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## **ETHICAL IMPLICATIONS IN THE SOCIO-ECONOMICAL LIFE**

**ION HIRGHIDUȘ \***

**ABSTRACT:** *Concern for the morality of economic life is relatively recent and involves the need to implement ethical codes that prevent violation of rules of conduct. The Socio-economical sphere is marked by profound transformations that shape a particular kind of rationality. The ethical rules can also be found under this kind of rationality. Apparently these rules hinder the economical processes, but in reality respecting the economical rule, leads to the increase of trust between economical actors. Hence, these actors are required to be aware of the ethical rules according to which their activity needs to be guided. These rules constitute mere moral determinations in public life.*

**KEY WORDS:** *ethics, economical ethics, socio-economical life, public life, public welfare, clients' welfare, personal welfare, profession, professionalism*

### **1. INTRODUCTION**

The economical and social ethics is a component of applied ethics, dealing with the problems of specific to the economical and social life, public life, public interest activities (Adrian Paul Iliescu). There is a strong correlation between the economical and the social, but the economical constitutes most of the times the fundament of the social. Hence, it is necessary to understand what economical ethics means. This is often called business ethics or corporate ethics, and comprises, as Adrian Paul Iliescu says, the moral problems the modern economical life, of the relationship of enterprises and community, enterprises and employees, enterprises and State, suppliers and clients, etc. Economical ethics, if seen as a science, may represent an important landmark, not only for some individuals in the society but also for economical actors.

One of the most frequent stereotypes in economics is that in this field, morality is not something ordinary. The larger part of the managers may say that ethical aspects do not have to be involved in economical decision taking. Moreover, during the last decades, considerable efforts have been made by some companies in order to make and

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implement their own business ethical conduct programmes. In a world where there is the risk to lose one's respect if you do not drive the correct type of car, or if you wear a cheap suit, imitation (being like everybody else) doesn't need to be underestimated as a motivational factor. Only it is far from enough for an explanation. Both the elaboration as well as the implementation of ethical codes is costing. Companies, often call an external consultant who will help draft it, to employ trainers and come up with an implementation mechanism which will be a part of the job of several employees, time which could have been used for directly productive activities. Costs seem to be unbalanced related to the simple satisfaction of the desire of being *trendy*.

Not even the mere observation that some of the procedures are imposed by rules is satisfactory, when ethical programmes of some companies go beyond the provisions of normative acts. Hence, it is unworldly to lay it all on the moral consciousness of managers. A plausible explanation should consider several complex considerations.

We could also start from common traditional idea of ethic thoughts, that our moral conduct is motivated by non-moral considerations. The fear of being stigmatised or excluded, the desire to build a certain type of reputation or simply the incertitude regarding the reactions of others, are factors which are able to guide people towards the adopting a moral conduct code more efficiently than adhering to a set of abstract principles. It is a common place of our professional experience, that, we avoid as much as possible the interactions with unpredictable individuals. Respecting as much as possible a set of norms sends out the signal that you are mainly a predictable individual. In other words, you are seen as a cooperating fellow.

What makes these ethical programmes investments profitable? Traditionally, authors from the sphere of business ethics have two main answers. First of all, the good reputation is a delicate capital, both for individuals as well as for the company. It is difficultly constructed, with a lot of effort, and disappears quickly with the slightest mistake. The reputation of being immoral in business may lead to the loss of clients, to collaborator's reticence in cooperating with the company, massive increase of production costs or even a decrease of the value of capital. The second classical answer visualises the situations where the immoral actions are illegal, this being the case, costs may be dramatically.

Recent literature highlights a third answer, next to the considerations related to image or risks derived from breaking the law. Companies do not compete just for clients, but also on the labour market. Having more performant employees, they are able to better and faster complete their tasks, means having an advantage with the other companies. These kinds of employees are a rare resource, justifying the needs for a trustworthy programme. Salary increase may be, up to a point an efficient method of repaying the trustworthy employees and decrease their temptation of leaving the company for other competing companies. But, from a certain degree they seize having the same considerable effect.

What matters, in fact, is the global satisfaction related to a working place. Here we might consider the money (both salaries as well as other collateral benefits), but also a large spectrum of non-monetary income, starting with professional pride to office atmosphere. The ethic climate is a vital component of this spectrum. A boss who

likes to use his power arbitrarily and discreetly, ambiguous promotion procedures, the uncertainty of professional trajectory or the risk of becoming a collateral victim of an inter-departmental war works as efficient as the stimuli for looking for a new job as well as a small salary. A larger number of empirical studies suggests that the wise implementation of ethical programmes has a significant role in discouraging migration. Hence, at least in the fields where economical results directly depend on the quality and stability of the labour force, the companies have an immediate interest to adopt strategies to realize an ethical climate, at least related to its own employees. In other domains, where performance is less dependent on the quality of the labour force, or where migration or instability do not have a massive impact over the costs, this kind of programmes have a less important value.

## 2. CONCEPT SIGNIFICANCE

The term “Ethics” comes from the Greek **ethos**, meaning “mores”, “custom”, and “character”. The term “moral”, has the same significance as ethics, but the etymological stem can be found in Latin, in **mores**. The acceptations give to ethics are the following: philosophical science dealing with the study of practical and theoretical problems of moral; systematized and coherent conception, be it personal, of a philosophic movement, or representing the commandments of a society regarding the development norms of moral life; moral.

Ethics is the science of moral. The definition of ethics is a complex problem, regarding the pluralism of society, the multitude of opinions and the variety of moral norms, legal, cultural and social, which are included in this concept. Even if ethical standards are created and followed on a professional level, they have a great impact over the entire society, the attributions and customs of which may differ from the individual ones. The personal values don't always correspond to the professional moral code or/and to the social values, as social justice is not equivalent to the legal one. There are also some situations where a person with moral integrity, or at least socially acceptable, does not have the motivation to or does not have the moral value to motivate moral action.

For example, society, considers homicide or imprisonment as repugnant, but justifies them as self-defence and belonging to the judicial system. Thus, the principles and ethical theories will help with taking a moral decision when the situation is ambiguous, and the values are in controversy. In a reductionist way, ethics may be resumed in the determination if an action or behaviour goes on according to the social norms. An action may be either correct or incorrect, if it is legally, communally, religiously accepted. When the things ought to be made, overlap the things which need to be made, and over the things which may be made then the ethical dilemma is solved. But, until we arrive to this perfect correlation, the application of ethical principles follows a very curved road, dominated by tradition, controversy, and prejudice.

There have been made some distinctions between ethics and moral, as follows:

1. Ethics is a science of behaviour, mores, and principles, which govern the practical problems; moral represents the totality of means we use to live within the society,

it, being made of concrete prescriptions which the individuals and the society in their whole.

2. Ethics is the ensemble of conduct rules resulted based on the distinction between good and evil, which a given community may accept; moral is an ensemble of principles of a universal-normative dimension, based on the distinction between good and evil.

