Editor in Chief
Assoc. Prof. Ph.D. Costel Ionaşcu
University of Craiova, Faculty of Economy and Business Administration, Romania

Editorial Board

Assoc. Prof. Ph.D Anca Bândoi
University of Craiova, Faculty of Economy and Business Administration, Romania

Assoc. Prof. Ph.D Cerasela Bolnăvescu
University of Craiova, Faculty of Economy and Business Administration, Romania

Prof. PhD Adriana Burlea-Şchiopoiu
University of Craiova, Faculty of Economy and Business Administration, Romania

Assist. PhD student Daniel Cîrciumaru
University of Craiova, Faculty of Economy and Business Administration, Romania

Assoc. Prof. PhD Mirela Cristea
University of Craiova, Faculty of Economy and Business Administration, Romania

Assoc. Prof. PhD Sorin Domnişor
University of Craiova, Faculty of Economy and Business Administration, Romania

Lect. Ph.D Laurentiu Dragomir
University of Craiova, Faculty of Economy and Business Administration, Romania

Lect. PhD Raluca Drăcea
University of Craiova, Faculty of Economy and Business Administration, Romania

Lect. PhD Cristi Drăgan
University of Craiova, Faculty of Economy and Business Administration, Romania

Lect. PhD Laura Giurcă Vasilescu
University of Craiova, Faculty of Economy and Business Administration, Romania

Lect. PhD Ramona Gruescu
University of Craiova, Faculty of Economy and Business Administration, Romania

Assist. PhD student Radu Ogarcă
University of Craiova, Faculty of Economy and Business Administration, Romania

Assoc. Prof. PhD Carmen Radu
University of Craiova, Faculty of Economy and Business Administration, Romania

Assoc. Prof. PhD Cristi Spulbar
University of Craiova, Faculty of Economy and Business Administration, Romania

Academic Review Board:

PhD Prof. Buşe Lucian
University of Craiova, Faculty of Economy and Business Administration, Romania

PhD Assist. Prof. Goran Petrevski
SS Cyril and Methodius University, Faculty of Economics, Skopje, Macedonia

PhD Assist. Prof. Daniel Stavárek
Silesian University, School of Business Administration, Karviná, Czech Republic

Ph.D Prof. Olivier Bachelard
Ecole Superieure de Commerce Saint Etienne
Saint Etienne, France

Ph.D Prof. IGALENS Jacques
Responsible Département GRH
Université 1 Toulouse Sciences Sociales, France

Paddy Gray
Director of Housing Management Programmes,
University of Ulster, Northern Ireland

PhD Prof. Conway Lackman
Duquesne University, Pittsburg, SUA

PhD Prof. Pedro CRUZ
Business Administration Department, Instituto Politécnico de Viseu, Portugal

PhD Assoc. Prof. Timothy A. Woods
University of Kentucky, Lexington, SUA

PhD Prof. Himayatullah Khan
Agricultural University, Peshawar,
Institute of Development Studies and COMSATS Institute of Information Technology, Abbottabad, Pakistan

PhD Prof. Vasilescu Nicolae
University of Craiova, Faculty of Economy and Business Administration, Romania

PhD Prof. Burdescu Dumitru Dan
University of Craiova, Faculty of Automation, Computers and Electronics, Romania

The authors have the entire responsibility for the content of the articles and only they will support all legal consequences generated by violation of the copyright.
EDITORIAL

European integration - a new start for the process of Romania’s re-branding?

European integration is a forced march against a traditional inertness. The process of integration in the European Union is going to determine complex changes not only in the business environment but in the whole Romanian society. Generally speaking, the advantages of integration to the European Union for Romania are much bigger than the costs of the integration. Anyway, between Euro-enthusiasm and Euro-pessimism should be found a middle way. Is obvious that the things will not change immediately after 1st January 2007. Besides, not only the Government is integrating into the EU but also the whole economy, the firms and the population. Therefore, the integration process involve a collective responsibility but also an individual one because every firm and person should make a personal analysis in function of its own interests.

One of the questions which arise is if the integration will also have a positive impact on the image of Romania? European integration is a chance, not a choice, for re-branding Romania, as far as:

- the world’s perception over Romania is still far off the Romanian reality. Romania is a brand but not necessarily one capable of creating fans and empathy. Unfortunately, Romania has an uneven, rather negative image, full of unwanted stereotypes and clichés;

- the beautiful landscapes cannot succeed to attract tourists and generate businesses by themselves, the best young talents dream to leave Romania for a better future outside, the products have not succeeded to build preference and positive associations on foreign markets, the legal system and corrupt way of doing business still keep the investors away;

- there is no clear visual identity of the country - graphic symbolism is simply chaotic and unprofessional and the communication messages about Romania are unconvincing, unattractive and unclear, like disparate pieces from different puzzles.

Taking into consideration the impact of the image on the general development, the Romania brand seems to be the Achilles’ heel of the current economical opportunities and problems. It is obvious that Romania does have a brand which has incorporated rather negative associations than positive ones. No matter how
much effort Romanian commercial brands would make to build
something outstanding, unique and valuable in front of the
global village audiences, the set of associations generated by the
country’s origin will negatively affect the mentioned effort, even
in the case of very good intrinsic quality.

It should be disregarded the cliché of the “last train”,
saying that we have to re-brand only because of the 2007 \textit{EU}
acceptance. It’s true that inside \textit{EU} community each country
must maintain a clear positioning based on competitive
advantages, those capable to build reputation and preference.
It’s also true that the circumstance of joining \textit{EU} is not the main
reason to re-brand the country, but the modern context of the 21-
century, which imposes us to follow the rules of the game and to
professionalize our approach to the future. And it is obvious that
in order to compete, to accelerate growth and to reborn our
nation as a modern European country, \textit{Romania} must be
managed like a valuable brand.

Globalization also means that countries are somehow
like products on a shelf - this prosaic view must not hurt any
feeling, because it is as true for \textit{USA} as it is for \textit{Romania}. The
investors’ choices are largely influenced by how secure,
competitive; attractive a country seems to be, for short, how
strong that country’s brand is.

For \textit{Romania}, a good branding strategy would mean
more foreign investment, more incoming foreign tourists,
increasing exports of domestic products and - maybe the first and
foremost - stopping the brain drain.

The aim of a re-branding process must be to create a
certain state of feeling – an elation state – able to channel the
energies of individuals and corporations. The advantages of such
a process will be felt by all of us: a nation brand is a certitude
agreement with the internal and external audience, able to
attract investors, tourists and clients. A potential country re-
branding process may also be perceived as a powerful statement
about \textit{Romania}’s commitment to the European Union.

\textit{Ph.D Lecturer Laura Giurcă Vasilescu}
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Faculty of Economy and Business Administration, Craiova, Romania</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>INCORPORATED IMMOBILIZED ACTIVES: IMPORTANCE, VALUATION, REVALUATION</td>
<td>Assoc. Prof. PhD Sorinel Domnişoru PhD Student Sorin Vînătoru Lect. PhD Daniela Giurescu</td>
<td>University of Craiova</td>
</tr>
<tr>
<td></td>
<td></td>
<td>University of Craiova Faculty of Economy and Business Administration, Craiova, Romania</td>
<td></td>
</tr>
<tr>
<td></td>
<td>POSSIBILITIES OF IMPROVING THE INFORMATIONAL SUBSYSTEM OF BODY OF EXPERT AND LICENSED ACCOUNTANTS OF ROMANIA CONCERNING THE PROBATIONERS’ MANAGEMENT</td>
<td>Ph.D. Student Ec. Lascu Ion Florin Lect. PhD Netoiu Lavinia Maria</td>
<td>University of Craiova, Faculty of Economics and Business Administration, Craiova, Romania</td>
</tr>
<tr>
<td>23</td>
<td>FOREIGN DIRECT INVESTMENT IN ROMANIA - RECENT TRENDS</td>
<td>Lect. PhD Laura Giurcă Vasilescu</td>
<td>University of Craiova</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Faculty of Economy and Business Administration, Craiova, Romania</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>RECENT EVOLUTIONS ON ROMANIAN CAPITAL MARKET</td>
<td>PhD Stud. Ec. Sorin Tudor Lect. PhD Daniela Dânculescule</td>
<td>University of Craiova</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Faculty of Economy and Business Administration, Craiova, Romania</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Faculty of Economy and Business Administration, Craiova, Romania</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>ROMANIAN ELECTRONIC SYSTEM OF INTERBANK PAYMENTS IN THE BACKGROUND OF CREATING THE SINGLE EURO PAYMENTS AREA</td>
<td>Assoc. Prof. PhD Mirela Cristea</td>
<td>University of Craiova</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Faculty of Economy and Business Administration, Craiova, Romania</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>RISK AND PROFITABILITY IN BANKING SECTOR OF NEW MEMBERS STATES AND CANDIDATE COUNTRIES</td>
<td>Lect. PhD Nanu Roxana Assist. PhD Gherghinescu Oana Lect. PhD Buziernescu Radu</td>
<td>University of Craiova</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Faculty of Economy and Business Administration, Craiova, Romania</td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>PERSPECTIVES OF REGIONAL TOURISM DEVELOPMENT IN CROATIA</td>
<td>Assist. Prof. Grzinic Jasmina</td>
<td>University Jurja Dobrile in Pula Department of Economics and Tourism «Dr. Mijo Mirkovic» Pula, Croatia</td>
</tr>
<tr>
<td>63</td>
<td>CHARACTERISTICS OF THE MANAGEMENT BASED ON KNOWLEDGE</td>
<td>Lect. PhD Mirela Sîrbu</td>
<td>University of Craiova</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ec. Augustin Cîmăroiu</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>Page</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVERVIEW OF THE NEWEST KNOWLEDGE MANAGEMENT INITIATIVES ASSESSMENT APPROACHES</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assist. PhD Student Dana Lupșa Lect. PhD Sanda Constantin Transilvania University of Brașov Economic Sciences Faculty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A COMPARATIVE ANALYSIS REGARDING BRAND NAME STRATEGIES</td>
<td>79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assist. Ph.D. Student Moisescu Ovidiu Ioan Ph.D. Student Gică Oana Adriana Babeș-Bolyai University Faculty of Economics and Business Administration, Cluj-Napoca, Romania</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EUROPEAN ECONOMIC MODEL: QUE VADIS UE?</td>
<td>87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lect. PhD Cosmin Marinescu Faculty of Economics Academy of Economic Studies Bucharest, Romania</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THE SERVICES, THE LASTING DEVELOPMENT AND THE QUALITY OF LIFE IN THE ROMANIAN SOCIETY</td>
<td>95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lect. PhD Rabontu Cecilia Irina Faculty of Economic Sciences University “Constantin Brancuși” Tg-Jiu, Romania</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEAR SHORING IT-ENABLED SERVICES IN AN ENLARGED EUROPE</td>
<td>99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lect. PhD Ana Bobircă Academy of Economic Studies Faculty of International Business and Economics, Bucharest, Romania</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GLOBAL KNOWLEDGE NETWORK – A SWOT APPROACH</td>
<td>105</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhD Student Neagu Cristina Denisa University “Al I Cuza Iași” Faculty of Economics and Business Administration, Iași, Romania</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POSSIBILITIES AND PROBLEMS FINANCING THE HUNGARIAN AGRICULTURE</td>
<td>111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhD, First Assist. Cecilia Szigeti SZE, Kautz Gy. Faculty of Economics, CSc, Reader Csaba Lentner Faculty of Economics, University of West-PhD Reader, Anita Borzán Head of Institute of Economic Sciences Tessedik Sámuel College, Faculty of Economics, Bekescsaba, Hungary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANALYSIS OF INVISIBLE CHILD LABOUR IN HAYATABAD, PESHAWAR</td>
<td>117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prof. Ph.D. Himayatullah Khan Department of Development Studies COMSATS Institute of Information Technology, Abbotabad Graduate Student Wajid Ali Shah Graduate Student Zain-ul-Abadin Institute of Development Studies NWFP Agricultural University, Peshawar, Pakistan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THE STATISTIC ANALYSIS ON THE RETURNS OF THE BET, CAC 40 AND DOW JONES EURO STOXX 50 PORTFOLIOS</td>
<td>127</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lect. PhD Viorica Chirilă University “Alexandru Ioan Cuza” Faculty of Economics And Business Administration, Iași, Romania</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DETERMINATION OF THE EU GRANT AND SPECIFIC ISSUES OF COST-BENEFIT ANALYSIS</td>
<td>137</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lect. PhD Sanda Constantin Assist. PhD Student Dana Lupșa Transilvania University of Brașov Faculty of Economical Science Brașov, Romania</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THE COMBINED EVALUATION OF THE OPERATING RISK AND OF THE FINANCIAL RISK</td>
<td>143</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assist. Ph.D. Student Daniel Cîrciumaru Assoc. Prof. Ph.D. Marian Siminiciță Assist. Ph.D. Student Radu Criveanu University of Craiova Faculty of Economics and Business Administration, Craiova</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
THE TRANSITION TO IFRS – ACCOUNTING DIFFICULTIES CONCERNING THE AMORTIZATION OF THE NON CURRENT ASSETS

Lect. PhD Valeriu Brabete
Lect. PhD Cristian Drăgan
University of Craiova
Faculty of Economy and Business
Administration, Craiova, Romania

Abstract: In Romania, starting with the requirements of the Regulation (CE) no. 1606/2002 and of the national regulations, it is compulsive for the IFRS to be applied, since 1-st of January 2007, by the entities whose movable possessions, at the date of the balance sheet, are admitted for the transaction on a regularized marked, with the purpose of laying down consolidated financial statements.

Keywords: IAS – IFRS, amortization, non current assets

Emphasizing the globalization of the national economy and the integration of the financial markets and informational systems requires more and more the use of a common language. Therefore, attracting the international finance capital must be based on a relevant informational offer, intelligible and especially comparable, elaborated in a general accepted accounting language.

The investors and financial analysts must understand the financial statements of the foreign companies whose stock holdings would like to buy; they want to compare the financial statements of some companies from different countries and to reassure that the respective information is relevant and sure.

Part of the national accounting system, the financial communication is performed according to the precautions of the accounting Regulations according to the European directives. Thus, for the economic agents, there has been transposed in national legislation the Directive IV and the Directive VII, having as a result the Accounting Regulations in concordance with the European directives. Moreover, in the other institutions with attributions of the regularization such as NRB (National Romanian Bank), The commission of Supervising the Assurances and the National Commission of the Movable Possessions, there were elaborated regulations according to the European directives specific for the activity domains of the entities regularized and supervised by those.

The accounting law from Romania foreseen the application of the accounting regulations that are concordant with the European directives and, respectively, with the International Financial Reporting Standards (IFRS). The states members of the European Union started the implementation of IFRS according to the precautions of the regulation (CE) no. 1606/2002 of the European Parliament and of the Council from 19-th of Julie 2002, concerning the application of the international accounting standards. Consequently, according to this regulation, the member countries apply IFRS in consolidated financial statements.
In Romania, starting with the Regulation requirements (CE) no. 1606/2002 and with other national regulations, the entities, whose movable possessions, at the date of the balance sheet, are admitted for the transaction on a regularized marked, with the purpose of laying down consolidated financial statements, have been forced to apply IFRS since 1-st of January 2007. All the other entities of public interest may apply IFRS when laying down the individual or consolidated financial situations for personal informational needs. In the category of the public entities, according to the norms in force, there are included:

a. credit institutions;
b. assurance, assurance-reassurance and reassurance societies;
c. societies of financial investment societies, societies of investment administration and organisms of collective investment, authorized/counselee by CNVM;
d. commercial societies whose movable possessions are admitted at the transaction on a regularized market;
e. national companies and societies;
f. juridical persons that pertain to a group of societies and enter the are of consolidation by the mother-society that applies IFRS;
g. juridical persons, others than the above mentioned, that beneficiate of non repayable loaning or of the state guarantee.

In addition to that, it has to be specified one aspect that we consider especially important and refers to the fact that in the relations of the commercial societies with the state institutions, the report base will be represented by the accounting regularizations in concordance to the European directives, including the collection of that information that is the bases of determining the due and taxes. Consequently, the financial situations resulted by applying IFRS are destined for the information users, others than the state institutions.

Furthermore, it must be considered the fact that the entities that have the right to apply and opted for IFRS must assure the continuity of their application.

The difference between the legislation that regularizes the problems that concern the amortization and certain precautions of IAS/IFRS are, under many aspects, essential only if we refer to the aspects concerning the amortization, the choice of the amortization methods, revision of the amortization duration and methods. What makes the huge difference between the present Romanian legislation concerning the amortization and the recommendations included in the international norms, to which we have referred previously, regard first of all the exertion, by the experts, of a professional rationalism at a level that, so far, cannot find its equivalent but in a very small measure in the national norms. In our opinion, this is a very important aspect with numberless implications over the quality of the information supplied by the accounting department.

Under these circumstances, we consider it necessary to specify some aspects that, in our opinion, are very important and must be taken into account as work hypothesis when talking about the amortization problem, considering the transition from the accounting processing specific to the national norms to those in concordance with IAS/IFRS.

According to IAS 16 and respectively IAS 38, after the initial recognition of the tangible or intangible assets, it will be evaluated to its diminished price with any cumulated amortization and any loss derived from accumulated depreciation.
The international norms define the amortization as **the systematic allocation of amortizable possessions of assets, during its entire useful duration of life**.

The entire useful duration of life is defined by means of:

a. the period in which the assets are foreseen to be available for being used by an entity (expressed in years); or

b. the number of products unitities or of some similar unitities that are expected to be obtained by the enterprise by the use of the respective assets.

The spirit of the international norms is different from what the national legislation imposes with regard to the amortization matter. Thus, in the opinion of the international referential, the **entity is the one that decides the amortization method and estimate the useful duration of life**. In other words, in this context, the professional rationalism becomes very important due to the fact that the specialists must appeal to it not only at the beginning of the assets’ “life”, but also subsequently, when it may become necessary the revision of the duration of life and the use of the amortization method.

The amortization of an non current assets must initiate in the moment it is available to being used, that is, when it find itself in the emplacement and the necessary condition for being used and must continue till its revision of duration of life or till the use of other amortization method.

Each part of a tangible assets element with a cost significantly bound to the total cost of the taken assets in general, will be amortized separately. On the other hand, one entity may choose to amortize separately parts of an element even if this has no significant cost compared to the total cost of the element.

IAS 16 settles that the useful duration of life of a tangible assets must be determined according to the assembly of factors, mentioned in what follows:

- the foreseen utilization of the assets, evaluated on bases of the productive capacity and of the estimated production;
- foreseen physical wearing out of the assets, evaluated according to the concrete exploring conditions;
- moral wearing out already existing or that will appear as a result of the modifications on the market;
- legal limits concerning the possibility of the assets use (such as the expiry date of some leasing contracts)

Additionally, IAS 38 specifies that the factors, which must be taken into consideration when determining the duration of the useful life of an intangible assets, refer to:

- stipulated use of the immovability by the entity and that possibility that this immovability were efficiently managed by another leading team;
- typical life cycles of the product for the respective immobility and the public information concerning the estimations and duration of life of some similar immobility that is used in a similar way;
- technical, technological, commercial and other type of wearing out;
- the stability of the domain in which the intangible assets functions and the modifications appeared concerning the market demand of the products and services achieved with the help of the respective assets;
- foreseen actions by the part of the competitors and potential competitors;
the level of the maintenance expenses needed for achieving the future economic benefits expected as a result of the use of the immovability and the desire to reach the expected level;

- the time control over the assets and the legal limits of using the product (such as the expiry date of the afferent leasing contracts);

- the dependence upon the duration of life of other non current assets of the entity.

If in the case of the tangible assets the duration of life may be expressed in the number of years of its utilization or the number of the products or similar unities that are waiting to be achieved out of the utilization of the active, in the case of the intangible assets, the determination upon the duration of life is a little more complex, due to the fact that the entities must evaluate if the duration of life of an intangible assets is determined or not, and if it is, which is it (it is expressed in years or product unities).

Referring to the duration of life of an intangible assets that comes out of the legal or contractual rights or of any other nature, IAS 38 (paragraph 94) specifies that it must not overcome the contractual rights period of the period of any other legal rights, but may be shorter according to the period in which the entity believes that it will use the non current assets. Furthermore, if the contractual or other legal rights are agreed on a length of time that may be renewed, the duration of life of the intangible assets will also include the periods or periods of renewal only in the case there are proves to attest the renewal from the part of the entity without a significant cost.

It may be considered proves that attest the renewal of the contractual rights or of any other type of legal rights without a significant cost:

a. the previous experience that these rights will be renewed;

b. there are relevant signs that all the necessary conditions for achieving the renewal will be fulfilled;

c. the renewal cost is not significant for the entity at the moment of comparing it to the future economic benefits.

IAS 38 specifies the fact that if this renewal cost if significant at the moment of comparing it to the expected future economic benefits, to go back to the entity by means of the renewal; the “renewal” cost actually represent the cost of achieving a new intangible assets.

With regard to the intangible assets with the undetermined duration of life, the standard allocated to this category of assets foresees that they will not be amortized. Moreover, the duration of life of the intangible assets that are not being amortized must by reviewed each period in order to determine if the events and circumstances continues to support the initial evaluation, otherwise the modification in the duration of life from determined to undetermined must be perceived as an estimative modification.

Another aspect specific for the international referential refers to the periodical review of the useful durations of life for tangible or intangible assets (at least at the end of each financial exercise) and in case that the new estimations differ significantly from the previous ones, the expenses with the amortization afferent to the present time and to the future periods must be adjusted. It may be possible that the useful duration of the life of the assets were prolonged by performing some modernizations that would bring an extra performance, or were diminished as a result of the technological progress or of the changes within the market structure. In these cases, similar installations, but utilized by different enterprises, with activity in different fields, may have different
durations of life.

The amortization of the assets ceases, the earliest, the date the assets are classified as detained for sale (or included in a group of cession that is being classified as detained for sale), as well as the date the assets are not being recognized any more.

In addition to that, a specific element for the international accounting norms refers to settling the amortization value. Under these circumstances, a new concept comes up, that is **the residual value**, defined as the estimated value that an entity may obtain by the cession of the assets, after the deduction of the costs estimated for the cession, in case the assets already had a length of service and the condition foreseen at the end of its utile duration of life.

In practice, most of the time, the residual value is insignificant and it is not taken into consideration when determining the amortization, but whenever the entity intend to replace the assets before the end of the economic duration of life, this value need to be estimated. To be practical, the determination of the residual value is attained by comparison to similar assets, at the end of their duration of life and on the base of the contractual foresees (in case of leasing).

Generally, in the case of the intangible assets with a determined duration of life, the residual value is considered to be zero, excepting the cases in which:

a. there is a commitment of a third party of purchasing the non current assets at the end of its duration of life; or  
b. there are assets market for the respective immovability and:
   1. the residual value may be determined by reference to that market;  
   2. there is the possibility that such a market exists at the end of the duration of life of the non current assets.

Consequently, the amortizing value is determined by deducting from the cost of the assets (or other value substituted to the cost) of the estimated residual value.

Moreover, it must be also mentioned the fact that the residual value of the assets may increase up to a value equal or higher than the accounting value of the assets. If this happens, the expenses with the amortization of the assets are zero only if until then the residual value did not decreased previously until a value inferior to the accounting value of the assets.

Concerning **the methods of amortization**, it must be mentioned that the international norms does not settle certain methods, but specify that for the systematic allotment of the amortizing value of the assets, during its utilization, there may be used different methods, referring to the linear method, digressive method or the method of the production unities. The entities must select the method which reflects in the most credible way the foreseen type of input of the future economic benefits included into the assets and to apply it diligently from on period to another, except the case when there appears a modification in the foreseen rhythm of the input of the respective future economic benefits.

The amortization method applied to the assets **must be revised at least at each year closing** and whenever there is observed a modification in the type of consuming the future economic benefits brought by those assets, the method will be replaces so that it reflects this modification.

Concerning the accounting of the amortization, the international norms stipulate its recognition in the account of interest and loss of the expenses with the amortization, only in case it is not included in the accounting value of the assets.

With regard to the problematic concerning the amortization of non current
assets, the national regularizations differs by a series of elements of international accounting norms. In this context, we may sense a more rigid character of the accounting regularizations corresponding to the European directives, on the one hand, and of the fiscal regularizations, on the other hand, compared to the accounting politics promoted by the accounting international standards concerning the amortization.

In the vision of national regularizations, the amortization represents the value expression that corresponds to the irreversible depreciation of the tangible and intangible assets as a result of their use, of the action of the natural factors and of the moral wearing out. It results that, from this point of view, the amortization covers, on the one hand, an economic aspect, by including the depreciation of the products within the expenses of counter-value exploration and, on the other hand, a financial aspect, by constituting the necessary source of replacing the non current assets that depreciates entirely or the financing of a new immovability.

The entities that apply the accounting regularizations according to the European directives determine the amortization by applying the amortization quotas on the entrance value of the corporal immovability of on the remained actualized value, depending on the case.

Considering that, for the beginning, we have to clarify the concept of entrance value the way it is define by the national norms, adding that the fiscal regularizations regard strictly the entrance value of the fix amortized resorts. That means that, by the entrance value of the fix resorts we understand:

a. the acquisition cost, by fix resorts achieved with onerous title;

b. the production cost, by fix resorts built up or produced by the contributors;

c. the value on the market, by fix resorts got with free title.

For the tangible assets that is used in lots, sets or form a single body, lot or set, at the determination of the amortization it is taken into account the value of the whole body, lot or set. For the components that enter the structure of corporal assets, whose normal duration of use differs from that of the resulted assets, the amortization is determined for each and every component. In this case it may be observed the proximity between the precautions from the national legislation and the international norms.

With regard to the duration of the amortization there must be pointed out a certain distinction between the corporal and intangible assets.

In the case of the intangible assets, the national regularizations settle the following rules:

- the constitutive expenses must be amortized within a period of maximum five years;

- the afferent expenses to the acquisition of patents acts, copyrights, licenses, trade marks or brands or other similar values, as well as the expenses for the development, which, from accounting point of view, represent incorporeal immovability, are recuperated by means of the amortization deduction during the contract or during its utilization, depending on the case. (in this situation, it can also be remarked the approaching way specific to the international standards).

- afferent expenses to the acquisitions or production of informatics programs are recuperated by the amortization deduction on a period of 3 years.
Certain particularities present the commercial fund, which, according to the fiscal legislation, is not considered amortizable assets. By all means, the accounting regularizations corresponding to the European directives specifies that, in case the commercial fund is treated as the assets, as a result of an acquisition of assets performed by an entity, actives that belong to a different entity, it must be taken into account the following aspects:

- the commercial fund usually is amortized in a period of maximum five years;
- nevertheless, the entities may amortize the commercial fund systematically in a period longer than five years, with the condition that this period do not overpass the duration of economic utilization of the assets.

With regard to the tangible assets, in our country the normal durations of utilization of the fix resorts are settled centralized by the governmental decision, being periodically revised. According to the normative precaution to which we have previously referred to, “The normal duration of functioning represent the duration of utilization in which it is fiscally recuperated the entrance value of the fix resorts by amortization. Consequently, the normal duration of functioning is smaller than the physical duration of life of the respective fix resort.”

Even if, the new Catalog, concerning the classification and normal durations of functioning of the fix resorts, there are foreseen the interval of time in which the economic agents may choose the duration they consider optimum compared to their economic necessities, we still believe that, in many cases, most of all the minimal limit imposed by the normative act does not coincide with the point of view of the specialists/technicians in production.

In Romania, the enterprises are forced to amortize the corporal and intangible assets according to the precautions of the legislation in force, using one of the regimens of amortization linear, degressive or accelerated.

Moreover, the fiscal legislation imposes greatly even the type of method that need to be applied for one or another category of non current assets.

The amortization regimen for a fix amortizable resort is determined, according to the fiscal law, on bases of the following rules:

- in case of constructions, it is applied the linear method of amortization;
- in case of technological equipments, that is of machines and installations, as well as of computers and peripheral equipments of it, the contributor may choose the linear, degressive or accelerated amortization method.
- in case of any other fix amortizable resort, the contributor may choose between the linear or the degressive amortization method;
- the patent acts, copyrights, licenses, commercial marks or the brands and other similar values, development expenses, as well as the informatics programs must be amortized by using the linear regimen (with the specification that the patent acts of invention may be amortized also degressive and accelerated)

**To resume**, trying to realize a short comparative analysis between the precautions of the two accounting reference systems, the conclusions may be formulated such as they appear in the table below:
<table>
<thead>
<tr>
<th>Explanations</th>
<th>International norms</th>
<th>National regularizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Definition of the amortization</td>
<td>The systematic allotting of the amortizable value of the assets during its entire useful duration of life.</td>
<td>The value expression that corresponds to the irrevocable depreciation of the tangible and intangible assets as a result of their use, of the natural factors action and of its moral wearing out.</td>
</tr>
<tr>
<td>2. Professional reasoning</td>
<td>It has an important role in the appliance of the accounting politics.</td>
<td>The national regularizations are rigid enough and do not allow the manifestation of the professional reasoning but in a small measure.</td>
</tr>
<tr>
<td>3. Amortization durations</td>
<td>Are estimated by the economic entities by means of applying the professional reasoning and they are periodically revised.</td>
<td>They are settled in a centralized way by normative acts, without the possibility of being revised.</td>
</tr>
<tr>
<td>4. Amortization value</td>
<td>The cost of the assets diminished with the residual value</td>
<td>Entrance value</td>
</tr>
<tr>
<td>5. Residual value</td>
<td>It is an element estimated by means of applying the professional reasoning and by taking into account the stabilization of the amortization value.</td>
<td>This concept is not used.</td>
</tr>
<tr>
<td>6. Amortization method</td>
<td>There are not imposed certain methods; the entity has the possibility to establish what kind of method is going to apply. By means of the professional reasoning, the methods are periodically revised.</td>
<td>There are imposed three amortization methods (linear, degressive and accelerated); in many cases, the entities have no possibility of option for the one or the other method.</td>
</tr>
</tbody>
</table>

**REFERENCES**

Abstract. In this article, we tried to display two problems. The first problem refers to the fact that, for the incorporated actives, it is stipulated in the law that the subsequent valuations are performed starting with the historic cost, except the amortization and the adjustments in case of devaluation, cumulated. This method has been inspired by the basic accounting treatment foreseen by IAS 38. The second problem relates to the fact that the application of the alternant accounting treatment, when revaluing the incorporated actives starting from the just value, is not only forbidden by the legal regulations from our country, but also perceived as a little further in time until the adoption, mainly because the just value must be reported at an active market.

Keywords: incorporated immobilizations, recognition, initial valuation, revaluation, subsequent valuation, schedule of assets and liability valuation

The unsatisfying position (place, share and importance) occupied by the incorporated actives in the managers’ perception and preoccupations, as well as in the small and intermediate firms’ patrimony represents the consequence of the conjugated action of several objective and subjective factors, such as:

a. inherent characteristics of the incorporated actives (immateriality, volatility, heterogeneity, diversity, contradictory dynamism of the value, polymorphism, strong subjective load attached to them, quick moral wearing out);

b. the insufficient interest manifested and the reduced importance given by the managers and specialists in the financial and managerial area and the business area towards these valuable patrimonial resources;

c. imprecision and ambiguity of the intern and international legal regulations related to it, especially with regard to the recognition, subsequent valuation, devaluation and amortization.

The importance of the incorporated actives in the contemporary economy (post-industrial) consists, generally speaking, in the fact that generation and using them judiciously represent the greatest wealth source and create the largest value-added rate, as it is based on the cheapest and most available resources (factors): imagination, creativity, emotion, feelings, belief, passion, vision etc. of the people (with the condition that they are stimulated and lead in a positive and efficient way, by consolidation, good-will, harmony and synergy among all those that work together and / or have interests in the firms activity - Stakeholders): shareholder, investors, managers, employees, state institutions, creditors, suppliers, clients, local communities, mass-media etc.

What else, more than the factors enumerated above, create letters patents, well-known brands, know-how, secrete prescriptions, high quality products, prestige and a
good image on the market, good client relations, sophisticated intellectual products, performing management methods etc.?

A single example, present and well-known, is eloquent enough with regard to this: compared to the level of the turnover of 310 millions Euro of SC Real Madrid SA during 2002 / 2003 season, in the 2003 / 2004 season they registered an increase with over 320 millions Euro, attaining more than 630 millions Euro only by the presence of the famous David Beckham in the team! (came at Real in the summer of 2003). The football allied with the marketing, mass-media, commerce and showbiz under the conditions of the globalization, generated and exploited the incorporated actives (especially Good Will) and on this basis it creates the value-added for some unexpected shares even from 10 years ago.

This piece of reality is valid, with particular accents from one case to another, for all the business nowadays.

As a matter of fact, we have not randomly named the contemporary economy also “post-industrial”, due to the fact that nowadays it is not of present interest the orientation of the enterprises activity towards the development of the material, quantitative, „hard” components of their assets (lands, buildings, machines, material supplies. Mass production) as in the industrial epoch: nowadays what prevail are the elements of the incorporated, intangible, „soft”, assets exemplified above.

**Defining, recognition, valuation and revaluation incorporated actives** are regulated by the Romanian legislation having as referential base the International Accounting Standards (IAS), the International Financial Reports Standards (IFRS), applying guides and their interpretation, EU Directives concerning the matter, as well as The International Valuing Standards (IVS).

An **incorporated immobilized active** is a non-monetary identifying active, with no material support and maintained for using it in the production or assets and services process, in order to be hired by third parties or for managerial purposes. IAS 38 “Incorporated Actives” are not applied:

a) the incorporated actives that are covered by another International Accounting Standard, given their specific type; in this sense, we exemplify: the incorporated actives that are obtained by an enterprise, during the development of the usual activities, for sale. For this, it is applied IAS 2 “Stocks” and IAS 11 “Building Contracts”;

b) delayed tax actives (see IAS 12 “Profit Tax”);

c) leasing contracts regulated by IAS 17 “Leasing”;

d) actives resulted of the employees’ benefits (see IAS 19 “Employees’ Benefits”);

e) commercial fund resulted from the a combination of enterprises (see IAS 22 ”Combination of Enterprises ”);

financial actives, such as they are define in IAS 32 “Financial Instruments.

In this spirit of the regulations in effect, there are considered immobilized actives those which are destined to being used on a continuous base, for the development of the entity’s activity. They are generated by benefits and, at the same time, exist in the entity’s patrimony on a period longer than one year¹.

In the spirit of the Law no. 82/1991, it is adopted the following detailed dissertation of the balance sheet of the incorporated immobilizations:

- constitution expenses;
- development expenses;
- concessions, patent acts, licenses, brands, rights and similar actives;
- commercial fund;
- other incorporated immobilizations;
- advances and incorporated immobilizations in process.

In their activity, the enterprises often spend or make debts for: acquisitions, development, maintenance or extend of some incorporated resources, such as: projection and implementation of new processes and systems, licenses, intellectual properties, market knowledge and trade marks, scientific or technical knowledge, etc. In all these examples there may be observed the consistent efforts performed by the unity that still do not cover a tangible form \(^1\).

In order for an incorporated active to be recognized in financial situations, it is necessary that it fulfils simultaneously two requirements, respectively:

a. the fulfilment of the two conditions of the definition of an incorporated active:

   - **identificability** (name and short description) and **separability** (the possibility of the owner enterprise to use, hire, change it for a separate, individual, independent element or to allot the future benefits generated by the respective incorporated active);

   - **control** over the corporate active, expressed by the enterprise capacity to obtain future economical benefits from the use of the active and to restrict the access of the third parties to those benefits; future economical benefits refers to the income that come either from the sale of products and services to which that incorporated active contribute to or from the reduction of some cost elements.

b. the reunion of the two criteria of the recognition of the incorporated active:

   - the real possibility that the future economical benefits, generated by the incorporated active, to be obtained by the owner enterprise;

   - the cost (initial value) of the incorporated active may be estimated in a credible way (correct).

If one of the mentioned criteria is not fulfilled, then the expenses with its acquirement and production from proper resources, is recognized as an expense, the moment it is performed. The exception is made by the commercial fund, that is recognized as an incorporated immobilization at the enterprises combination by acquisition.

Other criteria of recognizing an incorporated active is the determination of the value, of its costs. Including in the case of the incorporated immobilizations it is precise the accurate valuation of the cost.

The incorporated actives valuation also knows a series of rules, in different moments when it imposes itself.

**The entrance of the incorporated immobilizations can be performed by:** acquisition, production, contribution to the registered capital by means of change, donations or subsidies. For each of these cases of entrance, the valuing problem is formulated differently.

---

a) Thus, the incorporated actives acquired separately, are valuated at the acquirement cost, which represent the sum of all the efforts of buying, transport and setting to work (buying price, plus irrecoverable taxes, plus any direct expense for setting them to work).

Concerning the acquisition of incorporated immobilizations, there appear a series of particular elements. Thus, there exist incorporated actives that are acquired separately and incorporated actives that are acquired as part of enterprises combination. In the case of an incorporated active acquired in an enterprises combination, the cost of that active is based on the just value on the date of the acquirement. For the separate recognition of the cost of the incorporated active acquired in an enterprises combination, it is precise the professional rationalism, in order for the valuation to be performed with enough fidelity. The prices estimated on a market may be the most credible valuation of the just value. The market price is usually the price of the current sale. If no other prices are available, it may be used the most recent similar transactions price, if no significant changes appeared in the economic field. In case the just value cannot be faithfully estimated, the respective active is not admitted as an incorporated active independently, but it is included in a commercial fund.

To add more with regard to the incorporated immobilizations acquisitions, there may appear situations in which the payment of the acquired active is postponed beyond the crediting term. In these cases the difference between the value of the assets and effective payments represent an expense with the respective period interest. Moreover, there is also the possibility that the afferent interest of a long term credit, given for actives acquisition, to be capitalized, that is to enter the active cost competition.

b) Another method of obtaining incorporated immobilizations is concluding leasing contracts (specifications in IAS 17 “Leasing”). In this situation, the entering value of the active in the beneficiary accounting (occupier) depend on the type of contract or the form of leasing. Thus, in case the occupier in not a resident, in the operational leasing contract, the entrance of the active if performed on the day of the property transfer, at the residual value and the afferent customs. In the financial leasing contracts, the recognition of the active begins the moment of its utilization (that is, the moment it purchases economic benefits), the valuation being performed at the minimal between the just value and the actualized value of the minimal leasing prices.

c) Another way of entering of the incorporated immobilizations is represented by the contribution in kind to the subscribed social capital. Under this form, the valuation is performed at the just value of the actions received in exchange of the active, which equals the just value of the active.

d) the incorporated actives may be acquired by means of a governmental subvention. This method may appear when there is a transfer or governmental allowance of incorporated actives, such as: the rights of landing on the airport, licenses for operating the radio or TV stations, importation license, etc. The registration value is usually the just value. In case it is not possible, the society initially recognizes the active at its nominal value to which it is added any expense that is direct related to the preparation of the active for use.

e) The incorporated actives may enter by means of exchange with other actives. The cost of such an element is measured at the just value of the giveb active, adjusted with the sums of money paid / collected.

f) The incorporated immobilizations may be achieved as a result of its own production. It is difficult to state if an incorporated active, generated internally, is
qualified for recognition. IAS 38 specifies that: ”the commercial fund, the brands, the marks, the publications titles, the client lists and other similar actives, produced by self effort of the respective enterprise, are not recognized as incorporated actives”. This point of view of excluding the above mentioned elements, is due to the fact that they do not fulfill one or more of the recognition criteria of the immobilized actives, such as: identificability, control and future benefit generation, being also difficult to determine the truthful active cost. In many cases, the cost of internal generation may not be separated from the maintenance cost or of the increasing commercial fund cost.

In order to decide if an incorporated active, internal generated, combine all the criteria for recognition, an enterprise split the its generation process in two stages\(^1\):

a) research stage;

b) development stage.

If the enterprise cannot distinguish between the two stages for creating an incorporated active, the enterprise treats the expense with that project as if it were realized only in the research stage.

