procedures are mentioned in the internal rules of the employer under Article 258 letter d) from the Labour Code (Law no. 53/2004) which provides that the Internal Rules should include at least eight provisions including the one referred to letter. d) "a procedure for resolving individual employee requests or complaints".

We give below an extract from the internal regulations of a mid-sized private company from Suceava County, with its registered office in Campulung Moldovenesc. Company's name will not be mentioned due to lack of agreement from management. The unit has as its object of activity retreading and recycling waste tires.

According to article 32 paragraph 1 of the Rules "employees have the right to address management in writing, individual complaints, but only in relation to issues arising from their work and activity". Paragraph 3 provides that "anonymous complaints won't be taken into account, they are to be discarded".

Requests or individual complaints should be addressed to the manager and will be registered at the Secretariat (art. 33. Para. 1).

The manager of the company is required to communicate to the employee its response within 30 days after receiving the request or complaint, whether a favorable or unfavorable solution. (Art. 33. Paragraph 2).

Where issues received in the petition require a more thorough analysis, the employer can extend the term with another 15 days. (Art. 33. Paragraph 3).

Article 34. (1) Employees cannot bring two petitions regarding the same issue. (Art. 34. Paragraph 1). In the event that an employee addresses in the same period of time several petitions with the same object, they will interlock, the employee will receive one response. (Art. 34. paragraph 2). If, after sending the response, it is received a new petition with the same content or the same problem, it closes the original number, making the statement that was answered.

## **2.6. CASE STUDY REGARDING GRIEVANCES PROCEDURES**

During the period April to June 2009 the authors of this article conducted a study on



employee relations management in 67 units from the public and private system in Suceava based on questionnaires distributed randomly.

Managers of the 67 units responded at a rate of 52.2% that there is a formal procedure about the grievances in the unit, 20.90% of units encountered in the past 12 months individual complaints, of which 13.4% were made on issues of pay and working conditions.

## CONCLUSIONS

It is generally best but not always possible, to develop a working environment in which complaints will not appear the first time. Acting like this depends on the ability to recognize, diagnose and correct the possible causes of employee dissatisfaction before they become formal complaints.

However, in practice, dissatisfaction can be reduced, but never erased.

Procedures are an essential part of good employment relations and human resource practices as it provides a clear framework within which problems can be solved. In the absence of procedures, any new issue should be tackled from first principles with managers and with employee's representatives who will lose much time trying to establish rules of common points before something might be solved. The most important aspect when talking about procedures is that the employee satisfaction will increase when they will see that the issues of complaints were handled correctly and thereby retention will also increase. Without procedures, there would be no incentive for managers or employees to try and resolve disputes in an orderly manner. The final result would be that both sides would seek to use their best negotiator power to impose their favorite solutions over the other.

Nor should we forget that procedures help create a positive psychological contract by emphasizing the importance of fairness.

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## COMPARATIVE ASPECTS OF SELF-GOVERNANCE IN THE EU

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### Abstract:

*The demarcation of the content and the purpose of the concept of public administration has not only theoretical importance but also a practical one regarding the field of the right of a person aggrieved by a public authority, on the one hand, and administrative litigation area, on the other side. As the science of law can not ignore the positive law, it is understood that the demarcation of content and purpose of the concept of government requires an operation to explain the legal regulations in force in relation to what we might call the doctrine's constants in a democratic system.*

*The inter-war doctrine in our country, in line with the principle of separation of powers, granted, constantly, that the administrative law comprises the rules by which the activity of the executive power is exercised, but also contains extensive discussion about the limits of that power to the legislative power, of that power to court. Hence the variety of theoretical solutions on the content and purpose of the concept of **state administration**, or simply of administration. It's the period of crystallization of the classical doctrine in Europe, in general, which is marked by strong opinion fights, majoring those from the French school, theoretical disputes, which influenced the Romanian doctrine.*

*Regarding the post-war Western doctrine, we can retain the optical changes, especially in France after 1958, regarding the land concept of separation of powers, were reflected in their understanding of public administration. The removal from the classical paradigms challenged not only the relationship between the executive and the legislative, and, in this context, the relationship executive - administration, but also fundamental reference elements of the classical school, namely, the public service and the public interest.*

**Keywords:** administrative law, public administration, international relations, sovereignty, local autonomy, European integration.

**JEL Classification:** K23, K33.

## INTRODUCTION

The global political organization has been and is a subject of continuous particularly important transformations affecting, in fact, the essence of many legal institutions. The relations between the states and the deepening interdependences between the other participants in the international relations, the deepening global problems and solutions, the accelerating of the emergence and the course of social-political phenomena, have raised new and sometimes unusual issues for the scientists in the social or legal sciences and for politicians, issues which need to find viable solutions and answers.

History has shown that often the solutions provided by the classical theories have been insufficient or incomplete to describe the orientation of the social, political and legal relations, so they need new approaches, abandoning what no longer corresponds to the rethinking of the traditional guidelines to find positive answers.

Thus, the contemporary researchers have turned their attention and area of interest to relative issues to the forms of international cooperation, to the development of international regional cooperation and integration, to the state's place and sovereignty, to the development of the local autonomy, to the emphasis of the democratic values, to the respect of the man's rights and freedoms.

All these aspects are closely linked and their development can not be regarded but only as a whole, through a proper understanding of their own mechanisms and their mutual interconnections.

The problems which the international society, the states, the local communities and the individuals have not encountered before requires new and original solutions. The law as a set of rules, as well as a science is an evolutionary system which always manages to adapt itself and provide appropriate responses. The international and the local dimensions in front of which the sovereign state is located are not isolated issues. Increasingly, the public international law is

concerned with issues of local autonomy, which ceases to be a monopoly of the sovereign state, and at the same time, the local collectivities start playing an important role in the international arena through the external appearance of the local autonomy.

## THE EVOLUTION OF THE LEGAL FRAMEWORK AND THE CONCEPTS OF SOVEREIGNTY, LOCAL AUTONOMY AND REGIONAL EUROPEAN INTEGRATION

The state was and is the most important issue of law, both in terms of domestic law and in terms of international law, both for the public law and for the private law. The state is a human society resting on a given territory and subjected to an organized political and legal power, with a sovereign character. Therefore, the state is the sum of three elements: **the people or the nation** (the personal element), **the territory** (the material element) and **the state power or the political power** (the formal element).

Regarding the third element, the state power, its main feature is the **sovereignty**. The issue of sovereignty is one of the most important and, therefore, the most studied in the legal literature in general, in the public law, whether domestic or international, in particular.

Sovereignty can be defined as an essential feature of the state power, representing the fact that it is the only power-state within a state, being supreme over all the other powers, such as non-state, which exist and manifest within a state which are subordinated to it, as well as independence in terms of international relations, in relations with other states and other subjects of public international law. The political power takes precedence over any other forces within the territory of the state and it is exclusive, eliminating, in fact, any other state authority. Sovereignty has two dimensions, an internal one and an external one, namely the supremacy and the independence or, in French terminology, sovereignty in state and state sovereignty. The internal aspect of sovereignty, the supremacy, is manifested in relation to the non-state powers, which exist within a state, and which can not exist and can not be exercised unless they are recognized by the state power, within the limits and the conditions imposed by this and under no circumstance against the state power; otherwise, the state power intervenes and sanctions, even reaching the annihilation of the power which manifests itself illegal or even rebellious. The independence, so the external aspect of sovereignty, means subordination to the states, to intergovernmental international organizations and other subjects of public international law, with the consequence of sovereign equality of the states.

On the international stage, the countries are each sovereign. The international community is a juxtaposition of the sovereignty of the member states. Consequently, the sovereignty can not be absolute, but each state must respect the sovereignty of other states and the public international law, a minimum of international order. The public international law, the legal international order, far from being incompatible with the sovereignty of states, it represents their necessary corollary. The concept of sovereignty is a cornerstone of the contemporary public international law, the sovereign state is its main subject.

Gradually, in the international order, sovereignty decreases its absolute character. The initial most obvious expression of sovereignty, the right to make war, as a lawful event in the international relations, disappears in the first half of our century. *The Concord of the League of Nations*, from 1919, created the first substantial limitation on the right to use force in the international relations. *The Briand- Kellogg Concord (The Convention from Paris)* from 1928 put the war "outside the law", benefiting from an undeniable universality in the age, in relation to the independent states (63 states in 1939) and through its general formulation and the quasi-universal enforceability ends the traditional capacity of states for war. The general prohibition of using the force is stated as a fundamental principle of public international law, in the *U.N. Charter* [1]. At the regional European level, the prohibition of using the force in the relations between the states is explicitly stated in *The Final Act of the Conference on Security and Cooperation in Europe from Helsinki*, from 1975.

Also, the international law contains today institutions like *jus cogens* (art. 53 and art. 64 of *The Convention from Vienna on the Law of Treaties*, from 1969) -the mandatory rules from which

no derogation is possible, any contrary rule is invalid [2]. The military intervention to maintain or restore international peace and the humanitarian intervention are also practiced.