**Deontology** comes from the Greek *deon*, *deontos* (“what is necessary”) and **logos** (science). The significances given today to the term are the following:

1. Code of professional conduct, specific moral principles and norms, implied by a certain profession. This may be a written code or orally transmitted and accepted by all the probationers of a profession, e.g. Hippocrates Oath.
2. The meaning given by J. Bentham, who used for the first time the term deontology, is the following: it is a discipline, the scope of which would be the primary evaluation of the consequences of an action, in order to establish, depending on the quantity of pain or pleasure the action implies, is it deserves or not to be fulfilled (a utilitarian sense).
3. In a wider sense, deontology is the part of ethics which deals with the study of moral duty, origin of nature, nature and its forms, as a basic component of the moral consciousness.”
4. In a smaller sense, deontology represents the ensemble or rules of an organisation, institution, profession or a part of it, by the professional organisations which become the reference of elaboration, application and supervision of the application of these rules. Related to this definition of deontology, morality expresses what we should do if we were rational, benevolent, impartial, well intentioned.

### 3. MORAL DETERMINATIONS OF PUBLIC LIFE

Ethical implications in public life are extremely diverse and of great importance. After Miroiu Mihaela & Gabriela Blebea Nicolae main ethical implications for public life would be: defining rational criteria for moral evaluation for: institutions, rules, laws, collective elections, behaviour of rulers and politicians, of public officials (more generally, of public managers), professional behaviour, or simply of the citizen; evaluation of the law’s justice (for whom the laws are right); revealing how the institutions and organizations can help people’s freedom and fulfilment. In the public sphere there is a confrontation of the participants who give life to it. Freedom and personal fulfilment do not occur absolutely, because they are connected to the numerous situations that we are in.

According to the two authors, the major factors that determine people wonder about ethical aspects of the professional, civic and political life are:

1. Individual resistance to common rules, rules that are restrictive and may be contrary to personal desires.
2. Conflicts of roles that require determination of what prevails at a time. For example, the role of husband to that of the judge.
3. The choice between ways of life involves moral dilemmas relating to accountability.



4. The attitude towards social change, whether they happen in along period of time, such as the sequence of historical periods, whether they happen in a shorter period of time, such as transitions from one period to another.
5. Social pluralism involves legitimate influence from several factors, such as: family, interest groups, local communities, traditional culture, the political sphere. Social pluralism is specifically for open societies, in which the democratic freedom exists.
6. Responsibility for standards that are imposed in the society, the group requires a response of the individuals to the rules and not just their acceptance.
7. In this pluralist and democratic society the standards have to be just. There is a tendency for people to follow rules that are objective and correspond to most of them. It has to be solved the conflict between personal freedom and interests of the group, and this thing can be achieved by the fact that people need the social recognition only to strengthen their self-esteem.

#### 4. THE STATUS OF ETHICS AS A GENRE

Since its beginnings as a discipline, even though it was incorporated to philosophy, ethics had a certain status that it strengthened over time. On one hand, ethics proved that it is a philosophic discipline, philosophy always being the queen to whom the ethic discourse always came back, and on the other hand ethics developed as a science about the moral norms.

**Scientific Ethics** involves moral psychology, moral sociology, moral anthropology, ethology, etc. It is theological (if Christian ethics) and normative, being of first order (utilitarianism, Kantianism). Practical aspects of scientific ethics are the **applied ethics** (for example, that dealing with moral issues of abortion, euthanasia, etc.). **Philosophical Ethics** is a meta-ethics and is dealing with ethical theories, being considered by some people an ethic of II order.

**R.M. Hare** (1930-1940) thinks, as well as Kant, that ethics is equivalent to a moral philosophy and morality is equivalent to moral action, moral language, moral philosophy, moral thinking, moral beliefs, moral decisions. Pure ethics creates the empirical ethics, namely the "ethical substance" (normative). After R. M. Hare, ethics is divided into:

**Theoretical ethics** is a branch of modal logic (deontic): „I understand by the ethical theory (of the 2nd order) the study of moral concepts, that is, if you want the study of how the use moral words, their meaning in the broad sense, or what we do when we ask moral questions.... One of the most important things that are required from moral philosophy is for him to do something to help us to discuss rationally the moral questions; and this means for us to obey the logical rules governing these concepts. If we do not follow these rules we will never be able to rationally argue on moral problems. From Socrates onwards, the first task of philosophy was the study of arguments; and the first task of moral philosophy is the study of moral arguments, to distinguish the good ones from the bad ones. Ethical Theory is an essential tool in completing this task by revealing the logic of moral concepts”.

**Normative ethics** is a canon of moral reasoning derived from its meta-ethics: “Moral philosophy is an exercise in the study of such misleading words (moral words "right", "should", "good") and their logical properties to establish canons of argument or valid reasoning (moral) thus to make those who command them able to avoid mistakes in reasoning (confusion or logical errors) and to answer the moral questions (practical, applied ethics) with eyes open.”

R. M. Hare proposes a unifying project, about which A. W. Pirce says: “His ambition to unite elements from Aristotel, Kant and Mill in a logical manner that is intelligible to resolve fundamental issues of ethics; he always thought that he achieved this goal”.

## **5. THEORETICAL ASPECTS OF PROFESSIONALISM AND PROFESSIONAL ETHIC**

Since her modern time, society has increasingly emphasis on professionalism, because the society changed into a professional one. The main reasons that caused this major change are represented by the transforming of natural economy, specific to the Middle Ages, into the market economy which is dominated by objective laws. This would not have been possible without the industrial revolution which began in England in the seventeenth century, and which brought the greatest benefits for some European countries. People who want to pursue a certain career is because they hope to gain some satisfaction from practicing a profession. Those who come to master one or more professions are the proof of professionalism. It is understood that not only mastering a profession means also professionalism, it has to be also practiced under the imposed rules.

### **5.1. Profession**

There are several definitions given to profession:

1. Profession is a form of work organization, a kind of orientation in employment (a subjective experience of work) and a very effective control process performed by a group of interest. In an organized way, profession includes: a certain central control body which ensures a performance standard form the members as individuals; a code of conduct; careful knowledge management towards the competence which forms the foundation for those professional activities; herd control, selecting and training new entrants.
2. „A profession is an occupation that many people who are voluntarily organized have it, in order to earn a livelihood through direct service of a certain ideal in a morally permissible way beyond what the law requires them directly, market and common morality”. The profession should not be confused with the occupation which is limited by some sociologists to the concept of work from the market economy.

Professions have experienced and are experiencing ongoing dynamic which is the development of society as a whole. Any occupation involves the need for an ethical

code that can be achieved by explicit or tacit consent of those who practice that profession. In general the ideal characteristics of the profession are:

1. Any profession requires a basic education, more or less permanent, with a corresponding adjustment in terms of theory.
2. Initiating, maintaining and advancing a person in the professional competence is determined by the professional body.
3. Professional offenses are punished according to their seriousness, going as in extremely severe cases to removal from the professional community (withdrawal of right to practice that profession).
4. The purpose of professions is to satisfy certain social needs.
5. Members of a professional group are bound by a code of ethics that requires among other things the selfless service to society.
6. Practitioners of a profession must have normal collegial relationships in terms of professional and civilized behaviour between them.
7. Professional altruism requires, ultimately, in the event of disasters, even the maximum sacrifice for the common good.