IAS 38 paragraph 42, settles that, in the case of an incorporated active, **the research stage generates only expenses of the period**. During this stage, no incorporated active is recognized, as it cannot be demonstrated that that active will generate future benefits.

**The development stage of the project** is more advanced than the research stage and, as a result, an enterprise may, in certain cases, **identify an incorporated active** and demonstrate that the active will generate presumable future economic benefits. So, the development stage imposes the recognition of an incorporated active, if and only if an enterprise is able to demonstrate the following **conditions that must be fulfilled cumulatively** (IAS 38 paragraph 45):

a) the technical do ability for finalizing the active will determine its availability for sale;

b) the intention of finalizing an incorporated active in order to be use or sold;

c) the ability of using or selling the incorporated active;

d) the way the incorporated active will generate potential future economic benefits (such as: the existence of a market or the estimation of its internal utilization);

f) the enterprise ability to faithfully valuate the expense attributed to the incorporated active during its development.

The cost of an incorporated active internally generated, estimated since the day of the active’s recognition, and includes (IAS 38 paragraph 54-55):

- material and service expenses spent at the respective active generation.

Remember that: the loss resulted from the exploitation of the active aroused before the active realized the planned performances and the inefficiencies identifies in the first stages are excluded;

- the wages and other expenses connected to the direct hired personnel (such as: training personal expenses with active exploration purposes);

- any expense attributed directly to the active generation, such as the taxes for registering a legal right or the amortization of the patents and licenses that are used in order to generate the active;

---

management expenses that are needed in order to generate the active and that may be allotted on a consistent and reasonable base (for example: an allowance for the corporate immobilizations devaluing, insurance and rent and bonus). There are excluded the management expenses for the commercialization or general management, in case they cannot be attributed directly to IAS 23 ”Obligie Costs”, settles the criteria for the interest recognition as a component of the incorporated active internal generated cost.

If the initial value of any incorporated active rise no estimation problems given the cost (of acquisition or production) or the just value, settled by a valuing expert (in the case of the social capital contribution or in the case of subsidies, financing, donations) – except the cases when there was registered an adjustment for devaluing, the problems appear in the case of the subsequent revaluations. The Romanian Legislation (Accounting Law no. 82/1991, re-published in the Official Monitor no. 773/24.08.2004) foresees that „the revaluation of the incorporated actives is performed, except the cases foreseen by the legal regulations, at their just value”.

The first problem that is foreseen is that for the incorporated actives there is an exception foreseen in the legal regulations (OMFP 1752/2005). In this order it is stipulated that the subsequent valuations are to be performed starting with the historic cost, less the amortization and the adjustments for the devaluation, cumulated. This method is inspired by the accounting treatment in base of what was settled by IAS 38.

The second problem is related to the fact that the application of the alternative accounting treatment at the moment of revaluing the incorporated actives starting with their just value (foreseen by the same IAS 38), is not only forbidden by the regulations in our country, but also perceived as a little further in time until the adoption, mainly because the just value must be reported at an active market.

Thus, IAS 38 foreseen the alternative treatment (permission) for valuing the incorporated actives the revaluated sum, (just value), less any subsequent amortization cumulated and any loss resulted from the devaluing subsequently cumulated. Anyway, this treatment is allowed if and only if the just value can be determined by means of reports at an active market for the incorporated active. Furthermore, once the enterprise chooses this treatment, it is required that the revaluations were performed pretty regularly, so that the accounting value at a given moment were not significantly different from the one to be determined using the just value at the time of the balance sheet, and afterwards the differences from revaluing would be recognized in the profit and loss account or directly in its own capital.

For more precision, we define the just value as the sum for which the active may be exchanged, willingly, between the parties that are aware of what is happening and during a transaction in which the price is objectively determined.

The greatest impediment in the path of applying the alternative treatment for valuation is the inexistence of an active market, defined as being that market where there are the following conditions:

- the elements commercialized within the market are homogenous;
- there is always interested purchasers and sellers (there exists a sufficient transactions volume);
- the price is available to the public.

Recognition of certain subsequent expenses
The subsequent expenses with an incorporated active, after buying and finalizing it, must be recognized the moment they are performed, except the following cases:

a) when the expense will permit the active to generate future benefits above the initial standard foreseen (in this situation, the subsequent expense is part of the cost of the incorporated active that respect the recognition criteria);

b) this expense can be faithfully estimated and attributed to the incorporated active.

In general, it is difficult to estimate the level in which the subsequent expenses increase the afferent benefits subsequent to an incorporated active, a subsequent expense, necessary for the client list actualization, may lead to the increase of the future benefits level of all the enterprise activity. In many countries practice, there is the option of recognizing as expenses of the period, of the subsequent input related to the brands, emblems, publication titles, client list, etc.

A performed expense that is considered a period expense cannot be considered an incorporated active cost component. Examples related to it: constitution expenses, expenses with the publicist activities, with professional interests activity; expenses for the partial or total reorganization of an enterprise activity, etc. According to the precautions of the regulations approved by OMFP no. 1752/2005, the constitution expenses represent incorporated imobiliarizations inscribed in the balance sheet, the national legislation allows it. The constitution expenses may consist in a series of establishment inputs, such as: secretariat and juridical expenses established for a legal entity; expenses of opening new facilities or business; expenses with the new products and processes launching.

Schedule of assets and liability valuation

In the balance sheet, the incorporated actives are prominent by two modalities:
- basic accounting treatment
- alternative accounting treatment allowed.

The basic accounting treatment\(^1\) implies the recognition of the schedule of assets and liabilities of the incorporated actives cost, less the cumulated amortization and the value devaluation.

Alternative accounting treatment, implies that, after the initial recognition, an incorporated active is accounted at the revaluated value, in other words, the just value at the revaluation date, less the cumulated amortization and any loss resulted out of the accumulated devaluation, subsequent to the revaluation. The just value must be determined by reporting it to an active market. The revaluation must be performed regularly in order that an accounting net value would not substantially differ from the one that could be determined by means of the just value at the balance sheet date.

The alternative treatment assumes:
- revaluation of the incorporated actives that has not been prior recognized as actives;
- the initial recognition of the incorporated actives to other value than their cost.

In conclusion, nowadays, the economic agents are not stimulated to invest in the incorporated immobilized actives development, as they cannot be presented in the

---

\(^1\) Victoria Bărbăcioru, Sorinel Domnişoru, Radu Bălună – Contabilitate financiară, Universitaria Printing House, Craiova, 2005.
financial report at the just value, updated, credible, because of the lack of existence of a legal base, owing to the lack of a specific active market. We consider that this factor has a “vicious circle” effect (except the investments, transactions) and, consequently, the accentuated inhibition of the economic agent’s interest for the incorporated immobilizations investments and, by this, the reduction of the Romanian firm competitiveness.

The solution for this problem could also come from the legislative: fiscal stimulants for material investments, making the revaluation frame flexible by means of adopting the alternative treatment (for certain cases and specific situation).

REFERENCES

**POSSIBILITIES OF IMPROVING THE INFORMATIONAL SUBSYSTEM OF BODY OF EXPERT AND LICENSED ACCOUNTANTS OF ROMANIA CONCERNING THE PROBATIONERS’ MANAGEMENT**

Ph.D. Student Ec. Lascu Ion Florin  
Accounting director  
C.E.C.C.A.R. Dolj Subsidiary  
Lect. PhD Nețoiu Lavinia Maria  
University of Craiova  
Faculty of Economics and Business  
Administration, Craiova, Romania

**Abstract:** In order to improve the informational subsystem of management of the probationer’s existent at the level of the Body of Expert and Licensed Accountants of Romania, it was preceded to the analysis of the existent informational flow, and consequently there were observed inefficient circuits regarding the modality of obtain the quality of membership.

**Key words:** accounting profession, analysis, informational flow

A very important component of the informational system at the level of the Body of Expert And Licensed Accountants Of Romania (C.E.C.C.A.R..) is represented by the probationers’ management, which occasions a number of significant activities destined to assure the attainment of the theoretical knowledge and of the practice skills necessary for a good expert in the accounting professional field. The realization of such a desideratum under conditions of quality and responsibility needs, among others, the existence of an informational system organized in such a manner to permit the strict pursuit and the operational and detailed knowing of the numberless activities that are deployed in this purpose, a subsystem that, naturally, may periodically be perfected in order to respond better to the accounting managerial exigencies of the C.E.C.C.A.R. level, for obtaining the expected results.

With regard to the properly management of the probationers, we mention that, during the three years probation, it is concerned with the totality of activities that are deployed at central level, as well as at the subsidiaries level, starting with the initiation of the exam for the access to profession of the future C.E.C.C.A.R. members (who, until obtaining the professional qualities, have the status of probationers) until the skill exam, as well as subsequently for the organization and keeping the record of the members, the follow of the professional activities deployed by the accounting experts and the authorized accountings, the organization of the continuous professional formation and perfecting, the assurance of the work qualities performed by audit procedures, etc.

The above mentioned also represent the most important attributes of the professional organization named Body of Expert And Licensed Accountants Of Romania and the project of improving the present informational system is interested in following these activities. Its implementation is realized modulated, on operations, being concerned with the integration of the new projected components into the existing
informational system, which creates new premises for obtaining the information with a higher level of transparency and comparability, element also found in the IFRS,2006 vision.

On the other hand, we consider that, by the expected improvements, a certain contribution to the increase of the managerial activities performance at the level of the Body subsidiaries is assured, activities that will directly benefit from useful extra-information concerning it, especially from those which are situated on the highest places at this kind of indicators.

The activities occasioned by within C.E.C.C.A.R. are developed on professional areas, especially on the expert accounting area and that of the authorized accounting, on commissions and departments that are subordinated to the permanent Biro of the Supreme Council of the Body.

The sections have, in a first stage, attributions that regard the organization of the entrance exams for the access to the profession of accounting expert and authorized accounting that passed the entrance skill exam and got the professional competence.

The access to the profession, either to the accounting expert or to the authorized accounting, is performed on base of the entrance exam, after which it is completed a three year professional training probation and, in the end, the sustaining of the skill exam.

The expected informational applications are elaborated by the use of an adequate system of managing the data information called Visual FoxPro, which, in our opinion, is the proper one due to the fact that it offers the necessary instruments for the exploration and processing of data in conditions of efficiency and promptness.

In order to project the table for the record of the candidates’ signing up to the exam we take in consideration the data types for each informational request previously mentioned and, at the same time, there are added fields of data needed for the informational structuring, including for future purposes or for relating this table to other similar ones. Thus, the information will be stocked from all the exam sessions sustained along the years and, consequently, besides the fact that it is obtained a structural optimization of data (it will not be created a table folder for each and every session), it will be obtained a continuous historic record for all the candidates, of all the exam sessions.
Beginning with the data structure mentioned above, it has been performed the projection of the scale model of data introduction that represents an interface by means of which the user has the possibility of introducing the candidates’ appointing data at the entering exam the same way it is observed in the scale model presented above.

This interface facilities the operation of operating and, concerning the properly data introduction, that is that it is correlated with the correct form of the personal numerical code that, by means of the last control number, the PNC, by an algorithm use at the population record. At its turn, the day of birth is automatically generated by the use of the PNC components. Moreover, there are available fields with predefined values (unrolling lists), objects like ticking cassettes and option buttons are used and the scanning of the candidates list is very easy realized as it is alphabetically ordered and, in addition to that, it is offered the facility of finding the information related to a certain candidate very quickly, due to the fact that the scanning of the list is sensitive to the pressed keys.

The already introduced information is used subsequently for the generation of the contest identification cards, of the lists of the distribution on rooms, the laying down of the exam catalogues and, in the end, taking over, by selection, of the candidates declared admitted.

As a result of the use of this application, it can be listed the situation “Marks Centralizer” either by printing or by exposure on the screen.

After the access exam, the candidates declared admitted get the statute of probationers (accounting expert and authorized accounting with medium or superior studies), being necessary their taking over in order to obtain their record and to supervise the performance of the practice probation, the collaboration with the coordinator tutor, the professional formation during this period and the laying down of the activity reports.

![Figure 2. The Interface of the Pursuit of the Professional Activity of the Probationers](image)
The informatics application to which we have referred permits, in our opinion, the optimization of the pursuit of the activities corresponding to each probationer, concurrent with the display of the associated general information, fact that also emerges from the model presented above.

One should remember that the analyzed interface of the user, though complex in its structure, is easy to use due to the employment of the rendering-back information fields that are well structured. This interface render-back exactly the situation called the Probationers’ Registration Register, document of high importance in the record of the probationers, that offer the user important data concerning each probationer. Only by means of the registration number given to each probationer, he/she can be located in the candidates’ record, allowing thus the procurement of information concerning the number and date of the signing up for probation, the number and date of the admission certificate for probation, the date of the probation beginning and, if in case of an interruption during all this time, as well as if the criteria of performing all these three years probation has been fulfilled. In the analyzed register, one may also find information about the name of the probation tutor, the number and date of the probation certificate, as well as the professional quality for which he/she is applying.

In its turn, the calendar of the professional training and formation activities is mirrored on semesters, specifying the number of training days and the file-document names of the probation reports lay down. The report documents could be opened from this interface frame and visualized by means of the text processor called Microsoft Word.

According to the above mentioned, we consider that the employment of the analyzed application modules concerning the management of the profession for probationers, especially the access to the profession, the pursuit of their professional training along the entire training period and, in the end, the processing of this information in order to undergo the skill exam, may contribute to the improvement of the deployed activities with regard to the access to the profession and to the formation of the practice skills needed for a good specialist in the accounting profession field.

REFERENCES

3. Governmental Decision no. 562/ 03 Julie 2000, published in the Official Monitor of Romania, Section I, no. 332 from 17.07.2000
FOREIGN DIRECT INVESTMENT IN ROMANIA - RECENT TRENDS

Lect. PhD Laura Giurcă Vasilescu
University of Craiova
Faculty of Economy and Business Administration, Romania

Abstract: Though some substantial gains in recent years, direct investment flows have remained relatively low compared to the potential of a market with great natural resources, skilled labor and flexible legislative environment. Romania has lowered personal income and corporate tax rates and strengthened tax administration in order to attract the investor's interest but the legislative unpredictability continues and determines the investor's lack of confidence.

Key words: foreign direct investment, taxes, integration, investors

Introduction

Romania joined the EU on 1st of January 2007, a historical date, being an enormous chance for future generations and for the economy development. This accession, together with Bulgaria's, means that EU now has 27 members and half a billion people, and stretches as far east as the Black Sea.


Though, the road to full integration into the European structures has not yet ended, more efforts being required in order to fulfill the European standards and norms.

Legal framework with impact on direct investment

In order to improve the business climate and to offer incentives for large investment projects, the Romanian legislation regulating the foreign direct investment is still subject to frequent revisions.

The foreign investors in Romania are stimulated and attracted by free access to domestic markets, the possibility of taking part in privatizations, no imposed limits on foreign participation in commercial enterprises. Also, foreign investors despite usually prefer Joint Ventures, are also free to establish foreign-owned enterprises in Romania, and more, to repatriate 100% of their profit after taxes.

Foreign investors may use as main ways for engaging in business activities in Romania:

• setting up a new commercial company, a subsidiary or a branch (wholly
owned or in a partnership with a Romanian part;
  - acquiring shares, or by increasing the capital of an existing company;
  - acquiring concessions or leases.

The Parliament has issued in 2001 the Law No. 332 regarding the promotion of
direct investment with significant impact on the economy. Investment that qualify has a
value higher than USD 1 million (or equivalent), is made in the forms and ways
provided by the law and contributes to the development and modernization of the
Romanian economic infrastructure, determining a positive spin-off effect in economy
and creating new jobs. Direct investment with significant impact on economy regulated
by Law No. 332 are allowed in all economic sectors with the exception of financial,
banking, insurance and re-insurance, as well as the sectors regulated by special laws.

A significant step forward taken for improving the relationship with the
investors is the establishment of a governmental agency in charge with attracting and
maintaining the contact with foreign investors in Romania. This is the Romanian
Agency for Foreign Investment (ARIS), which has as main objectives to increase
significantly the investment volume in Romania, to actively promote investment
opportunities and to offer professional services for foreign investors, all along the
investment cycle.

The Fiscal Code, enforced starting 2004, maintained and reinforced the
investment incentives introduced by this law, such as:
  - exemption from payment of custom duties for the machinery, installations,
    equipment, measuring and control devices, automation equipment and software
    products purchased from abroad (outside the EU), necessary for achieving the
    investment;
  - carrying forward the fiscal loss during the following 5 years from the taxable
    profit;
  - other incentives that may be granted by the local authorities (such as
    exoneration or reduction of local taxes, etc).

Besides the law regarding the direct investments with significant impact on the
economy, the other most significant legal incentive offered to direct investment in
Romania is the new single tax reform, introduced by the Government at the beginning
of 2005. Thus, following a successful model already introduced by other countries in
the region, the corporate and individual incomes are levied with a single tax rate of
16%. This fiscal reform was coupled with a softening of the taxation principles on
which all fiscal procedures will be based: transparency, simplicity, partnership with
taxpayers, and prudence.

This modification brought Romania among the most competitive investment
destinations in the region. Presently, the Romanian single tax rate is competitive
compared to the other countries levels of taxation (figure 1).

According to the experience of other countries, the accession to the European
Union will increase Romania's competitive advantage in attracting higher FDI,
especially in export oriented, labor intensive and high value added industries.

In spite of the advantages of the new single tax system, its downside appeared
already after six months. In order to counter the lower taxes collected on corporate and
individual income, the Government was forced to raise quotas for other taxes, such as:
tax on dividends (from 5 to 10% for individuals, and subsequently to 16%), tax on
capital gains (from 1 to 10%, and then 16%). The new fiscal strategy of the
Government puts emphasis on indirect taxes, as compared to direct taxes (which are
Finances - Accounting

aligned at 16%, the same quota applicable for tax or income). Plus, Romania has revised its taxation system in order to bring it closer to the EU system and line it with the recommendations of the World Bank.

![Figure 1. Taxation level applicable in the South and Easter European Countries (2006)](image)

Some other changes in the Fiscal Code may take place in accordance with the specific timetables agreed with the EU. Prospective investors should investigate the current status of the fiscal incentives and also consider some future changes that may occur as a result of the EU accession when drafting investment plans.

**Recent evolutions of FDI in Romania**

Once part of the European Union, Romania has created a legal framework consistent with a market economy and investment promotion, and still continues to harmonize its legislation to the EU, by adding the so called "acquis communautaire".

Romania has a leading role in attracting FDI in Southeast European region. In 2005, out of the total EUR 10.4 billion in FDI attracted by countries in the region, Romania received half of these inflows. The positive trend continued in 2006, when, during the first four months of the year, FDI increased by 30% compared to the similar period of the previous year (figure 2).

![Figure 2. Evolution of FDI in Center and Eastern European Countries (Eur bn)](image)

In Romania, the record level of investment inflows in the last years, compared to the other South-East European countries, was partly a result of the successful
privatizations. Inflows were also important in green-field and expansion projects, particularly in the automotive industry and in services. The accelerated growth pace in the last three years has placed Romania among the leading FDI destinations in Center and Eastern European region.

In 2006, the investor's interest for Romania increased, and in 2006, Romania registered - accordingly with the Romanian Agency for Foreign Investments (ARIS) - 6.2 billion Euro in FDI in comparison with the 5.2 billion Euro in 2005. The improvements in the business environment, the flat tax of 16% and a positive attitude from foreign partners helped improving FDI inflows dramatically. A direct impact on the FDI level has also the process accession to the EU that changes the investor’s attitude towards the country that now has the status of a member state.

![Figure 3. The evolution of FDI in Romania (2000-2006)](image)

Source: ARIS INVEST - The Romanian Agency for Foreign Investment

Though some substantial gains in recent years, direct investment flows have remained relatively low compared to the potential of a market with 21.2 million inhabitants, great natural resources, skilled labor and flexible (but still under changes) legislative environment. Still, Romania has lowered personal income and corporate tax rates and strengthened tax administration in order to attract the investor’s interest. Though, the legislative unpredictability continues and determines the investor’s lack of confidence.

Having in view that FDI in a country is facilitated, inter alia, by the development of the infrastructure, the efficiency of administration, and by an adequate legislative system, the international financial institutions are actively supporting Romania in its efforts to meet these criteria, and surpass the difficulties of the transition.

**Main actors for FDI in Romania**

The European Bank for Reconstruction and Development (EBRD) is the largest individual investor in Romania, country which is the third-largest recipient of EBRD funding. As of December 2005, EBRD signed a number of 106 investment projects in Romania, totaling EUR 3.2 billion. A total of 67% of investments are concluded in the private sector, with its portfolio rapidly expanding in areas such as private sector investment, financial sector development, critical infrastructure such as power, transport and municipal infrastructure and large-scale privatization with strategic investors. Whenever possible, EBRD is encouraging the private financing of
Finances - Accounting

infrastructure through concessions and build, operate, transfer (BOT) schemes. The Bank is also actively supporting the development of the non-banking financial sector by promoting investment in leasing and insurance companies and in equity, mortgage and pension funds.

The World Bank is Romania's largest institutional creditor and its assistance covers all areas of the economy. The World Bank has financed over 40 operations in the country for a total original commitment of almost USD 5 billion.

In addition, rural development and poverty alleviation programs aim at improving rural infrastructure, including irrigation systems, social services and the rural finance system, through a participatory process. Bank's assistance focus is progressively changing from financing the "hard" sectors, such as industry and infrastructure, towards the "softer" sectors, such as human development and social protection, health, education and environment. In the coming future the World Bank is set to increase its involvement in developing rural infrastructure, providing finance to rural areas, social sector development, agriculture and forestry.

In support of the country integration into the EU community, the EU Commission actively assisted Romania technically and financially. It is estimated that the non-reimbursable funds that were made available for Romania in the last couple of years were up to EUR 650 million annually. The funds were allocated for projects supporting convergence with the EU and focused on updating the legislation, aid to institutionalized children, supporting solutions to minorities' issues, etc. The Government main tasks in the integration process were: to create the conditions for a functional market economy, to increase the financial discipline, to reduce inflation, and to stop injecting money into the big state-owned companies, and privatize them, in order to reduce losses.

As part of the EU, Romania will benefit of structural, post accession funds, as part of 7-year allocation plans, in amount of EUR 16.4 billion. The main recipients of these funds will be local and state administration, mainly for infrastructure projects.

The amount of FDI in a country is dependent also upon the privatization strategy adopted by the government. Until the end of 2005, the Romanian government has privatized most of the sectors of the economy. The largest privatization deals concluded are: Banca Comerciala Româna (sold to Erste Bank at the end of 2005), Petrom (the national oil company, sold to OMV in 2004), Agricultural Bank (sold to Raiffeisen Bank in 2001), Sidex - the giant steel mill (sold to LNM Ispat in 2000), Romanian Development Bank (sold to Société Générale in 1998), and Dacia car manufacturer (sold to French Renault in 1997).

Romania is actively integrated into the European economical environment, as reflected by the distribution of FDI per countries of origin. The top ten countries' classification according to foreign capital registered as at 30th of April 2006 is presented in table 1.

With over 20% of total foreign investment in Romania, The Netherlands occupies the first place in the top of foreign investors. More than 2,600 companies activating on the Romanian market have Dutch capital, high investment being made by Unilever, ING (ING Bank, ING Nederlanden, and ING Securities), ABN AMRO Bank, Frans Maas, Remco, Philips, Damen Shipyards Group, KPMG, Heineken, etc.

Since 1990, Austria has constantly been among Romania's most important trade partners. Currently, Austria ranks second within the classification of foreign investors in Romania, the subscribed equity capital amounting to EUR 1.9 billion, with over
4,100 companies having Austrian capital, and over one hundred thousand employees in joint ventures. The leading Austrian investors in Romania are, apart from the new entrant Erste Bank: OMV, Raiffeisen, Schweighofer (wood processing), Strabag (construction), Brau Union, Bramac Baumit and Wienerberger (building materials), Porsche Romania, Volksbank.

Table no. 1. Distribution of FDI per countries of origin - for companies with foreign ownership

<table>
<thead>
<tr>
<th>Country</th>
<th>Registered capital brought in foreign currency (Euro mn)</th>
<th>% in total capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Netherlands</td>
<td>3,112</td>
<td>20.82</td>
</tr>
<tr>
<td>Austria</td>
<td>1,983</td>
<td>13.37</td>
</tr>
<tr>
<td>France</td>
<td>1,593</td>
<td>10.59</td>
</tr>
<tr>
<td>Germany</td>
<td>1,516</td>
<td>10.14</td>
</tr>
<tr>
<td>Italy</td>
<td>845</td>
<td>5.66</td>
</tr>
<tr>
<td>USA</td>
<td>705</td>
<td>4.71</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>681</td>
<td>4.55</td>
</tr>
<tr>
<td>Dutch Antilles</td>
<td>567</td>
<td>3.79</td>
</tr>
<tr>
<td>Greece</td>
<td>543</td>
<td>3.63</td>
</tr>
<tr>
<td>Cyprus</td>
<td>538</td>
<td>3.60</td>
</tr>
</tbody>
</table>

Source: Statistical bulletin of the National Trade Registry Office, Nov. 2006

Over 4,600 French capital companies are registered with the Romanian Trade Registry, France occupying currently the third position in the top of foreign investors in Romania. The major French investors are France Telecom, Société Générale, Lafarge Romcim, Renault-Dacia, Vivendi Environment, Carrefour and Alcatel. French investors were mainly interested in companies being privatized, greenfield investments being less preferred. One exception is Alcatel that invested in Romania starting with 1991 and later France Telecom, which invested in Orange Romania.

Germany is one of the most important commercial partners of Romania, occupying in November 2006 the fourth position after The Netherlands, Austria, and France, with a total value of registered capital brought in foreign currency of EUR 1.5 billion and over 14,000 companies registered and operating in Romania. The majority of German investments are in small businesses. More than 90% of these investments amount to less than EUR 40,000, still the Germany's contribution to the strength of the Romanian economy is substantial. The main investment sectors for the German companies are: automotive industry, metallurgy, wholesale trade, plastics industry, textile industry, retail trade and main players are: Metro, Praktiker, Selgros, Billa, Tengelmann (Plus), Steilmann, Linde, Heidelberger Zement (CarpatCement), Siemens, Dr. Oetker, etc.

Italy is presently one of the most important commercial partners of Romania ranking fifth in the top of foreign investors in Romania, with more than 21,000 Italian capital companies registered with the Romanian Trade Registry. Mainly Italian investment is focused on the so-called "labor intensive" projects, developing the løhn system with raw materials brought from Italy. The traditional sectors in which Italians have been investing so far are textiles, construction, trade, services and agriculture. The
main Italian investors are Italstrade Spa, Unicredito Italiano Spa, Radicifibres, Butangas, Pirelli Telecom, Tenaris Dalmine, Radici, Natuzzi, and Zoppas.

American investor became key players within a series of strategic Romanian industries such as telecommunication, infrastructure, construction of large machines, finance, and agriculture. There are more than 4,800 companies with US participation registered at the end of 2006. In total, the American investment in Romania exceeds EUR 700 million, the main investors being General Electric, Citigroup, AIG, IBM, Procter & Gamble, Coca Cola, Philip Morris, Solectron, Timken, McDonald's System of Romania Inc., Trinity Industries Inc., Kraft Foods International Inc., American Life Insurance Company.

After seventeen years of transition, however, the results of the gradual reform and restructuring are beginning to show results. The services and the distribution, overlooked in the communist regime, have grown steadily, outshining the industry. The distribution of foreign investments stock per economic sectors reflects the development and the attractiveness of the industries for foreign investors, dependent also on the privatization strategy of the government. For the period 1991-April 2006 The foreign direct investments were registered in the following main fields: industry wholesale, services, retail (figure 4).

![Diagram showing the distribution of share capital stock subscribed in foreign companies (2006)](source: National Trade Registry Office)

**Figure 4. Distributions per industries of share capital stock subscribed in foreign companies (2006)**

The foreign investment funds are among the most active players acting on the Romanian market. The investment fund is defined as a venture capital association set-up as a closed investment fund or investment company, which manages the funds of private or corporate persons. Their presence on the market was simultaneous with the consolidation of the private sector. The targeted companies were mainly those with an important growth potential, a steady market and a competitive management.

Regional funds are becoming more active compared with country funds, particularly with respect to large deals. 2006 was considered by players the year of exists, considering the number of important exits concluded successfully by the major funds. Competition, not very intense until recently, is becoming stronger among the funds. Offering, besides financing option, know how, the funds are now of interest for investors, especially in lack of any serious competition coming from the banks. The banks, are not a threat for venture capital funds in the real economy, as they are not yet prepared to provide long-term development financing. This leads to relatively low entry.
valuations and may ensure significant returns. As the capital market is still not enough
developed, the most probable exit route to be used by the funds active in Romania is via
sales towards strategic investors.

Conclusions

For 2007, the estimations are also optimistic for FDI, at approximately 10
billion Euros, mainly due to the EU accession. The FDI increase will be determined by
major players that were not until now present on the Romanian market, but decided to
enter the ten countries that joined in 2004, immediately after the accession. The same
strategy will most probably be applied in Romania.

Among the factors that are deemed to support higher FDI in the future the
following are the most important:

- Romania is a politically and socially stable country, part of the European
  Union since 1st of January 2007;
- Romania has gained full membership of NATO;
- Romania represents the second largest market in the CEE region;
- the crucial geographical positioning of the country, a gateway between East
  and West of Europe;
- the commitment of investment funds present in the country to develop their
  business and the association of the government with international financial institutions,
  such as IMF, EBRD, World Bank, and the EU Commission;
- the high qualification of labor force and its low costs, below the levels of
  other countries in the CEE region;
- existence of important natural resources and proximity to energy suppliers;
- as the market is growing, there are increasing business opportunities, while
  the entry barriers remain low.

Romania is ready to accommodate a higher inflow of FDI in sectors such as
agriculture, construction materials, automotive industry, constructions and real estate,
oil and gas, petrochemical, energy, metallurgy, telecommunications, transportation, air
transport, railways, shipping and shipbuilding, food industry, retail, tourism, IT,
financial sector, and distribution. Among these, the most appealing for foreign investors
are automotive, financial services, software, constructions and real estate, electronics,
telecom, pharmaceutical, and chemical industries.

References

1. Dăianu, D. Voinea, L. Foreign Capital Flows in Romania, International Center
2. Giurca Vasilescu, L. Cristea, M. Dănciulescu, D. Romanian Economic Progress Towards EU Accession,
   Journal of Administrative Sciences (JAS), Canakkale, 2006
3. Hunya, G. Recent FDI Trends, Policies and Challenges in South
                   East European Countries, WIIW Research Reports
                   273, 2000
4. European Central Bank. Financial FDI to the EU accession countries,
   Directorate General International and European
   Relations, 2004
**Abstract:** As Romania became member of the EU, its financial markets are operating more and more like those of a developed capitalist country and the firms have to take into consideration all the advantages and to face all the challenges regarding the new financing sources such as: the public capital market, the private equity funds.

**Key words:** capital market, private equity funds, integration

**Introduction**

The legal framework for the Romanian capital market was set up in 1994, establishing the National Securities Commission (CNVM) as the regulatory authority, followed by the launch of trading on the Bucharest Stock Exchange (BSE) in November 1995. One year later, the over-the-counter RASDAQ market started its operations.

Over the last three years, there were several changes in the capital market legislation, with the aim of bringing legal provisions in line with the EU directives. The main step in this regard was the issue in 2004 of a new Capital Market Law, containing in a single act, provisions for the capital market institutions, intermediaries and issuers of securities.

Due to the limited offer of trading instruments (currently only shares, municipal and corporate bonds and since recently - preemptive rights are traded), and the limited number of large and well performing companies on the market, the average daily turnover in the first six months of 2006 was around EUR 10 mil.\(^1\) This ranks the BSE among the smallest exchanges in the Central European region.

The BSE official listing is structured into three segments: domestic stock; bonds and other debt securities; foreign securities.

The domestic stock segment is organized into the following tiers, based on the "quality" of the traded stock:

- First Tier (with 21 shares listed on July 2006);
- Second (Base) Tier (with 44 shares listed);
- the premium Plus Tier, introduced in 2001 for the most transparent listings.

The Plus Tier includes shares traded on both First and Base tiers which meet additional transparency and corporate governance criteria required by the exchange. The admission of shares to the Plus Tier has no impact on their preservation in the Base or First tiers. Currently, only one stock is listed on this tier. Apart from the Base and First tiers, the BSE runs the so-called "unlisted market" which trades stocks which have been delisted from the main market and for which the exchange does not impose any

\(^{1}\) Bucharest Stock Exchange, http://www.bvb.ro/
requirements of information disclosure or daily variance in price. The unlisted market is open only two hours a day and has low trading volume.

Listing of municipal bonds started in 2001 and at the end of July 2006 there were 12 such securities listed on the exchange. Apart from the municipal bonds, the BSE also trades 6 corporate bonds (one on the Base Tier and five on the unlisted market), of which three were issued by banks, two by leasing companies and one by an industrial firm.

Public offerings are regulated by the Capital Market Law as well as by specific CNVM rules. Making an Initial Public Offering (IPO) allows firms to expand their business, as well as bringing indirect benefits through giving them a higher public profile, which can be a particular boost to a company's image if the shares perform well.

In order to carry out a selling public offer, an issuer must prepare and submit a prospectus providing detailed information on the company and the conditions of the offer to CNVM for approval. According to the Capital Market Law, CNVM has to make a decision on the approval of the public offer in 10 days, but this term may be prolonged in case of any additional information requirements. The validity period of a prospectus is 12 months from the date of CNVM's approval.

**Evolutions on Romanian capital market**

As Romania's economy continues to grow, EU accession approaches and the activity on the Bucharest Stock Exchange increases, more and more companies are coming to see the advantages of making the public offering. This has proved a very useful way for these firms to raise financing for new investments, with many advantages over other alternative sources of funding such as bank loans. However, listing on the stock market imposes certain prerequisites on the company, requiring greater transparency and continuous compliance with the regulatory environment. The company needs a history of long serving and competent management, as well as to be financially stable, showing earnings growth and future potential.

A publicly listed company allows becoming more visible and enabling the free trading by investors, who can buy and sell shares, and this brings further advantages besides the initial influx of capital. It can increase a company's ability to obtain more and possibly cheaper finance through issuing either additional shares or bonds.

Despite the advantages, listings are a relatively recent occurrence on the Romanian exchanges. Only a few companies went public this way over the last years. In 2005, there were five new listings of shares on the BSE, all on the Second Tier, of which two were stocks transferred from the RASDAQ market, and three were first time listings. As of July, there was only one new listing in 2006, Traselectrica.

The year 2005 also registered three municipal bond listings, the first listing on the BSE of corporate bonds issued by a non-financial company (Hexol Lubricants) and two listings of preemptive rights (Impact and Petrom). From January to June 2006 there were two more municipal bond listings (Bistrita and Navodari).

In 2003, the BSE and RASDAQ started negotiations for a merger with the intention of strengthening the Romanian capital market, by increasing the daily volume and attracting the interest of investors. The merger was agreed to in August 2005 and formally completed in November 2005. Several hundred of the RASDAQ listed shares are already being traded using the more advanced trading platform of the BSE. The historical performance of BSE measured by the progress of the official BET index
(including the top ten shares in terms of market capitalization and liquidity listed on the First Tier) ranked the exchange among the best performing markets in the region in 2005. It was 2004, however, that was the year of highest returns, when the BET index advanced by 111.5% (figure 1).

![Figure 1. Yearly BET index performance (2000-July 2006)](image)

Source: Bucharest Stock Exchange

The total capitalization of the Romanian capital markets (BSE and RASDAQ) as of July 2006 stood at EUR 19.6 billion. The stocks traded on the BSE accounted for 88% of this capitalization. Capitalization increased more than ten times over the last four years as a result of the escalation in the market value of the companies in the First Tier.

<table>
<thead>
<tr>
<th>Year</th>
<th>Liquidity (Euro mil.)</th>
<th>Capitalization (Euro mil.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>84</td>
<td>313</td>
</tr>
<tr>
<td>2000</td>
<td>93</td>
<td>451</td>
</tr>
<tr>
<td>2001</td>
<td>149</td>
<td>1,361</td>
</tr>
<tr>
<td>2002</td>
<td>222</td>
<td>2,646</td>
</tr>
<tr>
<td>2003</td>
<td>269</td>
<td>2,991</td>
</tr>
<tr>
<td>2004</td>
<td>598</td>
<td>8,819</td>
</tr>
<tr>
<td>2005</td>
<td>2,152</td>
<td>15,311</td>
</tr>
<tr>
<td>2006</td>
<td>2,603</td>
<td>17,171</td>
</tr>
</tbody>
</table>

Source: Bucharest Stock Exchange

A breakdown of market capitalization in 2006 shows that the energy sector accounted for more than half (53%) of the value, followed by the financial sector (35%), materials (5%), equipment (3%), pharmaceuticals (3%) and chemicals (1%) stocks. As far as turnover is concerned, the financial sector (comprising a few banks and five investment funds) accounted for 71% of trades, while trades of energy stocks accounted for only 13%, chemicals 7%, pharmaceuticals 5% and equipment 4%1.

The low daily liquidity of the market, even in the best traded stocks was in the past a strong deterrent for large institutional investors. The average daily turnover

1 Bucharest stock Exchange, www.bvb.ro
exceeded EUR 1 mil. for the first time in early 2003, and grew to EUR 2.4 mil. in 2004, EUR 8.7 mil. in 2005 and EUR 10.1 mil. in the first six months of 2006.

Liquidity on the bond market has been very low (EUR 35.3 mil. during 2005). This is due to the relatively small size of the issues (the largest issue of municipal bonds did not exceed EUR 6 mil.) and the investors' preference to keep such instruments until maturity (as a result of the yields on these bonds, significantly higher than the ones offered by the alternative long-term bank deposits). The primary offers of municipal bonds were mostly subscribed by banks and investment funds and therefore there is a concentration of the issues in the hands of a few bondholders, which has reduced liquidity further.

Local institutional investors account for the lion's share of investment on the Romanian stock exchanges. The main categories of buyers on the capital market are the mutual funds, the five financial investment companies (SIFs) and the banking and insurance sectors. Fueled by the sharply falling interest rates on bank deposits, the demand for alternative investment opportunities has been constantly increasing. In the last half of 2005, eight new mutual funds were launched, of which five are focused on capital market investment. The close establishment of the private pension funds will critically increase the supply of investment capital on the market and put additional pressure on the stock exchange. Another stream of investment capital comes from foreign investors, attracted by the country's growth prospects following the accession to the EU. In 2005, the share of purchases of nonresidents on the BSE was over 30%.

Private equity funds (PE)

Private equity (PE) financing in the form of an injection of capital, in exchange for a minority (or majority) stake in the business is available for a limited number of well performing companies, that are in the growth stage of their life cycle, have proven the capacity of their management team and have outstanding growth prospects. The investment cycle of PE funds lasts for a period of 3-4 years and always includes an exit provision generally, through stock exchange listing or private placement.

The main reasons quoted by the managers of PE funds to explain their prior reluctance to invest in Romanian targets were the unavailability of professionally skilled management teams and the limited alternatives on exit (which could only be made through a private transaction due to the underdeveloped capital market). The country's advances in preparation for the accession to the EU, the steady economic growth over the last five years accompanied by the rushing demand for growth capital in many sectors of the economy and the recent progress of the stock market, have caused the acceleration of activity of the PE funds. This is reflected in the increase in invested capital. Judging from the value of the deals, over the last three years there was growing activity in terms of both investments and exit. The European Private Equity and Venture Capital Association (EVCA) reported the PE investments in Romania at EUR 32.5 mil. in 2005 (figure 2), not including additional EUR 51 mil. in transfers among PE investors.