Although the international society is changing rapidly and is essentially processed, the states remain strongly attached to their sovereignty. It is sovereign the state which has, following the rules of international law, its domestic and foreign policy leadership, i.e. has the power to control its territory and its citizens, this leadership giving the right to self-limiting and even transfer some of its powers to another law entity.

The territory of the unitary state (the argument is valid, *mutatis mutandis*, also for the territory of the federal state) is divided, in terms of administrative, in territorial administrative units [3].

The term *territorial-administrative unit* has two different meanings, of *local-territorial collectivity* and of *local territorial-administrative district*, which are used depending on the nature of the state's administrative system, i.e. either a system of decentralization, or invalid of deconcentration.

In a first sense, the territorial-administrative units mean *the administrative districts of the state's territory*, namely, the area of territorial jurisdiction of the deconcentrated state organs. For example, in Romania we speak about administrative district in case of the prefect, of the county directorate for social protection or employment or the county's general direction of the public finance and the state's financial control, respectively, about local or municipal district in case of the local police station or the municipal police.

The territorial-administrative units are, in a second sense, *the local territorial communities*, meaning the citizens, the population, living on a certain part of the state's territory, with an administrative legal organization and own, different public local interests. The local territorial authorities define the system of administrative decentralization or of local autonomy.

Therefore, the State is not the only recognized local authority, but along it, also the local authorities are moral persons of public law, political and territorial, with their own capacity of public law and own public interests, different from the public interests of the state. They have their own administrative authorities to meet these public interests and also the material, financial and human resources.

The administrative authorities of the territorial communities are chosen by their citizens and are responsible in front of them, they held the power not from the central authority, but from the local electoral body, by choosing, the autonomy is ensured only by choosing. They are named, they are not subordinated and can not be revoked by state governments. Therefore, the public administration loses its unitary character, being formed by the state's administration and the local communities' administration (autonomous local administration).

The local autonomy is manifested in many ways. On the plan of legal capacity, local territorial collectivities are distinct law subjects, with their own public interests. Institutionally speaking, they have their own administrative authorities, outside the state's administrative system. Regarding the autonomy of decision-making, the authorities have their own skills and make decisions in the interests of the communities they manage. Finally, autonomy can not be real, effective, without the presence of autonomy in terms of human, material and financial resources, the local territorial authorities having their own local officials, their own field (public and private), their financial autonomy, especially in terms of establishing and collecting their own taxes and the existence of its own budget.

The *local autonomy* denotes the right and the effective capacity of the local administrative authorities to solve and manage on behalf of and in the interest of the local communities they represent, the public affairs. This right shall be exercised by local councils and mayors, and by county councils, by the local public administrative authorities elected by universal, equal, direct, secret and freely expressed vote [4].

The principle of local autonomy is expressed in Article 120 of the Constitution and Law no. 215/2001 and is an important principle of public administration in territorial-administrative units.

The content of this principle and its complex valence result, however, from the law's regulations and it's the quintessence of the whole activity of the public administration from the territorial-administrative units. Its correct understanding has a special importance to the practical actions and avoids its stressing and absolutization, until it becomes synonymous with "the independence" of local authorities in all their actions, or with the so-called "self government" and other similar concepts, which involve a contraposition of the local public administration through which the executive power of the state is done.

## THE GENERAL FRAMEWORK OF THE EUROPEAN COOPERATION AND REGIONAL INTEGRATION

Since ancient times, the European societies have evolved not only in the direction of building and strengthening the states, but also establishing solid relationships of solidarity, collaboration, alliance between states. Often, however, when the European countries have undergone changes, increase or loss of territory, important changes in their form and structure, but continued - with rare exceptions – to exist, their alliances proved to be ephemeral, dictated by temporary needs, shattered by the change of some circumstances.

The process of formation and consolidation of the national states in Europe finally ended during World War I. Generally, the current European map overlays the map of nationalities, although not perfect and even though there are hotbeds of tension, ensuring thus, overall, a necessary and desired stability. Worldwide, the '60s were the boom years for the formation of the new independent states, in the process of decolonization.

Sometimes along these movements, sometimes out of step, there was the other process, of cooperation between states, of affirmation and institutionalization of the solidarity between them. With the emergence on the international scene, of a new category of subjects, the international intergovernmental organizations[5], appeared the main institutional form, with character of permanence, to meet the need of solidarity among states at the international level.

Obviously, the various international communities have an extremely varied degree of solidarity. Of course, those from the universal level have the lowest degree due to the extreme variety of the participating states, separated by a whole system of values, attitudes, ideology, tradition, religion, language etc..

The more reduced international communities have a higher degree of cohesion, although in their case, the variations are very large. They are formed, generally, based on very different criteria such as common political and democratic values (The Council of Europe, The North Atlantic Treaty Organization), plus a desire for integration, initially economic, then extended (The European Union [6]), religious values (The Organization of the Islamic Conference), language and the cultural values (The Francophony), traditional political ties derived from a common earlier political organization (The Commonwealth, The Community of the Independent States), communist ideology ( former Warsaw Treaty Organization and The Council of Mutual Economic Assistance), etc. political criteria.

Some of these communities benefit from the geographical proximity of their members (with reference to the European regional level, exemplified by The European Union, The Council of Europe, The Organization for Security and Cooperation in Europe), but others are spread across several continents (The Commonwealth, The Francophony).

However, the contemporary realities impose that the globalization of many of the problems, and their solutions, require an increased international solidarity, both universal and regional. This beginning of millennium and probably the coming decades are and will be the period of strong affirmation of the international communities.

Generally, we distinguish **an international collaboration at the universal level**, the typical framework being the United Nations and **international collaborations at regional and subregional levels**. Through its geographical location, but also through its system of values, Romania is interested, in this second part, first, in the international cooperation at the regional

European level. At the current level of development of the international relations, the most widespread form, of common law, of the international organizations, is the cooperation, where the sovereign and equal states cooperate, without transfer of sovereignty towards the international organization and without the possibility for it to impose something to the member states.

Gradually, however, at the international level, international organizations of integration appear, organizations for which the member states freely consent to transfer certain powers of sovereignty, recognizing their right to take compulsory decisions for the member states.

Qualifying an international organization as being of cooperation or integration it must take into account the main and the most numerous activities, its very purpose. It is possible to find in the organizations of cooperation, situations in which the organs take compulsory decisions for its members - the typical examples are the prerogatives of The Security Council to maintain or restore the peace or the compulsory jurisdiction of The European Court of Human Rights in the Council of Europe. Typically, the integration is facilitated, even exclusively possible, only at the international regional level and not universal, at least in the current state of the international society. The situations we analyze regards cooperation and integration at European regional level. Here we have both cooperation and integration.

From many European regional international organizations, we remember the most significant ones, which have quasi-general vocation through their work: of regional European cooperation – in **The Council of Europe** and in **The Organization for Security and Cooperation in Europe**, and of regional European integration– in **The European Union** [7].

## REGIONAL EUROPEAN INTEGRATION

The regional international organization which has attained a degree of multilateral integration between its members so far unparalleled in history, which has a series of very special features, is the **European Union**.

Through its original field of action, the organization began very modestly, **The Treaty of Paris from 1951** creating **The Economic Community of Coal and Steel (ECCS)** with six original members: France, Germany, Belgium, Italy, Luxembourg and the Netherlands (Europe of the 6). It is an initiative of the French Minister of Foreign Affairs, Robert Schumann, inspired and trained by Jean Monnet, taking the form of a statement on behalf of the French Government, which was based on three reasons: the reconciliation between France and Germany, by controlling the main products for the war; the situation of the basic industries; the need for Europe to react autonomous and effectively and facing up to the blocks around the U.S. and U.R.S.S. [8]. The organization has four institutions with different legitimacies and different roles: the High Authority, which seeks to override the interests of the Community, with supranational decision-making powers, The Council of Ministers, an intergovernmental body, the Assembly, with role of democratic control, the Court of Justice for law enforcement. It is a revolution in the traditional international organizations, being a Community with clear supranational powers and overstate organs, The High Authority and The Court of Justice. The field of integration is widened by creating, through **The Treaties of Rome from 1957**, **The European Economic Community (EEC)** and **The European Community of Atomic Energy (ECAE)**, with 6 members. Each is equipped with its own institutional structure, but the three have the same structure: Commission, Council, Assembly, Court of Justice. To the two treaties from Rome a **Convention on certain common institutions** is attached, in which two institutions, the Assembly and the Court of Justice, are common to the three Communities.

Although there are three distinct communities, founded on distinct treaties and having different institutional structures (with the two exceptions), they are founded in the same states, after the same model and pursue the same objectives. It creates a complex structure consisting of three international organizations of integration. The European Communities evolve in two directions: the geographical expansion and the institutional improvement of integration.