Every profession also requires professionalism. It is considered as an ideology relevant to those who practice a profession. Professionalism is characterised as it follows.

1. Expertise in the performance of a profession (epistemic authority).
2. Belief in autonomy professional decision and occupation (protection from amateurism and dilettantism).
3. Identification with the profession and with those in the same field (profession comes part of professional identity).
4. One decides for a long part of its life the chosen profession (recognition and prestige is acquired over time).
5. Moral obligation to work in customer service, avoiding excessive emotional involvement (but not empathy), the arbitrary and unwarranted preferential treatment by policy area.
6. Faith in the ability of self-control and peer maintaining professional standards.

## **5.2. General aspects of professional ethics**

“Professional Ethics states practices, rights and duties of a professional group, critical and sanctioned professional mal-practice”. Although there is no clear consensus on all ethical rules to be observed by those who practice a profession, however, certain principles of professional ethics are accepted as the core of a norm.

Professional ethics implies some principles as:

1. The need to protect, under normal conditions, the privacy of subjects through the practice of informed consent.
2. Subjects involved in the practice of a profession should not be subjected to unnecessary stress, manipulation or risk.
3. Professional practitioner is responsible for the confidentiality of any information which may lead to identification of subjects.
4. Protection and use of the data is subject to legal requirements.

The practice of a profession requires in most cases, in addition to compliance with legal standards, certain ethical standards too, with issues as: the professional authority, paternalistic practices, and customer rights. Professional ethics is a species of general ethics, but ethics is gender specific for each and every occupation. The need for introducing ethical standards in the practice of professions is required by the fact that there is a tendency for non-compliance with statutory law for which the law usually takes actions rather late. The purpose of professional ethics is to prevent and to warn.

Two types of professional ethics are frequently mentioned:

1. **Ethics for the entangled case** focuses on the negative cases, on what can be dramatic in practice of a profession (e.g. corruption of government, the neglect of patients in medicine, business customers' deception, abuse of authority and trust in education, cynicism and compromise in politics, misinformation in journalism, etc.). This kind of ethics does not focus on formal ethical codes and neglects the fact that ethics must be oriented primarily positive.
2. **Standard ethical approach** focuses on features that define a profession, through the rights and duties (e.g.. doctors have greater duties than other people, i.e. to help others, police have the right to make use of violence, etc.).

Professionals follow the accomplishment of three major objectives that bear the mark of good: **the public good, the customers' good, their own good.**

Following the need to achieve these objectives, professional ethics is a contractual nature, with vibrant utilitarian marked. This requires an agreement which will govern the relations between professional and customer. The contract involves the adjustment of the two perspectives: that of professional and that of the customer. Every professional thinks that his profession is useful, while the customer claims that professional obligation includes altruist and moral aspects too. Meaning that the professional should always give up his personal interest in favour of customers' interests. The contract has to be followed by a mutual agreement for the benefit of both sides involved.

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## **RISKS ASSOCIATED TO PUBLIC GOVERNMENTAL DEBT AND THEIR MANAGEMENT**

**ALINA GEORGIANA HOLT \***

**ABSTRACT:** *Public debt portfolio is the most important financial portfolio of a country, reflecting the complex and risky financial structures that can generate substantial risks on the patrimony of state and on its financial stability. Recent crises have highlighted the need to limit exposure to liquidity risk and other risks which make economies of states to become vulnerable to some external shocks. A viable and prudent management of public debt structures and strategies aimed at avoiding dangerous loan becomes crucial because the consequences it causes serious macroeconomic failure to pay debts, heavy losses of production and high costs associated with them.*

**KEY WORDS:** *public financial balance, public governmental debt, risks, public debt portfolio, debt management*

### **1. INTRODUCTION**

In the current period, characteristic feature of most countries with market economies is that it shows a trend of faster growth in public spending compared to current income (ordinary). In these circumstances, the state procurement of additional cash resources can be achieved either by increasing and/or imposition of new taxes or by borrowing state.

*Public financial balance*, to the existence conditions of imbalance in the public sector is achieved by identifying potential lending sources that can use the state. So, the state is able to ensure financial balance by financing and refinancing public deficit and debts based on special laws on account of debt, the domestic and foreign capital, both from individuals and legal entities.

The need to achieve public financial balance is given the respect even one designed to meet the needs of the general functions of the state of society. Following public authorities contracted loans to restore the balance between receipts and payments taking place in the public sector.

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The public financial balance is achieved through state borrowing/loans in order to finance budget deficits and debts taken over by the state based on special laws. These loans are found in public debt of the country since they are components of it. Public debt is established and managed separately by its two forms: government debt and local debt.

Government debt incorporate all financial obligations of the state from loans contracted directly or guaranteed by the Government, by the Ministry of Finance , on behalf of Romania, from domestic and foreign financial markets, and remaining to be repaid at some point.

Debt management strategy is the establishment of the state debt management in the mobilization of resources needed to finance it, and in the implementation risk and cost objectives established by the authorities.

In the context of national economic policies, states must ensure that both the level and growth of public debt to be sustainable, and debt service<sup>1</sup> can be provided in various situations respecting the cost and risk objectives.

The public debt must be properly structured in terms of interest rates, maturities and currencies in which loans are contracted to eliminate the risk of outbreak or spread negative effects on the finances of the state.

## **2. EVOLUTION ON PUBLIC GOVERNMENT DEBT**

In 2002, through monetary policy has given priority to reducing inflation and fiscal policy has resulted in controlling the consolidated budget deficit (2.6% of GDP) and its funding mainly from external sources ( equivalent to 1.4% of GDP) given the large interest differential between yields on government securities issued by domestic and external conditions for the loan to a loan. And in 2003 continued the policy of financing the budget deficit in 2002, funding is mainly accomplished by external sources. In 2004, the budget deficit originally scheduled at 3% of GDP was corrected in July to 2.1% of GDP and again in August to 1.6% of GDP, while actual implementation was done with a consolidated budget deficit of 1.1% of GDP. The budget deficit in 2004 was achieved in a balanced proportion of external sources (about 57.2% of deficit) and from internal sources (42.8%).

Romanian Government policy to reduce the budget deficit, similar to the previous year, helped temper inflation in 2005 (inflation has declined to around 8.6%), while limiting further deterioration of current account deficit. Problem areas were, however, this year, uneven implementation of budget expenditure, virtually the entire accumulated deficit in the last month of the year, falling to the level of 0.8% of GDP, well below the initial target level, 1.5 %. Even if in 2006 there was a relaxation of fiscal policy, reflected in an increase in the consolidated budget deficit to 1.7% of GDP to 0.8% of GDP in the previous year, it occurred in late , registering the same budget implementation asymmetric. In fact, it was the lack of government securities issues,

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<sup>1</sup> Annual public financial effort that includes all costs covering the actual debt repayment and interest payments and fees

preferring to use temporary funding availability of the Treasury General Account (approx. 84.3% of the budget deficit was financed from internal sources).

International financial market turmoil, triggered since the fall of 2007 financial crisis appeared on the U.S. mortgage market with high-risk (subprime mortgage loan market), have widened in the first months of 2008, registering developments with adverse market conditions to worsen in all developed economies. Towards the end of 2008, the government public debt climbed by 1.3 percentage points from 91.58% to 92.88%.