Taking into account the size of the country's GDP, PE investment level in Romania, which stood at 0.06% of GDP in 2005 was still below the CEE average of 0.1% and much below the general European average of 0.32%, according with the European Private Equity and Venture Capital Association (EVCA).
The most dynamic economic sectors in 2005 - retail and the related consumer finance, real estate and IT were among the preferred targets of the PE funds. In retail, two of the three top players in the white goods segment - Domo and Flanco obtained financing against minority participations in the business. Both companies have set up consumer finance firms, also with participation of private equity funds. The large supermarket/hypermarket retail chains (such as Metro, Carrefour, Cora, Mega Image) have available financing from their parent companies, but the smaller, privately owned players in need of funding such as Aritma and La Fourmi were also approached by the PE funds.

In the IT sector, Intercapital and Enterprise Investors took over a 32.5% stake in Siveco (a software producer), while other two top companies Romsys and Softwin are also in view of PE investors. Among the largest private equity deals in 2005, two were transfers among PE funds. In the largest deal, Enterprise Investors acquired 100% of the supermarket chain Aritma jointly held by the SEAF Trans Balkan Romania Fund and a private investor and expressed its intention to list the company on the capital market. In the other deal, Total Soft (a software company) was taken over by the Greek PE fund Global Finance.

The year 2005 was also remarkable by its wave of successful exits. Several PE funds which entered the market in the late nineties or in the early years of this decade, reached the end of their investment cycle and successfully sold their holdings to strategic investors or in a few cases to other PE funds. In 2005, three exits alone (AIG-CET Capital Investment and Enterprise Investors sold 23% stake in Orange, AIG New Europe Fund sold 25% in Astral Telecom and GED Capital Development and Global Finance sold 51% stake in Sicomed) gathered over USD 720 mil.

The returns earned by PE investors in Romania were significantly higher than the average such returns in the EU. For instance, Oressa Ventures, mentions 35% pa return from its recently sold investment in Credisson, Enterprise Investors earned four times its entry price in Orange five years ago, GED Capital Development reported 20-25% return on a group of eight investments in Romania, while SEAF Trans Balkan Romania Fund sold Aritma for more than 2.5 times the acquisition price paid in 2002.

To raise financing with a PE fund, a company has first to fulfill the eligibility criteria related to the size of investment, quality of management, profitability and growth prospects, prepare a detailed and argumented business plan for its activity and
try to contact as many as possible fund management companies targeting its economic sector, a search that can be made directly or intermediated by a financial advisory firm.

**Conclusion**

As Romania became member of the European Union, its financial markets are operating more and more like those of a developed capitalist country and the firms have to take into consideration all the advantages and to face all the challenges regarding the new financing sources.

Listing on the Bucharest Stock Exchange and other markets has proved a very useful way for the firms to raise financing for new investments, with many advantages over alternative sources of funding such as bank loans. A publicly listed company allows becoming more visible and enabling the free trading by investors, who can buy and sell shares, and this brings further advantages besides the initial influx of capital. It can increase a company's ability to obtain more and possibly cheaper finance through issuing either additional shares or bonds (loans).

Private equity financing in the form of an injection of capital, in exchange for a minority (or majority) stake in the business is available for a limited number of high performing companies. In order to raise financing with a private equity fund, a company has first to fulfill the eligibility criteria related to the size of investment, quality of management, profitability and growth prospects, prepare a detailed and argumented business plan for its activity and try to contact as many as possible fund management companies targeting its economic sector.

**References**

1. Dragota, V, Dragota, M., Stoian, A. *Share evaluation on the Romanian capital market*, ASE, Publishing House, Bucharest, 2005
CONSIDERATIONS REGARDING THE AUDIT VERIFICATIONS AND THE PROCEDURES FOR
ATTAINING THEM

Lect. PhD Drăgan Cristian
Lect. Ph.D. Brabete Valeriu
University of Craiova
Faculty of Economics and Business
Administration, Craiova, Romania

Abstract: Attaining the probation elements through which the opinion expressed in the audit report is sustained represents the central element of a financial audit mission. From this perspective, the document deals with the characteristics which the audit evidence, as well as the basic procedure regarding attaining them in the course of the auditors’ demarche.

Key words: audit evidence, quantity, quality, attaining procedures.

In the course of its mission, the auditor gathers information in order to determine the extent in which the examined information is presented according the pre-established reference criteria. As such, the information submitted to examination is represented by all the information attained and which serve issuing the conclusions on which the audit opinion will be based.

By combining all the attained evidence, the auditor must be able to decide if it can elaborate the audit report.

In the purpose of accomplishing this purpose, the audit standards (Audit standard no. 500 - Audit Evidence) retain the relevant conditions in order for the collected evidence to allow the opinion elaboration under the form of: sufficiency and adequate character. Also, regarding this aspect we mention that in the specialty literature, in order the express the adequate character, other equivalent terms can be encountered, among which we mention accuracy (Toma M., Chivulescu M, 1997) and solidness (Arens A., Loebbecke K., 2003).

Sufficiency represents the quantitative dimension of the audit evidence and regards its volume, number or value of the verified samples. According to some opinions, the evidences’ sufficient character can be appreciated according to several criteria, among which the auditor’s experience within past mission and the error risk discovered in the mission planning stage and in testing the inner verifications can be considered essential.

The adequate character constitutes the qualitative side of the audit evidence and represents the extent in which they are regarded as plausible or trustworthy.

The quality of the audit evidence is decisive for attaining the auditor’s assurance that the financial statements represent a true image. In this respect there are several characteristic through which the quality of the audit evidence is defined, which will be presented shortly in the following.

Relevance expresses the usefulness of the evidence for grounding the auditor’s opinion. In order to be useful, the evidence must strictly refer to the audit specific
objectives and also, to influence the professional reasoning in accepting or rejecting a declaration issued in the financial statements.

The source independence degree from which the audit evidence are attained, represent the criteria which separates the two representative categories, namely: evidence attained from external sources and from internal sources. Regarding this problem, the audit standards retain that “the audit evidence from external sources are more believable that the internal generated ones” (Audit Standard no.500 Audit Evidence). So, if the auditor attains a confirmation from a third party regarding an analyzed aspect, and, in the same time, has the employees’ answers regarding the aspect under debate, he will regard the external confirmation as more credible.

It is also mentioned that independence can be interpreted according to the degree in which the auditor or client influences the accomplishing of the attaining procedure, in the sense that it is appreciated on a higher level when the influence is exercised by the auditor and a reduced level in case it comes from the client.

The qualification of the information suppliers represents the criteria based on which audit evidence can be considered as more believable, even if it only partially fulfills the independence condition. So, the auditor will consider the evidence attained from a competent person as more believable, than the one attained from a person who is less familiar with the specific of the examined activities.

The auditor’s direct involvement leads to attaining more believable evidence than the ones attained indirectly.

The efficiency of internal control positively influences the credibility of the attained evidence. After performing the control tests, the auditor is able to appreciate the quality of the audit samples and the degree in which it will use them in issuing the conclusions.

The form of the audit evidence represents the basic criteria according to which the auditor will hold as believable the evidence materialized in documents or written confirmations other than the verbal affirmations.

The objectivity degree represents the extent of the auditor’s professional reasoning. In this respect, it appreciates as having an increased degree of credibility the evidence which require the smallest degree of subjective reasoning in order to determine their correctitude. Furthermore, the context in which the evidence is acquired within an audit procedure is also taken into consideration (for example, when the observation procedure is used, although the attained evidence fulfill the auditor’s individual independence and involvement criteria, generally their quality is regarded as reduced, as there is a high probability that the situation noticed by the auditor is modified immediately after his departure).

The specialty literature recommends the evaluation of the audit evidence by considering their combined effect of the qualitative and quantitative sides, which in most cases are more relevant that the particular examination of the adequate character and efficiency.

Determining the adequate character and of the audit evidence sufficiency is accomplished exclusively based on the auditor’s professional reasoning. The audit standards (Audit Standard no.500 - Audit Evidence) retain a series of factors which can influence the auditor’s professional judgment under this aspect, and namely:

- evaluation of the inherent risk nature and level as well as for the financial situation in their ensemble, as well as on the balance and transaction categories level;
- the nature of the accounting and inner control system, as well as the evaluation of the control risk;
• the significance threshold of the examined element;
• the experience acquired in the course of the previous performed missions;
• the results of the audit procedures, including the discovered frauds and errors;
• the source and credibility of the available information.

The auditor has the obligation of collecting the evidence for each evaluation of the leadership, distinctively, the compensation of the audit evidence lack regarding a certain assessment with the evidence attained for a different assessment being allowed.

Within the demarche of attaining sufficient and adequate evidence, the analysis of the correspondent costs, represents a problem constantly in the auditor’s attention. In our opinion, the decision in this matter is an extremely delicate one, at least from the perspective of the stipulation included in the standard regarding the audit samples, according to which “the implied costs do not intrinsically constitute a valid ground for omitting a necessary procedure”.

Another aspect which can be retained regarding the audit evidence is represented by the procedures for attaining them. The specialty literature refers to several procedures used for collecting the audit evidence, which can be classified into two significant categories (Rusovici A., Cojoc F., Rusu Gh., 2003): basic procedures and analytical procedures.

As the presentation of both categories require a more ample space, in the following we submit for debate the significant aspects regarding the basic procedures. In this respect, in the beginning, we consider useful to define the notion of audit procedure, by which we understand an ensemble of instructions presented in a detailed manner and used in the purpose of attaining a certain type of audit evidence, within one of its phases. The basic characteristic is represented by the precision with which the instructions are formulated within it. For example, the following formulas constitute audit procedures applied in the audit section named Debtors and advanced payments

- obtaining a table of the debt balances;
- obtaining a list of the commercial debtors;
- verifying the balances according to their seniority and subsequent cashing, etc

The presented instructions are completed with even more detailed elements. Referring to the last instruction, the details are presented as follows:

“Verifying the subsequent installments in cash is an important modality of checking the debtors’ balance. If round amounts are cashed, make sure that they regard the previous debts and that there are no problems regarding the not retrieved debentures for a long period of time. In the extent in which these procedures have satisfactory results, the direct confirmation of the debtors can be abandoned” (Auditors’ Chamber in Romania, 2001).

**The basic procedures** mainly insure attaining the valid information for understanding the content of the balance sheet elements, and based on it, the determination of the need to turn to external information sources.

The specialty literature retains in this category various types of procedures whose characteristic elements are exposed in the following.

*Physical examination* represents the direct modality through which the auditor verifies if an asset really exists. Next to proofing its existence, this procedure insures the evaluation of the asset’s state at a given moment. Analyzed based on the criteria regarding the quality and quantity of the audit evidence, it can be appreciated that this
examination is characterized by supplying audit evidence with a relatively high qualitative level (the auditor’s implication, which is a person qualified in this respect and does not require a high level of professional reasoning), but not sufficient enough (it does not offer information regarding the property right on assets). From the cost perspective, physical examination can be considered an expensive procedure, as it presupposes the auditor’s presence in the moment of the organization assets’ inventory, which imposes in most cases, shifting in various geographical locations with the elevated correspondent costs.

*The confirmation* represents receiving an answer in written or verbal form on behalf of a third independent party, as a consequence of the solicitation addressed by the auditor, in the name of the audited entity. In order to increase the value of the procedure, most opinions claim that the entire confirmation procedure must be managed by the leader of the audit team (the elaboration and delivery of the confirmation request, as well as the answer). The use of the confirmation method depends of the credibility degree necessary for each specific situation as well as of the alternative evidence in the auditor’s possession.

Confirmation constitutes a procedure with high level of application regarding the trading debts of the entity. In this respect, the norms in our country recommend that “if there are lots of balances, and the audit reports must be presented in a relatively short period of time, then the direct confirmation of the debtors can be a useful stage in the course of their verification.” (Auditors' Chamber in Romania, 2001). Also, the American standards (SAS 67) in the field stipulate that when proven practical and reasonable, the confirmation of a sample of the debts-clients is compulsory.

The practical demarche for accomplishing this procedure is exercised within two technical modalities and namely: *positive confirmation and negative confirmation*.

*The positive confirmation* presupposes a solicitation addressed to a third party through which an answer is required in any circumstances or based on the information which is to be confirmed, included in the application form. As the answer based on the information in the application form presupposes a relatively increased effort on behalf of the third party, a small frequency of the positive type to this solicitation is noticeable in the practical activity.

*The negative confirmation* consists of receiving the answer from the third party only in case the information is correct.

The examination based on quality reveals the fact that the confirmation procedure offers highly appreciated audit evidence, their adequate character being sustained by relevance, information source independence, auditor’s involvement and in many situations the presentation form.

From the quantitative point of view it can be appreciated that the evidence attained by confirmation are not sufficient, they are justified even by the name of the procedure which suggests that it is a completion of the information otherwise obtained.

From the cost point of view, the confirmation is considered to be costly enough, taking into consideration the administration of the process as such (elaborating the form, expedition, reception, etc).

In other words, it is mentioned that in the situations in which the auditor does not obtain confirmation on behalf of the third parties, the application of other procedures, named *alternative procedures* (such as the examination of a subsequent installment) proves necessary.

*The documentation* represents the examination of the documents and evidence
in the purpose of determining those aspects which should be included in the financial statements.

This constitutes a relevant procedure for obtaining audit evidence from at least two points of view.

Firstly, the evidence constitutes a strictly necessary component for the activity administration in an organized manner. As such, by studying them, the auditor obtains a higher quantity of information regarding the activity as an ensemble of entities.

Second of all, the accounting system includes documentation among the used procedures, the fact that any operation registered in accounting is based on a document is well known. So, through documentation a multitude of information is obtained regarding the conceiving and functioning of the entity’s accounting system.

Analyzed through the qualitative dimension, the documentation insures obtaining such evidence with an increased credibility in the case of external documents, due to the fact that they are relevant, obtained from an independent source and issued by competent persons.

Regarding the completion of the quantity criteria, as in the case of the previous procedures, the auditors determine these characteristics based on the audit’s objectives.

Under the aspect of the cost, it can be appreciated that the documentation is situated on a medium level, compared to the other procedures of obtaining the audit evidence.

The observation consists of following a process or a procedure within the entity. Through this, the auditor has an overview of the client’s assets, follows the manner in which the employees perform their functions (mainly in the accounting system), etc.

Observation represents an useful procedure in accomplishing the mission, but the obtained evidence does not fulfill the conditions imposed regarding their conclusions. That is why the practitioners consider that the situations in which the attained evidence are enough, and from the quality point of view the strong element is constituted only by the auditor’s implication.

Analyzed from the cost point of view, the observance is framed between the two less expensive procedures applied by the auditor.

Questioning or interrogation is the procedure through which written or verbal information are attained by means of the questions addressed to the personnel of the audited entity.

Questioning is a procedure characterized by a reduced conclusiveness of the obtained evidence as a result of both the qualitative side as well as the quantitative one.

Regarding the cost for obtaining the evidence through it is classified under the category of the cheap procedures.

With all the defective aspects regarding the conclusiveness of the evidence attained through this procedure, due to the matters of cost, as well as the extended collaboration possibilities with other information, it is used for many test performed by the auditor. From this perspective, we appreciate the presentation of a few recommendations in the specialty literature regarding the surveys’ elaboration and namely:

- formulating a optimal set of questions, clear and easy to understand, which varies according to the analyzed problem and to the interviewed person;
- the question elaboration will be performed in a manner which does not have personal character of which does not imply answer;
in the situation in which the survey is elaborated by a team, the paper coordinator must not annul the questions asked by another colleague, but he must patiently wait for the answer, afterwards he can intervene with new ones;

- when the interviewed persons offers an evasive answer to the addressed question, a lot of tact is required in the purpose of finding the most suitable modality for insisting in obtaining a satisfactory answer.

- all the questions addressed through the survey must be subject to some aspects on which the auditor already formed an impression or has an answer, accomplishing simultaneously the appreciation of the interviewed person’s credibility.

**The reconstitution or calculation** presupposes the verification of the arithmetic accuracy of the justifying documents and of the accounting registrations. In this purpose the auditor reconstitutes the evolution of some amounts in order to convince that any information registered in several places has the same amount every time.

This procedure is characterized by a relatively high conclusiveness of the obtained evidence, which is supported by the source independence and its objectivity.

From the implied cost perspective it is retained that it requires minimum costs, facilitated aspect and the possibility of using some IT audit programs in this respect.

In conclusion, the rigorous application of the procedures regarding obtaining the evidence constitute, among others, an essential condition for founding a pertinent opinion regarding the fidelity of the financial statements.

**REFERENCES**

5. Auditors’ Chamber in Romania Audit Standard no.500 Audit Evidence.
ROMANIAN ELECTRONIC SYSTEM OF INTERBANK PAYMENTS IN THE BACKGROUND OF CREATING THE SINGLE EURO PAYMENTS AREA

Assoc. Prof. PhD Mirela Cristea
University of Craiova
Faculty of Economy and Business Administration, Craiova, Romania

Abstract: Along with financial markets growth, the amplitude of settlements through payment systems has continuously increased. At the same time, it is necessary to be correlated with the need of streamline of noncash payments and with clients' demands to transfer sure, efficient and low-cost amounts of money. This action determined passing over to the electronic payment system functioning in real time. In this respect, we aim at drawing up a concise presentation of the electronic payment system in our country combined with assessments of this system aligned to the European Union's from the point of view of functionalities as well as respecting European and international standards and practices in the field.

Key words: interbank payments, electronic system, TARGET, Euro system, Single Market, real time payments, efficiency

1. Introduction

Since the establishment of the European Economic Community in 1958, the movement towards a more integrated European financial market has been marked by several events, the most visible of which were undoubtedly the launch of the euro in 1999 and the cash changeover in the euro area countries in 2002 in particular. Less visible, but also of great importance, was the establishment of the central banks’ large-value payment system, known as TARGET, on 1 January 1999. TARGET provides the backbone of the financial system in euro, and is the implementation tool for the Euro system’s single monetary policy.

The introduction of the euro as the single currency of the countries of the euro area will be completed only when the Single Euro Payments Area - SEPA - permits to individuals and corporations to make cashless payments throughout the euro area from a single payment account anywhere in the euro area using a single set of payment instruments as easily, efficiently and safely as they can make them today at the national level.

In Romania, the first steps in view of implementing this system were taken starting with the year 2005 by gradual operationalization of its three components: gross basis settlement, net basis settlement and settlement of government securities operations.

The architecture and functional characteristics of these systems were established by considering the following facts: the general policy existing in the field of payments and settlement systems of financial instrument based operations in the European Union, the main activities of interbank payments and settlements activities, standards and proposals issued by the European Central Bank, The Bank for...
International Regulations and other worldwide specialized institutions and organizations. As a result, implementing an infrastructure of payments and settlements compatible with similar infrastructures in the European Union member states contributes to the Romanian system alignment to the Community requirements in the field.

2. Single Euro Payments Area role to establish the Single Market of payment services

The Single Euro Payments Area - SEPA – represents a project for the next step towards closer European integration. SEPA will imply that customers can make payments throughout the whole euro area as efficiently and safely as in the national context today. This requires, in principle, that at the end of the process, euro area customers will have the possibility of using one payment account and one set of standardized instruments.

In 2002, the banking industry took up this challenging project by creating the European Payments Council (EPC). The EPC is defining the new rules and procedures for euro payments. In doing so, it involved not only the stakeholders in the euro area, but also those in other countries of the European Union (EU), Iceland, Liechtenstein, Norway and Switzerland. Communities outside the euro area will thus have the opportunity to participate in euro payment systems, and will be able to adopt SEPA standards and practices, thereby contributing to the establishment of a single market for payment services.

SEPA consists of: the single currency; a single set of euro payment instruments – credit transfers, direct debits and card payments; efficient processing infrastructures for euro payments; common technical standards; common business practices; a harmonized legal basis and ongoing development of new customer-oriented services.

**The SEPA project has two phases:**

1) *Implementation phase until 2008* - the schemes for SEPA payment instruments have been developed, and banks and infrastructures will prepare their systems for roll-out;

2) *Migration phase from 2008* - customers will be offered both “old” national instruments and the “new” SEPA instruments. The European infrastructures will be able to clear payments made by both types of instruments. A critical mass of transactions will have migrated to SEPA payment instruments by 2010. Moreover, by end-2010, all euro area retail payment clearing and settlement infrastructures must be capable of processing SEPA instruments. Consequently, infrastructures must be able to address or receive, directly or indirectly, payment orders from any bank in the euro area.

**The first phase**, the design phase, began in 2004 and is now almost complete. This phase involves the design of the new credit transfer and direct debit schemes and the frameworks for cards and clearing and settlement infrastructures. The necessary standards and specification of security requirements have also been developed.

**The second phase**, the implementation phase, started in middle of 2006 and is going on until the end of 2007. This phase of the project will concentrate on preparation for the roll-out of the new SEPA instruments, standards and infrastructures. National implementation/migration bodies that have now been established in each euro area country will assist by monitoring the different stakeholders’ preparations for SEPA roll-out. These stakeholders are very diverse, consisting of a number of parties such as banks, infrastructure operators, public administrations, companies and other users.
The final phase will be a migration period, in which national payment schemes will coexist with the new SEPA schemes. Customers will be offered both “old” national and new SEPA instruments, and the clearing and settlement infrastructures will be able to process payments made using both types of instruments. The goal is to achieve a gradual market driven migration to SEPA, so that by end of 2010, a critical mass of transactions has migrated.

Thus, by 1 January 2008, the Euro system expects that the standard SEPA Credit Transfer defined by the EPC and the priority credit transfer will be made available to customers, in parallel with the national instruments, to be used in both a national and a cross-border context. Customer-to-bank and bank-to-customer standards will also have been developed and made available to customers.

By the end of 2010, the Euro system expects that public administrations, corporations and perhaps individuals will use exclusively SEPA credit transfers.

It is expected that, on 1 January 2008, the basic SEPA Direct Debit scheme will be fully operational, and be made available for business-to-consumer and for business-to-business transactions. Possible additional options, which are currently being investigated, should be made available in 2008 (European Central Bank, „Towards a Single Euro Payments Area”, February 2006, Objectives and Deadlines Fourth Progress Report).

3. Electronic system of interbank payments in Romania

The payment system in Romania experienced significant structural changes in 2005 by completing the process of implementing the electronic payment system and gradual operationalization of its three components that is (BNR Annual Report 2005, Chapter 4, Payment system, pg. 67):
- RTGS system - Real Time Gross Settlement system – a real time gross settlement system that entered into force on April 8, 2005;
- ACH - Automated Clearing House - managed by TRANSFOND SA – an automated clearing house that became effective on May 13, 2005;
- GSRS - Government Securities Registration and Settlement system – registration and settlement system of government securities operations that entered into force on October 3, 2005.

3.1. Interbank discount system on gross basis

In Romania, gross basis settlement system – RTGS – is a real time gross settlement system ensuring the exchange of payment instructions between participants and final (definite) settlement of interbank funds transfers on a continuous, transaction by transaction basis, as well as final (definite) settlement of net positions resulted from net basis settlement systems and funds transfers afferent to financial instruments based operations (RTGS system regulations 3rd version of October 10, 2006, BNR, pg. 5).

This system represents the first component of the Romanian electronic payment system, entered into force on April 8, 2005 (according to Regulation no 1 of February 23, 2005 on payment systems ensuring funds clearing, published in the Official Monitor no. 265/March 31, 2005, annulled by Regulation no 9 of September 23, 2005 on modifying and completion of the National Bank of Romania Regulation no 1/2005 on payment systems ensuring funds clearing, published in the Official Monitor no. 881/Sep. 30, 2005), ensuring high-value settlements (over 50,000 RON) and urgent interbank payments by payment order as well as great value and urgent payments
between credit institutions and State Treasury initiated by payment orders for the Treasury. At the same time, RTGS system accepts and processes the instructions from BNR authorized clearing houses or from systems ensuring transaction settlement by means of financial instruments for participants’ net or gross positions settlement.

In view of fulfilling safety, security and availability conditions used internationally in projecting RTGS system in Romania there have been implemented **Straight Through Processing** - STP – systems in order to ensure efficiency increase through cutting down on operational risks and settlement time.

RTGS system was conceived in such a manner so as, along with the European Union accession, to make possible connecting to the platform of high-value payments settlements in the euro zone – TARGET ensuring the process of cross border payments in euro as well as changing the settlement currency from the actual national currency into euro.

### 3.2. Interbank multilateral net settlement system

According to the definition of clearing house given by the Governors Committee of EU member states Central Banks, “the clearing system represents a range of measures based on which, in a sole place (the clearing house), financial institutions present and change data and/or acts concerning funds transfer towards other financial institutions”.

In Romania, since 1995, there has been the Interbank Clearing House belonging to the National Bank of Romania. This entity allowed passing over from an intermediary settlement system (on a bilateral net basis) of interbank payments to a settlement system through multilateral clearing after a cessation of more than 50 years. Starting with the year 2001, multilateral clearing of interbank payments has been taken over by another operator - TransFonD – a trade company created by the banking community that carries out its activity as a BNR authorized agent.

When setting out, Funds transfer and Settlements Company - STFD TRANSFOND Ltd had BNR and 28 trade banks as shareholders. Presently, due to fusions and activity cessation in the payment system, TransFonD Ltd shareholders are BNR with 33.33% from the share capital and 24 commercial banks holding 66.67% of its share capital. As a BNR authorized agent, TransFonD sets up, by means of its 42 subsidiaries, clearing of debit payment instruments on paper (checks, bills of exchange and promissory notes) and RTGS net settlements.

The net settlement Electronic System managed by TransFonD Ltd – ACH system – represents the second component of the electronic payment system in Romania that entered into force on May 13, 2005 (BNR Regulation no. 1 of February 3, 2005 on payment systems ensuring funds clearing and Regulation no3/23.02.2005 on direct debiting made through automated clearing house, Official Monitor no. 265/31.03.2005).

**ACH** is an electronic system of multilateral payments clearing ensuring the exchange of payment instructions between participants, calculates participants ‘net positions through multilateral clearing and initiates, in RTGS system, a settlement of a net settlement instruction (ACH system regulations, version 5 TransFonD, July 7, 2005, pg. 7).

The administrator and operator of ACH system is TransFonD too, ensuring clearing small value payments (respectively transfer-credit type and direct debit under 50.000 RON) between credit institutions (except for institutions issuing electronic
currency) and between these and State Treasury, respectively calculating participants’ multilateral net positions in the system and transmitting these positions to final settlement in RTGS system.

Payment instructions of transfer-credit type are initiated by participants to ACH system under packages form (folders) representing groups of payments instructions of the same type, with a single initiator participant, a single addressee participant and a single settlement date sent and processed within ACH system framework. Just like the RTGS system, ACH settlement system implies a single national circuit at the level of bank units’ headquarters participating at the settlement through TransFonD headquarters.

By implementing some distinct settlement procedures according to the individual value of funds transfers and considering operating costs, we aim at preventing the settlement risk that is the situations where interbank payments could not be completed on account of funds insufficiency of one or more credit institutions participating at the system of interbank discount.

Within the electronic system of interbank payments in Romania, in order to prevent net settlement risk, it is implemented a unilateral guarantee procedure with blocked funds in the system reserve and with guarantee eligible assets, in principle, interbank deposits and government securities that is compulsory for all credit institutions participating.

4. Conclusion

The efficiency of interbank real time settlement system is appreciated through operational performances and facilities that it offers by liquidity supplying in a definite time (a bank day), the mechanism of waiting at queue as well as real time monitoring its own liquidities during the day.

In Romania, RTGS system can process and deduct a number of at least 30,000 day payment instructions and may ensure processing without interrupting payment instructions during the peak hours of a working day of at least 40% of the daily volume during an hour interval (RTGS system rules, ver. 3 of October 1, 2006, BNR, pg. 73). ACH system has certain specific characteristics such as great volume of processed instructions – between 150,000 and 300,000 instructions per day (TransFonD Annual Report 2005, pg. 14) – but of small value, as well as the fact that there are many clearing sessions on the same day, each session being followed by obligations settlement between participating members in the RTGS system. Thus, just like the RTGS system, ACH system may ensure normal processing during peak hours of at least 40% of the daily operations volume in an hour interval.

Another criterion in assessing the system efficiency consists of the commissioning policy set out by BNR in its quality of system manager that may apply commissions’ deduction on each type of instruction according to the volume of instructions processed and deducted in RTGS. Likewise, along with the system that is in operation, the commissions level was reduced by 25% compared to the one practiced until that moment in the system of great value payments on paper support.

The main advantages that credit institutions clients benefit from as a result of implementing the electronic payment system are the improvement of payment services quality by reducing the period from the moment of issuing the payment invoice and receiving funds of the payment beneficiary, the increase of funds circulating flow, efficiency increase, their safe transmission as well as cut down in costs afferent to
payment operations.

Moreover, perspectives foresee also implementing a model that would ensure electronic processing of small value payments afferent to instruments of written debit payment (checks, bills of exchange, promissory notes). This represents the last component of the classic payment system in operation. Thus, starting with May 13, 2005, the clearing system managed by BNR ensures only processing and clearing debit payment instruments on paper.

In view of further development of payment electronic system that would ensure an automated and quick processing of debit payment instruments, BNR, in its quality of regulatory and authorization agency in the field of payment systems as well as manager of clearing paper-based system, decided upon a project whose aim consisted of an electronic processing of debit payment instruments as well as modifying the legal framework in order to allow its implementation.

Interbank real time settlement system in Romania is structured in order to be compatible with similar infrastructures in the European Union member states, Single Euro Payments Area. Payments handling will be simplified as all incoming and outgoing payments will use the same format. By providing new payment instruments and common interoperable infrastructures, SEPA will bring about further European integration and market efficiency. This consolidation of infrastructures will spur competition and banks can then negotiate better clearing prices.

REFERENCES

1. European Central Bank, Eurosystem

2. European Central Bank

3. National Bank of Romania
   Regulation no. 1 of February 3, 2005 on payment systems ensuring funds clearing and Regulation no3/23.02.2005 on direct debiting made through automated clearing house, Official Monitor no. 265/31.03.2005

4. National Bank of Romania
   Annual Report 2005, Chapter 4, Payment system

5. National Bank of Romania
   Real Time Gross Settlement (RTGS) system regulations 3rd version of October 10, 2006

6. TransFonD
   Annual Report 2005

7. TransFonD
   Automated Clearing House (ACH) system regulations, version 5 TransFonD, July 7, 2005
RISK AND PROFITABILITY IN BANKING SECTOR OF NEW MEMBERS STATES AND CANDIDATE COUNTRIES

Abstract: With the recent accession of the new member states to the European Union, there is clearly a need for detailed analysis of their banking system risk and profitability. Rapid credit growth has been a recent feature of financial development in all countries under review and thus constitutes the main financial stability challenge. In general, monetary authorities have responded to these challenges by tightening monetary conditions and prudential standards, with concrete measures also reflecting the different monetary and exchange rate regimes in the region.

Key words: risk, profitability, candidate countries, new member’s states.

Over the last years, new member states (Bulgaria and Romania) and candidate countries (Croatia and Turkey) have seen strong economic growth, coupled with disinflation or low inflation. Domestic demand, fostered partly by rapid credit growth and strong capital inflows, has been the main engine of growth. In addition, given the increasing integration with the euro area and the EU, export performance has been buoyant, but outpaced by even stronger import growth.

Recently, however, inflation has picked up or disinflation has slowed down, as the expansion of domestic demand has been accompanied by several negative supply shocks, including a significant rise in energy prices, adjustments in regulated prices, exogenous shocks, such as floods, and increasing wage pressures. Current account deficits have remained high or increased from already high levels. External private debt has grown rapidly, as banks and enterprises have substantially increased their borrowing abroad.

Against this background, monetary authorities have tightened monetary conditions. Monetary and exchange rate regimes vary between the countries under review, eliciting different policy responses. Countries with a peg or tightly managed float have mainly relied on tightening prudential measures, raising minimum reserve requirements and introducing limits on credit growth. By contrast, countries with a floating exchange rate regime and inflation targeting have also allowed for nominal exchange rate appreciation and have either raised or curbed the decline in interest rates. Moreover, in all countries, fiscal policy has lent some support to monetary policy in safeguarding macroeconomic stability, as fiscal deficits have either declined or turned into surpluses.

Bulgaria’s financial sector is largely bank based, private and foreign-owned, and profitable. Moreover, the Romanian banking sector is generally composed of well capitalized, profitable and mostly foreign-owned banks.
The Croatian financial sector is largely bank based, private and foreign-owned, relatively concentrated and generally profitable. The Turkish financial sector is showing signs of increasing confidence: the portion of assets and liabilities in local currency is rising, and there is growing foreign interest in Turkish banks, although the share of assets held by foreign owned banks is still comparatively small.

### Table no.1. Profitability of banking sectors

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of net interest income in operating income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Bulgaria</td>
<td>43,7</td>
<td>55,1</td>
<td>55,0</td>
<td>65,9</td>
<td>68,1</td>
<td>78,0</td>
</tr>
<tr>
<td>- Romania</td>
<td>0,4</td>
<td>20,0</td>
<td>31,7</td>
<td>44,2</td>
<td>49,4</td>
<td>43,8</td>
</tr>
<tr>
<td>- Croatia</td>
<td>68,6</td>
<td>78,8</td>
<td>70,8</td>
<td>74,3</td>
<td>69,2</td>
<td>70,4</td>
</tr>
<tr>
<td>- Turkey</td>
<td>76,9</td>
<td>158,3</td>
<td>64,3</td>
<td>48,1</td>
<td>67,2</td>
<td>65,5</td>
</tr>
<tr>
<td>Loan loss provision expenses in % of total income:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Bulgaria</td>
<td>8,6</td>
<td>-8,7</td>
<td>1,3</td>
<td>3,7</td>
<td>9,4</td>
<td>13,5</td>
</tr>
<tr>
<td>- Romania</td>
<td>16,1</td>
<td>4,7</td>
<td>2,0</td>
<td>5,5</td>
<td>7,3</td>
<td>6,0</td>
</tr>
<tr>
<td>- Croatia</td>
<td>20,6</td>
<td>13,7</td>
<td>6,6</td>
<td>7,7</td>
<td>6,6</td>
<td>4,9</td>
</tr>
<tr>
<td>- Turkey</td>
<td>25,0</td>
<td>76,7</td>
<td>24,7</td>
<td>14,6</td>
<td>14,0</td>
<td>19,9</td>
</tr>
<tr>
<td>Return on assets:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Bulgaria</td>
<td>3,1</td>
<td>2,7</td>
<td>1,9</td>
<td>2,0</td>
<td>2,0</td>
<td>2,0</td>
</tr>
<tr>
<td>- Romania</td>
<td>1,5</td>
<td>3,1</td>
<td>2,6</td>
<td>2,2</td>
<td>2,0</td>
<td>1,7</td>
</tr>
<tr>
<td>- Croatia</td>
<td>1,4</td>
<td>0,9</td>
<td>1,6</td>
<td>1,6</td>
<td>1,7</td>
<td>1,7</td>
</tr>
<tr>
<td>- Turkey</td>
<td>-0,3</td>
<td>-5,7</td>
<td>1,1</td>
<td>2,2</td>
<td>2,1</td>
<td>1,1</td>
</tr>
<tr>
<td>Return non equity:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Bulgaria</td>
<td>22,6</td>
<td>21,9</td>
<td>15,9</td>
<td>18,7</td>
<td>20,0</td>
<td>21,6</td>
</tr>
<tr>
<td>- Romania</td>
<td>12,5</td>
<td>21,8</td>
<td>18,3</td>
<td>15,6</td>
<td>15,6</td>
<td>12,9</td>
</tr>
<tr>
<td>- Croatia</td>
<td>3,8</td>
<td>3,1</td>
<td>3,0</td>
<td>3,5</td>
<td>3,1</td>
<td>3,1</td>
</tr>
<tr>
<td>- Turkey</td>
<td>-62,4</td>
<td>-58,4</td>
<td>9,2</td>
<td>15,8</td>
<td>14,0</td>
<td>8,6</td>
</tr>
</tbody>
</table>

The profitability of the **Bulgarian** banking system has remained fairly stable and relatively high over the past few years. Return on assets has fluctuated between 2% and 3% (compared with 0.4% in the euro area in 2004), while return on equity initially increased to 22% in 2000 and 2001, then fell back to between 16% and 19% in 2002 and 2003, and increased again to above 20% since 2004 (see Table no.1). This evolution has been due to the rapid credit growth to domestic sectors and the simultaneous decrease in the net foreign assets position, as interest income on domestic assets significantly exceeds that on foreign assets.

Loan loss provisioning contributed to gross proof its in 2001 due to the release of large reserves (9% of operating income) that were created between 1999 and 2000. Since then, in the light of the rapid credit expansion, reserve provisions have increased, reaching 13.5% of operating income in 2005.

**Romanian** banking sector has been characterized by a relatively high level of profitability. Rising net interest income has been one of the main drivers of profitability in recent years, mainly reflecting the rapid growth in domestic credit. This marks a substantial change from the late 1990s, when net noninterest income constituted the bulk of revenues, due to the arbitrage opportunities opened up to banks by the imperfections in various segments of the financial and exchange markets. A substantial decline in the net costs of loan loss provisioning has been another important factor supporting profitability, but, more recently, these have increased again, which partly
explains the most recent drop in profitability, as measured by return on equity and return on assets.

Operating income has been declining, and this trend might continue in the light of decreasing interest rate margins, increasing competition and a falling share of domestic deposits, which are considered to be a relatively cheap source of financing.

*Owing to an improvement in cost management and overall efficiency, the profitability of the banking sector has increased over the past few years.*

Owing to the fall in interest rates, net interest income as a percentage of average assets and the share of net interest income in operating income declined from 2001 to 2005 (from 3.5% to 3% and from around 80% to 70% respectively), while net noninterest income as a percentage of average assets rose slightly.

Operating income remained almost stable at 4 to 4.5% of average assets. After the crises of 1998 and 2001 the high net costs of loan provisioning as a percentage of operating income could be largely reduced and has stood at 5% to 7% in the past few years.

*Following the crisis, the Turkish banking sector has returned to profit since 2002.* The crisis years saw very large losses in the banking sector. Since then, profitability has picked up, with return on equity and return on assets standing at 9% and 1% for the banking sector as a whole, as of September 2005 (see Table no.1).

State owned banks outperformed the privately owned banks in 2003 and 2004, in terms of both return on assets and return on equity, due to their lower levels of capital and their dominant position in the sector, which gives them easy access to relatively cheap funding (deposits).

Net interest income is the main source of income in the Turkish banking sector, mainly reflecting interest income from banks’ securities portfolios and interest income from loans.