**The Treaty of merger from Brussels from 1965** unifies all the institutions of the three Communities, namely the three Councils, respectively the two Committees and The High

Authority. From this moment, the Communities have an unique institutional structure: The Council, The Commission, The Assembly, The Court of Justice. By successive acts, the functions of these institutions are changed.

**The Single European Act from 1986** established a European cooperation in the foreign policy.

**The Treaty on the European Union (Maastricht Treaty) from 1992** establishes the European Union, consisting of three pillars. The first is the community pillar, ie the three communities (especially the former Economic European Community, which was renamed **The European Community**), adding **The External and Common Security Policy** and **The Cooperation in justice and domestic affairs** [9].

It is difficult to characterize **The European Union** after the classic patterns of the international organizations. The three **Communities** are international organizations with personality and common organs, which are borrowed to the Union. The main institutions are **The Council, The European Council, The European Commission, The European Parliament, The European Court of Justice and The First Instance Court and The Court of Auditors**. It also includes **The Economic and Monetary Union**, with institutions equipped with their own personality (**The European Central Bank** and **The Institution of the European Monetary**). Also, **The Western European Union**, a different international organization, forms part of the EU development. It is a complex regional international system.

## ASPECTS OF COMPARATIVE LAW ON THE CONSTITUTIONAL GUARANTEE OF THE LOCAL AUTONOMY

When talking about the comparative law, **The Constitution of Belgium**, with the very complicated federal system that it creates, establishes four linguistic regions and three communities, three regions, provinces and villages. Here are merging the federalism and the local autonomy in a complex manner, with a laborious constitutional separation of powers between the structures. Moreover, Belgium has made a curious and interesting development in terms of scientific, from an unitary state to a regional state and then to a complex and original federal state, but the question is whether this formula will resist or is, along the previous ones, a simple transition stage in a process that will end up dismantling the state. The Danish Constitution stipulates the right of villages to manage themselves, under the oversight of the state, in the conditions set by the law, providing the existence of municipal councils and elected parish councils.

France's Constitution also guarantees and develops the local autonomy, talking about their own management. In France, the free management of the local territorial collectivities and their status are matters enshrined in the Constitution (art. 34 and art. 72), (matters where the law determines the fundamental principles). The term used by the Constitution to refer to the local autonomy is self-administration. The doctrine emphasizes that, if the administrative decentralization regards only the state's relationships with the local territorial communities, the self-administration also takes into account the relationship between the territorial local collectivities.

**The German Constitution**, a constitution of a federal state, specifically regulates the relations between the Federation and the Länder, the local autonomy revealing the latter.

**The Greek Constitution** provides that the state's administration is based on the principle of deconcentration, and local collectivities enjoy local autonomy, having the management of the local affairs, under the aegis of the state.

**The Italian Constitution** creates a regional state, favoring the local autonomy, based on the principle of decentralization, regulated in detail.

**The Luxembourg Constitution** is for the municipal autonomy, the municipalities possessing their own personality, their own organs, their own patrimony and their own budget.

**The Dutch Constitution** also regulates, in detail, the local autonomous administration.

**Portugal's Constitution** states that the democratic organization of the state include the local collectivities, which are autonomous, with wide ranging legislation on local autonomy.

**The Spanish Constitution** recognizes the autonomy of regions and the solidarity between them, ensuring the municipalities' autonomy, offering in detail reports between them and the state.

**The Irish Constitution** does not mention the local autonomy [it is a problem of law. And **The United Kingdom** without a written Constitution leaves the local government for the law. Each of the four component parts (England, Wales, Scotland and Northern Ireland) has its own local organization.

## CONCLUSIONS

One important aspect is the state's commitment towards decentralization, the local autonomy, through the international regulation. This dimension of local autonomy is much more recent and has an important significance in the evolution of the concept at the international level.

By ensuring a detailed autonomy at the constitutional level, the state has committed virtually irreversible, but at a purely internal level. Through the international consecration of local autonomy, the state is committed to an international level, it is a huge step, with revolutionary character.

The local autonomy, the relations between the state and the local territorial authorities from its territory, are out of the exclusive sphere of the internal law, becoming a matter of cooperation and international regulation. The local authorities and the local autonomy are not up to the absolute sovereignty of states, but come to be internationally guaranteed and protected.

Introducing the problem of local autonomy in the international field is still shy in terms of regulations and especially, about the area of geographical expansion. It was not universally imposed, but strongly, only at regional European level. There are, thus, two multilateral international treaties, in the Council of Europe, relative to the local autonomy.

One is **The European Charter of the local autonomy** adopted in Strasbourg on 15 October 1985. The European charter of the local autonomy came into force on 1 September 1988. On 15 June 1998, it is ratified by 30 states and signed by 5 more. The other treaty is **The European Framework-Convention on the cross territorial cooperation of the territorial communities or authorities**.

The first treaty regards the problem of local autonomy globally, but the focus is on its internal dimension, while the second regulates only the external dimension of the local autonomy, it's only a particular issues, that is cross-border cooperation, and not the entire area of supra-border cooperation.

The will that animated the signatory states of the two international conventions is obvious from the preamble of each one and is extremely important for the characterization of the international protection of the local autonomy.

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## LAW OF 24 JUNE 1925 – ADMINISTRATIVE UNIFICATION LAW PURPOSE, GOALS, LIMITS

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### Abstract :

*The administrative unification law of 24 June 1925, with the 1923 Constitution, was a corollary of the interwar legislation and ensured a uniform development of all provinces of the country. The law is divided into six titles, comprising 400 articles containing provisions on the division of the kingdom territory, the village statute, the organization and functioning of the county institutions, the administrative elections, the validity of the proceedings of municipal and county councils and of the permanent delegations, the treatment of goods and works, the local finances, the activity of representatives of central authority.*

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## INTRODUCTION

According to Keith Hitchins, between the two world wars, Romania presented a striking contrast between a deeply entrenched backwardness, on the one hand, and a flourishing, even if almost uneven, of the industrialization and urbanization, on the other hand. Agriculture remained the basis of the economy, but industry was developing also, becoming competitive with products on the European market, raw material imports grew faster than those of manufactured products. The urban population was growing, the city becoming a key factor in organizing and managing the economy. However the state assumed the role of management and control in all sectors of the economy the planning and management of "the national economy", while respecting and protecting private property, providing many benefits to the domestic and foreign capital. In international relations, the Greater Romania remained dependent of the Western, "a market for its agricultural products and raw materials" (Hitchins, 1996).

The collapse of the Austro-Hungarian Empire and the creation of its successor states or which achieved their perfect state unity, led to the development of new European Constitutions in Austria, Poland, Czechoslovakia, Hungary, Romania, the Kingdom of Serbs, Croats and Slovenes. The new constitutions represented a triumph of what was then called the "European idea" because they encompassed the fundamental organizing principles of Western democracies, notably the universal suffrage.

Unification of laws has become the main measure that was needed to be taken as soon as possible by the authorized institutions after the foundation of the Romanian unitary national state. The territory of the country doubled, and the laws of the new provinces were legal systems quite different from that which the legislation of the old Romania belonged to.

The continuous improvement of the organization of administration should have a value and a realistic and scientific character by eliminating intermediate links, parallelisms, leading to solving community problems. Administrative Law unification should be prepared to reflect as main aim combining old contents with progressive elements of the legislation of other provinces.

### Provisions of the Constitution of 1923 on the reorganization of public administration

Based on the Constitution of 1923, the whole process of unification of laws, emerged as an imperative since the first years after unification could be achieved in a relatively fast pace (Banciu, 2001). In pursuit of achieving this important goal, the Constitution stated in one of the final items that would be "reviewed all existing laws and codices from various parts of the Romanian state to be put in harmony with the present constitution and to ensure the legislative unity". From this point

of view, the Constitution is the main nucleus around which the legislative unification of Greater Romania had to be completed.

The new Constitution of Romania was adopted on March 26, 1923 in the House, on 27 March in the Senate, was promulgated by King Ferdinand on 28 March, with the Royal Decree no. 1360 and published in the Official Gazette no. 282 of 28 March, the same year. Constitution of 1923 contained 138 articles, unlike that of 1866 which had 128 articles. They were replaced or fully modified 20 articles, 25 articles have been reformulated and 76 articles remained unchanged.

In Chapter V of the Constitution of 1923, Article 108 is covered the local public government – “On county and municipal institutions”, based on the administrative decentralization. Also there are some rules on how to choose the members of municipal and county councils, based on universal, equal, direct, secret, compulsory suffrage, with the representation of minorities and women.

### **THE PURPOSE, STRUCTURE AND CONTENT OF UNIFYING ADMINISTRATIVE LAW - THE LAW OF JUNE 24, 1925**

The constitution of 1923 retained the territorial division having as base cell the county, and its provisions were the basis for unifying administrative law (Opritescu, 2004).

C.D. Dumitru held that “an administrative unification in the strict sense of the word could be achieved either by generalizing the regime of the Old Kingdom, or by compiling laws from all Romanian territories.”