The increase or the decrease of government debt to GDP reflects a variety of factors influence the Romanian economy. Macroeconomic indicators and impact on debt indicators (economic growth, budget deficit) are:

**Table 1. Development of main macroeconomic indicators and the impact on government debt indicators**

<b>Indicators</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Nominal GDP (bilions ron)	151.5	197.6	246.4	288.0	342.4	404.7	475	531.2
GDP growth (%)	5.1	5.2	8.4	4.1	7.7	6.0	6.5	6.1
General consolidated budget deficit (% of GDP)	-2.4	-2.0	-1.5	-0.8	-1.5	-2.3	-2.2	-2.3
Government debt (billion.lei)	43.6	51.1	55.1	56.4	59.9	76.2	87.6	101.8
Share of government debt to GDP	28.81	25.9	22.4	19.6	17.5	18.8	18.4	18.6
Government debt service	14.6	16.2	13.2	13.4	8.5	10.4	15.7	11.7
The share of government debt service to GDP (%)	9.6	8.2	5.3	4.7	2.5	2.6	3.4	2.4

Thus, foreign government debt increased from 2002-2005 to EUR 1.8 billion reflecting Romania access to financing in foreign markets, while in 2005-2007 it reduced debt by 1.5 billion EUR due to changing the default strategy of the Ministry Economy and Finance to finance the budget deficit mainly from domestic sources. Foreign government debt share in GDP has declined significantly over the period 2002-2007 to 12.6% as a result of strong economic growth and currency appreciation in the period 2003-2006 and in 2007 RON depreciation partially diminished the effect of economic growth. Domestic government debt even though it increased between 2002-2007 to 30.2 billion lei, as a share of GDP it declined from 2002-2005 by 2.1% and in 2006 and 2007 saw a significant increase of 4.7% of GDP due to deficit financing from domestic sources.

### **3. RISKS RELATED TO GOVERNMENT PUBLIC DEBT MANAGEMENT**

Debt public management involves the financing needs of the State and its liability at a cost as low medium and long term, provided a continuing risk to tolerable level. Debt Management is a process closely related and dependent on monetary and budgetary policy.

In this context, the analysis of government debt portfolio should be made taking into account developments and macroeconomic forecasts (growth, inflation, monetary

policy rates, budget revenues and the budgetary deficit), the internal capital market efficiency, but also for economic change worldwide. An important component of government debt management is to manage risks associated with debt portfolio, which involves activities to identify, assess and insurance against various categories of risk.

a) refinancing risk (the inability to refinance its debt or refinance it to very high cost) - which depends on the development of domestic capital market (liquidity and interest rate changes in lei, which depend on macroeconomic developments and thus , the market expectations on progress), the international financial market developments, and can be reduced by avoiding payment of tips generated by the agglomeration of service maturity of loans or a great big share of short-term government debt denominated variable rate debt in total. In this regard we will consider a uniform distribution of government debt service and an appropriate duration of government debt portfolio, using the specific financial transactions, including repurchase in advance (buy back) or other securities exchange of securities in advance with longer maturity (bond exchanges) and active management of liabilities and liquidity, including here, and derivatives (swaps, interest rate, forward rate agreement or futures)

b) market risk with two components:

- foreign exchange rate (appreciation of foreign currency debt as a result of currency depreciation against the euro and the USD, given that state revenue is collected in local currency)-which is influenced by volatility in exchange rates as Following developments on international markets and domestic issues that are of such as monetary policy. Since assets (proceeds of revenues) are denominated in local currency to avoid currency risk the strategy would be recommended that the government debt ratio in lei in total to increase. The exception is given by estimates about Romania's accession to the euro area (2012-2014) which would, in after accession to the euro, state assets (revenue budget) be denominated in euro, which increases the desirability of contracting long-term loans denominated in euro. This type of strategy can be implemented mainly by contracting new loans in lei and gradually increase the share of debt in lei in total debt, coupled with active management of existing portfolio, depending on the existing opportunities in the financial markets by using derivative financial instruments ( foreign exchange swaps, currency forward contracts). Also, external funding, contracting loans in euros and very long term, provided the use of bullet-type instruments (Eurobonds issues) is appropriate, depending on market conditions and existing;
- interest rate risk (increases in domestic interest rates or foreign capital) - which is influenced by volatility in interest rates, monetary policy and budgetary developments in international financial markets, and may be offset by using financial derivatives: swaps interest rate, swaptions (combination of interest rate swaps and options), futures.

c) liquidity risk can be seen both in terms of cost to investors who want to close a position taken on debt state by selling them, and in terms of the state, when one takes into account the possibility of substantial reduction in the volume of liquid assets available to the authorities;

d) credit risk refers to the possibility of non-execution by state or by the guarantor, of the contractual obligations with financial assets;



e) operational risk groups different types of risks such as trading errors in various stages of implementation and registration of operations, internal control insuficiente or misconduct, legal problems, etc.

Developed countries, where government securities markets are very active and liquid, are especially concerned about market risk. However, developing states that have not access foreign capital markets and securities whose markets are relatively underdeveloped state, should pay attention to refinancing risk. For the analysis of main risks associated with debt portfolio shall have regard to following indicators: - the risk of refinancing, the repayment schedule determined by the absolute value and period of repayment / redemption of the debt indicator analysis to be used is the percentage of government debt maturing in a time horizon (degree of refinancing at 1 year and 5 years)

- for foreign exchange caused by the absolute value of the debt and currency, the analyze indicator to be used is the share debt in foreign currency, foreign currency debt being detailed for each currency;
- for the interest rate risk, the indicators used are:
  - share of variable interest rate debt in total government debt versus debt ratio;
  - fixed rate of interest;
  - refixing percentage, that percentage of government debt for which interest rate is changes in a chosen time horizon (indicator refixing 1 year and 5 years);
  - average maturity until the next change in interest rate variable, that the average time until the variable interest rate changes (average time to next refixing).

In order to assess the risks to the stock of government debt are needed on: the budget deficit and surplus / deficit primary projections of government debt service (detailed on the rates of capital and interest payments and the type of interest rate (fixed or variable), scenarios of deficit financing and refinancing of debt (securities issues program) selected horizon analysis, projections of financial variables (exchange rates and interest rates on domestic and international) and data key interest rates related to loans in RON, EUR, USD and CAD and exchange rates, to calculate their volatility for extrapolation of these variables for the period of analysis.

#### **4. THE MAIN DIRECTION FOR GOVERNMENT DEBT MANAGEMENT STRATEGY AND INSTRUMENTS WHICH ARE CONSIDERED FOR IMPLEMENTATION**

The main objective of government public debt management in the current period is:

*a. Controlled growth of government debt so that its level to maintain reasonable limits set by the Maastricht Treaty.* In the management of government debt will have regard to the maintenance of government debt indicators to sustainable levels, with their classification in limits set by the Maastricht Treaty.