### Table no.2 Credit risk

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic credit growth (annual percentage change):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Bulgaria</td>
<td>31.0</td>
<td>26.0</td>
<td>27.4</td>
<td>33.9</td>
<td>34.2</td>
<td>33.0</td>
</tr>
<tr>
<td>- Romania</td>
<td>11.4</td>
<td>26.9</td>
<td>39.9</td>
<td>50.4</td>
<td>21.2</td>
<td>49.7</td>
</tr>
<tr>
<td>- Croatia</td>
<td>10.1</td>
<td>23.2</td>
<td>33.6</td>
<td>16.8</td>
<td>13.1</td>
<td>20.3</td>
</tr>
<tr>
<td>- Turkey</td>
<td>63.9</td>
<td>100.6</td>
<td>29.0</td>
<td>18.3</td>
<td>21.2</td>
<td>16.1</td>
</tr>
<tr>
<td>Credit growth to the private sector (annual percentage change):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Bulgaria</td>
<td>17.0</td>
<td>32.1</td>
<td>44.0</td>
<td>48.3</td>
<td>48.6</td>
<td>32.4</td>
</tr>
<tr>
<td>- Romania</td>
<td>-10.2</td>
<td>16.5</td>
<td>14.2</td>
<td>23.7</td>
<td>18.7</td>
<td>37.8</td>
</tr>
<tr>
<td>- Croatia</td>
<td>8.5</td>
<td>24.7</td>
<td>31.6</td>
<td>15.9</td>
<td>13.6</td>
<td>18.5</td>
</tr>
<tr>
<td>- Turkey</td>
<td>72.1</td>
<td>22.7</td>
<td>10.2</td>
<td>44.6</td>
<td>52.8</td>
<td>41.3</td>
</tr>
<tr>
<td>Credit growth to the households:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Bulgaria</td>
<td>17</td>
<td>52.4</td>
<td>47.6</td>
<td>82.3</td>
<td>60.6</td>
<td>46.9</td>
</tr>
<tr>
<td>- Romania</td>
<td>3.2</td>
<td>44.0</td>
<td>122.0</td>
<td>214.6</td>
<td>44.8</td>
<td>65.7</td>
</tr>
<tr>
<td>- Croatia</td>
<td>21.0</td>
<td>29.3</td>
<td>43.0</td>
<td>27.7</td>
<td>8.7</td>
<td>20.3</td>
</tr>
<tr>
<td>- Turkey</td>
<td>208.4</td>
<td>-27.9</td>
<td>34.4</td>
<td>95.8</td>
<td>103.4</td>
<td>69.0</td>
</tr>
<tr>
<td>Non-performing loans:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Bulgaria</td>
<td>7.9</td>
<td>3.3</td>
<td>2.4</td>
<td>3.2</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>- Romania</td>
<td>3.8</td>
<td>2.5</td>
<td>1.1</td>
<td>3.4</td>
<td>2.9</td>
<td>2.6</td>
</tr>
<tr>
<td>- Croatia</td>
<td>9.5</td>
<td>7.3</td>
<td>5.9</td>
<td>5.1</td>
<td>4.5</td>
<td>4.0</td>
</tr>
<tr>
<td>- Turkey</td>
<td>11.1</td>
<td>25.2</td>
<td>17.6</td>
<td>11.5</td>
<td>6.0</td>
<td>5.4</td>
</tr>
</tbody>
</table>
Since 2000, real domestic credit in **Bulgaria** has grown on average by more than 30% annually (see Table no.2). Credit growth boosts financial deepening and can largely be considered a catching-up phenomenon brought about by deregulation, liberalization and privatization. It allows for a better allocation of savings to investment opportunities and facilitates higher growth. Although no significant deterioration in bank loan portfolios has been observed, most financial sector indicators are “lagging”, thus credit growth developments require close monitoring.

_While credit growth is high, the level of private sector credit is still relatively low and the debt burden of households and enterprises appears to remain contained._

Lending to households and mortgage lending have risen particularly quickly in recent years (see Table no.2), albeit from very low levels. Household debt amounts to around 16% of GDP (2005), which, together with a comparatively low ratio of interest payments to disposable income of around 1% (that of the euro area was 4.5% in 2004), does not constitute a heavy debt service burden.

The share of foreign currency lending is increasing and accounts for almost half of total lending, but credit risk associated with increased foreign currency exposure of the private sector is limited, given the CBA and the fact that lending in currencies other than the lev or the euro is almost insignificant (see below). An increase in interest rates from their current low levels could affect borrowers more significantly. However, as the portion of disposable income spent on interest payments is relatively low, the capacity of households to service their debt may withstand a potential increase in interest rates.

_Overall credit risk may be rising, but from a relatively low level._ Given the high credit growth, lending standards may have fallen, which, together with increasing debt burdens, would trigger a rise in the credit risk. However, as yet, there is no evidence of this in the credit quality figures. The share of nonperforming loans in total loans stands at 2.2% (see Table no.2).

_The Romanian banking system is primarily exposed to credit risk._ As the degree of financial intermediation continues to rise rapidly and bank assets increasingly consist of loans, credit risk is likely to remain of concern in the near future.

_Ongoing financial deepening in the Romanian banking sector is translating into rapid private sector credit growth, with household credit growing much faster than corporate credit, albeit from a much lower level_ (see Table no.2).

Real domestic credit in Romania grew at an average of 18.4% per annum between 2000 and 2005, up from the average 5% growth rate between 1995 and 1999.

However, while credit to the private sector has been the true driver of total credit growth, lending to the public sector has actually been decreasing since 2002. Real

<table>
<thead>
<tr>
<th>Share of foreign currency loans in total loans:</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>35.4</td>
<td>35.5</td>
<td>41.3</td>
<td>42.8</td>
<td>47.5</td>
<td>47.3</td>
</tr>
<tr>
<td>Romania</td>
<td>59.5</td>
<td>59.8</td>
<td>62.9</td>
<td>55.4</td>
<td>60.8</td>
<td>57.9</td>
</tr>
<tr>
<td>Croatia</td>
<td>85.6</td>
<td>84.9</td>
<td>80</td>
<td>74.4</td>
<td>75.8</td>
<td>77.5</td>
</tr>
<tr>
<td>Turkey</td>
<td>43.4</td>
<td>58.7</td>
<td>57.6</td>
<td>46.3</td>
<td>36.5</td>
<td>30.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Share of foreign currency deposits in total deposits:</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>59.2</td>
<td>58.3</td>
<td>54.6</td>
<td>52.4</td>
<td>46.7</td>
<td>46.5</td>
</tr>
<tr>
<td>Romania</td>
<td>47.0</td>
<td>49.3</td>
<td>44.7</td>
<td>42.5</td>
<td>41.2</td>
<td>34.5</td>
</tr>
<tr>
<td>Croatia</td>
<td>91.3</td>
<td>91.2</td>
<td>89.4</td>
<td>87.1</td>
<td>86.8</td>
<td>84.3</td>
</tr>
<tr>
<td>Turkey</td>
<td>46.1</td>
<td>59.7</td>
<td>57.9</td>
<td>49.3</td>
<td>44.8</td>
<td>39.3</td>
</tr>
</tbody>
</table>
claims on the private sector grew at an average of 18.3% per annum in the period 2000-04, supported by lower interest rates, as well as rising household incomes and real estate prices, which made household credit the most dynamic category. Overall, the share of household credit in total private sector credit grew from 5.7% in 2000 to 35.2% in December 2005.

Despite these developments, credit quality has been improving since 2003. Non-performing loans (unadjusted exposure of doubtful and loss loans and interests over total classified loans and interests) and doubtful and past due claims (over total net assets) have decreased, to 2.6 and 0.1 in 2005, respectively. These figures should be interpreted with some caution however, particularly because they benefited from the favorable economic conditions and are therefore subject to change in the event of a cyclical downturn. Moreover, the nonperforming loan ratio tends to be biased downward during times of strong credit growth, when the ratio’s denominator is rapidly increasing.

Finally, rapid credit growth can be associated with an overstretching of risk management capabilities (and consequently less careful analysis), as well as with the financing of less creditworthy clients and less profitable projects. In particular, this may be the case when bank managers are focusing on volumes in a bid to win market share.

The prime risk for Croatian banking sector is credit risk. Credit growth to the private sector peaked at 24.7% and 31.6% in 2001 and 2002 respectively (see Table 4.9). As this rapid expansion of credit was being financed increasingly through external borrowing, mainly from parent banks, the CNB introduced higher reserve requirements, especially for foreign credit, and made it mandatory for commercial banks to keep a minimum of foreign exchange liquid assets. Consequently, credit growth to the private sector as a whole slowed down initially but edged up again in 2005. At the same time, lending to households has continued to rise rapidly. This can be attributed to the fact that the corporate sector increasingly resorted to direct borrowing from foreign banks and non-bank financial institutions (leasing), as well as to increases in trade credit. The household sector has limited access to these sources of credit and banks have found enough capital and liquidity to continue expanding their lending to private households.

Credit risk from the household sector appears to be on the rise as debt levels and debt service burdens increase. Rapid credit growth may lead to higher credit risk through a number of channels. First, debt levels and debt service burdens have increased, making debtors more vulnerable to any kind of shock. Second, rapid credit growth may entail lower vetting standards and thereby cause lending to less creditworthy customers.

Furthermore, local managers of foreign banks may be more concerned about lending volumes than the risks of such a high growth environment. Anecdotal evidence suggests that banks have indeed begun more risky lending, for instance by accepting loans with debt service burdens in excess of 50% of disposable income.

Foreign-currency related risk is an important part of credit risk and stems from the high proportion of banking system activity denominated in or linked to euro. Domestic borrowers that are not foreign exchange earners bear the bulk of foreign exchange risk. While this risk is somewhat mitigated by the fact that most deposits are also in euro, net debtor households still bear foreign exchange rate risk and the structure of credit commitments directly exposes households to a high level of currency risk.

Households’ borrowing in currencies other than the euro is increasing, particularly in the Swiss franc (11% of total households’ borrowing in September
The CNB is trying to improve the monitoring of borrowers’ exposure to foreign exchange risk and further strengthen supervision. This includes requiring banks to collect information on their borrowers’ foreign currency exposure as part of their credit risk evaluation, and issuing a guideline for banks to report their exposures to foreign-exchange induced credit risk to the CNB.

Furthermore, the share of non-performing loans in total loans has declined in recent years from the peak that followed the eruption of the banking crisis. In the period 2000-2005, it decreased from 9.5% to 4%.

In line with the recent shift to core banking activities, the credit risk linked to the private sector has risen. The increase in the share of loans in total assets has added another dimension to the credit risk borne by the banking sector, which was traditionally overly dependent on government securities for revenue generation.

Credit demand stems from large corporations, SMEs and consumers, as around 95% of loans are extended to the private sector. The latter two categories, however, have historically played only a marginal role in banks’ loan portfolios. Only since 2003 has consumer lending picked up substantially.

Historically, NPLs have been a key problem for the Turkish banking sector. In the past, it faced three kinds of problem with NPLs, namely those linked to related party lending, those of state owned banks and those of privately-owned banks due to the economic downturn following the 2000 and 2001 crises. The restructuring programme that followed the crises addressed these issues. Related party lending was restricted by a new regulation, and the state-owned banks were recapitalized to improve the provisioning of NPLs. The NPLs of the privately owned banks were addressed as part of the “Istanbul Approach”, a voluntary framework aimed at facilitating the debt restructuring of mainly large corporate borrowers. As a result, the overall ratio of NPLs decreased substantially to around 5% of gross loans in 2005 (as of September) compared with 25% of total loans in 2001. At the same time, loan loss provisions increased over the same period from 49% to almost 90% of non-performing loans.

### Table no. 3. Liquidity risk

<table>
<thead>
<tr>
<th>Liquid assets as percentage of total assets:</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Bulgaria</td>
<td>22,9</td>
<td>27,2</td>
<td>28,0</td>
<td>20,0</td>
<td>18,6</td>
<td>18,4</td>
</tr>
<tr>
<td>- Romania</td>
<td>52,4</td>
<td>52,4</td>
<td>50,4</td>
<td>39,2</td>
<td>36,4</td>
<td>31,4</td>
</tr>
<tr>
<td>- Croatia</td>
<td>31,5</td>
<td>37,6</td>
<td>29,7</td>
<td>32,8</td>
<td>31,3</td>
<td>28,0</td>
</tr>
<tr>
<td>- Turkey</td>
<td>32,2</td>
<td>31,0</td>
<td>34,3</td>
<td>38,8</td>
<td>37,4</td>
<td>39,1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-Bulgaria</td>
<td>117,0</td>
<td>111,3</td>
<td>101,2</td>
<td>68,9</td>
<td>72,9</td>
<td>75,1</td>
</tr>
<tr>
<td>- Romania</td>
<td>115,3</td>
<td>116,2</td>
<td>118,5</td>
<td>207,2</td>
<td>197,0</td>
<td>239,8</td>
</tr>
<tr>
<td>- Croatia</td>
<td>110,4</td>
<td>126,7</td>
<td>97,7</td>
<td>117,2</td>
<td>120,4</td>
<td>104,5</td>
</tr>
<tr>
<td>- Turkey</td>
<td>-</td>
<td>81,1</td>
<td>75,1</td>
<td>80,5</td>
<td>82,7</td>
<td>82,7</td>
</tr>
</tbody>
</table>

Source: BNB, EBRD, BNR, CNB, CBRT, BRSA, IMF

Liquidity ratios in Bulgarian banking sector have been declining over the last five years, but may still be considered adequate. Liquid assets (cash and securities) represent around 18% of total assets and the ratio of short-term assets (cash and securities and credit up to 3 months) to short-term deposits (up to 3 months) is around 75%. Access to liquidity from the interbank market is still relatively limited, even though the size of interbank claims and interbank money market turnover has increased over the past few years.
Under the CBA, the availability of reserves imposes strict limitations on the role of the BNB as a liquidity provider for the banking system. 

**Liquidity risk has been decreasing in Romanian, as the system as a whole is highly liquid.** The ratio of liquid assets to total assets has remained relatively constant, due, among other things, to sizeable deposits at the central bank originating from its sterilization activity. The ratio of short-term assets to short-term liabilities has increased together with the ratio of loans to deposits.

Liquidity is high by international standards, because most loans have a short maturity and deposits with the central bank are considered highly liquid. Stress tests by both the IMF and the BNR find liquidity risk to be small, indicating that most institutions would be able to withstand large deposit withdrawals. The contagion risk from the interbank market is negligible, as most interbank assets and liabilities are held at the BNR.

**In Croatia liquidity risk has been increasing but is still low, as the system as a whole is still relatively liquid.** The decline in the ratio of liquid assets to total assets and the rise in the loan-to-deposit ratio point to deterioration in liquidity in the Croatian banking sector over the past few years.

This can be partly attributed to the CNB’s active policy to reduce liquidity through administrative measures, such as special reserve requirements on foreign currency assets. But, despite these measures, liquidity is still high, which is also reflected in the large amounts of free reserves held at the central bank. Stress tests by the CNB suggest that banks would withstand a substantial (35%) one-off deposit outflow. At the same time, however, international financing risk has been growing due to an increasing share of liabilities being owed to non-residents. Even though most of these are owed to foreign banks, which are, in most cases, probably the parent banks, this development warrants monitoring.

Liquidity is ample and liquidity ratios appear to be improving in **Turkey**. Liquid assets have been increasing both as a percentage of total assets and as a percentage of short-term liabilities.

Cash and cash equivalent assets stood at around 8% of total assets in September 2005. The ratio of assets to liabilities based on remaining maturities, however, has declined, due to banks’ preference for short-term funding in the light of declining interest rates and increasing longer-term lending because of macroeconomic stability.

<table>
<thead>
<tr>
<th>Loan loss provisions as percentage of non-performing loans:</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Bulgaria</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>52,8</td>
<td>48,9</td>
<td>49,2</td>
</tr>
<tr>
<td>- Romania</td>
<td>85,7</td>
<td>78,2</td>
<td>53,7</td>
<td>59,4</td>
<td>68,9</td>
<td>55,1</td>
</tr>
<tr>
<td>- Croatia</td>
<td>79,9</td>
<td>71,8</td>
<td>68,1</td>
<td>60,8</td>
<td>60,3</td>
<td>58,0</td>
</tr>
<tr>
<td>- Turkey</td>
<td>63,1</td>
<td>49,0</td>
<td>64,2</td>
<td>88,5</td>
<td>88,1</td>
<td>89,6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capital adequacy ratio:</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Bulgaria</td>
<td>35,6</td>
<td>31,3</td>
<td>25,2</td>
<td>22</td>
<td>16,1</td>
<td>15,2</td>
</tr>
<tr>
<td>- Romania</td>
<td>23,8</td>
<td>28,8</td>
<td>25</td>
<td>21,1</td>
<td>20,6</td>
<td>20,2</td>
</tr>
<tr>
<td>- Croatia</td>
<td>21,3</td>
<td>18,5</td>
<td>17,2</td>
<td>16,2</td>
<td>14,1</td>
<td>15,8</td>
</tr>
<tr>
<td>- Turkey</td>
<td>-</td>
<td>21,0</td>
<td>25,6</td>
<td>31,0</td>
<td>28,8</td>
<td>23,3</td>
</tr>
</tbody>
</table>

Source: BNB, EBRD, BNR, CNB, CBRT, BRSA, IMF

**Relatively high profitability and a solid capitalization are the basis for the banking sector’s capacity to absorb negative shocks.** Despite declining interest rate
margins, the profitability of the banking sector in **Bulgaria** continues to be relatively high, as evidenced by the return on equity and return on assets ratios. The capital adequacy ratio has decreased over recent years, but still comfortably exceeds the minimum requirement of 12% set by the BNB (and that of 8% in the Basel Capital Accord). Provisions cover more than two-thirds of nonperforming loans.

A reduction in spreads, owing to increased banking competition, fast credit growth, and macroeconomic stability, has recently led to a decline in the profitability of **Romanian** banks. The return on assets decreased from 3.1% at the end of 2001 to 1.7% at the end of 2005, and the return on equity decreased from 21.8% to 12.9% over the same period (see Table 3.7). Further declines in spreads triggered by continued nominal convergence and incoming capital flows for example, could have a further dampening impact on banks’ profitability, and may thus increase their appetite for risk.

Privatization and recapitalization efforts, as well as increasingly higher minimum capital requirements, have led to a well capitalized and sound banking system. The capital adequacy ratio, which stood at 28.8% in 2001 (partly as a result of enhanced risk aversion towards lending in the aftermath of the banking crisis), has fallen (to 20.2% in December 2005), but is still well above the minimum requirement of 12%. At the same time, loan loss reserves and provisions (as percentage of non-performing loans) have decreased from 85.7% in 2000 to 68.9% in 2004.

Profitability remains relatively high and provides a buffer against shocks. For the banking system as a whole, the return on average assets was 1.7% at the end of 2005, while the return on average equity stood at 16% (see Table no.4).

Banks appear well capitalized, and, despite a decreasing trend, capital adequacy ratios remain well above requirements. Commercial banks’ capital adequacy ratios ranged between 14 and 16% during 2003 and 2005, and all banks posted capital adequacy ratios in excess of the minimum 10% statutory limit. Privatization and recapitalization efforts, as well as increasingly higher minimum capital requirements, have led to a well capitalized and sound banking system. The capital adequacy ratio, which stood at 28.8% in 2001 (partly as a result of enhanced risk aversion towards lending in the aftermath of the banking crisis), has fallen (to 20.2% in December 2005), but is still well above the minimum requirement of 12%. At the same time, loan loss reserves and provisions (as percentage of non-performing loans) have decreased from 85.7% in 2000 to 68.9% in 2004.

Privatization and recapitalization efforts, as well as increasingly higher minimum capital requirements, have led to a well capitalized and sound banking system. The capital adequacy ratio, which stood at 28.8% in 2001 (partly as a result of enhanced risk aversion towards lending in the aftermath of the banking crisis), has fallen (to 20.2% in December 2005), but is still well above the minimum requirement of 12%. At the same time, loan loss reserves and provisions (as percentage of non-performing loans) have decreased from 85.7% in 2000 to 68.9% in 2004.

Following the new Banking Law (2002) and by-laws, market risk coverage is now included in the capital adequacy calculation. However, capital formally assigned to non-credit risk constitutes only 3.9% of total capital (June 2005), which seems low, even for the limited market risks of the **Croatian** banks. Moreover, banks do not take operational risk into account. That said, given that banks have capital ratios in excess of regulatory requirements, they appear sufficiently well capitalized to withstand shocks related to operational and market risk. Stress tests by the CNB using 2004 year-end data show that credit risk still poses the greatest threat to the Croatian banking system but that most banks would be able to tolerate substantial losses arising from asset deterioration.

Moreover, the stress tests find small banks to be even less vulnerable to credit risk shocks than the large banks.

The **Turkish** banking sector has increased its shock absorption capacity since the 2000 and 2001 crises. Profitability levels appear to be adequate and more sustainable in the long run, in contrast to the profits of the 1990s that stemmed from the government’s unsustainable financing needs. The capital adequacy ratio stood at 23% as of September 2005.

Stress tests suggest that banks would be able to cope with deterioration in the quality of their loan portfolio. Calculations by the Central Bank of the Republic of Turkey suggest that an increase in the NPL ratio from its current level of around 5% to 21% of total loans would reduce the capital adequacy ratio to 18.8%, still comfortably above the minimum level required. Under this scenario, all new NPLs are deemed to
fall in the 100% risk weight group. Hence, the scenario analysis shows that the sector’s shareholders’ equity levels are sufficient to cover credit risk.

*Progress has been made in strengthening the regulatory and supervisory framework.* The authorities responsible for supervising and regulating the financial sector are the Banking Regulation and Supervision Agency (BRSA), the Under-Secretariat of the Treasury under the Prime Ministry of the Republic of Turkey and the Capital Markets Board of Turkey (CMB). Following the 2000 and 2001 crises, the BRSA overhauled the regulatory and supervisory framework, bringing it more up to date with best practices. As a result, supervision has improved considerably, so that some of the main problems leading to the 2000 and 2001 crises should be able to be avoided in the future.

**REFERENCES**


3. ECB http://www.ecb.int or from the Social Science Research Network electronic library
PERSPECTIVES OF REGIONAL TOURISM DEVELOPMENT IN CROATIA

Assist. Prof. Grzinic Jasmina
University Jurja Dobrile in Pula
Department of Economics and Tourism
«Dr. Mijo Mirkovic» Pula, Croatia

Abstract: Croatia has a set of cultural, historical and natural attractions and also has a great tourism potential needed to be supported by the sustainability concept of tourism development. Current Local Agenda 21 processes emphasize a cooperative approach to identifying the community’s goals for tourism. Article present example of sustainable regional project in Croatian tourism on the Town of Rovinj. In spite of difficulties involved in trying to find an acceptable definition for sustainability in Croatia, the example present how society develops along sustainable principles.

Key words: Tourism, Croatia, Town of Rovinj, Sustainable development, Regional tourism, Attractions.

1. Introduction

The integration processes in Europe have had different motives and a long history. A serious integration as the expression of the will of the people and their states started only in the second half of the 20th century. The development and survival of Integration depends, because of the many differences, on the creation and implementation of regional policies. The Union gives significant importance to multidimensional regional policies. Besides on integration, the success of the regional policy depends on the activity of member countries. The article aims to improve the communication and cooperation between stakeholder’s communities in Croatian regions with the recommendations of supported actions. The government made a shift towards accession to the EU. Croatia signed the “Pact about stabilization and joining to EU” in 2001. From that time introducing sustainability as a guiding principle for local activities is generally supported from the side of the Ministry of Protection of Environment and Spatial Planning of Republic of Croatia. Recently the Ministry has made funds available for communities to start Local Agenda 21, but there is no funding to hire experts or trainers. That mean that there are problems with finances, human resources, training and education in the name of «Tourism sustainability» (Črnjar, M.: 2001). On the other side public participation on the local level is very low and there is also a little knowledge how sustainability can be achieved in practice.

The aim of «Croatian sustainability» was to develop co-operation between the interested groups in the Croatian tourism regions. Tourism regions (clusters) are still learning how sustainability can be achieved in tourism practice.

The goal of this paper is to explain two, interrelated concept. The first one is recognition the ability of society and the environment to absorb and benefit from the impacts of tourism in a sustainable way. On the other side is responsibility through the direction that tourism takes now, and will take in a near future.
2. Regional projects in tourism

Croatia as a potential member has important tasks in that field in order to build a complementary regional model with the Union. The tasks comprise mainly the creation of a convergent regional organization, an information system and regional economic policy. In referring to the process – orientation of the new regionalism, it is important to distinguish this from the procedural of the old regionalism. The new regionalism uses process as an alternative to structure and, at times, as a mechanism for creating structure.¹

Responsibility means the wise use of tourism resources from the governments and planners and local resident participants. On this meaning regional (sustainable) development will become more important the coming years because of complying with regulations on Structural and Cohesion Funds once acceded to the EU. Croatia can possibly foresee implementation of pre-accession schemes (PHARE, SAPARD, ISPA) similar as in the current candidate countries.

The improvement of communication and cooperation between civil organizations, local municipalities and other stakeholders will lead to plans for improving environmental and natural conditions in Croatian regions/communities. Some intentions are already made but with mixed results².

The main problem of the Croatian tourism offer is the low season. The creation of a network and the production of new ideas from the point of view of the tourist offer will make more attractive those coastal areas which are not popular tourist resorts yet. Diversification of the tourist offer linked to the sustainability of the territory (region) and increased will improve the flow of visitors during the low season. The other project «Green Agenda» aims to improve the communication and cooperation between civil organizations, local municipalities and other stakeholders in eight communities in Croatia with positive effective results in Istrian region.

2.1. Overview of tourist traffic in the area of the Town of Rovinj and the Istrian Region in 2005

Istrian County is covering an area of 2,820 km2 or 4,98% of the Croatian's total territory (56,610 km2). According to the census from 1991 it has a population of 204,346 citizens living in 71,185 households or 4,27% of the Croatian's total population (4,784,265 citizens.). Rovinj is coastal city with very high population growth rate. On the other side in 1997 city of Rovinj had the export of 45,8 mil. USD, and the import of 58,2 mil. USD.

Rovinj is a harbor divided in two parts: north port and south port. South port is mainly developed for passenger's traffic and anchoring because it is well protected from the waves. North port is used for cargo traffic. North port is well dimensioned according to its needs but there is a lack of space in south port. It is obvious decrease of traffic in last ten years mainly due to the war events. The table shows the number of arrivals and stays of tourists in the area of the Town of Rovinj in 2004 and 2005.

---

² Until now Local Agenda 21 was tried only in Croatian town Delnice.
The increase in the number of stays of 10% in relation to last year did not significantly affect the structure of realized stays this year in relation to the previous. In fact, in the structure of realized stays Croatian tourists contribute with 4%, and foreign with 96%. The share of Croatian tourists in the total realization of stays has remained unchanged since 2001. According to data of the Tourist Community of the Istrian Region, based on the number of realized stays, Poreč and Rovinj are the leading tourist destinations.

Source: Town of Rovinj

Table No 1. Number of arrivals and stays 2005.

<table>
<thead>
<tr>
<th>TOURIST TRAFFIC</th>
<th>2004</th>
<th>2005</th>
<th>INDEX 05/04</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL ARRIVALS</td>
<td>362.449</td>
<td>362.678</td>
<td>100</td>
</tr>
<tr>
<td>Croatian</td>
<td>25.873</td>
<td>24.457</td>
<td>95</td>
</tr>
<tr>
<td>foreign</td>
<td>336.576</td>
<td>338.203</td>
<td>100</td>
</tr>
<tr>
<td>TOTAL STAYS</td>
<td>2.418.461</td>
<td>2.464.496</td>
<td>102</td>
</tr>
<tr>
<td>Croatian</td>
<td>97.301</td>
<td>106.777</td>
<td>110</td>
</tr>
<tr>
<td>foreign</td>
<td>2.321.160</td>
<td>2.357.719</td>
<td>102</td>
</tr>
</tbody>
</table>

Source: Town of Rovinj

The share of Rovinj in the total of stays in the Istrian Region in 2005 is 14,2%, and of Poreč 14,4%, while the share of other tourist communities is below 10%. According to data of the Tourist Community Rovinj, in the course of 2005 the town was visited by the total of 362,678 tourists. Croatian tourists realized 24.457 arrivals, which is 5% less than in 2004, while the number of foreign tourists of 338.203 arrivals stayed at the same level. The total number of stays in 2005 was 2.464.496, which is 2% more than the previous year. The number of stays of Croatian tourists was 106.777, which is 10% more in relation to results realized in 2004, while foreign guests realized 2.357.719 nights or 2% more. In 2005 the most numerous guests in our town were German guests with 773.153 stays, which makes up 31% of the share in the total number of stays, followed by Italians (413.352 nights) and Austrians (296.062).

Source: Tourist Community (TC) of the Istrian Region, February 2006.

Figure No 1. Istrian tourism destinations (clusters)

The share of Rovinj in the total of stays in the Istrian Region in 2005 is 14,2%, and of Poreč 14,4%, while the share of other tourist communities is below 10%. According to data of the Tourist Community Rovinj, in the course of 2005 the town was visited by the total of 362,678 tourists. Croatian tourists realized 24.457 arrivals, which is 5% less than in 2004, while the number of foreign tourists of 338.203 arrivals stayed at the same level. The total number of stays in 2005 was 2.464.496, which is 2% more than the previous year. The number of stays of Croatian tourists was 106.777, which is 10% more in relation to results realized in 2004, while foreign guests realized 2.357.719 nights or 2% more. In 2005 the most numerous guests in our town were German guests with 773.153 stays, which makes up 31% of the share in the total number of stays, followed by Italians (413.352 nights) and Austrians (296.062).
2.2. Areas of special cultural value

Wider coastal area of the City Rovinj is rich with the archaeological localities dating from the antique time to the upper middle age. Especially valuable are complexes of late-antique rustically villas and economic complexes; preantique castles and necropolis; well preserved remaining of antique buildings mixed with traditional Istrian stile.

Localities are:
- Archaeological localities: Rovinj-Sošići-Maklavun – prehistorically bronze tumuli,
- Sacral localities: Rovinj – church Sv. Trojstva, Sošići – church of Marija Magdalena,
- Civil buildings: Rovinj – lighthouse Sv. Ivan na pučini.

Urban area of the city Rovinj with remaining of permanent settlements dating from the preantique and antique period to the recent time.

3. Goals of the regional sustainable Action

City of Rovinj is the integral part of the Istrian coast. According to the quality of the soil, and other natural parameters, on this area it can be grown:

a) Agricultures on the whole area; irrigation is needed, specially for vegetables
b) Grapes, olives and other sub Mediterranean and moderate climate fruits can be grown on the whole area. The overall goal is sustainable development according to the principles of “Agenda 21” document. Reasons and goals for the protection of Istrian natural coastal values:

-o Protection of woods and agricultural areas which are in close contact to the sea
-o Protection and revitalization of the traditional building of rocky-fences (suhozidi) around the fields; protection and revitalization of the rural architecture (kažuni)
-o Protection of the woods of Mediterranean Holm-oak (Quercus ilex)
-o Revitalization and maintenance of the young forests on the coast, mainly conifers
-o Stopping of the further coastal construction, except in much needed cases taking into consideration possible devastation and changes of the coast.

For the protection of the local biodiversity it is necessary to establish as much as possible number of protected areas.

During building and constructions it is necessary to avoid cutting and dividing of the important habitats; it's important to ensure passages for animals.

According to the Plan it is estimated the population of 14,000 – 15,000 in 2010. Church of St. Eufemija in Rovinj has national and regional importance and it can be reconstructed only according to the detail Plan documentation and projects.

Seawater quality in the port Valdibora is III. Category. It can remain on this quality until 2005; till the end of 2010 it is necessary to ensure all the infrastructure conditions to fulfil the criteria for the II. category of seawater quality. It is necessary to...

1 www.zelena-istra.hr
build waste water pipes for the north part of the city with the wastewater treatment plant with long pipes outlet in the sea.

4. Directions for the Istria County plan realization

According to the community and city's plans, areas assigned for ecological agriculture have to be specially valorized, after the verification of the study from the clause 1, article 149 of the law.

Carrying capacities in ports of nautical tourism are made according to the following plan:
- a) Rovinj-Valalta; category marina; minimum 250; maximum 350 boat places,
- b) Rovinj harbor I; category marina; minimum 150; maximum 200 boat places,
- c) Rovinj harbor II; category marina; minimum 380; maximum 650 boat places.

In the Istrian coastal area following landscape categories are recognized:
- Lim fjord, sea and underwater, and steep coasts with Mediterranean black oak communities (Quercus ilex) on the north exposition and white hornbeam and honey-oak on the south exposition,
- Rovinj coast with many small islands and cliffs covered with Mediterranean vegetation,
- Marsh "Palud" with its thick vegetation; on the other side it's continuing in agricultural fields.

In the period 2000-2010, in the second and third water-protected-zone, all illegal dump sites have to be cleaned, specially those with dangerous waste; waste from these dump sites has to be disposed on the legal dump site nearby, which should be under strict control of communal companies.

With this decision it is regulated the obligation to develop programs, studies and other documents which are necessary for carrying out the Plan:
- 1. County's agro-ecological bases – necessary for the development of ecological agriculture
- 2. Studies of seismological zoning of the Istrian County
- 3. Studies of developmental and spatial possibilities of County's bordering area
- 4. Integral Coastal Management Plan

Acceptance of the document from the amendment 1. of this article will conduct representative body of the County. Special measures of development are determined for four different characteristically parts of Istrian County: Coastal area (Cities: Umag, Novigrad, Poreč, Rovinj, Pula and Labin; communities: Vrsar, Bale, Vodnjan, Medulin, Ližnjan, Marčana, Barban, Kršan i Raša), Bordering area, Central developing area, Wider area of the accumulation Butoniga. It is suggested:
- Reduction of communal contributions and communal amends in the area with land planed for building, in which the quantity of buildings does not exceed 10% of the whole area;
- Establishment of special zones of payment of communal contributions and communal amends for residential-tourist settlements and extended parts of building areas of settlements, after this Plan comes into force;
To build industrial, trade and market buildings in economic zones pointed by this Plan with the help of lower credit politics and lower communal contributions and communal amends;

It is suggested to use city's/community's budget for solving of proprietary-legal relations in building the roads and infrastructure.

5. Recognition and responsibilities of development in Istrian peninsula according to the European Union

The advisory team will give advice, training and assistance throughout the project period to the implementing organizations of Green Agendas. The implementing organizations can request specific on-site sessions from one of the trainers and lawyers. Members of the advisory team will regularly visit the organizations to improve the quality of the projects. In return the advisory team will gather experiences from the pilot projects that will be used for developing the Green Agenda method according to local, Croatian circumstances. The project coordinator and local coordinator of Milieukontakt will pay regular on-site visits to the Croatian implementing organizations in order to provide practical assistance and advice and ensure quality of the activities.

The following type of assistance and training will be provided:

- always as a start: assessment of needs for defining support plan and define the targets to be achieved;
- assistance for planning phase and writing of project proposal;
- advise and assistance on execution phase (e.g. stakeholder analysis, organizing first meeting, forming a working group);
- facilitation of meetings with stakeholders or local working group meetings;
- held practical training sessions on specific issues for members of the NGO or the local working group (i.e. effective meetings, project management, accounting, work with media, volunteer management, communication);
- advise on development or writing of environmental action plans;
- advise on interpreting legal provisions, regulations and laws related to public participation or environment and nature protection;
- review local environmental action plans on existing laws and regulations;
- legal advise on concrete questions, such as filing petitions, making statutes, municipal responsibilities;
- assist and advise the communities on rights, duties and responsibilities in relation to national and regional structures.

Civil servants, local politicians, council members and mayors need practical tools for local cooperation, knowledge and awareness on (legal) possibilities and duties concerning public participation and sustainable development. There is a general need to improve skills and experiences of local personnel, as well as finances and measures to implement policies and adhere to regulations and laws.

The Croatian civil sector is largely pre-occupied with the efforts to survive in, to a great extent, changed conditions. It is an important reason why the environmental awareness among the public is rather low. On the other hand, Croatian citizens put priority to protection of Croatian natural assets. since the beginning of the Nineties a
general mistrust is built up towards policy makers and politicians. Citizens are not used to participate in democratic processes. The most successful projects of NGOs since the Nineties proved that citizens can be actively involved in public actions, such as signing of petitions, joining demonstrations and participation in public activities.

The national government is faced with serious problems concerning economic reforms and social issues (e.g. to deal with returning refugees). External actors, like NGOs, are still needed to push the government to take more action on sustainability and democratic practices. Cooperation with NGOs is improving, but still needs investments to develop it towards real partnership. The government has difficulties to fulfill its (legal) obligations and to enforce laws and regulations.

6. Assessment and evaluations of the project

Despite all negative influences since the beginning of the year, according to estimates of tourist economy, the year 2005 was successful for Rovinj. The advisory team will meet frequently to discuss progress and contents of the project and plan upcoming activities. The team will guarantee the quality of the activities.

Starting from achieved results in 2005 and taking into consideration the realistic quality of our tourist product considering further increase of tourist traffic, along with our attribute of a safe and attractive destination, we also need to enrich our offer with additional contents (wellness, swimming pools, golf courts, bike paths and other), prolong our tourist season, remodel the existing and build new high quality facilities (4 and 5-star category) improving the structure of accommodation facilities.

Times of passive approach to tourism are far behind, times characterized by lack of particular efforts. Today we live in the world of competitiveness in which we have to fight for every single guest. Advantages of Croatia were recognized a long time ago, advantages placing us at the very top of attractive tourist countries; preserved natural resources, clean sea and air, geographic position, climate and other, and all these are still not enough to make the guest satisfied. All natural beauties need to be boosted with attractive offer, which will additionally enrich our guests' experience.

7. Conclusion

The platform acts as a kind of think-tank for developing good practice on this topic in Croatia, as well as a vehicle for advocacy towards national decision-makers for concrete steps for improvement. The working group will initially consist of members of the training group who will take over the initiative of the support group during the course of the project and beyond. Green Agenda in Croatia is Improvement of local democracy and applying sustainability in practice.

REFERENCES:

4. Ćrnjar, M. ‘Ekonomika i menadžment zaštite okoliša’, Ekonomski


7. HAZU ‘Strategija zaštite okoliša i održivog razvitka u jadranskom području Republike Hrvatske’, Zagreb, 1996.


Internet resources

12. *** www.ecotourism.org

13. *** www.planeta.org

14. *** www.zelena-istra.hr

15. *** http://www.munimall.net/eos/2002/wallis_regionalism.nclk

CHARACTERISTICS OF THE MANAGEMENT BASED ON KNOWLEDGE

Lect. PhD Mirela Sîrbu
University of Craiova
Ec. Augustin Cîjmăroiu

Abstract: The decisive role held by knowledge in all domains of economic activity through the impact exerted upon the functionality and performance of the organization, asks for the promotion of the management based upon knowledge. The characteristics of the management based upon knowledge show its increased complexity and the significant role of the human factor in creating, implementing and exerting it efficiently.

Key words: knowledge, information, management based upon knowledge, a learning organization, culture of knowledge.

The quick and deep changes that take place within the global economy under the impact of the influences exerted by the revolution of knowledge emphasized the necessity of an economy based upon knowledge and its approach in a pragmatic and prospective way. In the same direction with the interests of the high developed countries of the world, there can be noticed the strategy of the European Union as well, adopted within the summit from Lisbon in 2000, whose strategic objective until 2010 is to become the most competitive economy in the whole world, based on knowledge, capable of a lasting development and generating new places of work.

Taking into consideration the current conditions, in which “information is often assimilated with power” the major interest for most organizations stands in collecting the necessary knowledge at a high qualitative level and using it with maximum efficiency, through its materialization into adequate managerial conducts, actions and decisions. Together with the assurance of the material, human resources, both international and financial, the performing organizations are more and more preoccupied by the production, transmitting, usage, depositing and protection of knowledge, especially of the strategic ones, essential for the companies’ development. The information became more and more a resource, a major asset, a main product and at the same time a strategic advantage for organizations, fact that has a significant influence over the content and the way of manifestation of the management, imposing with acuteness the promotion of the management based on knowledge.

From Michael Lester’s point of view, the management based upon knowledge is a key process, that through the capitalization of changes determined by both digital technologies and internet, contributes to the obtaining of economic performance in the countries, companies and the involved industrial branches, thus determining an increase of the life standard of the population. This approach shows the vision of the IT staff and gives a great importance to knowledge and innovation, the analysis of the managerial problems being tightly connected to the top information technologies. From the management specialists’ point of view, one can notice the remarks belonging to Christina Rollo and Thomas Clarke that state the fact that management based upon knowledge is not a goal in itself but derives from the actual
interests of the organizations in developing the field of production and the knowledge flow with the purpose of adding economic value.

The functionality and efficiency of management based on knowledge derive from its characteristics, namely: acting like an organization that is willing to learn; creating a tradition in knowledge; using data bases that include knowledge; mapping knowledge; dividing knowledge between employees and the other stakeholders; developing communication based on knowledge; leadership manifestation; using team work; learning from negative and positive practice.

In order to carry out some competitive activities it is necessary that the companies should maintain and develop continuously their knowledge portfolio that is they should be transformed into organizations that are collecting information all the time. The success of this step is conditioned by the fact that all the employees should become aware of the necessity of transforming the knowledge into the main resource of the company, as an intensive involvement of the managers within this process. Knowledge accumulation and the efficient usage of these are achieved either through the process of individual learning, at the level of each employee, or through the organizational teaching, achieved through a great scale of methods: allotting consultancy and specialty assistance, special programs of perfecting outside the organization, training courses inside the organization, etc.