The draft law on the administrative unification, entered the debate in Parliament by the royal message number 3789 of November, 14, 1924.

C.D. Dumitru believed that decentralization requires that counties and municipalities should accept the initiative and the right to decide in all matters of local interest, and central government to coordinate matters of general interest. To motivate and to support the principles contained in the law, senator C.D. Dumitru held that, unfortunately, the doctrine gives only examples and definitions, but in practice, the legislator must elect, according to the degree of skill and experience of local leaders. The more local governments will have experience and understanding, the more the control of the central authorities will be diminished.

According to C.I. Filliti and V.I. Gruia, the local administration is based on administrative decentralization. In the debates of the Constituent National Assembly of the Senate, is stated that the purpose of decentralization is not to create autonomous administrative bodies, but to achieve an indissoluble link between the administrative institutions. The Explanatory Memorandum explains that decentralization does not constitute a lack of interest of the State on issues of communes and districts, each fulfilling a crucial function, and together contributing to the national ideal.

In view of M. Gropișan “decentralization should be woven by a complete Romanian national spirit.” In order to achieve an effective decentralization, it should be guaranteed and hindered by executory organizing institutions. Senator T.T. Lupu is criticizing the idea of sudden, rapid decentralization, considering that “from the complete centralization to a complete decentralization, would be a too big leap. That’s why we should have a partial decentralization.”

Another principle that was the basis for the elaboration of law was the principle of autonomy. In view of senator T. Iliescu, autonomy aims to increase the initiative, and every citizen of a locality may be motivated and interested in local affairs: “regionalism, absolute autonomy, may become real political tumors, dangerous for the state.”

In view of Gh. Ghiteșcu, the new administrative law has the value of a constitution. In this respect, a study was made on the budgets of seven counties including Fălticeni, Gorj, Chisinau, Tighina and, surprisingly, the results showed that the good economic situation is reflected in the budgets of the counties of Basarabia: “I could compare the budgets of Basarabia with a full comb, and the results in the Kingdom are the worst.”

Another important issue which has been much discussed in the Parliamentary Debates on this law was the relationship between national minorities – Romanian administration. M. Gropișan

presents its expose having as epigraph Mircea Djuvara's statement: "think, gentlemen, but if you speak of minority rights, then please say that they have obligations too." Also, as regards the use of mother tongue in administration it was considered that it would not be subject to this law, but to keep pace with European realities in the future we will differentiate between state sovereignty and the right to expression in mother tongue.

In connection with the development of the county, C.D. Dumitriu considers that: "one can not know with precision the date when appeared the first administrative divisions, called counties today", but the motivation of their foundation should be found in population growth, in the need for the central power to strengthen its authority and thus to better manage the problems of the territory.

The Law of June, 24, 1925 is divided into six titles, comprising 400 articles as follows: Section I contains provisions on sharing the territory of the kingdom; Title II governs the statute of the municipality; Title III covers the organization and functioning of the institutions of the county; Title IV includes a number of common provisions on the administrative elections, the validity of municipal and county councils deliberations and of permanent delegations, the regime of goods and works, the local finances; Title V has in view the activity of representatives of central authority; Title VI contains final and transitional provisions.

Title I, entitled Sharing the territory of the kingdom. Administrative and elective local authorities. Control authorities contains 16 articles.

Romania's territory was administratively divided in counties, and counties in municipalities. The law on the establishment of county councils of April, 2, 1864, is the first law that systematically and methodically organizes the county government. The county was an administrative subdivision of the state, with legal personality, endowed with a certain public power and economic rights. Municipalities were classified into rural and urban communities. A rural community consisted of one or more villages. The urban communities were population centers, declared so by law, classified in urban communities, centers of the county, within which are comprised the prefectures and the rural centers of the county. Urban municipalities that were of particular importance in the economic, cultural or social field were able to receive municipality statute.

In Article 5 is regulated the statute of counties which are divided into districts called *plăși*, and urban municipalities in areas called sectors.

To ensure community development and implementation of economic, social, legislative decisions, at the base of the administrative system were founded communal and county councils, having no political character. In the category of monitoring bodies have been included the following institutions: the clerk, the deputy prefect, the general administrative inspectors, the directors of ministries, the superior education board members.

Title II, entitled *Comuna*, contains chapters on: the composition, constitution, powers and functioning of municipal council and municipal permanent delegation, choosing the mayor and his duties, the communal police, the suburban village, the municipal and civil services.

The village council had the following structure: three-fifths of counselors elected by all the municipal voters, with universal, equal, direct, secret, compulsory suffrage, by voting on the list; two-fifths of counselors elected on the right, women counselors.

- a. In article 18 is fixed the number of counselors elected in proportion to population, irrespectively of sex, age or nationality.

Number of counselors	Population of the village
36	250 000
30	100 000
24	50 000
18	25 000
15	10 000
12	under 10 000

b. Legal counselors were represented by the following categories: oldest titular representatives of the public, primary, vocational, secondary education; a representative of the largest cult in town; highest rank representatives of the Ministries of Public Health and Social Welfare, Agriculture and Fields, Public Works; one representative of the Chambers of Agriculture, Industry, Trade and Labour in all the municipalities of the county.

The mayor was elected by councils in all municipalities, except for three cities. Election is made by secret vote and absolute majority of votes. If the first voting majority is not obtained, the choice is repeated in the same session and declared elected the candidate who obtains the largest number of votes.

For municipalities, the municipal council shall appoint the candidates from among the candidates elected, except those sent to the county council, each adviser having the right to vote once. The names of candidates who obtained the highest number of votes shall be communicated to the Minister of Interior, which confirms as mayor one of the candidates.

**Functioning of the municipal council.** The first collegiate bodies to manage communal problems are to be found in The Organic Regulations. In urban municipalities have been established municipal councils, consisting in Wallachia of 4 members and in Moldova of 3 members, elected for a term of one year. This organization of the municipal government lasted until the adoption of municipal law no. 394 of 1/13 April 1864. Municipal councils consisted of 5 to 17 municipal councilors, set against the number of inhabitants: 5 in a village with population up to 1500, reaching 17 in municipalities with over 50,000 inhabitants. The 1866 Constitution upheld that law. The law was subsequently amended in 1874, 1882, 1886, 1894, 1904 and 1908, and, despite all that, the organization and operation of public administration organisms remained until 1925. The village council was meeting at least once a quarter or when required by the interests of the community. The convocation of the municipal council is made by the mayor at least three days off before the meeting. The agenda shall be notified to the notary in the rural communities and to the prefect in the other communities.

The council had no right to deliberate than with the absolute majority of members who compose it. Municipal council decisions were taken by an absolute majority of votes, unless the law may require a greater number of votes. After the meeting they drew up a detailed release of the issues debated, which was signed by the mayor and secretary. A summary of this release was published within 10 days at the door of the communal house.

**Powers of municipality.** In article 51 are regulated issues of local concern for the local municipal council: problems related to basic primary and vocational education; religion; public health: buildings, maintenance and administrative oversight in terms of hospitals, medical units, but also the conditions in which to appoint the administrative and health staff; the construction and maintenance of streets, roads, bridges, issues concerning the town: construction of public and private buildings; village systematization; guidance and encouragement of agriculture, commerce, industry; the composition of revenues and expenditure budget; the right to confer the statute of honorary citizen.

An innovation in highlighting the idea of decentralization and transparency of local government is Article 59 which contains references to setting up committees of citizens who, under a town councilor to make a contribution to resolving some issues concerning education, religion, public health, constructions, agriculture.

**Tasks of the permanent municipal delegation.** The main attribute of the permanent municipal delegation includes replacing the municipal council in the interval between sessions.

The permanent delegation will have powers such as: preparing voter lists for political and administrative elections, drafting the budget, setting the sales price of articles of prime necessity, overseeing the governance and maintenance of churches and all public establishments and institutions, municipality and police.

**Municipal police.** According to senator T. Iliescu, "a happy innovation in this project is to draft the municipal police establishment, and mayors became chiefs of that body."

This institution included in the category of local public administration authorities was headed by the mayor, who was entitled to exercise the powers either directly or through administrative agencies and police officers.

As the municipal police chief, the mayor had the following functions: hygiene and sanitation of dwellings; determining the conditions for the construction of private properties; ensure traffic safety on streets, roads, public places; protecting the public from fire and flood; prevention and control of epidemic or contagious diseases; ensure consumer protection.

**Municipality.** Within four years since the promulgation of the law, the municipalities are obliged to draw up an overall systematic plan, in which are included the utilities, the street alignment, the creation of streets, markets, water supply, lighting, creation of parks, providing means of transport, cheap dwellings.