*b. Government bonds market development.* Government securities market development strategy for financing the budget deficit and debt refinancing will be on

loan contraction of domestic issues with the launch of government bonds in order to develop domestic market for government securities. As another option, where conditions are favourable and depending on funding opportunities and, in particular to refinance loans in foreign exchange or early redemption of such loans, seek to finance the foreign currency by issuing Eurobonds, taking into account liquidity conditions in these secondary markets and the benefits of consolidation and expansion of the yield curve for Romanian Eurobonds and the objective of increasing market instruments denominated debt (debt is negotiable). Such a strategy has paid increasingly higher internal market as a source of financing has the advantage of adopting an optimal mix of macroeconomic policies to the existence of excess liquidity in the system, in the context of any significant inflows of foreign capital in Romania and the reduction of currency risk, negotiable debt growth and a reduction of government debt transactions. One of the objectives related to market development for government securities is that of strengthening the yield curve and its extension, is well known that yield securities sovereign liquidity conditions their growth on a wide range of maturity as the investment environment and create references for corporate and sovereign issuers in U.S. dollars. However, it should maintain regular consultation with participants on the domestic market (primary dealers, investors, etc.) to ensure transparency and predictability of how the contracting and management of government debt in lei and for regular evaluation of investment needs in the market and expectations for market conditions.

*c. Reduce costs with government public debt and budgetary risk caused by the granting of state guarantees and submitted loans.* The costs of government debt in GDP will be reduced gradually by improving conditions for domestic financing and contracting of government debt to yield more low to come their downward trend of inflation, but also by reducing the share of the debt contracted by state or economic agents to guarantee their submitted loans since the state guarantees / submitted loans will give only a special law issued for this purpose.

To improve the structure government debt portfolio will consider the following measures:

- the increasing share of government debt denominated in national currency in total government debt. This will seek to limit currency risk and domestic market development for government securities. Given that the budget revenue collection is done in national currency, contracting government debt in the same currency would eliminate currency risk;
- the increasing share of government debt denominated in Euros in total government debt in foreign currency. Increase the share of financing in the euro will have regard, on the one hand, minimize the costs of new foreign loans, given the conditions enjoyed by Romania in the European financial markets, and, secondly, to limit currency risk, given the structure of exchange reserves managed by the National Bank of Romania and currency composition of exports and imports;
- reducing the debt refinancing for the government, denominated in national currency and the euro denominated. This will aim to reduce the risk of refinancing at high levels of interest rates. By contracting for long-term loans, refinancing risk at high interest rates in the European market will be limited;

- increase the share of fixed-rate debt in total government debt. By increasing the share of fixed-rate debt will be considered on the one hand, limiting the risk for increased key interest rates in particular for government debt in foreign currency;
- contracting debt mainly denominated in foreign currency bond issue by launching international capital markets while reducing borrowing from international financial institutions in total government debt in foreign currency. It will consider increasing the share of government debt in foreign currency by the issue of market instruments, namely the issue of bonds on international capital markets. It intends to diversify the investment base and strengthen and extend the yield curve for government securities on foreign capital markets, with positive effects on costs associated with government debt in foreign currency. The issuance of bonds on foreign markets will provide a diversified investment base and portfolio restructuring to increase flexibility, since these instruments are traded permanently on secondary international markets;
- as uniform distribution of government debt service, by establishing new loan maturity, trying to avoid the formation of peaks of payment to not increase the risk of liquidity and refinancing.

Government public debt instruments used are:

- issues securities on the domestic issues that benchmark securities issued with maturities of 3, 5, 10 and 15 years, and issues of Treasury bills will be issued with a maturity of 6 months and 1 year (364 days)
- issues securities on the foreign capital market, that shows the long-term securities with maturities of 10 years and even 15 years, depending on the evolving financial markets and financing needs of the budget deficit;
- loans from international financial institutions to finance the budget deficit, only the comparative cost analysis tools provided by international financial institutions.
- the state guarantees and submitted loans for national projects, but for this type of instrument is absolutely necessary in a certain context, the case of very large strategic projects of national importance in the granting of a special law for that purpose, with requirements for state aid under the relevant legislation and following an analysis rigorous risk under the law.

In order to achieve a structure deemed optimal currency portfolio of government debt to maintain reasonable interest rate risk and refinancing and to reduce / relax the government debt service, it must be made regular scenario analysis and sensitivity and should maintained an ongoing dialogue with financial institutions, so depending on the opportunities offered by developments in international financial markets are used derivatives (currency swaps and interest rate) and other specific risk management instruments (futures, options).

In conditions in which such operations prove successful in terms of the objectives of government debt management has referred to the possibility of early repayment of existing loans in the portfolio of government debt, endeavouring to reduce the fragmentation of the stock portfolio and bring costs current levels by issuing government securities market conditions.

Moreover, to reduce refinancing risk over the medium term will be examined whether the use of bond exchange transactions (exchange of government securities with the remainder in the medium to long-term securities with maturities) or buyback

transaction type (redemption in advance government securities). Along with sustainable management practices of debt, it said, with the many crises occurring on the debt markets, the need for efficient and prudent capital market.

A viable management of public debt depends on the risk that authorities are willing to accept. This risk can change over time, depending on the size of the debt portfolio and the vulnerability of economic and financial shocks. In general, the country is more indebted and more vulnerable to external shocks, the losses are greater if a financial crisis or the entry in default of debt. In this case is very important to choose the loan conditions that limit the risks and caps loans, this approach is only likely to be followed by countries that are financially dependent on bilateral and multilateral creditors.

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## **REVALUATION OF ASSETS - ACCOUNTING AND FISCAL IMPLICATIONS**

**GHEORGHE HOLT, ALINA GEORGIANA HOLT \***

**ABSTRACT:** *Starting May 2009, revaluation reverts unknown for taxation, in terms of tax the profit. This new tax rule shapes again the accounting behaviour. Thus, it is likely that most firms with revalued assets to choose for transfer from revaluation reserve from account 105 "Revaluation Reserves" into account 1065 "Reserves representing surplus achieved in the revaluation reserve" as damping assessed property depreciation, and not to remove it from book-keeping.*

**KEY WORDS:** *revaluation of fixed assets, current accounting, fiscal applications*

### **1. THEORETICAL ISSUES RELATED TO THE REVALUATION OF FIXED ASSETS**

Revaluation issues represent the difference between the actual value or fair value accounting and the accounting value of items submitted for review, except tangible assets that have an important share of the patrimony active.

• **Further evaluation to initial recognition**

After the initially accounting as asset, tangible assets must be accounted to his *cost decreased by accumulated depreciation*. IAS 16 standard makes from the assessment processing *the reference (base)*. Alternative processing (other processing allowed) is revaluation, in which tangible assets must be charged to the value reassessed (revalued amount), of its *fair value on revaluation*, less subsequent accumulated depreciation and subsequent accumulated losses of value. *Revaluations* must be made with sufficient regularity so that the accounting value does not differ significant from those which were determined using the fair value on the closure of financial year.

The fair value of land and construction is naturally determined by qualified experts. This fair value is generally the market value.

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The fair value of the production facilities is usually determined by their market value estimated. For strictly specialized tangible assets species which are not subject to regular transactions, fair value is identified, most times, with replacement cost, less depreciation.