Within the successful implementation of the management based on knowledge, a decisive role has the organizational culture that according to Adam Flor, can represent “either the greatest enemy or the greatest ally”. That’s why it is necessary the “construction of a knowledge culture” whose definitive elements should be as it follows: is receptive at new things, at the innovation within all the activities of the organization; situates in the first line people and knowledge and not material things or elements; is focused on the individual and organizational learning and the intensive participation of the employees at taking decisions; is motivating in taking risks, actions and performance and tolerant in front of failures and errors, especially within the innovation process; lays the accent on the development of agreement, collaboration and cooperation among specialists based on knowledge; is open for both internal and external stakeholders, the relations among these being based on mutual respect and correctness.

As in the current context knowledge exerts a significant impact upon the performance and functionality of the organizations, it is necessary the usage of data bases that include knowledge. These include the assembly of knowledge within a company, structured according to the way they are obtained, the form of presentation and the domains of usage. As a rule, the knowledge used within a company is divided into two main categories, namely: external and internal, which in their turn are individual and organizational. The structure of knowledge is necessary because the costs of identification, getting, integration, usage, protection and capitalization are sensitively different.

Within the companies that use an impressive volume of complex and diverse knowledge, that have a crucial impact upon the obtained performance, there is often used the mapping of knowledge. This stands for a process that has as a goal the identification of the main resources of the existing knowledge and their usage among the stakeholders of the organization.

The success of the promotion of management based upon knowledge is conditioned by the induction to the staff of the organization of the conception and
conducits according to which *the parting and usage of knowledge between employees and the other stakeholders* is a normal and efficient approach both individually and organizationally. For this thing it is necessary the existence of a strong material and moral motivation, that should make the knowledge possessors share others as well and help them to use it. They should be convinced that after this process, through feed-back and other generated connections there can be obtained the amplification of the initial knowledge value, simultaneously with the increase of prestige and the development of the initial possessors of knowledge. This process is influenced by the existence of an organizational culture that promotes the sharing of knowledge among employees.

Altogether with the increase of dynamism and the complexity of the socio-economic phenomena, with the increasing tendency of change in all the domains of activity, it is more and more obvious the fact that the obtained results are influenced directly by quantity, quality and opportunity of the available information, provided through communication. The increase of complexity of the managerial process, the appearance and the usage of some perfected means of communication and decision make that the technology of information be viewed as an indispensable instrument for management, because as Robert Heller stated, the manager should be “excellently informed”. The intensification of the organizations’ interests for the promotion of management based on knowledge determines the development of the communication based on knowledge, because one of the “keys” of the efficiency in management is the achievement of good communication at all hierarchical levels.

In order to put into value the multiple features of the management based on knowledge it is necessary the existence of a strong **leadership**, more intensive and stronger than the one exerted within classic organizations. This derives from its accent laid upon knowledge and innovation and at the same time from its role of putting into value the silent knowledge of the stakeholders. The main parameters of the leadership of the organizations and of the management based upon knowledge are:

- directing the leadership towards a daring vision, that is simultaneously dynamic, creative and communicational;
- focusing on ideas, on knowledge value and the promotion of the “new”;
- paying an increased attention to the harmonization of the roles, responsibilities, rewards and the estimation of the other stakeholders of the organization;
- using on a large scale the “populist” communication at the level of the whole organization and at all hierarchical levels;
- possessing a great capacity of work and a permanent curiosity every time for everything that is around;
- the leader’s possession of knowledge, multiple abilities and capacities, fact that will permit him/her to encourage diversity, creativity and initiative among the members of the organization.

Another important characteristic of the management based on knowledge is the **usage of the work in team**. Team activity favors the dynamic effects that keep alive the continuous development, stimulates the individual qualities favorable for cooperation and interdependence and the active communication is favorable as far as some pre-established targets are settled, strengthening the cohesion inside the organization.

From the analysis of the functionality and performance of the organizations based on knowledge there came out several pragmatic conclusions, some major errors in putting into application the new type of management as well as some key aspects in
perfecting and increasing the managerial efficiency. These elements with a general character that appeared from the experience of the organizations that promote management based upon knowledge represent extremely useful reference points for the managers of the organizations, for consultants, trainers and examiners in specific domains.

The studies made by specialists in domain has shown a series of errors within the implementation of the management based upon knowledge namely: focusing with priority on the stocks of knowledge in the disadvantage of the flows of knowledge; the consideration that human beings are not rational all the time and from here the consequence reflected in neglecting the process of thinking; replacing the human nature contacts and the direct communication with contacts and communication based on technologies; the approach stressing the systematic leading of the place of work just as simple as a car is driven; the separation of knowledge from its usage and asking for measurements and direct estimations of these, etc.

In a similar way, the major aspects with a determinant role in the efficiency of the management based on knowledge are: identifying the knowledge and information that people need and providing it on time; integrating the creation and usage of knowledge within the economic process both inside and outside the organization; creating communities based on knowledge within the key area of the economic process; connecting people to the process of treating information with the purpose of achieving economic performance, etc.

All the characteristics presented above state the increased complexity of the management based on knowledge and the decisive role of the human factor in creating, implementing and exerting it efficiently. Through implied logistics, used specialists and permanent process of actualization, development, usage and protection of knowledge it attracts considerable costs, being a very expansive management. Although not practicing the management based upon knowledge is even more expansive having negative effects upon the obtained results, on a long period of time determining even the collapse of the organization.

**REFERENCES**

Abstract: Even if knowledge management practices and initiatives become more and more popular all over the world, there is not yet a general acceptance or standardized knowledge management assessment approach. The most utilized methods are the one based on the intellectual assets, considering that knowledge management implementation conduct to the development of such assets. Recently, there were developed methods, techniques and indexes especially designed to evaluate the impact of knowledge management and knowledge management systems initiatives over the company, the paper presenting these approaches.

Key words: knowledge management, assessment, methods

The most utilized methods to evaluate knowledge management and knowledge management system implementation are based on intellectual assets, considering that knowledge management implementation conduct to the development of such assets. The most popular methods are: Skandia Navigator, house of quality, intellectual capital index, intangible assets monitor, balanced scorecard, citation-weighted patents, technology broker, inclusive valuation methodology, the value explorer. These methods are either used to evaluate the correlation between inputs-processes-outputs, or the cause-effect relation.

For the past years, the preoccupations for evaluating exclusively the effects and the of knowledge management (KM) solutions conducted to new methods, both quantitative and qualitative, the assessment of the effects representing one of the challenges of KM, as managers need proofs of KM initiatives’ value in order to adopt them. These new quantitative methods consist mostly of indexes, but there is evidence that qualitative methods are more effective as knowledge is not material assets.

Thus, Roa (2005) developed five types of KM indexes in order to assess KM initiatives:

♦ indexes that reflect the technology – number of e-mails, online forums usage, site traffic, number of interrogations;
♦ indexes that reflect the process: time of answers at search, international standards certification conformation, increasing the number of interaction in real time;
♦ indexes that reflect knowledge: number of new ideas introduced by employees, number of new practices created, active communities of practice;
♦ indexes that reflect information about employees: degree of bound relationship with colleagues, importance feeling;
♦ indexes that reflect the business: reducing the costs, increasing the market share, increasing the productivity.
Beccera-Fernandez (2003) highlights the importance of combined evaluation – quantitative and qualitative, such as informal discussions with employees; semi structured interviews or structured interviews. As organizations become more experienced in KM usage, the proportion of quantitative measures increases.

Within the preoccupations for developing a knowledge-based economy and knowledge management, EU, through CEN (2004), developed also KM performance key indexes, such as:

- time to create new knowledge;
- contributions to knowledge bases;
- transfer and usage of best practices;
- number of identified experts;
- number of patents;
- employee’ satisfaction;
- knowledge about clients complaints;
- knowledge about clients’ satisfaction;
- proportion of employees with new initiatives;
- time to develop new ideas;
- percent of sales determined by new knowledge.

There are also used systems of indexes incorporated into guides of evaluation of intellectual capital, used in order to evaluate the performances of knowledge-based company, according to Nicolescu (2005), guides such the one elaborated by Patricia Pablos, the results being structured on three documents: report on intellectual capital, report over intellectual capital flows and memorium on intellectual capital.

Annie Green (2005) developed a dynamical model within which she represents the bounds between strategic objectives of knowledge management and the value of intangible assets, concluding that its value varies based on the degree of details of KM objectives.

In order to evaluate a knowledge management system implementation, seen as a complex software architecture that enables knowledge management processes, there are used direct methods to evaluate software applications, according to Ioniţă et. al (2004, p. 137) are: LOC method (lines of code) – number of code lines - or KLOC method (Kilo Lines of Code) – thousands of written code lines. The methods are based on determining the costs of development and effects of software/time unit type, considering also the aspects as: speed of development, memory allocated dimension, deficiencies on a certain time interval, number of documented pages, number of programmers that developed the product evaluated through the number of programmers/month (year).

The following indexes are thus developed, according to Ioniţă et. al (2004):

- productivity = KLOC/ number of programmers/month;
- quality = number of errors/KLOC;
- value = cost of programmers*KLOC;
- documentation = pages documented/KLOC.

Also, functional score method, according to Ioniţă et. al (2004, p. 138) allows determination the value of a software application through measuring its productivity from the point of view of functioning, ergonomic feature and utility. Indexes uses, according to Ioniţă et. al (2004), are:

- number of entries of users;
Management – Marketing - Tourism

- number of outputs of users: reports, error messages;
- number of on-line queries: inputs having as result on-line instant outputs;
- number of files;
- number of external interfaces.

U.S. Navy (2001) developed Knowledge Management Metrics Guide, the summary of KM Performance Measures for Personnel and Training, in form of outputs (first two) indexes and system indexes (the following eleven), being presented bellow:

- Usefulness survey
- Anecdotes
- Latency (response times)
- Number of downloads
- Number of hits to the site
- Dwell time per page or section
- Usability survey
- Frequency of use
- Navigation path analysis
- Number of help desk calls
- Number of users
- Frequency of use
- Percentage of total employees using system

Qualitative methods of success case studies is a method developed by Brinkerhoff (2003) and applied initially within human resources management in order to evaluate the effectiveness of investments in training. It offers a general framework for evaluating the impact of KM initiatives implementation over the organization’s performances. The application of this method offers information such as “what worked, what does not worked, what significant results were obtained, what actions must be undertaken to obtain better results in the future”, according to Brinkerhoff (2005, p.90).

The method is based on the hypothesis that the performance of the company may be increased in the most rapid and effective way by analyzing the most successful/unsuccessful KM case studies. It analyzes the factors that led to positive/negative performances after KM initiative implementation. Using a comparative analyze, there may be developed adequate strategies to obtain better performances. The investigation method and the interview methods are used in order to locate, prove and evaluate the case study.

The newest trend in assessment is based on fuzzy set and subtle sets utilization. Thus, Liebowitz (2005) developed a technique of evaluation using fuzzy sets, considering that the evaluators of the knowledge management system can judge the success of the knowledge management initiative on improving employee morale through looking at employee interaction. He proposes to create a fuzzy “employee morale” set by determining that an “A” grade would be “all employees are connected with everyone else in the organization” and an “F” grade is “no interaction.”

Four evaluators give their respective opinions, and varying weights, as to the overall employee morale in the organization based upon focus group interviews. These weights should be normalized to add up to 1. A synthetic index will be draw up by using a weighted averaging method (i.e., multiplying the measurement result matrix with the weight vector), where after these results are in the forms of fuzzy sets which can be defuzzyfied into a crisp value from ten to zero, according to Chan (2003).
defuzzyfied crisp number, would be the computed employee morale score, which incorporates the fuzzy sets and the opinions of the evaluators.

From all the above results that there is a strong interest in evaluating knowledge management initiative’s effects, both using quantitative and qualitative methods, as knowledge management become more and more used by the companies as a strategy to obtain competitive advantage, considering the sustainable development and the limited feature of material resources versus unlimited feature of knowledge.

**REFERENCES:**


A COMPARATIVE ANALYSIS REGARDING BRAND NAME STRATEGIES

Assist. Ph.D. Student Moisescu Ovidiu Ioan
Ph.D. Student Gică Oana Adriana
Babeș-Bolyai University
Faculty of Economics and Business
Administration, Cluj-Napoca, Romania

Abstract: Nowadays, in an age of globalization, brands are growing ever more valuable. They have to differentiate one product from another, position the offer and also be adaptable both to changes in product lines and ranges, and to evolving consumers’ expectations. The continual increase in the number of products makes branding an increasingly complex business. This paper approaches, in a comparative, critical and impartial manner, the main brand name strategies, revealing the specific features, advantages and disadvantages of each.

Key words: brand name, brand strategy, brand extension, co-branding

Introduction

Any successful business strategy must encompass a clearly defined brand strategy and involves enhancing the product mix. The latter can be done basically in two ways: through acquisition (buying other companies or acquiring patents, licenses or franchises from other companies) or through development of new products (Kotler, 2002). The brand strategy implies some major strategic decisions about: brand sponsorship (manufacturer’s brand, private brand, licensed brand, brand alliances), brand names and brand repositioning (Kotler, 1999).

Considering brand name strategies, various approaches can be identified in the specialized literature, many of them being somehow recurrent, but each of them adding scientifically value to our analysis.

Basic approaches regarding brand name strategies

In a first approach, Kotler (2003) outlines two basic brand name strategies consisting of establishing new brand names for new products and, respectively, putting existing brand names on additional products launched in the same category (line extension), in a new category of the same industry (brand extension) or in a new industry (brand stretching).

Each of these strategies has its own advantages and risks. Line extension can generate greater brand equity and cost reduction as brand awareness of a new name and offering is not necessary, but requires the discipline of adding new items while subtracting unprofitable items from the line. In some cases, the new items can cannibalize the sales of the old ones without bringing in the additional revenue to cover the additional cost. Using an existing brand name to launch additional products can sometimes reduce operational efficiency, increase distribution costs, confuse consumers, and reduce overall profitability. Most brand stretching and extensions imply the risk of diluting the brand image or even compromising it if the new product is a
failure. The existing brand name creates a feeling of more of the same, rather than offering the opportunity of establishing a fresh public relations story and valuable media attention.

In another approach, Kotler (2002) identifies three main choices when it comes to brand name strategy: line extensions, brand extensions and multi-brands.

Line extensions consist of introducing additional items in the same product category under the same brand name, such as new flavors, forms, colors, added ingredients, and package sizes. The vast majority of new products are actually line extensions. Yet, extensions may lead to the brand name losing its specific meaning, phenomenon called “line-extension trap”. A line extension obviously works best when it takes sales away from rivals, not when it cannibalizes the company’s other items.

Brand extensions imply using an existing brand name to launch new products in other categories. A recent trend in corporate brand-building is corporations licensing their names to manufacturers of a wide range of products. Brand-extension strategy offers many of the same advantages as line extensions but if the new product disappoints buyers, their respect for the company’s other products is damaged. In some cases the brand name may be inappropriate to the new product or the brand name may be diluted, when consumers no longer associate a brand with a specific product.

Multi-brands strategy consists of introducing new brand names in the same product category (usually trying to establish different features, appeal to different buying motives, lock up more distributor shelf space, or protect its major brand by setting up flanker brands) or in new product categories. Ideally, a company’s brands within a category should cannibalize the competitors’ brands and not each other, or, at the very least, net profits from multi-brands should be larger despite some cannibalism.

Another approach is that of Kapferer (1994) who sees six types of brand name strategies, considering the relationship between brand names and the product mix hierarchy: product brand, line brand, range brand, umbrella brand, source brand, and endorsing brand.

The product brand name strategy consists of assigning an exclusive name to a product and to accord it its own individual positioning. Thus, a firm has a brand portfolio which corresponds to its product mix. Kapferer considers this strategy suited in the when the firm carries out a mass attack on one market with several segments having different types of expectations, when the level of physical and functional differentiation among products is low, when the firm is highly innovative and wants to gain the pioneer advantage in markets where success gives rise to copying, when the firm wants to take risks in new markets, but does not want to put at risk its existing successful brand names, when the firm wants to extend itself into various and significantly different product categories and markets, or when the firm wants to gain more of the retailers’ shelf space. The product brand also implies some drawbacks: the marketing costs implied by each new brand launch and the spreading of marketing efforts on various directions.

The line and the range brand name strategy consist of assigning exclusive brand names to product lines or ranges. Both the line and the range brand extend their specific concepts across different products, allowing for what is called cross-branding. The line becomes an answer to the call for like products with complementary features, all under the same brand name. Line and range brand strategies raise the selling power of the brand, create a strong image consistency, ease the line extensions, and reduce launch costs, but, in the same time, might become marketing traps, especially when
brand managers forget that a line or range has limits given by the level of associations of new products to the existing ones. Line or range brand strategy could also slow down the development of a powerful innovation, in comparison to the product brand name strategy.

The umbrella brand name strategy consists of a single brand name supporting several products in different markets, each with its own communication and individual promise. The main advantages of this strategy are the capitalization of the single brand name and the considerable savings regarding the marketing communications effort. Still, the umbrella brand strategy involves risks when new products develop into failures or when the brand name is extended into product categories completely unsuited to its main associations. Thus, the equity of the umbrella brand might be negatively affected.

The source brand name strategy is identical to umbrella brand, apart from the fact that products are directly named (for example, Toyota Lexus, Toyota Yaris etc.). The main emphasis is still on the source brand, but each product or product line has its own additional secondary brand name. The main advantage of source brand strategy is its ability to impose a sense of difference and depth. The source brand can promote its own significance in an enriched way through the additional brand name, in order to attack a specific customer segment. The main disadvantage of this strategy lies in overstepping the limits of the source brand’s core identity.

The endorsing brand name strategy differs from the source brand strategy by the fact that the individual name of each product or product line is firstly emphasized, while the endorsing brand (usually the corporate brand) has only a secondary supportive role, suggesting values and guaranteeing quality or other attributes (examples of endorsing brands could be Nestle, GM, Kraft-Jacobs-Suchard etc.). The main advantage of this strategy is the greater freedom of maneuverability which it confers, being one of the less costly ways of giving substance to a company name.

Considering possible brand-naming strategies, Riezebos, Kist and Kootstra (2003) have a less complex view on the subject, distinguishing monolithic, dualithic, and multilithic brand name strategies.

The monolithic strategy uses one brand name and one visual style in different product groups or product classes. In this strategy, the brand name is also called “family brand” or “umbrella brand”.

The dualithic strategy uses two brand names for the same article: a joint brand name (usually the name of the company), and an individual brand name for each article, the individual brand name being a product-line extension of the joint brand name (consisting of letters and/or numbers), or being supported by the addition of the joint brand name (an endorsement). In general, product-line extensions are applied to durable goods, while endorsement strategies are suited for both durable and fast-moving goods. Research has also shown that consumers associate brand names with an alphanumeric extension with technological products (Pavia and Costa, 1993).

In a monolithic or dualithic strategy, one and the same brand name is used for several products, financial advantages being gained, while the value of a successful brand is thus exploited and probably enhanced, but the negative publicity around a branded article can obviously shift to other products brought onto the market under the same brand name.

The multilithic strategy consists of giving branded articles entirely different brand names and logos, similar brand names (thus creating series brand names which
usually have one common syllable (for example, Nestea, Nescafé, Nesquick, or McFries, McChicken, McDrive etc.), or entirely different brand names, but similar logos (thus creating series brand logos).

**Extended approaches regarding brand name strategies**

The choice of a specific brand name strategy very much depends on the financial and strategic advantages aimed by the parent company. Still, all the above mentioned strategies imply creating and/or using own brand names, while a company is not limited to its own brand names when it comes to brand naming strategies.

When developing a brand, considering the size of the budget that is made available to the marketing communication of the brand and the effect that this has on the possibility of using advertising as a brand–building instrument, there are basically two strategies – *low-budget versus high-budget brand strategy*.

The reason for choosing one of the two strategies is mainly financial, regarding the amount of financial reserves of the corporation, but can also be determined by a management choice, considering two main causes: the target group of the brand is not sufficiently large to guarantee a satisfying return on the invested advertising capital and/or the choice made for a general low-cost strategy for the brand, which implies a low level of differentiation in other terms than lower-price in the context of an acceptable quality.

The methods to be used for establishing the most suited budget oriented strategy for a brand, analyze the costs, in terms of advertising budgeting, related to reaching a certain percentage of the target group of the brand (task-assigning method) or to the market share to be achieved for the brand (competition-oriented method).

*The task-assigning method* implies the determination of the minimal size of the advertising budget needed to reach a part of the target group. Firstly, this target group must be clearly defined, then the media needs to be selected accordingly, and an objective should be formulated, in terms of percentage and frequency of the target group to be reached. The objectives further generates the gross rating points to be bought from the media concerned (GRP = one advertising contact with 1% of the target group). For example, the objective “50% of the target to be reached within an advertising campaign, each one 20 times” actually means 50x20=1,000 GRP. Considering the medium price for a GRP, the advertising budget can be estimated.

*The competition-oriented method* is based on identified correlations between the advertising share of the brand and its market share. Recent studies (Jones, 1992; Kent and Allen, 1994) have demonstrated a negative relationship between market share and advertising expenditures. Thus, a brand with relatively low market share should have an advertising share that is higher than the market share, while a brand with a relatively high market share can have an advertising share that is lower than its market share (table 1).

<table>
<thead>
<tr>
<th>Market share (%)</th>
<th>1-3</th>
<th>4-6</th>
<th>7-9</th>
<th>10-12</th>
<th>13-15</th>
<th>16-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional required advertising share (%)</td>
<td>+2</td>
<td>+1.5</td>
<td>+1</td>
<td>0</td>
<td>-2</td>
<td>-3.5</td>
</tr>
</tbody>
</table>

needed is estimated, and thus, a certain value for the advertising budget can be established. For a newly introduced brand, a rule often used is that the additional advertising share needed, should on average be doubled. For example, if for a newly introduced brand a 4% market share is to be achieved, than the advertising share should be $3+2\times1.5=6\%$ of the advertising expenditures in the product class.

After covering both calculation methods, if the financial reserve of the company is substantially lower than the highest amount determined, the low-budget brand strategy should be chosen. Otherwise, the high-budget brand strategy should be the most suited.

In comparison to the high budget strategy which involves significant investments in advertising, the low budget strategy shifts the accent to *brand naming, packaging* and to processes where *image transfer* can play a fundamental role.

Giving the fact that *the brand name and the packaging* reveal two kinds of associations in consumers’ minds – the associations of the name and packaging itself and those that consumers have learned to link to the brand name and packaging through marketing communications – both brand name and packaging can play an active or a passive role in the brand strategy. Thus, in the case of a low-budget strategy, the brand name and packaging should suggest within themselves, in the absence of advertising, certain associations (product category, quality, usage etc.), even at the first confrontation with customers, thus playing an active role and a symbolic function. Recent studies have shown that even in the absence of advertising, the confrontation with a brand name will call up certain associations (Collins, 1992) and the packaging design itself contributes to the brand image (Southgate, 1994). On the other side, in the case of a high-budget brand strategy, the brand name and packaging play a passive role and a signal function, consumers linking them to certain associations conveyed by advertising, the name and the packaging themselves being abstract and suggesting few or no associations at the first confrontation, in the absence of advertising.

However, besides brand name and packaging, there are a number of other useful instruments for giving meaning to the brand in the case of low-budget brand strategy, all being based upon the technique of *transferring the image* consumers have already developed around something to something else (for example, a new product), possible sources of image transfer being: an ingredient brand, a qualification mark, a geographic image, or another brand through the use of co-branding.

An *ingredient brand* is used only as a component of a branded article (Norris, 1992), being consumed and bought only as a part of the branded article, while the brand name of the component is only used as an ingredient to other products. Thus, although a brand like Michelin can only be consumed as a component of a vehicle, it is not an ingredient brand because it is usually bought separately. Still, Intel is considered an ingredient brand, although sometimes it is bought separately. Thus, a correction should be made to the ingredient brand definition, replacing the term “only” with the term “usually” when considering buying the ingredient separately.

Through the process of image transfer, the positive image of the ingredient brand may contribute positively to the image of the host brand, while the probability of a negative feedback for the ingredient in the case of the host’s failure is minimal. Recent studies (Simonin and Ruth, 1998) have shown that a higher level of brand awareness of the ingredient leads to a stronger influence on consumers’ attitude toward the host brand and to a weaker influence of the host brand on the ingredient brand (the
“feedback”). Thus, the more powerful the ingredient brand is, the more secured it is in the case of the host’s failure.

A *qualification mark* (Riezebos, Kist and Kootstra, 2003) is a collective brand that is mentioned as an additional distinguishing mark on products, meant to emit signals on product quality (for example, ISO) and/or guarantee the socially responsible way in which a product has been produced (for example, Fair Trade), and which is provided by an independent organization. It is important to know that qualification marks can only add value to a host brand when the brand-added value of the host brand is low. For strong brands, the qualification mark name will have little or no value to consumers.

A *geographic image* related to the stereotypical images that consumers often have of a city, region or country, can provide a positive addition to the host brand. A geographic image can be linked to a brand by referring directly (for example, British Airways) or indirectly (for example, Lamborghini) to it in the brand name or in the brand slogan, by applying the “made in” label, by drawing near a national flag etc. Considering the geographic images involved, the E.U. introduced regulations on names for regional food products, distinguishing three types of such geographical names: protected names of origin (the raw materials and the production are in a certain region), protected geographical indications (only the production is in a certain region), and guaranteed traditional specialties.

*Co-branding* consists of an alliance between brands, taking three different forms: co-branding *on the product level* (when a new branded article is created on the basis of two branded articles), on the *distribution level* (when one branded article is sold in combination with the other branded article, or corporations distribute each other’s branded articles in markets where one of them has a good distribution network), and on the *communication level* (when one branded article is praised in another brand’s marketing communication statements).

When co-branding on the product level, the two brands names must be owned by different companies or business units, must also be used independently of each other, and both brand names must be communicated equally to the consumers. Recent studies (Washburn, Till and Priluck, 2000) have shown that co-branding is a win/win proposition for compatible product categories, although it appears that low equity brands benefit most from co-branding. Co-branding with a high equity brand offers competitive advantage to a new product being introduced with a relatively unknown brand name or to the existing product seeking a means to build awareness or reposition. High equity brands appear to not be diminished by their pairing with low equity brands thereby offering protection from poor co-branding decisions. This positive impact affects both the co-branded product and the brand equity of each co-brand partner. The only brands not enhanced by co-branding are those with well-entrenched, long-standing positive images. Nevertheless, these brands are not negatively affected by co-branding. Consumers appear to be able to distinguish between the two co-branding partners about which partner is primarily responsible for the product's good/bad performance.

Considering the co-branding on the communication level, recent studies (Rao et al., 1999) have demonstrated that this form of co-branding could be favorable for a brand that needs a quality perception boost, but has significant effects only if the brand that offers the high reputation is vulnerable to negative feedback, in order for the reputation transfer to be credible. Other studies (Samu et al., 1999) have shown that if the goal is to increase brand name awareness, a complementary partner should be
selected, while if the objective is to increase the awareness of certain attributes or benefits, a non-complementary partner is better suited.

The concept of co-branding is also analyzed by Kotler (2002). His *dual brands* strategy occurs when two or more well-known brand names are combined in an offer. Each brand sponsor expects that the other brand name will strengthen preference or purchase intention. According to Kotler, co-branding can take one of the following forms: *ingredient co-branding* (one of the brand names is an ingredient of the product branded through the other name), *same-company co-branding* (when one of the brand names is the corporate brand name, and the other is a specific product category brand name), *joint venture co-branding* (when the two brand names are both corporate names), and *multiple-sponsor co-branding* (when more than two brand names are put together).

**Discussion and conclusions**

Analyzing the above mentioned brand name strategies, one might observe, in the same time, both recurrences and differences.

Thus, the multi brand strategy of Kotler is very much the same to the product brand strategy of Kapferer and the multilithic strategy of Riezebos, Kist and Kootstra. Still, each author differently nuances their specifics, Kapferer being the most analytical, somehow separating the line and range brand name strategies from what the other authors group into the “multi” type strategies, or slightly grouping them into simple “line extensions”. Also, the monolithic and dualithic brand name strategies of Riezebos, Kist and Kootstra very much resemble the umbrella and source brand name strategies of Kapferer, the latter being again more analytical, separately grouping apparently similar brand name strategies: umbrella, source and endorsing brand strategies.

On the other hand, Kapferer does not identify among the brand name strategies those considering brand alliances, dual branding, co-branding etc. More than that, when analyzing dual brand name strategies, Kotler is surprisingly restraining the strategy range, while Riezebos, Kist and Kootstra are more detailed analyzing this concept, going beyond what most of the authors call brand name strategies, approaching geographic image and qualification marks.

Obviously, the knowledge about brand name strategies has been strongly enriched by years of research on the subject. Based on the findings previously reviewed, there is no doubt that a set of fundamental factors must be considered when establishing such a strategy and assessing the consumers’ evaluations. Although there is much knowledge about the antecedents and outcomes of various brand name strategies, much remains to be discovered particularly in the field of the outcomes. Even though brand extensions and co-brandings are becoming increasingly popular as more firms try to benefit from their established brands by expanding their range of products, present insights into the factors contributing to success and failure are rather modest. A better understanding of these factors can help reduce the risk in these important business decisions.
<table>
<thead>
<tr>
<th>Reference</th>
<th>Author(s)</th>
<th>Title</th>
<th>Publisher/Details</th>
</tr>
</thead>
</table>
EUROPEAN ECONOMIC MODEL: QUE VADIS UE?

Lect. PhD Cosmin Marinescu
Faculty of Economics,
Academy of Economic Studies,
Bucharest, Romania

Abstract: Recent evolutions in Europe raise questions on the viability of the actual economic and social model that defines the European construction project. In this paper, I will try to explain the viability of institutional European model that stick between free market mechanisms and protectionism. The main challenge for the EU is about the possibility to bring together the institutional convergence and the wellbeing for all Europeans. If „development through integration” seems to be harmonization through „institutional transplant”, how could then be the European model one sufficiently wide open to market which creates the prosperity so long waited for by new member countries?

Key words: economic model, institutions, economic integration, competition

Latest news presented great union demonstrations that almost paralyzed symbol towns of EU. Worried and astonished, we assisted to the terrifying show offered to the entire world. “Bolkenstein Directive”, against which were hundreds of thousands of European people, seemed to become a horror movie title that threatened to dethrone social privileges of the welfare state. In France, politics proposed in order to liberalize the labor market turned Paris in a siege capital, through which unions almost colonized the state. This is the image of an unprecedented institutional crisis that characterizes the present social arrangements of UE. There is no doubt that we speak about an amazing state of affairs, contrary to “social cohesion and solidarity” challenges that begin and end almost all EU programmatic documents.

Harmonized Europe or European Harmony?

European integration is built on a system of common policies negotiated and adopted by European governments. This integration process is not the result of the political constraints abolition, it does not mean free market and competition mechanisms, despite all efforts towards these. We can speak about a political-bureaucratic option towards what should be the economic and society European model. And this political normative derived into an institutional arrangement exported, with the highest fidelity possible, to member countries and to those that applied for membership.

We are all aware of the confusion that the philosophy of EU political elite makes between “harmonization” and “harmony”. In fact, harmonization is another way of speaking about “unification”, meaning accepting a unique rule, in fact “standardization” that European institutional arrangement propose to almost all social life sectors.

Harmonization architects seem to ignore what is most important precondition for the economic prosperity, meaning diversity, competition between different institutional arrangements and, in globalization terms, even between different fiscal
systems. Competition is the only one that can improve the situation, meaning reducing tax burdens and improving public services.

**Within economic sectors, same as in music, harmony does not derive from unanimity agreement, but from diversity agreement.** This could be the future of fiscal Europe: European contributors capitalize the inter-jurisdictional differences, and those will facilitate tax competition. For the very moment, hundreds of young French go abroad trying to escape from the French tax system rapaciousness. Which could be the harmonization scope? To stop the free movement of production factors by constraining the other European countries to “harmonize” (it could be also read “increase”) their tax system to rough requirements of welfare state.

**Free Market vs. Protectionism**

The entire EU institutional arrangement - with American pedigree at its origins - is fundamentally the result of the European political system. Despite many economic arguments being quoted in favor of European integration, the defining source of the European project is, par excellence, primary a political one. Initially, the energies of the European integration were animated by the necessity to build a (political) power to counterbalance the American "imperialism" and the un-precedent taking aim of East Asia. In time, the economic dimension gained (an) increasing importance.

But who are the creators of this political project and what were they aiming at? The founding fathers of the "United States of Europe", starting with Jean Monnet, were convinced that the "high" European authorities would have the capacity to plan the economic development overriding the economic principles of the market. We talk here about the model of an economy built via and surrounding the state policies and budgets?. As shown in Institutions and Prosperity. From Ethics to Efficiency (Marinescu, 2004), the allocation of public resources does not impede the exigencies of economic calculus and of markets, but rather political rationales. In fact, the political allocation of resources bears the stamp of any governmental budget. European budgets are built on an immense scheme of subsidies, aids, structural funds and financial external assistance. All this explains the redistribution of resources in the European space via governmental budgets, the European budget and the common policies.

The candidate countries, being in the position of net-receivers, consider this a very positive process, at least at this stage. Since the Marshall Plan, it became clear that the dramatic expansion of „foreign aid” programmes is the result of a political option and not necessary of an efficiency criterion. Hence, the impossibility to assess whether the politically „exported” resources will serve a real economic need or will only contribute to feeding corruption and the “ossification” of the state elites. Billions of dollars external aids offered generously to the African countries by international financial institutions had a modest efficiency or proved to be painfully failure in reducing poverty (India, some countries from Latin America or Africa). Numerous studies have shown that external financial assistance neither creates, nor is it correlated with the essential sources of prosperity. If liberty is the determining source of prosperity, one could notice that a reduction of economic freedom is often – paradoxically - the result of foreign aid increasing. Setting external fund at the foundation of a country’s economic success is a dismal illusion. This approach neglects the role of liberal policies (some of them even anti-European) in creating prosperity.

---

Ireland is a very good illustration of the case when the reduction of public expenditure exceeded the inflow of European funds.

In its essence, the transition to market economy resides in the generalization of the private property as a fundamental institution and its logic corollaries: economic freedom, markets and economic calculus. For all candidate countries, excepting probably Estonia, embracing the European model was the equivalent of reducing the degree of state intervention in the economy and accompanied by an expansion of the market mechanisms. From this point of view, for the governments of Central and East European countries, accession represented an external constraint favoring the completion of reforms towards the market. For example, the liberalization of external trade (the adoption of a common trade policy), reducing the barriers to foreign investment and the free movement, the competition policy in general which can clarify the national business environments and even the almost obsessively invoked safeguard of legal stability and certainty.

However, the very European model itself is insufficiently open to the market mechanism in order to rapidly induce in the candidate countries the long waited for prosperity. Moreover, embracing this model requires costs which are far from negligible and which can reflect in the slow down the economic performance. The so much wanted economic growth is the product of economic liberalization and market mechanisms. Prosperity is not a spontaneous result of gaining the EU membership, but of sound economic policies which stimulate capital accumulation, investment and entrepreneurship.

CEE economies are emerging economies for which economic progress and spread of prosperity via the market could be more important than the protection by the state of consumers’ interests, job security or other aspects related to environmental protection. Moreover, it has been admitted that the implementation of European rules in labour, agriculture and environmental sectors is associated with huge costs, which would vitiate the potential for economic growth.

For instance, if the European environmental regulations were immediately applied, they would sentence the Romanian economy to stagnation, by the imposition of the required high standards and prohibitive costs. It is understandable why, at present, the most stringent standards and legislations regarding environmental issues are to be found in the developed countries: improving the environmental quality is the consequence and the reflection of an improvement in the standard of living. Empirical studies have shown that environmental standards tend to rise with the GDP/capita. This means that the European exigencies should give priority to the fast economic growth in the CEEC which should be followed, rather than preceded, by an improvement in the environmental standards. Besides, the possibilities of reforming the present approach (state ownership, high standards and huge governmental spending) through the systematic expansion of the private property in the environmental sector are an illusion.

Institutional Transplant of European Centralism

There are two ways in which the national governments could react to the generalization and the intensification of competition: giving up to the market forces or forming a cartel. The first means the consolidation of freedom and a greater prosperity, the second one erodes freedom, determines the preservation of the status quo and only redistributes wealth.
The first way reflects the generalization of the institutional competition, which represents the spontaneous adjustment of the national institutional arrangements with the aim of improving competitiveness and economic performance. In the context of globalization – intensification of cross-border trade and the increased mobility of factors of production – economic systems are prone to certain adjustments and even to institutional changes of high magnitude. Under the new circumstances, the institutional competition – the competition between rules – is the natural consequence of technological and organizational innovations. These have induced the increase in the mobility of goods and people at international level, the unprecedented development of communications through the reduction of transaction costs. Thus, the opportunities offered by the external market are greater and their fructification becomes more advantageous.

The European model of institutional building and political governance corresponds to the second path. This derives from the European political elite belief that the politically and economically uniformed, harmonized United Europe will better resist the “disruptive” forces of globalization. In this view, the acquis would represent an instrument of harmonization through institutional transplant and the taking over the legislation corpus (acquis communitaire).

The Brussels bureaucracy, also called Eurocracy, has developed specific forms of hierarchical coordination and administrative harmonization (read standardization) in almost every domain of public policy. The transposition of the 97,000 pages of European legislation means importing institutions, administrative structures, legal practices and economic policies. The acquis illustrates probably the best way the legislation can be turned into a governing (political) instrument, thus creating a radical discrepancy between Legislation (governing regulation) and Law (applying the rule of law through the distinction between good and evil). Moreover, the project of the European Constitution, the longest and most politicized constitution of all times - 270 pages and 70,000 words, in comparison with the only 17 pages and 4,500 words that the USA Constitution counts) is a clear example of European centralism at economic, institutional and political level.

With regard to the constitutional arrangements, one needs to mention that the most important difference between the American Constitution and the Constitutional project of the European Union resides in their view on “rights”. The „Bill of Rights” of the US Constitution consists in a list of individual rights against the state and its constraining powers, the „Charter of Fundamental Rights” of the European project consists in a long list of rights to the state monopolized services, like the right to education and health, the right to security, social assistance, right to work etc. The US Constitution is largely build on the philosophy of “the right to …” (ownership) because, lastly, the philosophy of the natural right of John Locke demonstrates the human rights cannot be conceived other than as ownership rights. In turn, the European constitutional project talks about “the right of…”, a concept that implies the very undermining of the true human rights, by the expansion of political power and the authority of the state over the life of the individual. By the sacrifice of these fundamental principles of law, the authors of the constitutional treaty project have overloaded the vessel of social rights with nothing else but privileges that dilute the concepts of contract and individual responsibility, favoring set up of a union like, collectivist regime.

The accession process, as it was conceived, was based on the creation and consolidation of an executive specialized branch at national level, which favors the
executive component of government. This derives from the fact that the negotiating process and the adoption of European norms is, in reality, an administrative exercise which has the nature of consolidating even more the “statist model” in Europe through the perpetuation of the welfare (redistributive) state and the social market economy model - a model whose economic performances are more and more modest. The fact that the whole process of EU enlargement has developed in a purely elitist, technocratic way has eroded the public support and the trust in the integration process. This could explain why, in what regards the enlargement issue, the public opinion in many European countries is less enthusiastic than in the Brussels officials’ declarations.

From an economic perspective, it is not clear why should EU be an centralized institutional and political arrangement. The free market and competition are capable of boosting Europeans prosperity without necessarily regulating the size and shape of fruits and vegetables, as it happens with the European legislation. Almost all economic and social policies and subject to “harmonization” at a pan-European level while enlargement based on a strictly conditionality system becomes a powerful instrument of reducing diversity.