**Services and municipal officials.** The number of civil servants increased after 1918. In 1923 was voted Civil Servants' Statute, which entered into force on January 1, 1924, officials being the citizens "fulfilling a permanent public service – civil or ecclesiastical, for the state, county, or municipality or for the institutions the budget of which is subject to approval by parliament, government or county and municipal councils. In view of Professor P. Negulescu "civil servants are those citizens who, appointed by the competent authority and legally vested with the attributes of their duties, perform a certain activity on a permanent basis", and according to Professor A. Teodorescu "a public official is a person who, in return for remuneration, meets or works permanently for performing a public service which depends on the administrative authority of the state, counties or municipalities." As for the notion of statute of civil servants in the Romanian law, it is used for the first time in art. 8. 4 of the 1923 Constitution, according to which "special law will determine the statute of civil servants." The statute provides: a uniform system of employment and promotion, civil servants enjoyed immovability, had a 7-hour program, they had no right to go out on strike or take political decisions.

With no proper assessment of needs, the number of civil servants has increased too much, and the Journal of the Council of Ministers of 1 April 1927 decided to reduce the number of civil servants by 25% (Scurtu, Buzatu, 1999). Even if the leaders of political parties were claiming the excessive number of government officials, when they were getting the power, they used to place their political supporters in important posts.

Title III of the Act for administrative unification is devoted to presenting the administration bodies of the county, including the following aspects: the composition, constitution, powers and operation of county councils and county commissions; the permanent county delegation and its duties; services and county officials.

In art. 1 comma 1 of Law for county councils no. 396 of 2 April 1864, was stated that in "every county is established a council to gather on a regular basis and to represent the local and economic interests of the county." With the modifications occurred in 1872, 1894, 1904, the County Councils Act remained in force until the adoption of the Law of 24 June 1925. The counties had three types of skills, namely:

- legislative, because within the limits of laws and regulations of the central government, they could adopt regulations of county interest and indoor administration;
- administrative, whereby it was possible to decide on all matters related to the county
- judicial, because in some cases, the county council was entitled to resolve some legal conflicts.

In Article 100 of the law for administrative unification the county administrative board composition is examined:

- three-fifths of all members elected by all the county voters who were eligible to vote
- up to two-fifths as members on the right, to this group belonged: the mayor and two councilors elected; the school reviewer, along with the oldest representatives of primary and secondary education, the highest representatives of the Ministries of Public Health and Social Welfare, Agriculture and Estates, Public Works; the financial administrator; the agricultural adviser; the arch-priest of the religion with the highest number of

believers; one representative of the Chambers of Agriculture, Commerce, Industry and Trade.

The number of councilors was established in proportion to the population, irrespectively of sex, age and nationality.

36 councilors	400 000
30 councilors	200 000
24 councilors	Under 200 000

The Commission's mandate was for four years, each councilor having the right to be part of no more than two committees.

The county council had powers such as: initiative and decision in all matters of the county; through surveillance, control and guide the administration of municipalities and county services, the annual budget vote, given the county property; officials established the number of county services, decide on the limit settlement law and collecting various taxes, measures to protect the interests of the county court.

County commissions had the following structure:

The administrative, financial and control commission	- administrative problems; - the county finances; - submits annually to the council the budget composed by the permanent delegation.
The Commission of Public Works	- studies on means of communication on land and water; - constructions of any kind.
The Economic Commission	- examines the issues of agriculture, trade and industry; - measures to supply the population with primary necessity items.
The Commission of health and social care	- matters concerning public health and social care; - fight against epidemics; - maintenance of health and social care institutions.
The Commission of Religious Affairs and Education	- religion, professional, elementary and primary education issues.

The County Council was meeting in ordinary and extraordinary sessions. In ordinary sessions it was reuniting at the prefecture on 1 October and 1 March, and in extraordinary sessions when the interests of the county required it, at the request of the prefect or of the Minister of Interior and his approval. The duration of the ordinary session was 15 days, with possibility of extension, and of the extraordinary session of 10 days.

The county permanent delegation consisted of the protractors of the five specialized committees under the prefect as president, and in his absence, the meeting was chaired by the eldest member of the delegation. The secretary of the delegation was the secretary of the county council.

The members of the delegation were remunerated with a fixed salary, decided by the board and were incompatible to hold another public function. The permanent delegation had permanent tasks such as: supervising the administration of county services; control, administration of county municipalities except the cities; taking measures on the defense of the interests of the county in courts, through a member of the delegation; it may be also retained the role of advisory body of the prefect.

In the county government were operating public services with various tasks such as: the administrative service, the financial service, the accounting and statistical service, the technical service of constructions and roads, the health and social welfare service, the veterinary and livestock service, the education service, the religious service, the economic service, the legal department service.

In Article 150 civil servants are divided into two main categories:

- Administrative Officials: the county council secretary, the directors and heads of different departments, heads of offices;
- Specialty officials: primary and professional education staff, of legal departments and junior medical, veterinary, technical, financial, economic and agricultural staff.

### **The Secretary of the County Council**

Secretary's duties are to attend the board and the permanent delegation meetings; write and record minutes of meetings; countersign documents issued by the council or the permanent delegation.

Title IV called Common provisions governs complex problems on: administrative elections at the level of village and county; goods and works; local finances; operational regulations; the manner of dissolution of municipal councils and counties; the association of municipalities and counties; changes on the territories in communes and districts.

Municipalities and county finances are administered in accordance with the Public Accountancy Act. Incomes, expenses of villages and districts, of facilities and institutions that were dependent on them were established for each financial year by the respective budgets, voted and approved in the forms required by law.

A revolutionary provision for that time, giving a democratic note was included in Art. 229: "the draft budget will be made available to the public 10 days before voting", citizens having the right to make written complaints on the draft budget that will be submitted to the mayor.

Municipalities and counties were authorized to charge fees, direct and indirect taxes, to cover costs. Administration authorities of municipal baths were entitled to charge special fees from visitors.

Title V - addresses issues of representatives of central authority and of monitoring bodies: the prefect and the council of the prefecture; the sub-prefect; the praetor; the notary.

The prefect. Since the establishment for the first time by the County Law of 2 April 1864 and until the adoption of The Law of public administration of 1925, except for the period 1948-1990, when addressing the function of prefect were followed two solutions, namely: the administrative prefect and the political prefect.

In view of Senator C. Rigi, the mayor, as well as the prefect must have skills, energy and power to work, initiative and especially practical capacity, not necessarily to be licensed or PhD in any discipline: "I do not speak more than about Prahova county, where we have a prefect who is not academic, but distinguished himself in the past three years, by a great job", therefore please do not limit the function of prefect with academic titles, for it decreases the possibility to find prefects." C. Crupenschi supports this view advocating for the prefect to attend a higher administrative and legal school. The same senator made an interesting comparison between the institution of the prefect in France and in Great Romania, therefore in France, the studies don't represent a prerequisite to fill such positions, "the prefect does not need any title. However, it is not common, no doubt, to appoint anyone, because they always look for the head of the county to be a man with sufficient moral authority and skill, being supported in its work by a board of 4-5 members, outlining the idea that the prefect should become an administrative judge.

Senator N. Hasnas stressed upon the idea that no matter what amendments would be introduced, what other proposals will be discussed, supported or not, "the prefect is a political instrument, and any measures we will take through this law, the prefect will only be a political tool. On the same plane is located senator T.T. Lupu arguing that by keeping prefects on the political line, politics will continue to dominate the government and "the law will not set the fruit you want, with all its good."

Bishop P.S.S. Bartolomeu claimed that the prefect should have a stable basis, so as not to be changed forever, he has to be a technocrat, so as to avoid conflicts between a mayor belonging to a political party and a prefect belonging to another political party.



According to art. 330, the prefect is appointed by royal decree, at the proposal of the Minister of Interior, while being under the regulations of art. 333 and "the head of the county administration."

In that capacity he was meeting the following tasks: control and supervision of all county and municipal services, taking appropriate measures for enforcement of the county council and the standing delegation. Senator Gh. Ghitescu considered the prefects has a double quality, being the representative of the central power and administrator of local interests.

To get the function of prefect, a person had to meet the following criteria: to be 30 years old, to be graduated from a high school recognized by the state.

The Prefectural Board. According to art. 351, to the Council prefecture structure belonged: the mayor of the county, the chief prosecutor or the procurator of the tribunal, the county's primary physician, the financial manager, the engineer, the architect, the veterinarian, the school reviewer, the agricultural advisor, the forester in the highest degree of the county, the county's gendarmerie commander, the members of the permanent delegation.

The tasks of this body aim to problems such as: the harmonization of various administrative services in the county, the overcoming of difficulties which may arise in law enforcement.

**The Deputy Prefect.** At the proposal of subprefect I. Panaitescu was changed the title of director of the prefecture in the deputy prefect. The deputy prefect was working, in every county in the prefecture, being appointed by royal decree, proposed by the Minister of the Interior and by the recommendation of the prefect.

In addition to the requirements for other civil servants, the deputy prefect is also required the following criteria: to be licensed in law or to have a degree in the special training school and for five years to have served as administrator of a *plasă*.

The deputy prefect's powers must be analyzed closely with the tasks that must be satisfied by the prefect: he was helping the prefect to carry out his duties and replaced him while he was missing, being officer of the judicial police.