Frequency of revaluation depends on fluctuations in fair value of tangible assets were assessed. When the fair value of a revalued asset differs significantly from its accounting value, it is necessary a new review. Some tangible assets could know important developments and unsteady of their fair values, reason for requesting an annual review, clearly such frequent reassessment are not required for minor developments tangible recording of their fair value, in this case is sufficient/enough review every three to five years.

An asset can't be revalued in isolation. Reassessment should apply *to all goods of the same class*, in the other hand, on all such assets and use the same. Land, buildings, machinery, equipment, vessels, aircraft, motor vehicles, office fixed assets represent different categories of assets which can be revalued independently of one another.

In principle, all the goods of that class must be reassessed simultaneously in order to avoid too great a disparity in the assessment of various items in the financial statements. When the carrying amount of an asset increases, following a revaluation, the increase has the effect of *increase equity* in case of *revaluation reserves* in extent offset a positive revaluation of that asset a negative review previously charged to expense positive revaluation should be charged to income. When the carrying/accounting amount of any asset is reduced, following a revaluation, the revaluation must be accounted *as expense*. However, it is a negative revaluation reserve is directly attributable to the revaluation corresponding to the extent such reduction does not exceed the size of the revaluation reserve relating to the same asset.

Revaluation reserve included in equity may be transferred directly to other retained earnings when the revaluation reserve is done the entire revaluation reserve is undertaken during decommissioning of the asset or transfer. However, some of the revaluation can be implemented, as the asset is used by the enterprise, in this case, the size of the revaluation reserves made the difference between depreciation based on revalued carrying amount of the asset and depreciation based on cost entry of the asset. Transfer from revaluation reserve to retained earnings does not pass through the income statement.

In order to account revaluations of tangible assets are using one of two processes: the process no.1: simultaneous re-evaluation of gross values and accumulated depreciation; the process no. 2: a reassessment only to net accounting value, determined by deducting depreciation from the cost of property.

## **2. EXAMPLES OF FISCAL AND ACCOUNTING MECHANISMS OF RECOGNITION THE CURRENT PROPERTY/ASSETS REVALUATION**

We assume that in December 2004, the company operates a device whose input value is 360,000 lei and is amortized linearly to 10 years (annual depreciation is thus of 36,000 lei). According to accepted tax and accounting rules, depreciation is calculated from

January 2005. Assume that at the end of 2007 (after the entry into force of OMFP no. L.752/2005), the company decided to apply the fair value model for equipment with due and that on that date, the fair value amounts to 311,500 lei.

In this example we opt for the procedure to cancel the yearly accumulated depreciation and adding the difference in net book value before revaluation.

The calculations necessary for accounting revaluation are:

- the recording value (balance account of equipment): 360,000 RON;
- accumulated depreciation for the financial years 2005, 2006 and 2007:  $36,000 \times 3 = 108,000$  Ron;
- net accounting value:  $360,000 - 108,000 = 252,000$  Ron;
- fair value was set at 311,500 Ron;
- clear difference in revaluation:  $311,500 - 252,000 = 59,500$  Ron.

The accounting record is easy to achieve:

- Cancellation of existing depreciation:

	2813	=	213		108,000
“Depreciation of plant, motor vehicles, animals and plantations”			“Technical installations, vehicles, animals and plantations”		
- Adding the net difference from revaluation to net accounting value :					
	213	=	105		59,500
			“Revaluation reserve”		

After these records, the account balance, that interest us are:

- Account balance 213 “Technical installations, vehicles, animals and plantations” 311,500 Ron (equal to fair value)
- Account balance 2813 “Depreciation of facilities, vehicles, animals and plantations” 0 (it cancelled the review)
- Account balance 105” Revaluation Reserves” 59,500 Ron

After re-evaluation, the depreciation is calculate again for the following year, like ratio between the amount remaining and the period remained  $(311,500 - 0) / 7 = 44,500$  lei / year in 2008, the deductible depreciation expense of such equipment is 44,500 lei, equal to the expense accounts (we consider the fiscal rules described above). We simplify the example considering that we record only once the depreciation in 2008:

	6811	=	2813		44,500
“Operating expenditure of depreciation”			“Depreciation of facilities, vehicles, animals and plantations”		

However, we opt for the disposal of revaluation reserve on depreciation measure, which means that virtually assigned revaluation reserve on the remaining seven years of life:  $59,500 / 7 = 8500$  lei/year:

	105	=	1065		8,500
“Revaluation reserves “			“Reserves representing surplus achieved in the revaluation reserve “		

The amount made available in 2008 is not taxable (is not changed, in fiscal mean, the purpose reserve), which means that the revaluation has the fiscal advantage

of additional expenditure deduction with depreciation exactly equal with 8,500 Ron (44,500 - 36,000 = 8,500 Ron).

We further suppose that the company take the revaluation and that on 31.12.2008, the fair value is 299,520 Ron:

- the value registration (account balance of equipment): 311,500 Ron;
- accumulated depreciation: 44,500 Ron;
- net accounting value:  $311,500 - 44,500 = 267,000$  Ron;
- fair value: 299.520 Ron;
- clear difference in revaluation:  $299,520 - 267,000 = 32,520$  Ron.

The account registrations are:

- Remove the existing depreciation:
 

2813	=	105	44,500
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- “Depreciation of facilities, vehicles, animals and plantations”
- “Revaluation reserves”
- Adding the net difference in net value accounting review
 

213	=	105	32,520
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- “Thermal installations, vehicles, animals and plantations”
- “Revaluation reserves”

Thus, after the revaluation of 31.12.2008, account balances are:

- Account balance 213 “Plant, vehicles, animals and plantations” 299,520 Ron (again equal to fair value)
- Account balance 2813 “Depreciation of plant, vehicles, animals and plantations” 0;
- Account balance 105 “Revaluation Reserves” from  $59,500 - 8,500 + 32,520 = 83,520$  Ron.

Depreciation expense in 2009 is  $(299,520 - 0) / 6 = 49,920$  lei (49,920/12 = 4,160 lei per month), expenditure deductible under normal conditions, while the difference from revaluation will be made available and it will be  $83,520/6 = 13,920$  Ron (1,160lei/ month).

However, in 2009, starting from May, revaluation reserve becomes taxable, which means that we have two periods in 2009 for tax purposes:

- until April including:
  - deductible depreciation expense:  $4,160 \times 4 = 16,640$  Ron;
  - revaluation difference dismissed:  $1,160 \times 4 = 4,640$  lei allowance;
- from May until December:
  - deductible depreciation expense:  $4,160 \times 8 = 33,280$  Ron;
  - revaluation difference dismissed:  $1,160 \times 8 = 9,280$  lei, taxable amount.

Thus, in the aftermath of the fiscal code changes, the net deduction is  $33,280 - 9,280 = 24,000$  lei, exactly how it was if there were no revaluated:  $36,000 \times (8/12) = 24,000$  lei. To facilitate registration, is very useful that in the account 1065 “Reserves representing surplus achieved in the revaluation reserve “to go on the analytical accounts, in which is separate the taxable amounts from the untaxed amount of tax so that when change the reserve destination is known easily how must be taxed and which part must not to be taxed.