At fiscal level, harmonization could lead to the alignment of taxes “higher” at the level of most burdensome fiscal regimes. It is alarming that European officials tackle the competition issue only half the way: competition is good, but not between governments (at fiscal level). It seems ironic that many European officials have shown concerns for the fact that some countries use fiscal dumping as more and more business turn towards more friendly fiscal jurisdictions. Moreover, both at EU and OECD level, there are concrete proposals for fiscal harmonization in order to prevent the damages of fiscal competition!! These measures are meant to prevent the national governments to resort to the fiscal competition “gun” as the main means of rending their business environment more appealing; this is similar with prohibiting the entrepreneurs to use all the tools and instruments they know for obtaining the best quality product in the least costly way. In that case, the constitutional rights of American and Swiss citizens to legislative proposals of fiscal reductions should be forbidden, since this would lead to the reduction of revenues from taxation to the German of the French government?! And, to finally conclude on the issue of fiscal competition, we should quote Pascal Salin who said that prosperity needs not to abolish the “fiscal paradises”, but to abolish the „fiscal hell”...

Theoretically, fiscal competition if the natural consequence of the mobility of taxation base between the states. As a non-cooperative game between governments, the fiscal competition generates the incentive to reduce the fiscal pressure for the taxation bases with a higher mobility and the increase of the burden for the factor of production and activities less mobile. As globalization diminishes the possibilities for monopolies to resist in different markets, so it acts towards the limitation of the monopoly of governmental power. Consequently, governments that cannot resist fiscal competition could exhibit the tendency to operate at a higher level of constraint of the political monopoly, in a fiscal cartel very likely to be built at European level.

At present, the ample technological and institutional changes facilitate the international migration and the intensification of fiscal policy in the labour markets, a factor whose mobility has increased significantly: the high tech sector specific skills, artists, sportsmen, all place their activities taking into account the friendliest fiscal jurisdiction. For instance, the fiscal authority in France reports that each year, thousands of tax-payers leave the country for fiscal reasons; a large number of French
entrepreneurs place their operations in UK; the strong relief of fiscal pressure in Ireland has reversed the traditional trend of migration.

At sector policy level, guided by its aim to “organize” (read make uniform) whole sectors of economic activity, the European Commission has adopted the strategy of “common policies”, based on the proliferation of regulations, administrative controls and political subsidies. What are the results? The ACP - an expression of the view that private agriculture is impossible – has deprived consumers, contributors and even farmers. The Brussels fixed prices did not prevent the rural exodus; they have put pressure on households’ income, while the protectionist policy diminishes the benefits from agricultural cheaper imports. Moreover, as a result of accession, the farmers in the new Member States will have to reduce their output in conformity with the already negotiated and arbitrary established quotas together with the European decision making bodies, based on un-loyal competition grounds, despite the fact that old Member States export more to Easter Europe than they import. But how do the production quotas – a concept reminiscent from the old soviet system - shake hands with the idea of a true, compete internal market?

**The Welfare State or the Redistribution that deprives**

When the economic history of Europe from the last third of 20th century will be written, we will understand the whole series of battles that national governments have launched against the economic reality, with the mere illusion that victory can be granted by the embodiment of a simple majority. In this period, Europe was dominated by the institutional arrangement of the welfare state, whose practices were promising education, healthcare, security, prosperity, jobs, in a word happiness for everyone. For the achievement of this goal, national governments understood to increase governmental spending to over 50% of their GDP.

Beyond the increase in public spending, the welfare state machinery was fortified by numerous protectionist laws, ranging from an extremely elaborated system of “working rights” to a huge administrative mechanism in the social insurance and social care. The almost full subordination of the economic to the political was justified, on a large scale, by two reasons. The first one, packaged in cheap electoral pills like „The man counts more than the market” or „In democracy, it is the votes that decide, not the dollars”, is based on the fallacy that man, on one side and dollars, on the other side, have conflicting interests. The second reason, one that amplified the invasion of economy by a multitude of “welfare” policies consists in the unhappy belief that the redistribution of income by the government through taxation and policies is an act of “social justice” and a moral duty.

The institutional arrangement initially named “welfare state” was later on recalled in numerous programmatic declarations of EU as the “European model. This very skilful linguistic manoeuvre is meant to underline the clear antagonism of the „European model” in contrast with the „Anglo-Saxon” or, even further, with its political rival, the „American model”. In this sense, the supporters of the institutional construction of the EU try to accredit the idea that the performance of this „European model” will be the more obvious, the more the good Europeans will disagree with the cultural model of Anglo-Saxon origin.

Obviously, the claim that, at present, this „European model” would be representative for all Europeans is biased. Essentially, the nature of the „model” is French-German. Its essence is derived from the French socialism of military Gaullist
inspiration, from the German social-democracy and the doctrine of the unions\(^1\). Thus, the European model gets attached, as it is the case for any „rational planned” society, to its own system of cultural values, meant to clearly illustrate the dislike of the Anglo–Saxon civilization, still liberal, but more and more to a lesser extent.

The fundamental trait of the “European model”, taken over \textit{ad-litteram} from the arrangement of the „welfare state”, consists in the redistribution of welfare in the society. Nowadays, the political redistribution of property is considered, even amongst economists, a “natural” prerogative of the state. But the institutionalization of the redistributive practices of the \textit{welfare state} produces, during time, as it has been proved, two types of consequences that inhibit economic prosperity (Marinescu, 2004):

a) At \textit{economic level}, the incentives for work, initiative and entrepreneurial activity are negatively affected; a decrease in the rate of capital formation, the disincentive of the investments with depressive effects on the economic activity.

b) At \textit{socio-cultural level}, changes occur in the social structure regarding the types of personality and character of humans. Social assistance is the one that creates a “mentality of assisted” and favors the collectivist and equalizing cultural values.

Beyond the precarious realism of the policies of the European welfare state, the main goal of the “model” consists in developing a vast scheme of social security, starting with the full monopoly of state in the education sector, goes further with the legal protection of labour places, the best paid holidays, the lowest duration of labour-time that ever existed and ends up with the social insurances for the unemployed and the state pensions.

But which are the economic costs of this social „generosity”? First, we need to understand this public “generosity” is built on higher taxes that have always defined the welfare state institutional arrangement. The redistribution mechanisms and the burdensome taxation are the very sources of the economic problems that Europe faces at this moment. First, we talk about a very pale economic growth experienced by some of the \textit{hard-core} members of the Union. Economic growth rates of 1-2\% have become almost a rule, thus being official figures of the economic counter-performance in the EU. Happily, the economic growth deficit in the EU raises serious constraints for the European elite in continuing to rolling systematically the social (read “political”) leverages of “welfare”. Secondly, it is the serious frictions in the way of the realization of “social harmony” whose source resides, ultimately, in the administrative defection of the labour market mechanism. During the thirty years since the “social model” became a political must, unemployment exploded from an average of 4\% to over 10\% in France and to approx. 12\% in Germany. And from the side-slip of the labour market (if we allow ourselves to call it labour market) to the undermining of the fundamentals of civilizations, of “social cohesion” (a concept so dear to the planners of the EU) are only a few very small steps.

The morale is that social policies meant at ensuring social cohesion end up by off-setting economic growth and implicitly, the creation of jobs, which also explains the dramatic tensions in the labour market in countries like France and Germany.

\(^1\) The European Union tradition is well known. The Americans had spoiled theirs by the capitalist „spirit” that animated the initial development of their economy. If \textit{socialism} was aiming at collective state property on capital, the \textit{union-ship} (as a doctrine and a tactic) had as a fundamental goal the abolition of the separation of workers from the means of production and consequently the annihilation of the entrepreneurial spirit (see Ludwig von Mises, 1966, chapter XXXIII).
Moreover, the partisans of the “European social model” proved the misunderstanding of a simple economic logic when they claim that unemployment is high in Europe because the model is not “social” enough…or “European”, which holds the danger of giving birth to an even more stringent need of European “harmonization. In reality, unemployment is the consequence of a labour market stiffens by its own over-regulations by the job protectionism. This is contrary even to the principle of “freedom of contracts” by a fiscal burden that ruins the incentives of entrepreneurship, hence the scarcity of the newly created jobs. In an economy dominated by the public sector, the thirty years time of economic socialist policies have spoiled the incentives of the entrepreneurship and turned the “working class” to an amorphous mass continuously nourished with preferential legislation.

References

2. Bastiat, Frédéric *Ce qu’on voit et ce qu’on ne voit pas* [1848], Editions Romillat, Paris, 1993
THE SERVICES, THE LASTING DEVELOPMENT AND THE QUALITY OF LIFE IN THE ROMANIAN SOCIETY

Lect. PhD Rabontu Cecilia Irina  
Faculty of Economic Sciences  
University “ Constantin Brâncuși” - Tg-Jiu

**Abstract:** The publication necessity of this paper it’s also owed to the absence of some answers about the evaluation way of the services dynamic, of some fields efficiency, others’ for making them able to attract labour force and for their contribution at life’s quality and at lasting development, for growing up their competitively etc.

**Keywords:** the services' development, the national economy, dynamics and the complexity of the services, the life quality, lasting development and

The proportion and the all around presence of the services’ development especially in the fast decades, require in a normally way, an appropriate treatment of these, also from the reconceptualization point of view as from the approaching in a general vision. The services dynamism field imposes the permanent adaptation of the economical agents at business environment, because of the confrontation with the problems whose solutions need an approaching in a new outlook.

The publication necessity of this paper it’s also owed to the absence of some answers about the evaluation way of the services dynamic, of some fields efficiency, others’ for making them able to attract labour force and for their contribution at life’s quality and at lasting development, for growing up their competitively etc.

The concept of services economy gains new dimensions by defining services as the final product of the activity of a company or economic sector, as a producer for creating and distributing a product or service designated to consumption and services of strategy of development apply able to all economic sector establishing new organization competition and valuing principles.

The economic once material, discreet, impersonal and lasting, has become spectaculars, relational and ephemeral along to its transfer towards the third sector.

The quick development of the services sector has exceeded the economic theory. Given the strong intervention of the services in all activity fields, it can’t be talked only about a simple quantity modification in the consumption structures but, more, it can be noticed the nature’s itself modification of the most part of the activity and a general quality leap of the economic and social life.

A lot of time, the services haven’t been on the first place in the economist’s studies, because they were considerate by those parts from the unproductive activities’ sphere. Today, these have become big components of the of the modern national economy’s structures and of the economical theory, and so the role and their social functions has been amplified.
The notion of “service” is a notion that has attracted attention from the antiquity, but in a limited meaning, proportional with the development rank of this moment. Later, after an interesting and scientific co-ordinates and it’s extremely disputed in the present and it appears in a variety of hypostases. This is why in this part of important moments and the most remarkable economists who marked the services’ field development.

The informational society represents a new stage of human civilization, a new superior lifestyle, which supposes an intensive use of information in all activities’ spheres and human existence, with an important economical and social impact.

Most research workers from this field consider that the unprecedented progresses from informatics technology are the foundations of the appearance of new services and support the already existent services.

The economical development process of a nation led to the appearance of ensemble of branches and activities which forms the national economic complex that offers the country which represents certain interdependence, according to its own interest. The intellectual sector presents as an offer the science the piece of information, the ideas and other intellectual products. The matter energy consumed by this sector is relatively reduced and we referee here to the electronic energy used for the computers functioning, paper etc. The third intellectual field contains the specialized for intellectual services companies ensemble.

The variety, the dynamics and the complexity of the services led to the appearance in the specialized literature of a variety of classification criteria and implicitly of numerous services categories. The importance of these classifications is represented by the necessity of grouping them into homogenizes categories, characterized by the same specific features and aspects referring to the resources’ administration and production and marketing processes management, on the intern and extern market.

The services, an important sector in the economy of the developed countries, gained and continue to own a higher weight for attaining the most important Romanian macro/economic indicators.

Now, the services are in an incipient development level, been part of the category of the activities reduced as number and variety. We can claim that the Romanian economy is mostly agrarian, but we can’t omit the fact that services had a higher number of workers then the secondary sector, meaning 11.6% in the third sector comparing 10.2% in the secondary one. Also, the third sector had the highest weight in the national income achievement witch at that time was of 1500 million dollars.

So, comparing to the primary sector which used to participate with 38,7% according to the fact that it was considered a mainly agrarian economy, comparing to 22,6% which the secondary sector was proud of, the third sector deposed these two sectors with 39% of the national income.

It is know the fact that a long time Romania’s economy had the shape of the economy with centralized planning.

From the pieces of information presented in the paper, in can be firstly noticed extremely large existent discrepancy between the primary sector and the secondary and third sectors in the year 1950, when in the third sector there worked only 11,5%, not with much fewer than in industry and construction (14.2%).

Also, it can be noticed that the labour force occupied in the third sector has known an ascending dynamic, achieving in the year 1970 a weigh of 19.9% of the total
occupied population, and in 1989, when the economy with centralized planning ended, it reached 27% from the total.

Between 1950 and 1989 in the services sector the population occupied has registered a plus of 1989,8 thousands persons, important aspect for the national economy if we consider that the services sector is a move and move important sector and it attracts the labour force released from other sector.

Between 1950 and 1989 in the social product's creation is very reduced, of only 20,2% in 1950 and 12,6 in 1976, comparing to the other two sector which sum 79,8%-87,4%. The same inferiority tendency in the services weight is found in the case of the national income, which has values between 22% in 1950 and 18,6% in 1976.

The transition was seen as an ensemble of the changes which take place in the society’s configuration, which includes all the components and fields of the society, the politic and economic systems, the institutions, the social relationships, the civil society organisms, and the organization forms, lifestyles and mentalities.

Concerning the changes which take place in the social, political and economical life in the transition period, the economic reform represents the support and the guarantee for the success of the reforms in the other fields. Concerning the fiscal background it can be said that it has improved meaning that a number of cvasi-fiscal elements have been accompanied of higher transparency in the budget, the number of extra-budgetary finds has reduced, and the cvasi-fiscal deficits are at a much lower level than in the year 1996.

The progress in the financial sector’s reform has been realized in the last years through privatization, the reorganization or the liquidation of the important banks state property. In this period, after the year 1997, the delays acquired in the reorganization of the large enterprises sector led to the preventing of the new companies access an the market, which summed to be the main motor of the economic transformation, if we refer to the reforms in the services field, meaning, the reform, the public administration reform and others.

The way in which the services have advances in this delicate and difficult period Romanian is crossing is and interesting one and this fact was presented through some general or specific indicators of this very large field of the services.

In the analyses done, it can be easily, noticed the large discrepancy between the occupied population’s weight in services in the countries economically developed and the one in Romania in the analyzed period. These indicators proves the major role of services in the labour force occupation from this category of countries, but implicitly the contribution of this field at the development of these countries. It can by easily noticed that in countries as the USA, Austria, Belgium, Denmark, Canada, Norway, Holland, the United Kingdom the population’s weight occupied in services is over 70%, when in Romania it is under half of this weight, namely 34,1%.

In the developed countries, the primary sector’s weight has drastically fallen in favor of the RIP creation. In all these developed countries presented, the services weight in the RIP creation is included between 60% end 80%, comparing to the weight owned by the primary sector (0.7-3%) and the secondary sector (20%-30%). We can't say the same thing about the present existing situation in Romania, where the services weight in the RIP creation doesn’t exceed 47%, which is an extremely low level comparing to those present in the developed countries.

The lasting development is an extremely topical concept, but it is in the same time a reality of which all the economy sector must consider in the following activities.
Cooperating with the concept of life quality, the lasting development has become in our days the most important objective from the strategies and politics from every activities domain.

The importance of the services’ contribution at the lasting development is that much clearly presented that we enounce some types of services straight implicated in this valuable process for the society services for surroundings’ protection, sanitation services, touristic services, etc.

The services for the production and maintenance of the production machinery included all the activities that satisfied the output needs in general, and this domain includes the material production activities and the ones of the immaterial production. The worn that performs these services is not materialized in a good material, but it contributes at its obtaining

As the specialist say, the population material and spiritual needs can only be satisfied through the material goods and services consumption. The utility of the material goods is filled by the possibility which services give them to become consumable. Concerning the main categories of paid performed services for the population, through the dates’ analysis in the table, we can say that their tendency is an increasing one in general and also for each services analyzed category. This fact is mainly caused by their value expression in present prices which include inflation, too.

The standard of living and the quality of life are two concepts strictly bound with the person of each of us, which presently have a special place and importance.

Each person is conscious by these two aspects through the natural attempt of answering a maybe ordinary question, even expressive in this context: “On What scale of the society am I situated?” “With What social class am I identifying myself?”

Services are deeply involved in all these aspects, the services consumption of the population being an important element of the life quality. Between the leisure time and services it is created an important interdependence relationship, even though we refer to its size and it’s using possibilities, aspect which we will delay next.

Services are involved in the work time reduction favorization also as in the reduction of the time affects to the satisfaction of the existence’s requests.

Between the population’s services and leisure time we can talk about a feed/back relationship. This fact results from the reality that the services development level determines the time given by man to an ensemble of inherent activities as transport time, housekeeping time, basic physiologic necessities time, etc.

**REFERENCES**

5. Rabontu,C. Serviciile în economia românească, Ed. Scrisul Romanesc, Craiova, 2005
NEAR SHORING IT-ENABLED SERVICES IN AN ENLARGED EUROPE

Lect. PhD Ana Bobircă
Academy of Economic Studies
Faculty of International Business and Economics, Bucharest, Romania

Abstract: The aim of the paper is to explore the potential for off shoring IT-enabled services among traditional (EU15) and new Member States of the EU, including Romania. First, issues related to the theoretical background of the off shoring phenomenon are addressed. The second part of the paper includes the assessment of EU15 - CEECs (Central and Eastern European countries) trade and FDI in e-tradable services. In the final section, potential factors that could explain the preference of the EU15 to offshore services to the CEECs, especially Romania, are considered, as well as the challenges of off shoring for the enlarged EU.

Key words: IT-enabled services, e-tradable services, near shoring, off shoring, Central and Eastern European countries, EU15

Cross-border trade in “IT-enabled services”¹ is today among the fastest growing areas of international trade. While industrial countries are the largest exporters of such services, with trade being still conducted predominantly among them, some of the most dynamic exporters are developing countries. At least three factors are responsible for this phenomenon: (1) advances in technology, that influenced the structure and organization of services sectors, determined changes in the way services are internationalized and dramatically improved the tradability of services through electronic transfer; (2) substantial investments in education in a number of developing countries, that resulted in the creation of a relative abundance of skilled labor available at fairly low wages, due to the absence of proportionate employment opportunities; (3) innovations in business practice that have led to the out-location of service activities or functions, by multinational enterprises in the manufacturing and services industries, to their own operational units located abroad or to independent service providers (Mattoo, 2004).

Companies in developed countries are increasingly outsourcing information technology services (ITS) and business process services (BPS) or are establishing their own subsidiaries in developing countries. Rapid technological progress has lowered the cost and increased the efficiency of communication and transfers of information. Companies have capitalized on the availability of information, communication and technology infrastructure (ICT) to fragment their value chain and carry out different parts of their operations via geographically dispersed subsidiaries and foreign third-party service providers. Standardization and service market liberalization, including increasing openness to foreign direct investment by developing countries (improving

¹ IT-enabled or E-tradable services are services provided from one country to another over telecommunication or data networks; include information technology services and business process (outsourcing) services.
ICT infrastructure and permitting establishment by foreign subsidiaries) are other important enabling factors.

The aim of the paper is to explore the potential for near shoring IT-enabled services among old (EU15) and some new Member States of the EU, including Romania. First, issues related to the theoretical background of the off shoring phenomenon are addressed. The central part of the paper focuses on the analysis of EU15 - CEECs (Central and Eastern European countries) trade and FDI in e-tradable services, to evaluate whether the statistical evidence supports near shoring trends towards the CEECs and to determine the geographic orientation of this trend. In the final section, potential factors that could explain the preference of the EU15 to near shore services to the CEECs, especially Romania, are considered, as well as the challenges of near shoring for the enlarged EU.

1. Theoretical framework

The current trends on the global market, related to the international organization of services activities, namely (1) the redefinition of firms’ core activities through stripping away services functions that no longer fit the firms’ strategy, the emphasis being on “core competencies”, resulting in a separation of peripheral activities, in order to improve the operational efficiency and the capacity to create value added; (2) the geographical reconfiguration of firms’ value chain activities internationally, through redefining the roles and functions of individual corporate units; (3) the reconfiguration of firms’ activities through redefining the boundaries between internalized and externalized transactions, led to the emergence of new models for the international expansion of corporate services activities and functions – off shoring models.

According to UNCTAD (2004) and BCG Consulting (Colsman, 2005), off shoring - shifting an activity abroad - can be undertaken through:

(1) internalization or captive off shoring - continuing to produce services in-house, by transferring the supply of those services to an affiliate set up, in a location with a cost advantage. Captive off shoring allows the company to benefit from the scale and cost advantages, while maintaining operational control of the offshore activities.

(2) externalization or outsourcing - contracting the supply of services with a foreign independent service provider. Companies that choose this model aim at exploiting cost and specialization advantages of some locations or suppliers, while agreeing to give up operational control.

Near shoring, as a form of off shoring, entails the relocation of business processes to another country, located geographically near. For EU15 countries the near shore locations are especially the CEECs¹.

The most dynamic segments of the services market, with a high potential for off shoring and a significant contribution to the increase in developing countries’ exports, as well as to their integration into the global trading system are e-tradable services, namely information technology services (software development and implementation services, data processing and database services, IT support services, application development & maintenance, enterprise security, enterprise application integration, total infrastructure outsourcing, web services etc.) and business process

¹ Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia, Romania, Bulgaria.
Economic Theories – International Economic Relations

(outsourcing) services (customer interaction services, administrative services, sales-related services, operations, professional and other business services) (Mattoo, Wunsch-Vincent, 2004)\(^1\).

2. Near shoring patterns within the enlarged EU

2.1. Near shoring practices within EU25

The estimates of the size and likely effects of off shoring for the EU rely primarily on evidence focusing on the number of jobs that could potentially be relocated (Schaaf, 2004)\(^2\). The analysis of the EU25 employment distribution shows that, in 2003, 13.7 million workers worked in the fields of “computer and related services” and “other business services”, the two service sectors that best approximate activities that can be offshore. While EU15 account for the majority of jobs in these two sectors, the strongest growth rates in employment in 2000-2003 period were experienced in the new Members States (NMS), partly due to the relocation of jobs from old to NMS (Huws & al, 2004) and indicate the growing capacity of the NMS to provide IT-enabled services.

Because of the lack of reliable statistical indicators on the extent or the nature of off shoring (Van Welsum, 2004) examined from the point of view of potential jobs that could be shifted abroad, this paper will follow a different approach and will attempt to provide complementary data on the potential extent of the near shoring of services between EU15 and CEECs, based on data referring to trade and FDI in “other business services” and “computer and information services”, that will serve as proxy indicators. The main sources of data for the investigation are the balance of payments statistics on trade in computer services and in other business services and data on flows/stocks of foreign direct investment by activities.

Differences in the demand and supply of labor and wage levels in the enlarged EU have spurred intra-EU trade in IT and business process services. Western European companies are increasingly importing services from Eastern Europe, where salaries are modest and skilled labor abundant. Trade is further boosted by inflows of FDI from both EU and non-EU companies that locate regional headquarters and service centers in countries like Hungary and the Czech Republic to service customers in the European single market.

2.2. EU15-CEECs trade in IT-enabled services

Data on services trade reveal the existence of positive growth rates of the CEECs exports of e-tradable services to EU15. Exports from the new member states to EU15 grew in the period 2000-2004 by 7.6% in information and computer services (ICS) and by 4.2% in business services. During 1997-2004 period the EU15 imports of services from the NMS grew faster than their total imports of services, and this in particular relates to information and computer services.

Trends in intra-EU15 trade are rarely similar to those in EU15 trade with the CEECs. EU15 imports of services from all CEECs, with the exception of the Czech Republic, recorded higher growth rates in 2000-2004 period than intra EU15 trade in services. When longer time period is considered (1997-2004) the CEEC performed

---

\(^1\) The list of activities is not exhaustive, nor are the categories mutually exclusive.

\(^2\) it has been assessed that until 2009 a maximum of 2% of all jobs in the services sector will be lost due to outsourcing.
better than EU15 as the growth rates of the EU15 imports of ICS and business services from the CEEC (24.2 % and 16.3 %) surpassed those of intra EU15 trade (23.0 % and 12.4 %) (Eurostat, 2005).

The main competitors of the CEEC in supplying IT-enabled services to the EU15 are Asian countries, with India topping the list. Although the volume of the EU15 imports of e-tradable services from India is larger than from the CEECs and the imports of ITS from India experienced much faster growth than from the CEECs throughout the 1997-2004 period, the EU15 imports of business services from the CEECs during 1997-2004 grew faster than from India (12.3%), mainly due to the performance of Lithuania (29.6%), Estonia (21%), Hungary (15%) and Romania (13%). If we take into account more recent period (2000-2004) four CEECs (Estonia-16.7%, Lithuania-15.1%, Hungary-15.4% and Romania–12.7%) outperformed India (10.2%) in regard of the dynamics of IT-enabled services’ exports to the EU15. Finally, it is worth noting that in the 1997-2004 period all CEECs with available data (except for the Czech Republic) show higher growth rates in exports of services, business services and ICS to the EU15 than Asian countries (Eurostat, 2005).

As for Romania, exports of IT and business process services grew by 32.3% in the period 2002-2003 and by 40% in 2004, with over $250 million in exports in 2004. For the period 1995-2002, Romania witnessed an increase in these services of 28%, ranging 2nd in the world, after India. In addition, 70% of Romania’s trade with the EU is derived from outsourced facilities. Consequently, available empirical evidence tends to speak in favor of the CEECs potential to compete in the provision of information and computer services and other business services to the EU15.

2.3. EU15 – CEECs FDI in IT-enabled services

Inward FDI in business services in those CEECs countries with available data (Czech Republic, Estonia, Latvia, Poland, Hungary, Romania, Bulgaria), originating in EU15 countries have on average increased in the period 2000-2004 by 39%, with a stunning increase displayed by Latvia (78%), followed by Estonia (27%), Czech Republic (27%) and Poland (21%).

With respect to the distribution of FDI flows from EU15 to CEECs, Romania is on the 5th place, with 10%, Hungary, Czech Republic and Poland being on top of the list.

It is also worth highlighting that EU15 FDI in business services abroad have grown much faster than the intra EU investment (32.7% vs. 24.2% in 1997-2004 and 15.3% vs. 6.5% in 2000- 2004). Moreover, FDI growth rates in intra EU15 were much smaller (6.5%) than FDI growth rates to the CEECs in business services (Eurostat, 2005).

Even though empirical data regarding trade and FDI in information and computer services and other business services from EU15 to CEECs is limited, we could at least assert that CEECs are supplying a higher quantity of such services to the EU15 countries than are importing from them and are dynamically increasing their supply of services to EU15. In addition, other factors support this statement and illustrate that near shoring of e-tradable services from EU15 to CEECs is already taking place: (1) the AT Kearney consulting company report from 2003 placed Hungary, Slovakia, Romania and Czech Republic among the top EU off shoring locations for information services, indicating a very high potential for CEECs; (2) the McKinsey report from 2005 point to Hungary, Czech Republic, Poland and Romania as the most
attractive locations for services offshoring (Farrel, 2005); (3) The Economist Intelligence Unit from 2005 places Romania on the 14th place worldwide as a services outsourcing destination, with a 7.08 score, as opposed to India, ranked the first, with a 7.76 score.

3. Factors underlying the potential of CEECs to serve as near shoring location

In the last fifteen years the CEECs have experienced a dynamic growth of the service sector that resulted in narrowing the gap in relation to the EU15. The most advanced CEECs have surpassed the performance of some EU15 member states regarding the service sector development, blurring the line between the old and the new EU members. The progress of the CEECs in services in terms of growth and improved range of services was enabled by privatization, regulatory and institutional reform, liberalization, technological and organizational change (Rubalcaba, 2005).

The level of labor costs in different locations plays a major role in offshoring and might also be a strong determinant of near shoring from old to new and prospective Member States of the EU. Labor costs in the CEECs vary between 5.7% and 49.5% of the EU15 average in market services. In the case of Romania, labor costs represent only 7% of the EU15 average, while labor productivity is approximately 30% of the EU15 average. An index of productivity/labor costs points to countries like Romania, Bulgaria, Latvia and Slovakia that are more cost-attractive for near shoring.

One of the obvious advantages for European companies of near shoring to CEECs rather than offshoring to India or elsewhere is the issue of human capital, in terms of language skills, cultural affinity and education levels and qualifications. All CEECs achieve better result by education attainment than the EU15 average and four of the CEECs surpass the EU15 by the share of graduates from tertiary education per 1000 inhabitants (Estonia, Latvia, Lithuania and Poland). As for Romania, it ranks the 6th in the world by number of certified professionals in the field of information technology and the 13th by the number of graduates in the field (Brainbench, 2003). Currently, about 25,000 software professionals work in the industry and almost 1/5 of them are involved in software export activities. Romania’s density of software graduates per thousand inhabitants is significantly higher than in the USA, it is two times that of Russia and nearly seven times that of India. Romania is in fact seen as the most promising location for IT outsourcing worldwide due not only to low labor costs but also to well-educated and multilingual labor pool, competitive property costs and time zone (UNCTAD, 2004).

Another factor that influences the near shoring of services from EU15 to CEECs is the existence of cultural similarities, historical ties, geographical proximity to operations and a familiarity with language. The Romanian work force has some fairly unique language skills. Pierre Audoin Consultants found that 80% of the IT work force speaks English, 25% speak French and 11-12% speaks German including native speakers, and many other western languages are present in smaller percentages. Also, some 60% of the Romanian population speaks a foreign language, mainly English.

Some additional reasons why EU15 companies may prefer to near shore to the NMS, Romania and Bulgaria rather than to other low-wage locations relate to easier coordination of offshoring procedures, but also to harmonized standards and other regulations, easier alignment of prices in single currency.

The available evidence presented above suggests that future developments may speak in favor of EU concentrating a large part of offshoring within its frontiers. This
view is founded on the comprehension that differences in wages may not be sufficient
condition for outsourcing to Asian locations with lower wages. The experience shows
that off shoring are not an easy process for companies and that other costs may in the
end surpass the differences in wages. These costs include direct and indirect costs that
relate to business and legal framework, cultural barriers, etc. Hence, the harmonization
of regulation among the EU member states, especially through the efficient
implementation of the Directive on Internal Market for Services could help to alleviate
rigidity in labor market within the EU and contribute to increased provision of services,
thus favoring near shoring of services within the enlarged EU. The European
“proximity”, in the wide sense of the term, i.e. cultural, historical and geographical
becomes a major competitive advantage of CEECs as a near shoring location. It should,
however, be complemented by an “economic proximity”, supported through the
removal of obstacles to services trade and the creation of a pro-competitive regulatory
environment required for improving service market competitiveness in Europe. An
enhanced service economy throughout the enlarged Europe is the prerequisite to
encourage an effective European integration.

<table>
<thead>
<tr>
<th>References:</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
</tr>
<tr>
<td>8. AT Kearney</td>
</tr>
<tr>
<td>10. Eurostat</td>
</tr>
</tbody>
</table>
GLOBAL KNOWLEDGE NETWORK – A SWOT APPROACH

PhD Student Neagu Cristina Denisa
University “Al I Cuza Iaşi”
Faculty of Economics and Business
Administration, Iaşi, Romania

Abstract: We live at a local level but act at a global one and each organization is a player in a global world. Each company has its own knowledge base and network and we can say that at the global level exists an unorganized global knowledge base without connections between local ones which limits the access to knowledge. The solution for this problem is represented by a global knowledge network based on an organized global knowledge base. This paper underlines the need to create a global knowledge network and a global knowledge base composed of connected local knowledge bases and presents a SWOT approach for this issue.

Keywords: network, knowledge network, knowledge base

Introduction

Actual society is characterized by an increased significance of information and communication technologies (ICTs) which have conducted to a transformation in the nature of economic activity, with associated implications for the shape of the society.

Knowledge has always been a factor of production since the very old times of human society and it has influenced and advanced the economic and social development. At the beginning of the human society, the knowledge was related to how to hunt and prepare the meat. Later it has become related to how to farm, to build or to manufacture. The technology developed changed only the degree and speed of knowledge integration in the economic activity.

Taking into consideration that the capacity to manipulate, store and transmit large quantities of information cheaply has rapidly increased in the recent years, we can say that the digitization of information and the associated pervasiveness of Internet facilitate a new application of knowledge to economic activity and more, favorite the intensification of new knowledge in the economy, generally speaking.

In this context, the problem of integrated information and knowledge base at the global level appears more critical now than it used to be in the past. This paper is presenting the steps in achieving a global knowledge network and global knowledge base and their relation with individual elements at local, regional and national levels and it presents a SWOT analysis approach for this issues.

Definitions

We consider necessarily starting with some definitions of concepts used in this paper, concepts such as:

1. knowledge – is organized and contextualized information which can be applied to create new meanings and new ideas
2. knowledge management – involves processes such as: capturing, creating, organizing, storing, transferring and using knowledge and experiences of workers and groups within an organization and making knowledge available to all organization and its partners

3. knowledge base – knowledge collected into schemas based of a specific field of interest

4. knowledge networks – are group of experts working together on a common interests, sharing knowledge and developing solutions for various problems which are then available to be used by other individuals inside or outside the network

5. community of practice – an informal group where ideas are generated and exchanged with members who have common interest in some subjects or problems, which collaborate to share ideas, find solutions and build innovations

6. practitioners – persons who practice specific professions and need specific knowledge to perform their tasks

7. global knowledge base – collection of knowledge from various knowledge bases arranged into schemas based on various fields of interest

8. global knowledge network – groups of experts and practitioners working together on a common interest, sharing knowledge and developing solutions to be used in various domains of activity.

Motivation

Each enterprise acts in the economic environment by using data, information and knowledge. These are the main resources with high impact on the way in which enterprises do business.

Organizations, no matter what type, are agents in a very complex world characterized by dynamism, diversity and too much unorganized information and too less knowledge. The enterprise’s environment is influenced by:

1. competitors
2. government
3. politics
4. culture
5. education system
6. market, etc.

We underlined the fact that organizations have too much information. It is too much because each day we receives much more information than we needs and for specific information we loose precious time in the searching process. How is that possible? Because we create information and knowledge and we don’t know how to organize it. The main result is represented by the fact that we create, transfer and store a huge quantity of information, which is not classified, and the access to the needed information or knowledge is very difficult. In our times, information quantity grows each day (each hour) and the information can be seen, at the global level, as a global database. From databases, one can extract information, and from information creates knowledge. But why should one reinvent the wheel? It would be much simpler to have access to a global knowledge base, to search in and to try to find the needed knowledge, and in case of negative results then one will try to create that needed knowledge. Ok, this looks very simple. It is very simple to say and very difficult to do. Why? We don’t
have a global knowledge base. We only have a search engine, which can help us to search in a global information network. If we are lucky we can find the right information, and if we are really lucky, we can find the proper knowledge.

From the enterprises point of view, the plan to solve these problems already exists and each enterprise is working on or has already finished the optimization of the internal processes by discovering solutions such as:

1. business information systems analysis and design
2. workflow management
3. document management
4. knowledge management.

The solution we propose is one that provides access to the global knowledge base through global knowledge networks. This will be possible when each organization will have a proper knowledge base and will be a part in strategic alliances or knowledge networks. Then each partner will have the chance to access the other knowledge bases with the purpose to find solutions for their problems. We continue by presenting the way to create the global knowledge base.

**Steps to create the global knowledge network**

The creation of a global knowledge network involves each organization to follow steps such as:

1. implementing knowledge management – in this way, it will exist a knowledge base in each organization
2. understanding the need to create or to become part in strategic alliances with organizations from the same activity area, universities, research centers, foundations, financing organizations, independent research institutes, government, official and unofficial forums, local, regional and international organizations and non-state actors – this will be the first step to create knowledge networks
3. connecting their knowledge bases – partners must find a solution to create one knowledge base for the strategic alliance based on their knowledge bases
4. acting like an important agent inside alliances and try to create, transfer and use knowledge inside this structure – this is very important to develop the strategic alliance knowledge base;
5. becoming agent in more than one strategic alliance, not only at local level, but national, and international – this will be the first step to create a bigger knowledge base and, after this each agent which is part of different alliances must share the knowledge.

After this plan will be implemented, we will have a global knowledge base which will be characterized by knowledge bases placed in different locations but connected through knowledge management systems and information technologies.

In the next figure, we present the structure of global knowledge networks with its components:

1. enterprise’s knowledge base;
2. local knowledge base – from community points of view;
3. national knowledge base;
4. strategic alliance’s knowledge base;
5. activity area knowledge base;
6. international knowledge base;
7. global knowledge base.

Figure no. 1 Global knowledge Base – Global Knowledge Network
As you can see in Figure 1, the global knowledge base will have as components all elements mentioned above and if we decrease on scale level we can see the content of each knowledge base.

It will be very easy to search in the global knowledge base through a knowledge search engine and the knowledge will be on our screen in short time. Each owner will have the chance to develop the global knowledge base by adding new knowledge.

In the next rows we will present a global knowledge network SWOT analysis approach by using the characteristics of this analysis and by changing it to our purpose. This analysis is far to be complete; it wants to underline the main characteristics of a global knowledge network project.

The SWOT analysis approach

For this SWOT approach, we start by presenting the key elements of this analysis:
1. cultural aspects – each culture has its own specific elements and it is impossible to create a global structure;
2. legal aspects – each country has its own law but there is a start to a law unification;
3. political aspects – are different at national level but we can see some unification processes; this political aspects can affect or help the knowledge sharing processes between countries;

4. economical aspects
   a. market demands can change very quickly and we can see an increased need to find solutions to answer those demands in the shortest time; these solutions imply to have access to knowledge and best practices;
   b. competition – companies will not share knowledge to competitors because they don’t want to lose their market place;

5. management aspects – we can see different styles of management and each strategy is focused on some objective, but we can see in the same time a unification of management style, for example: European management style;

6. technological aspects
   a. informational aspects – ICTs allow the information and knowledge transfer at low costs;
   b. new technologies – imply high skilled people to use them

7. educational aspects – educational institutions must adapt the learning programs to society demands;

8. environment aspects – global problems need global solution and player from the entire world; the cooperation between different organizations to solve environment problems is already done by using ICTs.

Based on these elements mentioned above, we present in the next table the SWOT analysis for a global knowledge network:

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. large ICTs utilization inside enterprises;</td>
<td>1. knowledge divide – knowledge exists in the entire world but at different levels;</td>
</tr>
<tr>
<td>2. low costs for information transfer assured by ICTs;</td>
<td>2. lack of knowledge classification inside many organizations – they need to implement knowledge management and to create knowledge bases;</td>
</tr>
<tr>
<td>3. people are able to share their knowledge;</td>
<td>3. the lack of knowledge networks – organizations must become important agents in strategic alliances and they need to agree to share their knowledge;</td>
</tr>
<tr>
<td>4. increased number of educated people;</td>
<td>4. lack of trust between people – we share our knowledge especially with known persons;</td>
</tr>
<tr>
<td>5. increasing knowledge transfer;</td>
<td>5. no existent model for global knowledge network;</td>
</tr>
<tr>
<td>6. increasing number of alliances;</td>
<td>6. implementation of knowledge management at a global and creation of global knowledge networks need a long time;</td>
</tr>
<tr>
<td>7. valuable knowledge owned by people and organizations;</td>
<td>7. lack of full understanding of knowledge management;</td>
</tr>
<tr>
<td>8. people concretize the need to have access to knowledge bases;</td>
<td>8. lack of experience in knowledge management implementation;</td>
</tr>
<tr>
<td>9. solutions for knowledge management and strategic alliances are already implemented;</td>
<td>9. lack of knowledge management strategies at different levels;</td>
</tr>
<tr>
<td>10. existing practice in knowledge management and knowledge management area;</td>
<td>10. lack of access to different knowledge bases;</td>
</tr>
<tr>
<td>11. training programs which can be seen in many enterprises.</td>
<td>11. no standard for knowledge transfer;</td>
</tr>
<tr>
<td></td>
<td>12. conservationism from people’s side;</td>
</tr>
<tr>
<td></td>
<td>13. expensive education;</td>
</tr>
<tr>
<td>Opportunities</td>
<td>Threats</td>
</tr>
<tr>
<td>---------------</td>
<td>---------</td>
</tr>
<tr>
<td>1. increased number of highly educated people;</td>
<td>1. shift in enterprise’s strategy;</td>
</tr>
<tr>
<td>2. arrival of new ICTs;</td>
<td>2. military conflicts which can affect the access to a</td>
</tr>
<tr>
<td>3. loosening of regulations;</td>
<td>global knowledge base;</td>
</tr>
<tr>
<td>4. global politics – unitary politics at a global level;</td>
<td>3. political problems unsolved and others which may</td>
</tr>
<tr>
<td>5. a global effort to protect the copyright and the intellectual property;</td>
<td>appear;</td>
</tr>
<tr>
<td>6. global events;</td>
<td>4. cultural differences;</td>
</tr>
<tr>
<td>7. market requirements will expand;</td>
<td>5. legislative changes which can affect the knowledge</td>
</tr>
<tr>
<td>8. global trend to implement knowledge management solutions and to create strategic alliances;</td>
<td>transfer;</td>
</tr>
<tr>
<td>9. change in people education, profiles, lifestyles;</td>
<td>6. new ICTs which will need skilled persons;</td>
</tr>
<tr>
<td>10. short time needed to resolve global and local problems;</td>
<td>7. vulnerable to attacks on global knowledge networks;</td>
</tr>
<tr>
<td>11. research activities on knowledge management and knowledge networks topics;</td>
<td>8. possible misunderstandings of global knowledge network’s role;</td>
</tr>
<tr>
<td>12. increased quality of product, services and of solutions to solve problems.</td>
<td>9. attacks on knowledge base or knowledge networks (local, regional, national or international).</td>
</tr>
</tbody>
</table>

The discussion about global knowledge network remains open. Its importance for the society is clear; the problem is how to make it real. From our point of view, the only solution is to connect all local knowledge bases and in this way we will have a global knowledge base.