**The *Plasa*.** The number of *plăși* in each county will be fixed or modified by the decision of the Ministry of Interior, based on the approval of the higher administrative board, after consultation with the county council or interim county commission. Each *plasă* was led by a praetor.

The praetor was undertaking tasks relating to: the performance of the direct orders of the prefect, the agent of central power, the chief of police, being under the control of the prefect; as such he will take measures to maintain public order and safety; he also was an officer of the judicial police.

The conditions to be satisfied by a person to get the fuction were: the candidate had to be graduated of an administrative training school; to be functioned for five years as a stable notary with academic diploma or to possess the diploma of an administrative vocational training school, to be resident at the resident of the *plasă*.

The Notary. According to M. Gropișan, the notary had to be an "important cell in the administrative life", "a good supervisor of the village," "to be on a par with the mayor."

The notary institution regulated for the first time in the administrative law of 1925, reflects a different institution in the interwar period as compared with the periods 1945-1989, 1989-2011. The notary agent was considered the central authority in the village, appointed by the prefect with the following duties: law enforcement, government regulations, orders, instructions that the law requires them to be released, as an emanation of the executive power, enforcement of dispositions on statistical data, the administrative police chief of the village, chief of judiciary police, auxiliary of the prosecutor, civil status officer duties, excepting marriage celebration.

To occupy a position of notary were asked the following requirements: to be graduate of an administrative training school, institution that would be established after the entry into force of this Act. Until then had the opportunity to become notaries the following categories: licensees in state law and science, graduates of schools of notaries, which operated in Fagaras, Arad, Lugoj, graduates of schools of notaries in the Old Kingdom.

For modernization of the administration, in the European spirit of the time is decided the establishment of administrative professional training schools for civil servants of any branch, county, with the agreement of the Ministry of Public Instruction.

In the new rules of law is projected a new administrative and territorial organization of Greater Romania: by royal decree will be determined territorial boundaries, the number and limits of urban municipalities, of the county, the county seat and of municipalities; the number and name of suburban and rural municipalities, of the villages, the number of advisers for each county and village. Senator T. Lupu, welcomed the new law "which will make a new assignation of counties, Bucovina will remain only a name, a nickname for a historical misdeed, a painful memory for us."

By ministerial decision, on a proposal from prefects and the opinion of the superior administrative council will be determined the *plăși* of each county and their capital cities and at the mayor's proposal, the number of sectors of urban communities.

A first attempt to observe the separation of powers and the establishment of courts of an administrative nature under the provisions of Article 394, which stipulates that, in accordance with the laws of Transylvania, Banat, Crisana, Maramures, Bucovina, criminal cases will be judged by praetors in rural municipalities and by the chiefs of the police authorities in the urban communities.

### **The position of parliamentary political parties**

The interwar parties recorded with the sensitivity of seismographs the new economic and social realities, reflected on several fronts: ideological, programmatic, organizational, tactical.

### **The Conservative Democratic Party**

On October 19, 1919, under the leadership of Take Ionescu, has been adopted a new political program. Among the desiderata that have been promoted we have to keep the idea of unifying the state life. Regarding the administrative reform they needed "a true decentralization, with a de-politicization of administrative bodies. The Conservative-Democratic Party program stresses the idea of promoting the image of the public institution, of forming a body of competent, honest, incorruptible civil servants, "the verification of wealth obtained in times of war by civil servants".

### **The Romanian National Party in Transylvania**

After the unification of Transylvania with Romania, the Romanian National Party began to be called the National Party and adopted as its own program the Declaration of 1 December 1918 of Alba Iulia, published in the newspaper "Românul." In Chapter V of the program is stated the principle of administrative decentralization, claiming its achievement to the lowest administrative organization of state with the active participation of citizens. These principles on the administrative reform were included in the new party program adopted after the Congress of 24 April 1919.

Ion Vescan, representative of the National Party stated that "the reform project presented by the liberal government, is in flagrant opposition to the principles of modern administration based on the idea of democratic local self-government", considering that the new law is based on centralized organization, which aims serving party interests.

**The National Peasant Party.** In the program developed and published on 13 October 1926 in the "Aurora" newspaper was expected a new administrative reform based on the principle of decentralization and local autonomy. "Central organs of government" must have only the right of guidance and control and, in cases of abuse, to call on local government agencies for the judgment of administrative courts, which had to be established." The requirement that local councils are elected on the public and proportional vote was a democratic requirement, and its application would have marked a step ahead of the liberal administrative law.

An important role in the political life of Bucovina had the Unification Democratic Party, created on 15 September 1919, with I. Nistor as president. In the program of this party an important place occupies, in addition to the full unification and consolidation of Romania the idea of "administrative decentralization". At the Party Congress in April 1920, in the program adopted, it was stated that "the union has been done, but the administrative unification wasn't completed."

**The Socialist Party.** In the election program adopted in May 1919, they required, beyond the individual freedoms, "the administrative decentralization, with county and municipal autonomy."

## THE POSITION OF THE PRESS

In the paper "Universe" is mentioned the Congress of public servants on February 3, 1925. In the events that took place the following attitudes were shaped and claims of civil servants: to give a minimum of subsistence in relation to the rises index, improving the situation of civil servants; the control and confiscation of assets that can not be justified."

In the newspaper "Adevarul" of 27 May 1925 it was emphasized that "such a law may agree to a regime of dictatorship. At the moment that democracy will win, this law will be gone, hypocritely wrapped in the folds of the Romanian tricolor today." The publicist N. Batzaria stated: "the draft of the administrative law is of a ferocious reactionarism, brutally pushed by a reactionarism which places us back in time, it abolishes the communal autonomy, even the commune, making by councilors and mayors tools left in the hands of the government."

The journalist Traian Vlad publishes the article "Voting Law in 35 minutes", which made a detailed presentation on how to vote "under the magic wand of government we voted from 4:30 to 5 and 5 minutes, i.e. in 35 minutes, 280 articles of the administrative law: by 8 items per minute. The voting began with Article 120 and finished with Article 400. It was not a simple law, but the administrative law, the main law of the Romanian state."

## CONCLUSIONS

In a fair and impartial analysis on the content and provisions of the Law of June 24, 1925 we can agree with Senator D.M. Gropișan (Parliamentary Debates 29 March 1925), "this bill will come is only a concept, it is the way, the instrument for our national and social rehabilitation," "the administrative reform is also the moral reform par excellence" and "the unification process is a very painful process, with a very thorough process."

The Law of 24 June 1925 was based on two fundamental principles: keeping the national character, and administrative decentralization.

In the report presented by Constantin C. Georgescu and presented to the National Constituent Assembly of the Senate, they pointed out that the project represents an improvement on the past in the direction of an active decentralization of the administration and bringing together the many administrative law codes.

The Administrative unification was made by Law of 24 June 1925, by which has been provided a uniform development of all provinces which existed before on completely different regimes of each other. The law for the administrative unification of 1924 was adopted by the Liberals, long criticized by the opposition, remained in force until the establishment of the authoritarian regime of Charles II.

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## GENERAL FRAMEWORK OF IMPLEMENTING DECISION NO. 2002/584/JAI ON THE EUROPEAN ARREST WARRANT

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### **Abstract:**

*The European Union has given birth to a unique form of judicial cooperation in the field of criminal matters, freedom of movement creating new opportunities for the cross-border criminality. In such conditions, in order to face the new challenges, there has been established the aim of the maintenance and the development of a common space of freedom, security and justice.*

*The accomplishment of such desiderata has imposed simplified procedures of cooperation between the Member states consisting in recognition and compliance of court orders outside the state without the formalities stipulated in the classical conventions regarding the international legal assistance, which had been accomplished by adopting the Framework decision on the European arrest warrant.*

*Yet, numerous institutional courts of the European states have faced difficulties on the concordance of certain provisions in the fundamental law and the implementation law of this present decision in what concerns the sovereignty of the states, the nationality exception, the principle of legality, the principle of dual criminality.*

*Such objections have placed the European states in front of two contrary interests, on one side that of the European integration, of judicial cooperation in the field of criminal matters and of development of common space of freedom, security and justice, and on the other side, that of the preservation of national sovereignty and of the protection of own nationals.*

*In such context, according to sovereignty an absolute value means waiving interdependence, cooperation, and their lacking render the sovereignty useless.*

*To this conclusion have come, without any reserve, the majority of the European states after the terrorist attacks in the United States of America on the 11<sup>th</sup> of September 2001, events which stood at the basis of the speediness of adopting and implementing the framework decision on the European arrest warrant.*

**Key words:** international judicial cooperation in the field of criminal matters, extradition, European arrest warrant, nationality exception

**JEL Classification:** K14

## **INTRODUCTION**

The holistic development of our human society, its states and nations, has been made possible as a consequence of the international relationships established and sedimented in time.