We continue the example, in order to highlight other aspects of accounting and fiscal aspects of revaluation, such as what would happen if the fair value would become smaller than the net accounting value before revaluation. For this, we suppose that the fair value at 31.12.2009 reaches 222,000 lei, so that:

- recording value (equipment account balance): 299,520 Ron;
- accumulated depreciation/amortization: 49,920 Ron;
- net accounting value:  $299,520 - 49,920 = 249,600$  Ron;
- fair value: 222,000 Ron;
- net difference in revaluation:  $222,000 - 249,600 = -27,600$  Ron

Revaluation difference is negative and is in fact an impairment. For accounting depreciation balance we need to check what balance we have to 105 account "Revaluation reserves"  $83,520 - 13,920 = 69,600$  Ron. This balance is sufficient to cover depreciation found at 31.12.2009:

- Cancelling the existing depreciation:

	2813	=	213		49,920
	"Depreciation of facilities, vehicles, animals and plantations"		"Technical installations, vehicles, animals and plantations"		

- Decreased net revaluation difference from net accounting value:

	105	=	213		27,600
	"Revaluation reserves"		"Technical installations, vehicles, animals and plantations"		

Account balances reach to:

- Account balance 213 "Plant, vehicles, animals and plantations" 222,000 lei;
- Account balance in 2813 "Depreciation of facilities, vehicles, animals and plantations" 0;
- Account balance 105 "Revaluation reserves" from  $83,520 - 13,920 - 27,600 = 42,000$  Ron.

For 2010, the depreciation expense amounted to the level of  $(222,000 - 0) / 5 = 44,400$  lei - deductible expense, while the stocks last taxable amount reached  $42,000 / 5 = 8,400$  lei. Once again is verified that the net deduction is at the depreciation level that would be calculated if there was no revaluation:  $44,400 - 8,400 = 36,000$  lei.

Assume at 31.12.2010 a fair value in amount of 127,000 Ron :

- recording value (account balance of equipment): 222,000 Ron;
- accumulated depreciation: 44,400 Ron;
- net accounting value:  $222,000 - 44,400 = 177,600$  Ron;
- fair value: 127,000 Ron;
- clear difference in revaluation:  $127,000 - 177,600 = -50,600$  Ron;
- differences from revaluation account balance:  $42,000 - 8,400 = 33,600$  Ron.

Impairment is greater than the revaluation of difference remained in balance, which means that if exhaustion revaluation difference will remain a part of depreciation that will be registered on expenses:

• Cancellation of the existing depreciation:

	2813	=	213		44,400
	"Depreciation of facilities, vehicles, animals and plantations"		"Technical installations, vehicles, animals and plantations"		

animals and plantations”		animals and plantations”	
- Decreased net revaluation difference from net accounting value:			
105	=	213	33,600
“Revaluation reserves”		“Technical installations, vehicles, animals and plantations”	
• Switching on expense the part of depreciation not covered by existing revaluation difference: 50.600 – 33.600 = 17.000 lei:			
6813	=	2913	17,000
“Operating expenses for depreciation adjustment assets”		“Adjustments for depreciation of facilities, vehicles, animals and plantations”	

Balance accounts, after the records from 31.12.2010, are as follows:

- Account balance 213 “Plant, vehicles, animals and plantations”: 222,000 – 44.400 -33.600 = 144.000 Ron;
- Account balance 2813 “Depreciation of installations, facilities transport, animals and plantations“: 0;
- Account balance 105 “Revaluation reserves” 0;
- Account balance 2913 “Adjustments for depreciation facilities, vehicles, animals and plantations”: 17,000 Ron.

As the tax point of view, depreciation expense adjustment for property is not deductible when is calculate the income tax. This recognition of the depreciation of property tax is therefore interesting. We take again a new rule established in the fiscal code: if following the revaluation net new accounts that fall below the value would be reached only through depreciation of cost of acquisition or production, then the fiscal amount remaining outstanding shall be recalculated depreciation of fixed assets to the level of value based on initial input.

Translation of this rule is: in the event of a depreciation of fixed assets, depreciation expense after tax is equal to the depreciation would be calculated if there is any impairment. This is exactly the depreciation tax depreciation calculated on the basis of input (in our case, the acquisition cost of 360,000 lei), in these conditions, the calculations for depreciation in 2011 may be presented as follows:

- tax depreciation:  $360,000/10 = 36,000$  lei, or remaining fiscal amount reported in the remainder period  $(360,000-6 \times 36,000)/4 = 36,000$  lei;
- calculate depreciation expense reporting accounting book value remaining to the remainder period (DR):

$$\frac{\text{sold 213}-\text{sold 2813}-\text{sold 2913}}{\text{DR}} = \frac{144.000-0-17.000}{4} = \frac{127.000}{4} = 31.750$$

Once you can see that if by the end depreciation would not record any review (positive or negative), then the accumulated depreciation account balance in 2813 “Depreciation of facilities, vehicles, animals and plantations “ would reach  $4 \times 31,750 = 127,000$  lei, the account balance amount less than 213 “Plant, vehicles, animals and plantations “ (144,000 lei). However, Romania does not support the retention of residual values for depreciable property, which means that at the end of the depreciation, accumulated depreciation (account balance in 2813 “Depreciation of facilities, vehicles, animals and plantations”) must equals record value (account

balance 213 “Plant, vehicles, animals and plantations”). To ensure that equality is necessary, since 2011, the credit in 2813 “Depreciation of facilities, vehicles, animals and plantations” to record  $144,000/4 = 36,000$  lei, and not 31,750 lei, as we saw that accounting expense amortization is.

The accounting article for depreciation record will appear as so:

%	=	2813	36,000
6811		“Depreciation of facilities, vehicles, animals and plantations”	31,750
“Operating expenditure of depreciation”			
2913			4,250
“Adjustments for depreciation of facilities, vehicles, animals and plantations”			

The amount of 4,250 lei that we fell for the impairment adjustment resulting from the distribution just on four years of adjustment recognized in late 2010:  $17,000/4 = 4,250$  lei. Summarize the situation in year 2011:

- accounting depreciation expense is 31,750 lei;
- tax depreciation expense is 36,000 lei;
- the amount recorded as depreciation is credited to the specific account of 36,000 lei.

### 3. CURRENT ACCOUNTING AND FISCAL APPLICATIONS IN ASSETS REVALUATION

Revaluation of assets is an option with significant accounting and fiscal implications. Revaluations that were required or which companies may wished to be recognized in 2003 were fiscal recognized and thanks to the obvious connection of Romanian accounting with the fiscal system, in present Romanian accounting rules are no longer aligned, at the level of principle, after the fiscal ones. This raises the possibility of depreciation accounts differ from tax records of it. When we say that differences arise, we refer to all three elements necessary to establish depreciation: the amortized amount, period of depreciation, amortization schedule. Moreover, current fiscal code is clear in this respect: the accounting expense depreciation is entirely non-deductible, following that fiscal deduction will be recognized on fiscal deductions. In this general framework of depreciation of assets, the revaluation is also located. However, we allow ourselves to suppose (without empirical confirmation) that to many Romanian enterprises (especially SMEs) accounting and fiscal evidence of depreciation are often identical.