Conclusions

The knowledge economy is that type of economic environment where enterprises can increase or fall based on they way in which they create, share, access, store and use knowledge.

Global knowledge network is a dream which becomes slowly reality. It will have different communities as target groups: students, researchers, policy – makers, managers, experts, employees, various organizations, etc. It will represent a real help for them to accomplish their tasks.

REFERENCES

**Abstract:** The solving and improving the problem of financing agriculture is one of the most important questions. The agriculture has many specialties compared to other sectors of national economy. In case of agriculture, the payback period is longer compared to industrial sector. That is why the capital prefers to flow to industry and commerce. The rate of credit for agricultural sector is varying from 19% to 2% compared to the total amount of outstanding. This rate is very low in every case. The main aims of financing the Hungarian agriculture are the following: Most important the competitiveness and profitability; reservation of agriculture and forestry with the aim of environment protection; advancing and bring to a level of other sectors the income- and social position of farmers.

**Keywords:** agricultural credit, loan breakdown, multi variable statistical method.

**Introduction**

The income shortage, which is typical of agriculture from long years, destroying the agriculture’s possibility for competitiveness and market acquisition in long-term. The consolidated income shortage of the primary sector is obviously opposed to the long-range interest of the rural population and the better utilization of the agri-resources.

In view of financing, banks have very difficult position, because the inquiring agricultural enterprises have the following specialties:

- using biological basis (animals, plants) during farmer activity;
- the agriculture is defenseless against weather conditions (mostly in the area of cultivation of plants), infections, epidemics (uncertainty of return);
- the most important mean of production is the ground;
- very typical that each process of production lasts for long time, that’s why the payback period of operating- and fixed assets and investment is longer than in any other branch of industry;
- difference between producing and working period;
- the producing is seasonal, which has influence for exploitation fixed assets and labour force (working peaks). Farmers need to take care for these specifics by planning production;
- the optimal date for each field of work is determinates by climate and weather conditions;
the timing structure of cash flow (spending and income) is different during a producing cycle. While spending appearing continuously during each working stage, the income can be realized mostly in the end of the cycle by selling products. This suppose the need of using external resources (loan, aid, credit);

- product-circulation inside farm (connection between cultivation of plants and animal keeping);
- some agricultural product (e.g. seed grain, breeding material) goes back to the same producing process as a mean of production;
- the differences between means of production, raw materials and auxiliary materials sometimes totally indistinct (e.g. fertilizer);
- very important peculiarity the geographical location.

Material and methods

The main methods of the research are statistical and theoretical analyses. The statistical data used for the examination come from the databank of the MNB. We have studied the distribution of the bank credit balance of 2005 according to the main sectors. The results were compared with the facts of the risk Graphic analysis was carried out with the help of Microsoft Excel.

![Figure 1. Distribution of the bank credit balance (2005.)](image)

According to the evaluation of the credit leaders the (Figure 2.) shows the agricultural credit’s change of the risk. The figures mean the following:
1: significantly more risky;
3: the risk has not changed;
5: the risk of the credit has significantly decreased.

According to the banks judgment of the agriculture in the studied period turned into a negative direction which can justify the stop of the growing tendency in the agricultural credit balance (Figure 2.).
Figure 2. Agricultural credit’s change of the risk

The basic data of the following study derives from the annual report of the banks. (Table 1.). The connection between the data has been determined by principal component analysis, the results were provided by so called „principal components” function of MINITAB program-package (Figure 4.).

Table 1. Loan breakdown by sector in 2003.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Raiffeisen (1)</th>
<th>K&amp;H (2)</th>
<th>OTP (3)</th>
<th>HVB (4)</th>
<th>MKB (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service sector (C2)</td>
<td>195 356</td>
<td>202 799</td>
<td>79 992</td>
<td>260 549</td>
<td>497 535</td>
</tr>
<tr>
<td>Agriculture (C3)</td>
<td>127 146</td>
<td>79 937</td>
<td>28 384</td>
<td>10 961</td>
<td>18 549</td>
</tr>
<tr>
<td>Construction and processing industries (C4)</td>
<td>14 416</td>
<td>144 410</td>
<td>101 926</td>
<td>19 604</td>
<td>22 762</td>
</tr>
<tr>
<td>Food industry (C5)</td>
<td>40 192</td>
<td>60 611</td>
<td>36 592</td>
<td>21 249</td>
<td>39 036</td>
</tr>
<tr>
<td>Commerce (C6)</td>
<td>104 056</td>
<td>127 299</td>
<td>86 470</td>
<td>54 634</td>
<td>81 586</td>
</tr>
<tr>
<td>Energy industry (C7)</td>
<td>18 811</td>
<td>51 121</td>
<td>87 089</td>
<td>29 407</td>
<td>63 479</td>
</tr>
<tr>
<td>Other (C8)</td>
<td>35 551</td>
<td>69 402</td>
<td>224 647</td>
<td>47 638</td>
<td>38 667</td>
</tr>
<tr>
<td>Private individuals (C8)</td>
<td>127 146</td>
<td>243 610</td>
<td>………</td>
<td>22 851</td>
<td>72 281</td>
</tr>
<tr>
<td>Total</td>
<td>662 674</td>
<td>979 189</td>
<td>645 100</td>
<td>486 893</td>
<td>833 895</td>
</tr>
</tbody>
</table>
The goal of the study is the exploration of the interaction between the original features (credit outsourcing) in the grouping completed according to the main factors, the two factors mean latent variants, which do not have a definite meaning. The two factors (Table 2.) were diagrammated in a C2-C1 rectangular co-ordinate system with the help of the „graph-plot” function of the MINTATAB program package.

**Table 2. „U matrix”**

<table>
<thead>
<tr>
<th>Variable</th>
<th>PC1</th>
<th>PC2</th>
<th>PC3</th>
<th>PC4</th>
<th>PC5</th>
<th>PC6</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2</td>
<td>-0.169</td>
<td>0.322</td>
<td>0.703</td>
<td>-0.270</td>
<td>0.486</td>
<td>0.056</td>
</tr>
<tr>
<td>C3</td>
<td>0.367</td>
<td>0.287</td>
<td>-0.436</td>
<td>-0.504</td>
<td>0.476</td>
<td>0.011</td>
</tr>
<tr>
<td>C4</td>
<td>0.359</td>
<td>-0.385</td>
<td>0.132</td>
<td>0.529</td>
<td>0.521</td>
<td>-0.216</td>
</tr>
<tr>
<td>C5</td>
<td>0.488</td>
<td>-0.033</td>
<td>0.276</td>
<td>-0.120</td>
<td>-0.145</td>
<td>-0.517</td>
</tr>
<tr>
<td>C6</td>
<td>0.508</td>
<td>0.003</td>
<td>0.041</td>
<td>-0.272</td>
<td>-0.333</td>
<td>0.006</td>
</tr>
<tr>
<td>C7</td>
<td>-0.011</td>
<td>-0.533</td>
<td>0.391</td>
<td>-0.395</td>
<td>-0.200</td>
<td>0.176</td>
</tr>
<tr>
<td>C8</td>
<td>-0.007</td>
<td>-0.589</td>
<td>-0.197</td>
<td>-0.235</td>
<td>0.283</td>
<td>0.331</td>
</tr>
<tr>
<td>C9</td>
<td>0.460</td>
<td>0.224</td>
<td>0.171</td>
<td>0.306</td>
<td>-0.080</td>
<td>0.735</td>
</tr>
</tbody>
</table>

**Source: Table 1**

**Figure 3.: Loan breakdown by sector in 2003.**
Based on point’s fixing up the similarities can be recognized more easily and those ones, which can be considered coherent, are easy to be marked off. C2 was diagrammatized on the horizontal axis of the chart, while C1 on the vertical one (Figure 5.).

Results

Banks help the most favorable investment possibility of capital in exchange for interest. In case of agriculture because of cyclical productivity and long process the payback period is longer compare to industrial sector. That’s why the capital prefers to flow to industry and commerce. In 2005 the agricultural branch shared 6 % in the credits granted for the non – financial enterprises (Figure 1.). According to the banks judgment of the agriculture in the studied period turned into a negative direction which can justify the stop of the growing tendency in the agricultural credit balance (Figure 2.).

Banks help the most favorable investment possibility of capital in exchange for interest. In case of agriculture because of cyclical productivity and long process the payback period is longer compare to industrial sector. That’s why the capital prefers to flow to industry and commerce (Figure 3.). According to the examined banks’ data, Raiffeisen Bank had the biggest portfolio in agriculture sector in 2003. Earlier the K&H Bank had this role – in the time of ABN Amro Bank – but after the accession it lost its leading role. The rate of credit for agricultural sector is varying from 19% to 2% compare to the total amount of outstanding. This rate is very low in every case.

Conclusion

The income shortage, which is typical of agriculture from long years, destroying the agriculture’s possibility for competitiveness and market acquisition in long-term. The consolidated income shortage of the primary sector is obviously opposed to the
long-range interest of the rural population and the better utilization of the agri-
resources.

Every country, which made a special point of determination agri-policy, pointed
out the competitiveness, as the main watchword of target- and resource system.

The solution of the financing problems can be seen in the improvement of the
competitiveness, which has an encouraging effect on the banks' more intensive role,
played in the agriculture through the more assured return of the loans.

REFERENCES

1. Lentner, C. Ezredfordulós dilemmák: agrárpolitika fogságában, Magyarország Politikai Évkönyve, Budapest, 2001
2. Lentner, C. The state of the Hungarian financial sector in the integration with the EU, ETK Füzetek, NYME KTK, 2003
3. Lentner, C. Az Európai integráció várható hatásai a magyar mezőgazdaság finanszírozására, Sopron, 2004
4. Lentner, C. Ingatlanpiaci dilemmák és finanszírozási lehetőségek a magyar mezőgazdaságban, Sopron, 2004
5. Lentner, C. Rendszerváltás és pénzügypolitika, Akadémiai Kiadó, Budapest, 2005
6. MNB Nem pénzügyi vállalkozások hitel állományai nemzetgazdasági ágazatok szerint statisztika Magyar Nemzeti Bank, 2006
7. Mónika P. Felmérés a hitelezési vezetők körében, a bankok hitelezési gyakorlatának vizsgálatára Magyar Nemzeti Bank, 2006
8. *** Yearly reports of banks www.bank.lap.hu
Abstract: This study was undertaken in Hayatabad Town, Peshawar. The study investigates socio-economic factors affecting invisible child labour. The study was based on a sample of 95 households and the data were collected in July 2006. The study found that although the wages of working children were small but they contributed significantly to their households' income. More than half of the working children were not satisfied with their present job and their employers and more than half of working children reported that their employers were harsh with them. The regression results showed that household income, landholdings and parents’ education were significant determinants of invisible child labour in the study area.

Key words: Invisible child labour, poverty, Hayatabad, Pakistan

1. Introduction

"Child labor" is, generally speaking, work for children that harms them or exploits them in some way (physically, mentally, morally, or by blocking access to education). There, however, is no universally accepted definition of "child labor". Varying definitions of the term are used by international organizations, non-governmental organizations, trade unions and other interest groups. Writers and speakers don’t always specify what definition they are using, and that often leads to confusion (Khan, 2007).

Not all work is bad for children. Some social scientists point out that some kinds of work may be completely unobjectionable — except for one thing about the work that makes it exploitative. For instance, a child who delivers newspapers before school might actually benefit from learning how to work, gaining responsibility, and earn a bit of money. But what if the child is not paid? Then he or she is being exploited. As Unicef’s 1997 State of the World’s Children Report puts it, "Children’s work needs to be seen as happening along a continuum, with destructive or exploitative work at one end and beneficial work - promoting or enhancing children’s development without interfering with their schooling, recreation and rest - at the other. And between these two poles are vast areas of work that need not negatively affect a child’s development." Other social scientists have slightly different ways of drawing the line between acceptable and unacceptable work.
International conventions also define "child labor" as activities such as soldiering and prostitution. Not everyone agrees with this definition. Some child workers themselves think that illegal work (such as prostitution) should not be considered in the definition of "child labor." The reason: These child workers would like to be respected for their legal work, because they feel they have no other choice but to work.

Though restrictions on child labor exist in most nations, many children do work. This vulnerable state leaves them prone to exploitation. The International Labour Office reports that children work the longest hours and are the worst paid of all laborers (Bequele and Boyden 1988). They endure work conditions, which include health hazards and potential abuse. Employers capitalize on the docility of the children recognizing that these laborers cannot legally form unions to change their conditions. Such manipulation stifles the development of youths. Their working conditions do not provide the stimulation for proper physical and mental development. Finally, these children are deprived of the simple joys of childhood, relegated instead to a life of drudgery. However, there are problems with the obvious solution of abolishing child labor. First, there is no international agreement defining child labor. Countries not only have different minimum age work restrictions, but also have varying regulations based on the type of labor. This makes the limits of child labor very ambiguous. Most would agree that a six year old is too young to work, but whether the same can be said about a twelve year old is debatable. Until there is global agreement, which can isolate cases of child labor, it will be very hard to abolish. There is also the view that work can help a child in terms of socialization, in building self-esteem and for training. The problem is, then, not child labor itself, but the conditions under which it operates (Ashraf, 1994).

The International Labor Organization (ILO) estimated that there were around 250 million children working all over the world. At least 120 million children aged between 5 and 15 were working full time. One third of them were performing dangerous work (ILO/IPEC, 1998). The informal sector in a number of developing countries in general and in Pakistan in particular accounts for a large share of the economic activities of the country. Children, thus, participate fully in every activity of the informal sector, like workshops, small scale industries, leather work, carpet weaving centres, hotels, brick kilns etc. In addition, a substantial number are self employed, hawking cheap goods, shining shoes or collecting waste materials (Tunio, 1992). Like other developing countries, children in Pakistan are working in various sectors which include children working in rural economy, informal economy, export economy, etc. One of the most important categories of child labour is invisible child labour. Invisible child workers are those who are virtually invisible to outsiders, as they work in the privacy of people’s homes. Most of these workers are girls. Children working inside people’s houses now receive far more attention than before, although there is still no accurate estimate of the number of child domestic workers worldwide (Himayatullah, 2005). Although much research work has been done on other aspects of child labour, no study has been conducted on this issue of child labour in Pakistan. This study, therefore, will be concluded on invisible child workers. The present study would constitute as a pioneering work in this regard. The phenomenon of child labor, not only

---

1 Invisible child workers are those who are virtually invisible to outsiders, as they work in the privacy of people’s homes. See Khan, Himayatullah (2007) for further details.
closes the future of millions of children in the third world countries but it also restricts the development prospects of these countries drastically. The existence of child labor is a threat to the overall development, solidarity and peace in the world. Eradication of labor from the world is, therefore, a goal that must be achieved at the earliest.

The main objectives of the study are to examine the socio-economic background of the households with invisible child labor, to analyze the factors determining invisible child labor in the study area, to investigate the economic contribution of child labor in their families’ income, and to suggest policy recommendations for reducing child labor.

2. Methodology and Data

2.1 Area of the Study

Hayatabad constitutes the area of this study. Hayatabad is relatively a modern sub-urban area of Peshawar where the invisible child labour is prevailing in most of the houses.

2.2 Sampling Method and Sample Size

There are seven Phases in Hayatabad but due to lack of time and financial resource, Phase II and Phase VI were purposively selected. It was assumed that in Phase II most households were relatively richer than those in Phase VI. Thus, these two phases were selected to compare the prevalence of invisible child labour. Before collection of data, an informal survey was conducted in June 2006 to find out households with invisible child labour in the two phases. According to informal survey the total number of households with invisible child labour was 950 in the two phases. Then a sample of 10% was selected from the population to analyze the issue of invisible child labour. The distribution of sample households in the study area is given in table 1.

The respondents were selected by simple random sampling using a lottery method from a list of households having invisible child workers.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Total Households Having Invisible Child Workers</th>
<th>Sample Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase II</td>
<td>500</td>
<td>50</td>
</tr>
<tr>
<td>Phase VI</td>
<td>450</td>
<td>45</td>
</tr>
<tr>
<td>All</td>
<td>950</td>
<td>95</td>
</tr>
</tbody>
</table>

Source: Survey

The data were collected with the help of a pre-tested interview schedule. Based on a feedback from pre-testing, the interview schedule was revised and finalized. The final version of the interview schedule was used for data collection. The data were collected in the first week of July 2006.

2.3 Data Analysis

After conducting survey for data collection, the data were analyzed with the help of a computer by using Statistical Package for Social Sciences (SPSS). In order to analyze the determinants of child labour the following econometric model was estimated.
2.4. Model

In order to examine what factors affect/determine invisible child labor, an econometric model was used which is given as follows:

\[ Y_i = \beta_0 + \beta_1 \sum_{i=1}^{k} X_i + \theta D_i + \epsilon_i \]

Where the dependent variable \( Y_i \) shows number of children working in the respondent’s household. \( \beta_0 \) is the vertical intercept in the regression equation whereas \( \beta_1 \) and \( \theta \) are coefficients of independent variable. \( X_i \) are (quantitative) explanatory variable like, family income, household size, operated land and \( D_i \) is a dummy variable representing father’s education and \( \epsilon_i \) is the stochastic error term.

3. Results and Discussion

The results of the study showed that maximum (31 percent) of the sample respondents belonged to households with an average size of 8-10 members. As many as 27% and 32% of the sample respondents were from households with 5-8 and 10-12 members, respectively. On the whole 58% of the sample respondents were from households of size 8 and above.

One would also hypothesize that larger households may have more members who earn many but in our case the large households had more dependents and they sent children to work and earn money.

The data showed that a large member (50%) of the households had no land and were categorized as landless. Among all, 37% of the sample households operated farm area up to 10 canals. Only a small proportion (13%) of the households operated land of 10 and above canals. This implies that majority of households were poor because income and landholdings are positively correlated. This claim is supported by our findings as 87% of working children were from households with either no land or with land of up to 10 canals.

Income of the households may have bearing upon child labour and it can be hypothesized that the higher the household income, the lower the prevalence of child labour. Household income may be one of the important determinants.

The data show that majority (82%) of the working children belonged to households with monthly income of up to Rs.3,500. Only a small proportion (6%) of households had monthly income of Rs.4,500 and above. This was followed by 12% which had monthly income in the range of Rs.3,500-4,500. The data show an inverse relationship between household incomes and prevalence of child labour.

Father literacy status may be also an important factor determining child labour. It was hypothesized that invisible child labour was negatively correlated with literacy status of household’s head. The findings of the present study confirm this hypothesis. Majority (74%) of the working children had illiterate fathers. Only 26% of the working children had literate parents.

<table>
<thead>
<tr>
<th>Literacy Status</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literate</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>Illiterate</td>
<td>70</td>
<td>74</td>
</tr>
<tr>
<td>All</td>
<td>95</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Survey*
Like land area, family income, and literacy status, father’s occupation is also related to child labour. About 21% of the working children fathers were either employed in public sector or self employed (shopkeepers). As many as 26% of the children’s fathers were jobless but looking for work, 13% jobless who did not want to work and 16% were farmers (Table 3).

### Table 3. Distributions of Working Children by Father’s Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed in Govt. Sector</td>
<td>10</td>
<td>10.5</td>
</tr>
<tr>
<td>Landless Laborer</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Farmer</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Jobless but looking for work</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>Jobless Doesn’t want to work</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Other (Shopkeeper etc)</td>
<td>10</td>
<td>10.5</td>
</tr>
<tr>
<td>All</td>
<td>95</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Survey

3.1. Invisible Child Worker, Household’s Income and Literacy Status of Fathers of Working Children

Analysis of child labour was also performed simultaneously by parent’s income and their literacy status (Table 4). The data show that in all income groups, illiterate fathers had more working children which means that more and working children had illiterate fathers. Looking from another angle it is evident that as income of households increases the number of working children decreases. Thus, Table 4.6 points out two phenomena simultaneously (i) child labour was more prevalent in households where fathers were illiterate, and (ii) household income had an inverse relationship with the number of working children. These are important findings and pose threats to policy makers and planners.

### Table 4. Prevalence of Child Labour by Parent’s Income and Literacy Status

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Literate</th>
<th>Illiterate</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 1,500</td>
<td>8</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>1,500 – 2,500</td>
<td>8</td>
<td>21</td>
<td>29</td>
</tr>
<tr>
<td>2,500 – 3,500</td>
<td>7</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>3,500 – 4,500</td>
<td>4</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>4,500 &amp; above</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>All</td>
<td>29</td>
<td>66</td>
<td>95</td>
</tr>
</tbody>
</table>

Source: Survey

3.2. Working Children and their Socio-Economic Conditions

This section analyses the invisible child labour with respect to age, education, working conditions, earnings, employers’ behavior, satisfaction from job and difficulties faced during job.

3.3. Literacy Status of Sample Respondents

Literacy is an important factor playing a major role in decision-making. The working children were asked about their literacy status. It is evident that amongst all more than half (58%) were illiterate compared to those who were literate (42%). This can be seen in Table 6.
Table 6. Sample Respondents Distinguished by Literacy Status

<table>
<thead>
<tr>
<th>Phase/Literacy Status</th>
<th>LITERATE</th>
<th>Illiterate</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase II</td>
<td>21 (42)</td>
<td>29 (58)</td>
<td>50 (100)</td>
</tr>
<tr>
<td>Phase VI</td>
<td>19 (42.2)</td>
<td>26 (57.8)</td>
<td>45 (100)</td>
</tr>
<tr>
<td>All</td>
<td>40 (42)</td>
<td>55 (58)</td>
<td>95 (100)</td>
</tr>
</tbody>
</table>

Source: Survey  Note: Figures in parentheses are percentages.

3.4. Education Level of Working Children

Working children who were literate were also classified based on their level of education. Table 7 shows that out of all, 58% were illiterate. About one-third (30.5%) and 12% of the working children had education level of up to primary and middle, respectively. None of the working children was matriculate.

Table 7. Sample Respondents Classified on the Basis of Level of Education

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Phase II</th>
<th>Phase VI</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>29</td>
<td>26</td>
<td>55</td>
</tr>
<tr>
<td>Primary</td>
<td>15</td>
<td>14</td>
<td>29</td>
</tr>
<tr>
<td>Middle</td>
<td>6</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Matric</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PERCENT</td>
<td>58</td>
<td>30.5</td>
<td>11.5</td>
</tr>
</tbody>
</table>

Source: Survey

3.5. Why Working Children did not/don't Go to School?

As mentioned earlier, majority (58%) were illiterate and only 42% were literate. Majority of the literate children (73%) percent were educated only up to primary level. This can be caused by many factors. The working children, when asked what their main hurdle in getting education was, reported a number of reasons for not going to school. About half (54%) of them considered their families’ poor economic conditions as the biggest cause of discontinuation of their education. One-fifth (20%) of them stated that they left school because of their poor academic performance. This in turn may be due to the reason that they did not have proper facilities for getting education including non-availability of books, uniform and coaching by either parents or tutors. This resulted in their poor performance in education. Similarly 20% of the sample respondents thought fear of teacher as a causing factor of leaving school. They stated that they were being beaten by their teachers which may be due to their poor performance in school. All factors compelling children to discontinue education may be attributed to lack of affordability by their parents as they were financially poor.

3.6. Monetary Reward for Child Labour

As mentioned earlier child labour was exploited, their weekly earnings were as low as given in Table 8. The maximum weekly earnings amounted to above Rs.200-300. This was reported only by 10% of the working children. The minimum weekly earnings were up to Rs.50 as reported by 29% of the respondents. Majority of them (61%) were earning in the range of Rs.50-200 on weekly basis. This implies that the weekly earnings by working children were very low.
Table 8. Classification of Working Children by Amount of Weekly Earning

<table>
<thead>
<tr>
<th>Weekly Earning (Rupees)</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 50</td>
<td>28</td>
<td>29.5</td>
</tr>
<tr>
<td>50 - 100</td>
<td>24</td>
<td>25.3</td>
</tr>
<tr>
<td>100 – 150</td>
<td>21</td>
<td>22.1</td>
</tr>
<tr>
<td>150 – 200</td>
<td>12</td>
<td>12.6</td>
</tr>
<tr>
<td>200 – 300</td>
<td>10</td>
<td>10.5</td>
</tr>
<tr>
<td>All</td>
<td>95</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Survey

3.7. Working Relations Between Employers and the Child Labour

Working relations between employees and the employer assume an important role. Bad working relations between labour and employers result in unrest and disputes. Child labour is no exception in this regard. This was also observed and confirmed by our data. A very small proportion (5%) reported that their employer’s behavior was very good. Some 16% termed their behaviors as good. A vast majority (79%) of the working children stated that the employers’ behavior was not good at all and that they were ill-treated by their employers. The negative and harsh dealing of the employers may have negative impact upon children’s mind and future career.

3.8. Sample Respondents Comparing Work with Going to School

Although working children were out of school and were working for negligible sum of money in reward for their long working hours, they intended to go to school provided they were allowed to do so and given chance. More than half (53%) of the respondents preferred going to school rather than to work labour. They reported that they were unable to go to school because of many reasons but they would like to go to school if they were provided the opportunity. This implies that children were not satisfied with their job, wages and employers. Only 26 respondents (27%) showed preference to work rather than going to school. Similarly, 20% were not sure and did not know about their preference (Table 9).

Table 9. Sample Respondents Comparing Work With Going to School

<table>
<thead>
<tr>
<th>If allowed would you go to School or prefer to work</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefer to go to School</td>
<td>50</td>
<td>53</td>
</tr>
<tr>
<td>Prefer to work</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>Don’t know</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>All</td>
<td>95</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Survey

4. Estimated Econometric Model

General descriptive analyses of invisible child workers in relation to the sample households and the socio-economic conditions of the working children were performed using one-way classification as well as cross tabulation preceding sections. In order to test such hypotheses, an econometric model was also estimated where the number of working children in each households was treated as dependent variable regressed on household’s income, household’s size, farm area operated by household, father’s education/literacy status, etc. The estimated regression model is as given in Table 10.
The estimated regression model shows that the number of working children labour has a mixed type of relationship with explanatory variables. The dependent variable, Y, represents the number of working children in a household. The coefficients of independent variables have the expected algebraic signs and support our hypotheses. The household size coefficient is positive showing that as the size of household increases the number of working children also goes up. However, it is not statistically significant. This may be partly true because larger households may have either more dependents (i.e. working children) and/or more adults earning money. So it depends upon the nature of household. One thing, however, is clear that household size had positive correlation with child labour. Household’s monthly income has a negative coefficient, which is significant at 5%. This is an important finding that shows that the higher the household’s income, the lower the incidence/prevalence of child labours. This is in line with theoretical expectation. Like income, farm area operated by household is also negatively correlated with child labour and its coefficient is statistically significant at 1%. This may be true because if household operates more area, it is likely to have more income and may need to not force children to work. Literacy status (D₁) was also found a significant determinant of child labour. The negative coefficient of D₁ shows that if the father is literate the intercept decreases by 2.34 and it is significant at 1%. In addition to dummy variable for literacy, another dummy (D₂) was also used as an explanatory variable which captured difference between two phases. D₂ = 1 if the respondent belongs to Phase II and zero otherwise. The phase dummy shows no significant difference in invisible child worker.

The above estimated model shows the best fit as its coefficients have algebraic signs in agreement with prior theoretical expectations. Three coefficients are highly significant. The whole regression model is also significant as based on the value of F-statistic. The explanatory power of model is not bad also because the R² = 0.53 indicating that about half of the total variation in dependent variable is explained by the explanatory variables.

If we analyze the estimated coefficients of the model it poses serious policy challenges. Firstly, the positive correlation between child labour and household size implies that the larger the population the lower the head income and land area per family. This would in turn result in child labour. So population growth rates need to be reduced. Secondly, the negative correlation between family income and child labour also necessitates that efforts be done to increase income per capita. This could be done
through introducing and implementing income generating activities. Thirdly, the negative relation between households’ land holding and child labour implies that as population increases, the available land would be subdivided and fragmented in small pieces. This would lead to food insecurity and lower incomes and resultantly more and more child labour. Fourthly, the negative coefficient of literacy status dummy shows that if literacy rate is low more and more children would be sent to work, the opportunity cost of which may be very high and would be socially costly.

**REFERENCES**


THE STATISTIC ANALYSIS ON THE RETURNS OF THE BET, CAC 40 AND DOW JONES EURO STOXX 50 PORTFOLIOS

Lect. PhD Viorica Chirilă
University “Alexandru Ioan Cuza”
Faculty of Economics And Business Administration, Iași, Romania

Abstract: The BET, CAC 40 and Dow Jones EURO STOXX 50 portfolios present the overall trend of the financial markets in Bucharest, Paris and Euro zone. In this paper we analyzed the returns of these portfolios, which allow us to emphasize the characteristics of the returns that can be obtained on those three financial markets. The analysis was made by using descriptive methods, evaluating the autocorrelation and the dependence of the returns.

Key words: market indices, returns, autocorrelation, dependence

The BET, CAC 40 and Dow Jones Euro STOXX 50 market index Portfolios

On September 22nd, 2000, by the union of the stock markets of Amsterdam, Brussels and Paris, a unique market was born under the name of Euronext. Creating Euronext represented the first Pan-European Market for stocks and derived products. The three initial markets continued to run as branches necessary to register the stock quotes and set some regulations. The national indices of the three markets (AEX, BEL 20, CAC 40 etc.) were maintained. Besides, new indices of the unified market were calculated: EURONEXT 100, NEXT 150.

In order to characterize the European stock market we used the Dow Jones EURO STOXX 50 index, which is made up of the Euro zone stocks, instead of EURONEXT 100 index, because its portfolio contains only stocks from the financial markets of three European countries.

The BET Index Portfolio. The BET Index Portfolio is a 10-stock portfolio which lies at the foundation of BET index. The BET index was initiated at the Bucharest Stock Exchange on September 22nd, 1997. The main purpose of its creation is connected to reflecting the overall trend of the prices according to the 10 most liquid companies traded in the Bucharest Stock Exchange. Another goal of the BET index was to provide an adequate ground to transact derived tools on indices (options and futures contracts). BET is an index of Laspeyres type.

Stocks included in the BET portfolio have to meet the following requirements:
- to be quoted as of 1st Class at the Bucharest Stock Exchange;
- to have the highest financial capitalization;
- stocks to be chosen in such a way to assure the diversity of the index portfolio;
- stocks included in the index have to be the most liquid of the Bucharest Stock Exchange.

The CAC 40 Index Portfolio. As suggested by its name, the CAC 40 Index Portfolio is made up of the 40 most liquid stocks transacted at the Paris market. It was
created in June 1988 to represent the French financial market entirely and work as a support to the derived markets. Since it was founded, the CAC 40 index has been known as a reference point for the Paris market.

Its calculation method changed by the Decision of the Scientific Index Council on December 1st, 2003. The CAC 40 index is no longer weighted through the total financial capitalization of the sample stocks, but through floating capitalization. The floating market capitalization considers the stock financial capitalization by excluding the market capitalization of the following stocks:

- stocks owned by companies which issued them,
- stocks owned by persons who have power over the issuing company,
- stocks owned by the state,
- stocks linked through a contract signed between holders (contract according to the article 233/10 and 11 of the French Commerce Code).

This calculation method for the CAC 40 index ensured coherence between the quoted stocks and their reflection on the index.

The Dow Jones EURO STOXX 50 Index Portfolio. The Dow Jones Euro STOXX 50 Index Portfolio is made up of the most liquid stocks of the Euro zone (15) and the most important activity areas. 8 activity areas are specified, as follows: chemistry, raw materials, media, distribution, cars, cyclic goods, pharmacy, food industry, energy, banks, assurances, diversified financial services, conglomerates, constructions, equipment goods and professional services, technology, telecommunication, group services.

The Dow Jones EURO STOXX 50 Index is calculated, as the other indices, as a Laspeyres type index. Just like CAC 40, Dow Jones EURO STOXX 50 is calculated based on the floating financial capitalization of stocks.

Establishing the returns of the BET, CAC 40 and Dow Jones Euro STOXX 50 Index Portfolios

For an accessible interpretation, we will first determine the returns of the index portfolios through the rates of return. The BET, CAC 40 and Dow Jones EURO STOXX 50 rates of return are calculated on a monthly basis, between January 2000 - December 2004. The year 2000 was chosen as a debut for the analysis as, in Romania, it represents the beginning of the negotiations regarding the European economical integration.

In this study we analyzed the rates of return of the portfolios converted through logarithmization. If we record the rate of monthly return as LR (LRBET, LRCAC and LREUROX, respectively) and if P signifies the index value (PCAC and PEUROX, respectively) the calculation method is as follows:

\[ LR_t = \left( \ln P_t - \ln P_{t-1} \right) \times 100 \]

The value of the BET portfolio is assessed in the national currency which is lei. In order to compare, we determined the BET portfolio returns according the index value in Euro:

\[ LRBET_t = \left( \ln \text{BETL}_t - \ln \text{BETL}_{t-1} \right) \times 100 \]

\[ LRBETE_t = \left( \ln \text{BETE}_t - \ln \text{BETE}_{t-1} \right) \times 100 \]

where: \(-LRBET_t\) signifies the monthly returns converted through logarithmization expressed in Lei at time \(t\);
- $LRBETE_t$ signifies the monthly returns converted through logarithmization expressed in Euro at time $t$;

In the following analysis, we refer to the monthly rate of return as the monthly rate of return converted through logarithmization expressed in percentages.

Before showing a descriptive analysis of the rates of return series for the chosen portfolios, we analyzed the evolution of their values.

**Figure no. 1** The evolution of the value of the BET portfolio expressed in Lei and Euro

During the entire period of analysis, the values of the BET portfolio expressed in Lei and Euro, respectively, show an ascending trend. The evolution of the Leu/Euro exchange rate indicates an ascending trend and represents the depreciation of the Leu during the entire period. The evolution of the BET portfolio value expressed in Euro also reflects the influence of the Leu-Euro exchange rate. This exchange rate follows a linear ascending evolution, between January 2000 - December 2004.

**Figure no. 2** The evolution of the Leu-Euro exchange rate (1 Euro = TCLE Lei)

During the last months of 2004 we can notice a rise of the Leu (even if a slight one) which will influence the relative evolution of the BET value expressed in Euro and of the BET value expressed in Lei.
The evolution of the CAC 40 and Dow Jones EURO STOXX 50 portfolio values are very close. Two periods may be identified in the evolution of these portfolios: a period of decrease until 2003 determined by the effect of a financial bubble and then a period of return. However, during the whole period, January 2000 - December 2004, the two portfolios describe a descending trend.

**Descriptive analysis of the portfolio returns**

A purpose of this study is to analyze the BET portfolio rate of return expressed in Lei but also in Euro because our analysis refers to two types of investors: the rate of return expressed in Lei is strategic for the Romanian investors who negotiate between the real assets and the Romanian financial assets, while the rate of return expressed in Euro is strategic for the international investors. The Romanian investors may be also interested by the rate of return expressed in Euro when having in mind the international diversification of their portfolios, protection against inflation in Romania and simultaneous depreciation of the Leu.

**Table no. 1. Indicators of the central trend for the monthly rates of return of the BET, CAC 40 and Dow Jones EURO STOXX portfolios**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Test Value z</th>
<th>Likelihood associated to the test z</th>
<th>Number of observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRBETL</td>
<td>3.79221</td>
<td>3.58880</td>
<td>3.475958</td>
<td>0.0010</td>
<td>60</td>
</tr>
<tr>
<td>LRBTE</td>
<td>2.53512</td>
<td>2.65024</td>
<td>2.290568</td>
<td>0.0256</td>
<td>60</td>
</tr>
<tr>
<td>LRCAC</td>
<td>-0.74039</td>
<td>0.76191</td>
<td>-0.957181</td>
<td>0.3424</td>
<td>60</td>
</tr>
<tr>
<td>LREUROX</td>
<td>-0.84653</td>
<td>-0.18527</td>
<td>-0.941243</td>
<td>0.3504</td>
<td>60</td>
</tr>
</tbody>
</table>

N.B.: Results obtained with the support of EViews programme

The mean of the monthly rates of returns of the BET portfolio expressed in Euro is positive and high. It equals to 2.535% showing us that, on the average, in a month, an investor may get a return of 2.535%. The means of the rates of return of the CAC 40 and Dow Jones EURO STOXX 50 portfolios are negative and very close to zero. The CAC 40 and Dow Jones EURO STOXX 50 portfolios hardly register loss on the average, in a month; however, if we determine the losses on a whole year they turn out to be important.
The mean of the monthly rates of returns of the BET portfolio expressed in Euro is lower than the mean of the monthly rates of returns expressed in Lei because of the depreciation of the Leu against the Euro during the analyzed period.

To check if the mean of the monthly rate of return is significant and different from zero, we used the test $z$. The probability associated to the test indicates the following:

- the means of the monthly rates of return of the BET portfolio expressed in Lei and Euro are significantly different from zero (and considerably positive);
- the mean of the monthly rates of return of the CAC 40 portfolio is not significantly different from zero;
- the mean of the monthly rates of return of the Dow Jones EURO STOXX 50 portfolio is not significantly different from zero.

Since the mean of the monthly rates of return of the BET portfolio is significantly different from zero, we can say that the investors of the BET portfolio may hope to get significant returns. However the investors of the CAC 40 and Dow Jones EURO STOXX 50 portfolios may not benefit of such hope.

Given only the average rate of returns, we say it is preferable for a risk neutral investor to invest on the Romanian market rather than on the French or European one.

The median lines of the monthly rates of return of the BET portfolio expressed in Lei and Euro have positive values, showing us that more than a half of the values of the BET portfolio rates of return are positive.

The median line of the monthly rates of return of the CAC 40 portfolio, during the period we had in view, is positive and very close to zero. We can say the values of the rates of returns are almost equally divided into positive and negative values.

The median line of the monthly rates of return of the Dow Jones EURO STOXX 50 portfolio, during the period we had in view, is negative and very close to zero, which shows that the monthly results of the investment in this portfolio are equally divided into returns and losses.