At the international cooperation basis has been permanently stood the principle of respect for independence and states' sovereignty, implicitly for their national legislation, reflected in their legal regulations, as well as for the mutual confidence in a well regulated institutional framework.

Unprecedented development of the international relationships in the contemporary society has been accompanied by an increase, also unprecedented, of the international criminality, by proliferation of certain forms of criminality on the territory of certain states (Bulai C. and Bulai N.B., 2007) and of difficulties in holding criminals liable.

In such context, extradition represents the legal instrument of one of the oldest forms of collaboration between states in order to combat criminality.

Extradition appeared as a consequence of absolute monarchies' need to preserve their authority. Yet, in time, it has evolved in the same time as the society in its ensemble developed, until becoming today one of the most efficient forms of battle against transnational criminality. (Boroi and Rusu, 2008).

Extradition is defined as being a bilateral act, both political and legal, by means of which the state on which territory there is a wrongdoer, surrender him to the state where the crime was committed or the state which interests were injured by the commission of the crime or which

national he is, in order to hold him legally responsible or to serve the sentence to which he has been convicted by binding judgement (Dobrinou s.a., 1995).

In the context of the two world wars, there has been noticed that it is absolutely necessary that sovereign states cooperate, hence the ceation of international organisations such as the United Nations Organisation, the European Council, the Economic European Community etc. which influenced the bilateral treaties in the field of extradition to be more commonly replaced by multilateral treaties.

History of law regarding extradition in Europe is included in the European Convention on extradition from the 13<sup>th</sup> of December 1957, issued by the Council of Europe, ratified by all Member states of the European Union, as well as in the two additional protocols, from 1975 and respectively 1978, which have also been ratified by several Member state of the European Union, some of them raising doubts at several individual formulations.

Consequently, the European Union has counted, even since the beginning, on the idea of extradition of nationals convicted to serve a sentence, which idea was reconsidered once again, by agreeing several treaties by means of which it has been tried, during time, to adapt the concept of extradition to the evolution of the European Union.

In such sens, we detail the most important instruments of regulation of extradition which followed the Convention from 1957 : the Benelux Union Treaty regarding extradition and common assistance in the field of criminal matters (1962), the Agreement between the twelve Member states of the European Community concerning the simplification and modernization of the means of transmission of the extradition requests, since the 26<sup>th</sup> of May 1989, the Convention on the 19<sup>th</sup> of June 1990 of putting into force the Schengen Agreement on the 14<sup>th</sup> of July 1985 of gradual elimination of checks at common borders, the Convention regarding the simplified procedure of extradition between Member States of the European Union on the 10<sup>th</sup> of March 1995.

A special importance in judicial cooperation in the field of criminal matters is given to the Amsterdam Treaty (1999) which stipulates that the European Union shall maintain and develop a common space of freedom, security and justice. The accomplishment of such desiderata has as advantage the existence of a judicial common space, in which European nationals can appeal to the justice in one of the Member States the same way they appeal in their own country. Yet, on the other side, such benefit creates the possibility for the criminals to exploit the difference between the legal systems of the states. In such conditions it is mandatory, in order to eliminate this present danger, that all court orders are recognized and complied in the foreign area without the formalities stipulated in the classical conventions regarding international legal assistance.

### **ADOPTING THE FRAMEWORK DECISION NO. 2002/584/JAI**

The European Union has given birth to a unique form of judicial cooperation in the field of criminal matters, freedom of movement creating new opportunities for the cross-border criminality. For this reason, in order to face the new challenges, it has been considered necessary the extension of the Union's competences in the field of justice and internal affairs. Such thing has been accomplished first by the Maastricht Treaty (1992) and then it became widespread once with the entering into force of the Amsterdam Treaty (1997).

Thus, although principally the criminal matters hasn't made the object of the legislative unification at the European level, criminal law being considered an expression of the sovereignty of every Member state, attribute which doesn't disappear by the adhesion the the E.U. [1], reality has outlined the necessity of a continual proximity of the national criminal laws of the Member states in order to face in a more efficient manner the danger represented by the phenomenon of criminality at the European and world levels.

Taking into consideration the important differences existing between the Member states' national legislations and even inside their legal systems, there have been identified two ways of surpassing this obstacle : mutual recognition and harmonisation. The supporters of the mutual recognition consider that the harmonisation of the national legislations of the Member states is not

necessary as long as the courts in a state recognize and comply the court orders from another Member state. In such sens, there has been given an example : art. IV of the United States of America's Constitution, according to which each Member state must offer full faith and credit to the judicial proceedings in another state (Radu, 2008).

In such context, in 1999, the European Council from Tampere, Finland, on the 15<sup>th</sup> and the 16<sup>th</sup> of October 1999, has statuted that mutual recognition of the court orders must become the conerstone of judicial cooperation in the field of criminal matters between the EU Member states, by adopting a Plan of measures meant to give life to this principle.

The terrorist attacks in the United State of America on the 11<sup>th</sup> of September 2001 represent the events leading both at the adoption of the framework decision regarding the harmonisation of criminal law in Member states – the Framework Decision regarding the combatting of terrorism, and at the adoption of the most efficient instrument based on mutual recognition – the Framework Decicion no. 584/13.06.2002 regarding the European arrest warrant and the extradition procedures between the Member states of the European Union.

Thus, by means of the Framework Decision no. 584/13.06.2002 of the European Unions's Council there has been materialized the decision taken inside the European Council from Tampere that, between the Member states of the European Union, the formal procedure of extradition, in the case of nationals attempting to elude the compliance of a freedom's privative sentence, should be replaced by a procedure of extradition more simplified, in the case of nationals attempting to elude the criminal prosecution and trial.

In conformity with art. 1 from the Framework decision, the European arrest warrant is a legal decision issued by a Member state in view of arresting and surrendering by another Member State of a prosecuted national, in order to accomplish the criminal prosecution in the purpose of executing a punishment of a freedom's privative security measure.

In Romania, the Framework decision on the European arrest warrant is transposed in full content in the III<sup>rd</sup> Title of Law 302/2004 on the international judicial cooperation in the field of criminal matters [2] altered and completed by Law no. 224 on the 1<sup>st</sup> of June 2006 [3] and by Law no. 222/2008 [4], art. 77 para. 1 preserving the definition according to which the European arrest warrant is a legal decision by means of which a competent legal authority from a European Union Member state requests another Member state arresting and surrendering a national, in the purpose of accomplishing the criminal prosecution, trial or executing a punishment or a freedom's privative security measure.

While between the Member states of the European Union extradition has been replaced by the European arrest warrant, the regulations regarding extradition still find their application in the relationships between Romania and the states outside the European Union, in such situation being possible to issue an international criminal prosecution warrant in view of extradition.

## NATIONALITY EXCEPTION

The extraordinary result of the European Council from the end of year 2001 has consisted, on one side, on an instrument facilitating the cooperation against cross-border criminality but which, on another side, does not respond to all exigences of respecting the right to defense.

This new orientation brought by the Amsterdam Treaty and the European Council from Tampere, the creation of a favorable framework for extradition as simplified as possible concretized by the adoption of a framework decision on the European arrest warrant, brings into discussion the sovereignty of the Member states or “the nationality exception in the law of extradition”.

For centuries, it has been accepted that the states have the sovereign right to refuse the extradition of their nationals. Such right is based on national constitutional regulations stipulating that the national has the right to remain on the territory of the state, without being expelled or extradited. In other words, the sovereign authority is the only one to have the power of controlling the nationals. Such assertion is based on three premisses : the state owes its subjects the protection of

its laws, it is impossible to have full faith in the justice of a foreign state, is disadvantageous to be tried in a foreign country (Stănilă, 2007).

Thus, after a long period of time in which European states have put the base of a mutual judicial cooperation and made efforts in order to develop the legal cooperation forms, the states' waiving of their sovereign right to invoke the nationality of the defendant or of the convicted, has constituted a reason of refusing the request regarding the adoption of the Framework decision on the European arrest warrant.

The European Convention on extradition (1957) has confirmed the right of the parties to refuse surrendering their own nationals thus giving birth to the principle of the exception of nationality. The Convention stipulated the freedom of the contracting states to attach a declaration in the content of which to define the term "national" for the application of the convention's provisions. In the content, it is provided the *aut dedere aut judicare* principle [5] as a compensation of the negative consequences of the exception of nationality. It opposes as well extradition, consolidating the principle of the exception of nationality, the Benelux Union Treaty on extradition and common assistance in the field criminal matters (1962), the Convention of putting into practice the Schengen Agreement on the 14<sup>th</sup> of July 1985 (1990).

The traditional regime of the exception of nationality begins to loose its power once with the adoption the the Convention on extradition between the Member states of the European Unions (1996) which leaves us to foresee the conclusions of the European Council of Tampere (1999).

The exception of nationality places us between two contrary interests, on one side, that of the European integration, of the judicial cooperation in the field of criminal matters and of development of a common space of freedom, security and justice, and on other side, that of the national sovereignty and of the protection of it's own nationals. In such context, according the sovereignty an absolute value means waiving interdependence, cooperation, yet their lacking render the existence of the sovereignty useless.

The Framework decision on the European arrest warrant has contributed decisively to the declining of the principle of nationality. Articles 3 and 4 from the Framework decision on the European arrest warrant make reference to the mandatory and optional reasons of refusal of the execution of the European arrest warrant.

Thus, the exception of nationality, in the new European regulation of the cooperation in the field of criminal matters, is considered being a facultative reason of refusal of execution of the European arrest warrant, which invocation is limited to certain conditions strictly stipulated.

The application of the Framework decision on the European arrest has created a series of constitutional implications and litigations with the national laws in certain states, especially in what concerns the exception of nationality.

## CONSTITUTIONAL IMPLICATIONS

Adopted under the impulse if the dramatic events on the 11<sup>th</sup> of September 2001, the Framework decision on the European arrest warrant has risen constitutional problems in many Member states in the process of their transposition in their internal law and ulteriorly the transposition, under at least three aspects : the extradition of their own citizens, the rights and processual and double incrimination (Radu, 2008).

Extradition being considered an act of sovereignty of the state (Popescu, 1994) justifies the attitude of several constitutional systems, inclusively from the Member states of the European Union, of maintaining the rule of non-extradition for their own nationals, although this represents one of the obstacles in the way of an efficient cooperation between states in the field of criminal matters.

The cooperation between the European Union's Member states, as a consequence of the European Council from Tampere from 1999, is based on mutual confidence, as the presumption sitting at the base of the non-extradition rule of its own nationals does not exist. The framework decision on the European Arrest warrant does not regulate, by mandatory of facultative reasons of



non-execution of an European arrest warrant the citizenship of the prosecuted person. In spite of all these, analysing the situations adjusted by art. 4 pt. 6 [6] and art. 5 pt. 3 [7] from the framework decision, we notice a derogation from the regulation of extradition of own nationals, instituted implicitly by this present framework decision. Yet, the interpretation *per a contrario* of such texts, as well as their systematic interpretation, lead to the firm conclusion that the rule is surrendering own nationals.

Thus, numerous Member state has been forced, before transposing this framework decision in their internal legislation, to revise the fundamental law interdicting the extradition of its own subjects.

In Poland, the Constitutional Court has been summoned to pronounce on the constitutionality of certain provisions from the Criminal Code regarding the implementation of the European arrest warrant, taking into consideration that the Polish fundamental law interdicts the extradition of own subjects. The Polish Constitutional Court decides to revoke the respective provisions of the Criminal Code.

In Great Britain, although nationalist press manifested a very sceptical attitude towards the Corpus Juris project and accomplished its role of the forth power in a state, the events on the 11<sup>th</sup> of September 2001 have determined an acceleration of the European cooperation in the field of criminal matters, thus rederring possible the adoption of the Framework decision on the European arrest warrant.

In Belgium, the Constitutional Court has been summoned regarding the fact that international cooperation in the field of criminal matters should be regulated by a convention and not by a Framework decision. Another reason for the notification consists on the partial derogation of the principle of dual criminality which would constitute, according to claimants, a breach of the principle of legality in the field of criminal matters.

Absolute interdiction of its own nationals has been consecrated by the Constitution of Romania since 1991 in art. 19 para. (1) [8]. In the process of European adhesion, inclusively in order to be able to transpose the Framework decision on the European arrest warrant, it was imposed the revision of the Consitution of Romania under this aspect as well. Yet, at least formally, non-extradition of its own subjectss has remained a rule even after the revision in October 2003, para. (2) [9], newly introduced setting the conditions under which, as an exception to the rule, Romanian nationals can be extradited from Romania.

Although art. 19 from the Constitution has been revised also for the facilitation of the application of the European arrest warrant in cases in which legal authorities are requested the extradition of certain Romanian nationals, the form under which it has been edited the second paragraph of this article, does not respond adequately to this objective, allowing the extradition of Romanian nationals if there are met three cummulative conditions : the existence of a convention permitting the extradition of own subjects, the accomplishment of the conditions stipulated by the law and the existence of the mutuality in what concerns the extradition of own subjects.

Yet the European arrest warrant is not instituted by means of an international convention, but by means of a framework decision of the Council, which aspect sat at the basis of invoking certain exception of nonconsitutionality of the provisions of Law 302/2004 on international judicial cooperation in the field of criminal matters.

Thus, Constitutional Court has been summoned in several occasions regarding the constitutionality of certain provisions of Law no. 302/2004, altered in what concerns the procedures of the European arrest warrant and the conceding of certain rights and pledges of the person to be extradited on the basis of such warrant.

By analyzing the notifications of the Constitutional Court, it is interesting the fact that all dealing with the consitutionality controle date since year 2007, probably on the basis of the intensification of discussions regarding the problems of implementation of the framework decision in the Member states of the EU. It is even more interesting the fact that the Romanian constitutional court refused all these exceptions of nonconstitutionality, supporting this way the Romanian enactor

summoning the existant problems in the original draft of Law no. 302/2004 and solving them in 2006 and 2008 [10].

## CONCLUSIONS

Although initially the idea of an European arrest warrant, bringing into discussion the prejudice of the Member states' sovereignty and accomplishment of certain pledges, has been welcomed with scepticism, the terrorist attacks on the 11<sup>th</sup> of September 2001 in the United States of America have convinced the EU states of the necessity of adopting a legal instrument which contributes to the maintainance and the development of a comon space of freedom, security and justice.

The European arrest warrant replaces the procedures regarding extradition in the relationships between all the Member states of the EU, the regulations regarding extradition still finding their apilicability in the relationships between the EU Member states and the other states of the world.

Adopting and implementing the Framework decision on the European arrest warrant represents an instrument of enforcement of the international legal order preparing the necessary framework for a future unification of the criminal law and criminal procedure legislation at the European level, because, efficient international repression measures should responded to an internationalization of the crime.

## NOTES

- [1] *Such conclusion results clearly from the provisions of the Rome Treaty, signed on the 25<sup>th</sup> of March 1957, entered into force on the 1<sup>st</sup> of January 1958, altered by the Single European Act from the 17-28<sup>th</sup> of February 1986, from the contents of the Treaty on the European Union from the 7<sup>th</sup> of February 1992 (the Maastricht Treaty), from the Amsterdam Treaty entered into force on the 1<sup>st</sup> of May 1999 and from the provisions of the Nice Treaty, documents in which it is outlines that the EU Member states does not renounce to their sovereignty in what concerns the criminality and sanction of dangerous fact for the judicial order; criminal law and criminal procedure law remaining in the competence of Member States.*
- [2] *Published in O. G. no. 594 from 1<sup>st</sup> of July 2004.*
- [3] *Published in O. G. no. 534 from 21<sup>st</sup> of June 2006.*
- [4] *Published in O. G. no. 758 from 10<sup>th</sup> of November 2008.*
- [5] *Liability of a state, according international public law, to prosecute persons guilty of international crimes as long as any other state didn't requested their extradition, no matter if the crimes were committed on the territory of a state other than the one which will prosecute them.*
- [6] *In the situation in which the European arrest warrant is issued in the purpose of serving a penalty or a freedom' privative security measure, whenever the prosecuted person remains in the Executing Member state, is a foreign national or resident, and this state is charged to execute this penalty or freedom's privative security measure in conformity with the national legislation.*
- [7] *Whenever a person makes the object of a European arrest warrant in the purpose of criminal prosecution, is a foreign national or resident of the Requesting Member stat, the surrendering must be submitted to the condition that after being heard, the person is returned the Executing Member state in order to serve the sentence or the freedom' privative security measure pronounced aagainst her in the Issuer Member state.*
- [8] *In such sens, art. 19 para. (1) from the Romanian Constitution stipulates that : a Romanian citizen cannot be extradited or expelled from Romania.*
- [9] *Art. 19 para. (2) from the Romanian Constitution : By derogation from the provisions in paragraph (1), Romanian citizens based on the international conventions to which Romania is a party, upon conditions of the law and reciprocity.*
- [10] *See decisions no. 400, 419, 443 and 583 year 2007 pronounced by the Constitutional Court of Romania.*

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**INSTRUCTIUNI UTILE PENTRU AUTORI / AUTHOR GUIDELINES****RO**

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Must be in 12-point bold type, Times New Roman, centered across the top of the page and will be written in uppercase.

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Author's names will be written under the paper title after a blank line, centered across the page, single spaced specifying: title, university/institution affiliation, country and e-mail address. It must be written in 10 point type, Times New Roman in lowercase.

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It will be written after authors leaving a blank line before. The abstract must include sufficient information for readers to judge the nature and significance of the topic, the adequacy of the investigative strategy, the nature of the results and the conclusions. An abstract is not an introduction, it summarizes the substantive results of the work. The abstract will be written in 10 point type italic, Times New Roman, justify. It must have 200 to 250 words, single spaced type.

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