### Table no. 2. The values of the asymmetry and smoothing ratios for the monthly rates of returns of the BET and CAC 40 portfolios

<table>
<thead>
<tr>
<th>Variable</th>
<th>Asymmetry Ratio</th>
<th>Pearson Curve Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRBETL</td>
<td>0.485979</td>
<td>5.185887</td>
</tr>
<tr>
<td>LRBETE</td>
<td>0.464967</td>
<td>4.497785</td>
</tr>
<tr>
<td>LRCAC</td>
<td>-0.491157</td>
<td>3.828834</td>
</tr>
<tr>
<td>LREUROX</td>
<td>-0.450405</td>
<td>4.043383</td>
</tr>
</tbody>
</table>

_N.B.: Results obtained with the support of EViews programme_

The monthly rates of return of the BET portfolio expressed in lei and Euro, respectively, show an asymmetry to the right. The appearance frequencies of the rates of return of the BET portfolio are displayed to the right (to the positive values of the rate of return).

The monthly rates of return of the CAC 40 and Dow Jones EURO STOXX 50 portfolios respectively, show both an asymmetry to the left. The distributions of the rates of return of the CAC 40 and Dow Jones EURO STOXX 50 portfolios are displayed to the negative values of the distribution.

The distributions of the monthly rates of return of the BET portfolio (expressed in Lei and Euro respectively), of the CAC 40 and Dow Jones EURO STOXX 50
portfolios are leptokurtic and the extreme values have higher rate of recurrence than the normal ones, showing „fat tails” (in French “queues de distribution épaisses”). If the investors own the BET, CAC 40 and Dow Jones EURO STOXX 50 portfolios they can get either exaggerated returns or extreme losses of higher occurrence than the normal ones.

We use the Jarque-Bera test to check the normality of the monthly rates of return. The monthly rate of return of the BET portfolio, expressed in Lei and Euro, do not follow normal distributions (probabilities associated to the Jarque-Bera test are lower than the taken risk of 5%). The monthly rates of return of the CAC 40 and Dow Jones EURO STOXX 50 portfolios are subject to a normal distribution.

Table no. 3. Values of the Jarque-Bera test for the monthly rates of returns

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value of the Jarque-Bera test</th>
<th>Probability associated to the Jarque-Bera test</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRBETL</td>
<td>14.30701</td>
<td>0.000782</td>
</tr>
<tr>
<td>LRBETE</td>
<td>7.770340</td>
<td>0.020544</td>
</tr>
<tr>
<td>LRCAC</td>
<td>4.129763</td>
<td>0.126833</td>
</tr>
<tr>
<td>LREUROX</td>
<td>4.750264</td>
<td>0.093002</td>
</tr>
</tbody>
</table>

N.B.: Results obtained with the support of EViews programme

Since the monthly rates of returns of the CAC 40 and Dow Jones EURO STOXX 50 portfolios are subject to normal distributions, their mean and variance are enough to characterize these distributions.

The evaluation of the portfolio returns autocorrelation

The analysis of the autocorrelation of the rates of return through the functions of autocorrelation has two goals [Jean-Pierre Berdot, 2003, p. 20]:
- it facilitates the definition of the character of the return rates process (AR – autoregressive, MA – moving average or ARMA autoregressive and of moving average);
- it determines whether or not the returns rates are correlated, the former theory being frequent in the theoretical and empirical literature of the financial markets.

To identify the process followed by the return rates, we can use the autocorrelation functions. For a random variable Y we can define two autocorrelation functions: the total autocorrelation function and the partial autocorrelation function.

The total autocorrelation function, TACF, is defined by the autocorrelation coefficient at lag k: \( \rho_k = \frac{Cov(Y_t, Y_{t-k})}{\sqrt{V(Y_t)V(Y_{t-k})}} \). For a stationary variable the autocorrelation coefficient at lag k gets: \( \rho_k = \frac{Cov(Y_t, Y_{t-k})}{V(Y_t)} \). Its calculation is:

\[
\hat{\rho}_k = \frac{\sum_{t=k+1}^{T} (Y_t - \bar{Y})(Y_{t-k} - \bar{Y})}{\sum_{t=1}^{T} (Y_t - \bar{Y})^2}.
\]
To test the null hypothesis (which supposes the absence of autocorrelation up to lag k) we use Ljung-Box’s Q statistics as follows:

$$Q_k = T(T+2) \sum_{i=1}^{k} \frac{\hat{\rho}_i^2}{T-i}.$$ 

The tested hypotheses are:

$H_0$: $\rho_1 = \rho_2 = \ldots = \rho_k = 0$

$H_1$: $\rho_1 \neq \rho_2 \neq \ldots \neq \rho_k \neq 0$

The null hypothesis supposes the absence of autocorrelation up to lag k and the alternative hypothesis supposes the presence of autocorrelation. Supposing the real hypothesis is null, the Q variable follows a law $\chi^2_k$ (with k degrees of freedom).

The partial autocorrelation function, PACF, is defined by the autocorrelation at lag k. The partial autocorrelation of lag k is calculated by $b_{kk}$ of the equation:

$$Y_t = b_{k0} + b_{k1}Y_{t-1} + b_{k2}Y_{t-2} + \ldots + b_{kk}Y_{t-k} + \varepsilon_t$$

The calculation of the parameter $b_{kk}$ is done with the support of the smallest squares method.

Recognizing the process pursued by a variable by means of the autocorrelation functions is done as follows:

- a process AR(p) has an infinite function TACF convergent to o (in case of stationarity) and a function PACF at lag p;
- a process MA(q) has an infinite function PACF convergent to o (in case of inversability) and a function TACF cut-off at lag q;
- a process ARMA(p, q) has the functions TACF and PACF infinite and convergent (in case of stationarity and inversability) the lags p and q being determined by trials.

### Table no. 4. Values of the autocorrelation functions and of the Ljung-Box test for the monthly rates of return of the BET portfolio

<table>
<thead>
<tr>
<th>LRBETL</th>
<th>LRBETE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AC</strong></td>
<td><strong>PAC</strong></td>
</tr>
<tr>
<td>0.021</td>
<td>0.021</td>
</tr>
<tr>
<td>-0.231</td>
<td>-0.232</td>
</tr>
<tr>
<td>-0.089</td>
<td>-0.083</td>
</tr>
<tr>
<td>0.121</td>
<td>0.074</td>
</tr>
<tr>
<td>0.121</td>
<td>0.085</td>
</tr>
<tr>
<td>-0.068</td>
<td>-0.037</td>
</tr>
<tr>
<td>-0.138</td>
<td>-0.085</td>
</tr>
<tr>
<td>0.075</td>
<td>0.067</td>
</tr>
<tr>
<td>0.023</td>
<td>-0.052</td>
</tr>
<tr>
<td>-0.075</td>
<td>-0.070</td>
</tr>
<tr>
<td>0.029</td>
<td>0.068</td>
</tr>
<tr>
<td>-0.104</td>
<td>-0.142</td>
</tr>
</tbody>
</table>

*N.B.: Results obtained with the support of EViews programme*

Since all the probabilities associated to the Ljung-Box test are higher than 0.05 we will keep in mind the hypothesis on the absence of the monthly return rates autocorrelations.
Table no. 5. Values of the autocorrelation functions and of the Ljung-Box test for the monthly rates of return of the CAC 40 and Dow Jones EURO STOXX 50 portfolios

<table>
<thead>
<tr>
<th></th>
<th>LRCAC</th>
<th>LREUROX</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>0.000</td>
<td>0.016</td>
</tr>
<tr>
<td>PAC</td>
<td>0.000</td>
<td>-0.016</td>
</tr>
<tr>
<td>Q-Stat</td>
<td>2.E-06</td>
<td>0.016</td>
</tr>
<tr>
<td>Prob</td>
<td>0.999</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.031</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.994</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.034</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.0781</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>2.E-06</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.998</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.035</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.1517</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.780</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>1.8149</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.874</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>4.6268</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.592</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>4.9418</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.667</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>6.9433</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.543</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>8.8667</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.450</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>8.8843</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.543</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>8.9556</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.626</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>10.300</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>0.590</td>
<td>0.0160</td>
</tr>
</tbody>
</table>

N.B.: Results obtained with the support of EViews programme

The lack of the return rates autocorrelation suggests that the monthly rates of return follow a process ARMA(0,0), totally at random such as: \( LR_t = c + \varepsilon_t \).

The calculation of \( c \) is the empirical mean of the rates of return and after the test it is not much different from zero for LRCAC. The calculation results of the process \( LR_t = c + aLR_{t-1} + \varepsilon_t \) are shown in Table 6.

For the returns LRBET, the constant \( c \) is significantly different from zero since the probability associated to the test \( t \) is lower than 5%.

Table no. 6. The calculation results of the process \( LR_t = c + aLR_{t-1} + \varepsilon_t \) followed by the monthly rates of return of the BET and CAC 40 portfolios

<table>
<thead>
<tr>
<th></th>
<th>c</th>
<th>prob. assoc t test</th>
<th>a</th>
<th>prob. assoc t test</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRBET</td>
<td>2.9409</td>
<td>0.006</td>
<td>0.04228</td>
<td>0.763</td>
<td>0.00175</td>
</tr>
<tr>
<td>LRCAC</td>
<td>-0.946</td>
<td>0.268</td>
<td>0.03810</td>
<td>0.779</td>
<td>0.00152</td>
</tr>
</tbody>
</table>

N.B.: Results obtained with the support of EViews programme

The estimated parameter \( a \) is not considerably different from zero for none of the analyzed rates of returns. The determination ratio \( R^2 \) which is not much different from zero confirms that the rates of returns cannot be explained according to their previous values.

The evaluation of the return dependence

From the previous analyses, we reached the conclusion that the monthly rates of return of the BET and CAC 40 portfolios are not autocorrelated. However they may be dependent. The dependence signifies the situation when the high rates of returns (positive or negative) are followed by other high rates of returns, whatever their sign [Jean-Pierre Berdot, 2003, p. 24]. The presence of the return rates dependence suggests
they can be modeled with the support of the autoregressive conditioned models ARCH (Auto Regressive Conditional Heteroscedasticity).

To check the dependence we will calculate the autocorrelation functions of the return rates squares.

Table no. 7. Values of the total and partial autocorrelation functions of the monthly rates of return of the BET portfolio (expressed in Lei and Euro)

<table>
<thead>
<tr>
<th></th>
<th>LRBETL</th>
<th></th>
<th>LRBETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>PAC</td>
<td>Q-Stat</td>
<td>Prob</td>
</tr>
<tr>
<td>-0.044</td>
<td>-0.044</td>
<td>0.1228</td>
<td>0.726</td>
</tr>
<tr>
<td>-0.004</td>
<td>-0.006</td>
<td>0.1238</td>
<td>0.940</td>
</tr>
<tr>
<td>-0.092</td>
<td>-0.093</td>
<td>0.6771</td>
<td>0.879</td>
</tr>
<tr>
<td>-0.044</td>
<td>-0.052</td>
<td>0.8032</td>
<td>0.938</td>
</tr>
<tr>
<td>0.087</td>
<td>0.082</td>
<td>1.3108</td>
<td>0.934</td>
</tr>
<tr>
<td>-0.098</td>
<td>-0.102</td>
<td>1.9761</td>
<td>0.922</td>
</tr>
<tr>
<td>0.160</td>
<td>0.148</td>
<td>3.7733</td>
<td>0.805</td>
</tr>
<tr>
<td>0.032</td>
<td>0.057</td>
<td>3.8462</td>
<td>0.871</td>
</tr>
<tr>
<td>-0.061</td>
<td>-0.071</td>
<td>4.1207</td>
<td>0.903</td>
</tr>
<tr>
<td>-0.025</td>
<td>-0.014</td>
<td>4.1684</td>
<td>0.939</td>
</tr>
<tr>
<td>-0.078</td>
<td>-0.047</td>
<td>4.6352</td>
<td>0.948</td>
</tr>
<tr>
<td>0.004</td>
<td>-0.048</td>
<td>4.6365</td>
<td>0.969</td>
</tr>
</tbody>
</table>

N.B.: Results obtained with the support of EViews programme

The values of the probabilities associated to the Ljung-Box test, calculated for the monthly return rates squares of the BET (expressed in Lei and Euro), CAC 40 and Dow Jones EURO STOXX 50 portfolios, respectively, indicate the absence of the dependence. There is no effect of autoregressive Heteroscedasticity. This way, the rates of returns with high values (positive or negative are not followed by other higher rates of returns.

Table no. 8. Values of the total and partial autocorrelation functions of the monthly rates of return of the CAC 40 and Dow Jones EURO STOXX 50 portfolios

<table>
<thead>
<tr>
<th></th>
<th>LRCAC</th>
<th></th>
<th>LRREUROX</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>PAC</td>
<td>Q-Stat</td>
<td>Prob</td>
</tr>
<tr>
<td>0.188</td>
<td>0.188</td>
<td>2.2726</td>
<td>0.136</td>
</tr>
<tr>
<td>0.217</td>
<td>0.189</td>
<td>5.2615</td>
<td>0.072</td>
</tr>
<tr>
<td>0.191</td>
<td>0.132</td>
<td>7.6487</td>
<td>0.054</td>
</tr>
<tr>
<td>-0.022</td>
<td>-0.118</td>
<td>7.6810</td>
<td>0.104</td>
</tr>
<tr>
<td>0.025</td>
<td>-0.019</td>
<td>7.7237</td>
<td>0.172</td>
</tr>
<tr>
<td>0.042</td>
<td>0.047</td>
<td>7.8427</td>
<td>0.250</td>
</tr>
<tr>
<td>0.145</td>
<td>0.176</td>
<td>9.3208</td>
<td>0.230</td>
</tr>
<tr>
<td>-0.168</td>
<td>-0.263</td>
<td>11.339</td>
<td>0.183</td>
</tr>
<tr>
<td>0.007</td>
<td>-0.007</td>
<td>11.342</td>
<td>0.253</td>
</tr>
<tr>
<td>0.028</td>
<td>0.084</td>
<td>11.401</td>
<td>0.327</td>
</tr>
<tr>
<td>-0.107</td>
<td>-0.022</td>
<td>12.273</td>
<td>0.343</td>
</tr>
<tr>
<td>0.204</td>
<td>0.198</td>
<td>15.488</td>
<td>0.216</td>
</tr>
</tbody>
</table>

N.B.: Results obtained with the support of EViews programme
Conclusions

We analyzed the BET portfolio rate of return, expressed in Lei, but also in Euro, since we took into account two types of investors. Thus, the rate of return expressed in Lei is strategic for the Romanian investors who choose between the real assets and the Romanian financial assets, while the rate of return expressed in Euro is strategic for the international investors. The Romanian investors may also show their interest in the rate of return expressed in Euro for an international diversification of their portfolios, to protect themselves against the Romanian inflation and the simultaneous depreciation of the Leu.

On the overall period of analysis, the values of the BET portfolio expressed in Lei and in Euro, respectively, indicate an ascending trend. The evolution of the Leu-Euro exchange rate shows an ascending trend and reveals the depreciation of Leu on the whole period. The evolution of the value of the BET portfolio expressed in Euro is a sign of the influence of the exchange rate Leu-Euro.

The evolutions of the values of the CAC 40 and Dow Jones EURO STOXX 50 portfolios are very close. During the whole period, January 2000 - December 2004, the two portfolios have a descending trend.

The investors in the BET portfolio may hope to obtain significant returns. Since the return rates distribution of the BET portfolio is leptokurtic, the investors may obtain either exaggerated returns either extreme losses with higher rate of recurrence than the normal ones. The rates of return of the BET portfolio are neither correlated nor dependent. That is why the return rates of this portfolio may not be foreseen.

The investors in the CAC 40 and Dow Jones EURO STOXX 50 portfolios may not expect considerable returns. If the rates of return of the BET portfolio did not follow a normal distribution, the rates of return of the CAC 40 and Dow Jones EURO STOXX 50 portfolios pursue a normal distribution. At the same time, the returns of these portfolios may not be foreseen.

REFERENCES

1. Berdot, J. P. „Econométrie” Université de Poitiers, 2002
2. Berdot, J. P. „Econométrie sans trop de peine” Université de Poitiers, 2001
DETERMINATION OF THE EU GRANT AND SPECIFIC ISSUES OF COST-BENEFIT ANALYSIS

Lect. PhD Sanda Constantin
Assist. PhD Student Dana Lupşa
Transilvania University of Braşov
Faculty of Economical Science
Braşov, Romania

Abstract: The objective of this paper is to present a set of working rules which will lead to more consistency and rigor in future cost – benefit analyses (CBA) and hence to better informed decision making. In order to ensure consistency within a Member State, it is proposed that Member States develop their own guidance frameworks taking account of specific institutional settings, particularly for transport and environment sectors. The paper provides guidance on determining the basis on which the EU grant will be established and the particular issues relating to the profitability that would normally be expected, the polluter pays principle, affordability and public private partnerships.

Key words: EU grant, cost-benefit analyses, profitability

Determination of the EU grant

Article 55(2) of the European Commission Guide to cost – benefit analysis of investment projects, 2002, maintains the funding-gap method as the basis for the calculation of EU grant in revenue-generating projects, stipulating that the eligible expenditure cannot exceed the current value of the investment cost less the current value of the net revenue from the investment over a specific reference period appropriate to the category of investment concerned.

However, in contrast to the 2000-2006 period, the eligible expenditure and not the cofinancing rate is modulated in order to relate the contribution from the Funds to the revenues generated by the project.

It should be noted that Article 55 applies to all projects and not just to major projects. However, “Member States may adopt procedures proportionate to the amounts concerned for monitoring revenues generated by operations whose total cost is below € 200.000” – Art. 55(5).

Scope

Art. 55 applies to investment operations which generate net revenues through charges borne directly by users. It does not apply to the following cases:

- Projects that do not generate revenues (e.g., roads without tolls)
- Projects whose revenues do not fully cover the operating costs (e.g., some railways)
- Projects subject to state-aid rules – Art. 55(6).

As a general rule, for all projects that can be subject to COST-BENEFIT ANALYSIS (CBA) it should be possible to estimate the expected revenues, if any,
according to Article 55(2). When the estimation of future revenues proves to be difficult, particular attention should be paid to the sensitivity and risk analysis.

The determination of the level of Community assistance is based on the “funding gap” rate of the project, i.e. the share of the discounted cost of the initial investment not covered by the discounted net revenue of the project.

The identification of the eligible expenditure according to Art. 55(2) ensures that the project has enough financial resources to be implemented and avoids the granting of an undue advantage to the recipient of the aid, i.e. over-financing of the project.

There are presented the steps to be followed to determine the EU grant in accordance with Art. 55.

**Steps to determining the EU grant 2007-2013 programming period**

1. Find the funding-gap rate (R):
   \[ R = \text{Max EE/DIC} \]

   where
   - Max EE is the *maximum eligible expenditure* = DIC-DNR (Art. 55.2)
   - DIC is the *discounted investment cost*
   - DNR is the *discounted net revenue* = discounted revenues – discounted operating costs + discounted residual value

2. Find the “decision amount” (DA), i.e. “the amount to which the co-financing rate for the priority axis applies” (Art. 41.2):
   \[ DA = EC \times R \]

   where
   - EC is the eligible cost.

3. Find the (maximum) EU grant:
   \[ \text{EU grant} = DA \times \text{Max CRpa} \]

   where
   - Max CRpa is the maximum co-funding rate fixed for the priority axis in the Commission’s decision adopting the operational programme (Art. 53.6).

**Specific issues**

**Normally expected profitability**

Profitability refers to the amount of profit received relative to the amount invested. The simplest way to assess profitability is to measure the internal rate of return of the investment, that is the discount rate that makes the discounted flow of the project’s costs and revenues add up to zero. In other words, the internal rate of return is the discount rate at which a stream of costs and revenues has a net present value (NPV) of zero.

The profitability of an investment normally expected is that which provides enough income to exactly cover the inputs’ opportunity cost (the best alternative return that could be earned by the investor’s labour, management and equity capital).

The expected profitability may be strictly dependent on the project’s risks. Risk in turn depends on numerous factors such as: the socio-economic context of the country/region in which the project is implemented, the difficulties of implementation of the project, its economic lifetime, the currency exchange risk and, above all, the risk related to the projected revenues. These should be appropriately dealt with in the sensitivity and risk analysis. Art. 55 allows designing the Funds’ interventions in such a
way that normal expected profitability is duly taken into account and no over-financing occurs. This aspect is particularly relevant when a private partner is involved in the project. In this case, the contribution from the Funds should be determined prudently so that no undue profit is reaped by the private investor.

### Table 1

<table>
<thead>
<tr>
<th>Financing scheme Expected Profitability*</th>
<th>Mainly loans (+ low grants)</th>
<th>Loans + Grants</th>
<th>Public grants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medium – high</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Airports</td>
<td>□ Energy</td>
<td>□ Public transport</td>
<td></td>
</tr>
<tr>
<td>□ Energy</td>
<td>□ Telecom/ICT</td>
<td>□ Water supply and waste water treatment plants</td>
<td></td>
</tr>
<tr>
<td>□ Tourism</td>
<td>□ Industrial estates and business parks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Telecom/ICT</td>
<td>□ Productive investments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Industrial estates and business parks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Productive investments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medium</strong></td>
<td>□ Solid waste</td>
<td>□ Railways</td>
<td></td>
</tr>
<tr>
<td>□ Solid waste</td>
<td>□ Ports</td>
<td>□ Health care</td>
<td></td>
</tr>
<tr>
<td>□ Ports</td>
<td>□ Tolleled roads</td>
<td>□ Education</td>
<td></td>
</tr>
<tr>
<td>□ Tolleled roads</td>
<td>□ Water supply and waste water treatment plants</td>
<td>□ Research, innovation and technology transfer</td>
<td></td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>□ Roads without tolls</td>
<td>□ Roads without tolls</td>
<td></td>
</tr>
<tr>
<td>□ Roads without tolls</td>
<td>□ Flood prevention</td>
<td>□ Flood prevention</td>
<td></td>
</tr>
</tbody>
</table>

*Source: DG Regio*

It should be noted that the table is based on the financial rate of return of the *investment* (FRR/C) which may considerably vary across country and does not necessarily reflect the profitability expected by the investor(s). This should be checked on a case-by-case basis by the project promoter, particularly when a private investor is involved, by estimating the relevant financial rate of return of *capital* (FRR/K).
Polluter Pays Principle

The Polluter Pays Principle is one of the principles of Community environmental policy (Art. 174 EC Treaty) and applies throughout the European territory. Specific Community legislative provisions exist for waste. Under Directive 2006/12/EC of the European Parliament and of the Council on waste, in accordance with the polluter pays principle, the cost of disposing of waste must be borne by the holder who has waste handled by a waste collector or by an undertaking and/or by the previous holders or the producer from which the waste came (Art. 15).

According to the Water Framework Directive (2000/60/EC) of the European Parliament and of the Council, “Member States shall take account of the principle of recovery of the costs of water services, including environmental and resource costs, in accordance in particular with the polluter pays principle” (Art. 9).

The Commission aims to encourage charging systems where the environmental costs of pollution and preventive measures are borne by those who cause pollution.

These charging systems should be proportional to the social marginal production costs, including costs for the environment and those linked to the scarcity of the resources in the case of water, or calculated in such a way as to influence the choice of use of the different modes of operation. So for instance, for transport infrastructure, the charge should cover not only infrastructure costs, but also external costs, i.e. costs connected with accidents, air pollution, noise and congestion.

It should be noted that the funding-gap method has disincentive effects for the application of the polluter pays principle as higher tariffs result in a lower contribution from the Funds, all else equal. However, managing authorities should bear in mind that an appropriate charging system is not only valuable from an economic point of view but is also desirable for the financial sustainability of operations in the long run.

Equity (affordability)

In the context of Art. 55, “considerations of equity linked to the relative prosperity of the Member State” are to be taken as referring to the affordability of tariffs. Art. 55 implicitly refers to possible variations of the Community assistance (through the determination of eligible expenditure), according to the relative wealth of the country or region concerned, that is to say the capacity of the users to pay. For a given project, the lower the tariffs the higher the EU grant, ceteris paribus. So, assuming that the tariffs are set to take regional (national) income levels into account, the lower the regional (national) income the higher the funds’ contribution. In order to enhance allocative efficiency, the Commission wishes to encourage the development of charging systems which reflect the social marginal production cost. However, when the affordability of tariffs is considered, Member States may wish to artificially cap the level of charges with a view to avoiding a disproportionate financing burden for the users, thereby ensuring that the service or good is affordable also for the most disadvantaged groups.

Ideally, the charging system should be based on the real consumption of resources, and tariffs should at least cover operating and maintenance costs as well as a significant part of the assets’ depreciation. An adequate tariff structure should be envisaged attempting to maximize the project’s revenues before public subsidies, while taking affordability into account. For instance, a commonly accepted affordability ratio for water supply and sanitation is 4%.
The Commission encourages the Member States to provide information in their guidance documents about the affordability ratios (for average and/or low-income groups) which may be taken as a benchmark for the projects that will be submitted for co-financing.

Managing authorities should be aware of the possible trade-off between the long-term financial sustainability of the operations and the level of tariff at which users will be charged for a good or service taking into account affordability criteria.

Public Private Partnership (PPP)

Public private partnership (PPP) arrangements come in many forms and are still an evolving concept which must be adapted to the individual needs and characteristics of each project and the project partners. PPP may be an appropriate method of financing investment where there is significant scope for involving the private sector, so as to provide additional capital and a more efficient service. Particular attention should then be paid to the legal structure of the PPP, as this may affect to some extent the eligibility of expenditure that can be co-financed. PPP arrangements appear particularly attractive for the new Member States given the enormous financing requirements, the large funding shortfall, the need for efficient public services, growing market stability, and trends creating a favorable environment for private investment.

In the context of CBA, the following aspects need to be borne in mind when the financial analysis is carried out:

- The financial discount rate may be increased to reflect a higher opportunity cost of capital to the private investor. This should be justified by the project promoter on a case-by-case basis, providing evidence, where available, of the private investor’s past returns on similar projects.

- Under several types of PPP schemes (e.g., BOT, DBFO) the owner of the infrastructure (typically the public partner) is different from the operator (the private partner). The financial analysis is usually carried out from the point of view of the owner of the infrastructure. However, in such cases, a consolidated analysis (owner and operator) should be used for the determination of the funding gap.

Under Article 55(1), the revenue that needs to be considered for the calculation of the eligible expenditure and subsequently of the project’s funding gap is that directly paid by the users through charges. For instance, under a “shadow tolling” model, users pay no fees. Instead, the public body (owner) pays “tolls” to the private partner (operator) for a given concession period. Using a consolidated financial analysis for the determination of the funding gap ensures that the “tolls” are not considered in this case, consistent with the provisions of Article 55(1). Indeed, the revenue for the operator corresponds to the cost borne by the owner, and in the consolidated analysis the two cancel each other out and do not affect the project’s net cash flows.

Concluding remarks

Member States are responsible for applying the provisions laid down in the regulations with regard to cost-benefit analysis and revenue generating projects. For ERDF and Cohesion Fund major projects, the Commission takes the decision and in it sets the contribution from the funds in the light of the information contained in the application and further appraisals if necessary.
In order to ensure consistency within a Member State, it is proposed that Member States develop their own guidance frameworks taking account of specific institutional settings, particularly for the transport and environment sectors. The Commission will continue to assist Member States in their task, with the aid of JASPERS, in order to ensure proper application of EU guidance to national contexts.

This approach will bring substantial benefits in terms of simplification both for the Commission and the Member States, and thereby contribute to speeding up decision procedures for large projects. It will also have an important capacity building effect with a view to the programming period 2007-13.

REFERENCES

**The Combined Evaluation of the Operating Risk and of the Financial Risk**

Assist. Ph.D. Student Daniel Cîrciumaru  
Assoc. Prof. Ph.D. Marian Siminică  
Assist. Ph.D. Student Radu Criveanu  
University of Craiova  
Faculty of Economics and Business  
Administration, Craiova, Romania

**Abstract:** While performing its current activity, a company can face two types of risks: the operating risk and the financial risk. The combined effect of these risks obviously influences the shareholders’ earnings. In order to quantify this effect, we have used the degree of combined leverage, calculated in two ways, by taking into account the net result of the company and the economic value added. In order to better point out the size of the combined risk, we have made the graphical representation of the degree of combined leverage as a function of the operating result. Using this chart, we have made analyses regarding the dynamic of the combined risk for different intervals of evolutions of the operating result.

**Key words:** operating risk, financial risk, degree of combined leverage, economic value added

While performing its current activity, a company can face two types of risks: the operating risk and the financial risk. There is a strong connection between these two risks. Because the operating costs are covered before the financial ones, it means that the operating risk precedes the financial one. The higher are the fixed operating costs, the more difficult will be for the company to pay the interests to the creditors.

No matter the activity profile, all the enterprises post fixed costs. In exchange, the costs with interests are only posted by the companies that use bank loans or issue bonds. However, because most of the companies use borrowed capital in order to finance their activity, we can presume that the majority of the enterprises face nowadays both the operating and the financial risk. Considering the relation of interdependence between these two types of risks, they must be analyzed together, because the managers can use either the operating leverage or the financial one in order to decrease the overall risk or to increase the shareholders’ earnings.

The combined risk reflects the variability of the shareholders’ earnings, as a result of the unfavorable change of the operating and the financing states of the company.

We can notice that the combined risk directly affects the shareholders’ earnings, that could increase or decrease with a bigger or smaller percentage, depending on the size of the operating leverage effect and of the financial leverage effect. The cumulated effect of these two leverages generates the **leverage combined effect**, which represents the variation of the shareholders’ earnings as a result of using the operating and the financial leverage. Therefore, the existence of the fixed costs, both operating and financial, can cause a change of the return on equity, depending on the variation of the volume of the sold quantity.
In order to appreciate the size of the combined risk, the specialized literature recommends the use of the **degree of combined leverage (DCL)**, calculated as a product between the **degree of operating leverage (DOL)** and the **degree of financial leverage (DFL)**:

$$\text{DCL} = \text{DOL} \times \text{DFL} = \frac{\Delta \text{OP}}{\Delta S} \times \frac{\Delta \text{Nr}}{\Delta \text{OP}} = \frac{\Delta \text{Nr}}{\Delta S} \times \frac{\Delta \text{NP}}{\Delta \text{OP}}$$

$$\text{OP} \rightarrow \text{operating profit}; \quad \text{S} \rightarrow \text{sales}; \quad \text{Nr} \rightarrow \text{net result}.$$

The degree of combined leverage reflects the impact of a change in sales on the net result. The bigger its level is, the higher is the combined risk. We mention that the level of DCL is always bigger than 1.

If the company only produces and sells a single product, the relation for calculating the DCL can be expressed as follows:

$$\text{DCL} = \frac{\Delta \text{Nr}}{\Delta q} = \frac{\Delta \text{q}(p - v - F)}{\Delta q} = \frac{\text{q}_0(p - v) - F}{\text{q}_0}.$$

$$\text{q}_0 \rightarrow \text{original sold quantity}; \quad p \rightarrow \text{price per unit}; \quad v \rightarrow \text{variable cost per unit}; \quad F \rightarrow \text{total operating fixed costs}; \quad I \rightarrow \text{interests}.$$

Considering the previous relation, the bigger are the operating fixed costs and the interests, the bigger is the DCL and consequently the combined risk.

The company has a variety of possible combinations between the operating and the financial leverage in order to get a certain level of the DCL. Thus, a high level of the fixed costs (that involves a high DOL) will imply the use of a smaller level of borrowed capital (cutting down the DFL) or, if the company has a high level of debts, it can reduce the combined risk by diminishing the operating fixed costs.

When using the combined leverage in order to increase the results, a special attention has to be paid to the fact that investors (shareholders and creditors) will require a higher return once the combined risk increases, in order to compensate the higher risk. As a result, when the DCL grows, the cost of the invested capital grows with a higher rate against the additional earnings, which involves a carefully maneuver of the combined leverage.

Further on, we’ll use the **economic value added (EVA)** in order to calculate the degree of financial leverage, which will lead to a change in the formula of the degree of combined leverage. The new relation is:

$$\text{DCL}^* = \text{DOL} \times \text{DFL}^* = \frac{\Delta \text{OP}}{\Delta S} \times \frac{\Delta \text{EVA}}{\Delta \text{OP}} = \frac{\Delta \text{EVA}}{\Delta S}.$$

In this case, the DCL* reflects the impact of the relative variation of the sales on EVA. In order to express the relation in a simpler way, we’ll consider that the enterprise only sells a single product on the market. Therefore, the DCL* can be determined as follows:
Ceq – cost of equity.

This way, the DCL* can be determined as a ratio between the margin of the variable costs and the economical value added. When using the economical value added for calculating the degree of combined leverage, EVA has to be positive, in the opposite case, the DCL would lose its economical significance.

In order to better analyze the level and the evolution of these coefficients, we’ll further make the graphical representations of the degree of combined leverage (DCL) and of the degree of changed combined leverage (DCL*), as functions of the operating result. We mention that we’ll consider the mathematical approach for these coefficients in stead of the economical one. The use of the mathematical approach will determine the variation of the degrees of leverage on an interval between -∞ and +∞. The independent variable is the operating result. The type of the functions is hyperbolic and they have the following mathematical expression:

$$\begin{align*}
\text{DCL} &= \frac{\text{OP} + F}{\text{OP} - I} = 1 + \frac{F + I}{\text{OP} - I}; \\
\text{DCL}^* &= \frac{\text{Op} + F}{\text{Op} - I - \text{Ceq}} = 1 + \frac{F + I + \text{Ceq}}{\text{Op} - I - \text{Ceq}}.
\end{align*}$$

The graphic of these variables has the shape of a hyperbole, as in the following figure.

![Figure no. 1. The dynamic of DCL and DCL* depending on the operating result](image-url)
Depending on the level of the operating result, these two coefficients can take the following values:

\( a) \ OP < - F: 0 < \text{DCL} < 1; 0 < \text{DCL*} < 1 \)

There is a very difficult situation for the company, because, on this variation interval of the operating result, the company not only posts operating losses, but it has a negative margin of the variable costs. This means that the price doesn’t cover the variable cost per unit. The DCL and DCL* have positive values, but under 1, on this variation interval of OP, and have a decreasing trend. The level of DCL is higher than DCL*, which means a higher sensibility of the net result against the economic value added, when the sales change with one percent.

\( b) \ OP = - F: \text{DCL} = 0; \text{DCL*} = 0 \)

In this point, the margin of the variable costs becomes null, which means that the price equals the variable cost per unit; the company covers the variable costs, but not the fixed ones. This point can be defined as the break-even of the margin of the variable costs (BEMV) and the enterprise shouldn’t decrease its operating result under this level. The chart of the two coefficients crosses the x-axis in this point.

\( c) \ - F < OP < 0: \ - \frac{F}{I} < \text{DCL} < 0; - \frac{F}{I + \text{Ceq}} < \text{DCL*} < 0 \)

Gradually, the selling price is rising and the margin of the variable costs becomes positive, but still it is not big enough to entirely cover the fixed operating costs. After surpassing the break-even of the margin of the variable costs, the level of DCL* becomes bigger than DCL.

\( d) \ OP = 0: \text{DCL} = - \frac{F}{I}; \text{DCL*} = - \frac{F}{I + \text{Ceq}} \)

This is the operating break-even (OBE), which allows the company to entirely cover its fixed operating costs and the net result is zero.

\( e) \ 0 < OP < I: \text{DCL} < 0; - \frac{F + I}{\text{Ceq}} < \text{DCL*} < 0 \)

In this area, the OP yet doesn’t entirely cover the interests, which determines a negative net result. The operating risk is very high, especially when the operating result is close to zero. The rise of the operating profit determines the reduction of the DCL that tends toward infinite while the operating result becomes close to the level of the interests.

\( f) \ OP = I: \text{DCL takes no values; DCL*} = - \frac{F + I}{\text{Ceq}} \)

This is the creditors’ break-even (CBE), where the sold quantity allows the enterprise to get an operating result that entirely covers the interests, but the net profit is 0. This is the asymptote of the chart of the DCL function.

\( g) \ I < OP < I + \text{Ceq}: \ 1 + \frac{F + I}{\text{Ceq}} < \text{DCL}; \text{DCL*} < - \frac{F + I}{\text{Ceq}} \)

The enterprise has a positive and increasing net result, but still it is not big enough to satisfy the requirements for return of the shareholders. The DCL level becomes bigger than 1 and than DCL* and has a rapid decrease rate. The size of CLC* is negative, heading towards -∞ while the operating result increases. The combined risk is high when the operating result is very close to the level of interests.
h) \( \text{OP} = I + \text{Ceq} \): \( \text{DCL} = 1 + \frac{F+I}{\text{Ceq}} \); \( \text{DCL}^{*} \) has no values

The company reaches the shareholders’ break-even (SBE). The operating result is big enough to remunerate the invested capital (the borrowed capital and the owned capital), but there is nothing left after covering this cost. The asymptote of the \( \text{DCL}^{*} \) chart is reached.

i) \( \text{OP} > I + \text{Ceq} \): \( 1 < \text{DCL} < 1 + \frac{F+I}{\text{Ceq}} \); \( 1 < \text{DCL}^{*} \)

This is the most favorable situation for the company, because it generates \textit{economic value added} for the shareholders. The level of \( \text{DCL} \) and \( \text{DCL}^{*} \) tends towards 1 while the quantity and the operating result grow. The combined risk (operating and financial) has a decreasing trend.

The use of these coefficients must be differently carried out. Thus, if a company faces a lot of difficulties, it hasn’t a satisfactory return of the operating activity so that to cover the fixed operating costs, then the use of the cost of the invested capital when determining the degree of the financial leverage is not justifiable, because the enterprise can hardly manage to pay the interests and to refund the installments. In these circumstances, the issue of the effect of the cost of the invested capital on the capacity of the company to create added value for the shareholders is out of discussion. But, if the enterprise has a high performance and uses efficiently the bank loans and has no problem in paying the interests, then it could moot the question regarding the capacity of the sources of capital to generate added value for the shareholders. In this latter case, it is recommended to calculate the degree of financial leverage and of combined leverage using the economic value added.

When constructing the indicators for appreciating the risk, the use of the economic value added is a first step in changing the managers’ attitude regarding the level of the shareholders’ earnings, the real performances of the operating activity and their correlation with the sources of capital.

\textbf{REFERENCES}

2. Radu F., Circiumaru D., Bondoc D. \textit{Analiza economico – financiară a societăților comerciale}, Ed. Scrisul Românesc, Craiova, 2004
Instructions for the authors

| The language of the article and abstract | For the articles: English  
For abstract: English |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>File format</td>
<td>Word document (Microsoft Word XP or better)</td>
</tr>
<tr>
<td>Page format</td>
<td>B5, (see the below template)</td>
</tr>
<tr>
<td><strong>Article Structure and formatting</strong></td>
<td><strong>Important!</strong> Use the styles included in the bellow template for each elements of the article.</td>
</tr>
<tr>
<td>Title</td>
<td>1_RTE Title</td>
</tr>
<tr>
<td>Authors</td>
<td>2_RTE Authors</td>
</tr>
<tr>
<td>Abstract</td>
<td>3_RTE Abstract</td>
</tr>
<tr>
<td>Keywords</td>
<td>4_RTE Keywords</td>
</tr>
<tr>
<td>Text, Subtitles, Figures and Tables</td>
<td>6_RTE Text , 5_RTE Subtitle, 7_RTE Figures and Tables</td>
</tr>
<tr>
<td>References</td>
<td>8_RTE References</td>
</tr>
<tr>
<td><strong>Number of pages</strong></td>
<td>minimum 4, maximum 12, even number</td>
</tr>
<tr>
<td><strong>Article template</strong></td>
<td>For download the template, see the journal’s website, <em>Instructions for the authors</em> section.</td>
</tr>
<tr>
<td><strong>Sending the article</strong></td>
<td>The sending of article for acceptance and publishing will be made to the web address: <a href="mailto:rte@central.ucv.ro">rte@central.ucv.ro</a></td>
</tr>
<tr>
<td><strong>Deadlines</strong></td>
<td>Usually for the April issue the deadline for sending the full articles is February, 25\textsuperscript{th} and for the November issue the deadline for sending the full articles is September, 25\textsuperscript{th}.</td>
</tr>
</tbody>
</table>

For other informations or for accessing the contents of each issue of the journal go to the following website: http://stat257.central.ucv.ro/rte