This is due to the need for simplification. Some accountants believes - rightly, we tell- that there would always justify keeping different records regarding property, so they are retained in the accounts those elements valid for fiscal purposes in respect of revaluation, fiscal implications arise not only from income tax but also, for example, the tax on buildings: we know that local authorities require a much higher tax rate for those buildings which have not been revalued in the last three years, so that option revaluation of buildings is particularly timely. Revaluation accounts, as it is previewed

in OMFP no.752/2005 it, takes many of general rules available in IAS / IFRS. This takeover is complete, which may lead to less bizarre situations such as the revaluation of fully depreciated fixed assets.

Another consequence of the revaluation is that if fair value falls below the net value that would be reached without revaluation, then the calculation of depreciation becomes more difficult, in that we have at least two rows of sums: amortization expense, calculated as relation between remaining value and the left duration on the one hand, and amortization of past credit amending account, set up so that at the end of depreciation, account balance restraining is equal to account balance of accumulated depreciation.

In terms of tax, in 2009 there are two periods:

- up to April 2009 inclusive, during which the revaluation is recognized for tax purposes, provided they have been made under the law and without obligation to tax revaluation reserve until the next change of it's destination;
- in May 2009, depreciation expense from revaluation results is further fiscal recognized, but the revaluation reserve becomes assimilated to taxable income as recognition of that respective depreciation/amortization.

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## **THE INFLUENCE OF CERTAIN FACTORS UPON BUSINESS COMMUNICATION**

**LAVINIA HULEA \***

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

**KEY WORDS:** *business communication, language, environment, motivation, objectives, communication channels*

Language, environment, beliefs or convictions, individual competence, the specific accumulations of the marketing environments, motivation that determines message's enunciation, the objective of the message, the choice of communication channels, the malfunctioning of communication channels are all factors that influence communication and implicitly business communication.

Linguists and psychologists have defined language as a system of signs and symbols. In order to communicate, individuals can employ certain codes. The choice of a specific code is nevertheless determined by the language of communication. Certain theories set forth the fact that experience and knowledge are dependent on language while other theories start from the premises that language is a reflection of social and economical relations.

According to linguistic relativism, language determines the interpretation of primary reality by the individual. Consequently, the individual perceives and decodes primary reality due to the linguistic code he/she handles. Individuals live different experiences depending on the linguistic customs of the community they belong to which determine their interpretative options. During the process of communication the code generates a means of classifying individual experience.

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An object belonging to the external environment is identified according to the previous experience and to language. This fact leads to the conclusion that environment is mainly organized and mentally divided according to resembling features and less according to different characteristics.

The idea largely explains language's restrictive capacity as well as the impossibility of the complete use of any language. Further, the relativity of reporting language to surrounding reality can explain the conventional character of any communication, including business communication.

Environment includes all linguistic, social, economic, cultural, and ethical factors that have an influence upon the development and the evolution of an individual. The part played by the environment is quite complex, yet, most often, underestimated. Environment factors play different parts and might have a dominant or less important influence determining the orientation of individual behavior towards a certain objective.

Beliefs or convictions exhibit an important resistance to change. Environment factors determine an important resistance to change. Environment factors determine a process of permanent learning that implies the modification of human behavior according to experience. Subsequently, a formal system is acquired generally having as a basis religious beliefs; such a system determines a certain behavior as well as a series of social barriers. Often the individual can be in contradiction with his/her environment or with himself/herself due to the fact that social barriers prevent the free expression of an individual.

It was Noam Chomsky that employed for the first time the term "competence" in order to designate the capacity of a speaker to produce and understand numberless enunciations (verbal messages). In order to communicate it is necessary to easily handle language or languages - and business communication does not depart from such a rule - with a view, under certain circumstances, of getting the interlocutor's maximum reaction.

This is what one usually calls communication competence. It includes a series of rules regarding the identification and use of the most adequate words within a certain context, and the capacity of transmitting a message that would not determine the adverse reactions of the receiver. Communication competence permanently changes according to individual experience. In other words, an individual is going to display a mixture of communication competences as a result of his/her contact with various communities.

The capacity of an individual to communicate is largely the result of external environment. The two key elements of the process of communication, namely the emitter and the receiver, are constantly influenced by a series of well-determined environments: educational, economic, demographic, political, legislative, cultural, religious, institutional, ecological, technological, and social. The tremendous development of the technological environment during the last decades has determined new communication ways that facilitate the exchange of ideas among individuals.

Motivation appears before a message is sent under the influence of external stimuli. It is exactly the reason of communication. At a human level, the complexity of cognitive structures determines, as a result of learning processes, the existence of

certain abstract specific motivations which develop beside the psychological ones. Among the numberless classifications and theories of motivation, the one belonging to Maslow is widely known. According to Maslow human needs can be distributed on five levels, as follows: the first level includes psychological needs, the second one is the level of security needs, the third level includes recognition needs, the fourth one is the level of esteem needs, and the fifth level includes self-accomplishment.

The objective of a message is the consequence of the motivation that determines the process of communication. When initiating a message, the emitter strives to get a certain effect over the receiver. It is exactly this effect that represents the objective of enunciation. A message exerts a significant influence upon the ideas, opinions, and behavior of the receiver, according to the emitter's communication objective. The emitter has in view a final goal: the enunciation of the message; nevertheless, side effects - intended or not by the emitter - can co-exist with the final, unique objective.

A message should be synchronic with the communication channel that enables its transmission in order to get a maximum impact over the receiver. People are generally accustomed to recognize five senses. Yet, such an approach seems to be far from reality as human body is nothing but a sum, of receivers or "detection devices". Sensitivity grows with the increased number of sensorial centers.

Accordingly, the choice of the communication channel - tangible or not - should be done with a view of getting the receiver's maximum sensitivity. The choice of the communication channel should also observe the receiver's needs, aspirations, desires, and expectations while, at the level of the impact of the message over the receiver, it increases when honesty, conciseness, clarity, and a positive tone are employed.

Interferences with the communication channel, generally spoken about as "noises", can appear in the very moment of the encoding of the message and reach the receiver who decodes the message. Interferences may be audible, tactile or odorous; they occur in whatever system of communication and a consequence of this fact is that messages are unique; even under the circumstances of transmitting the same items of information there are no identical messages. Interferences are perceived as irrelevant information. The success of a process of communication appears when the receiver gives the message an almost identical signification as the one of the emitter's, neglecting interferences.

The process of business communication is governed by a series of rules that are representative for communication in general. Business communication implies two "protagonists" - the emitter and the receiver - who admit their own right to communicate as well as the other's right to do so. Nevertheless, both the emitter and the receiver are influenced by the factors exhibited above.

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## **PROJECT RISK EVALUATION METHODS - SENSITIVITY ANALYSIS**

**MIRELA ILOIU, DIANA CSIMINGA \***

**ABSTRACT:** *The viability of investment projects is based on IRR and NPV criteria. In the economic analysis of the projects there are some aspects of project feasibility which may require sensitivity and risk analysis. Sensitivity analysis estimates the effect on achieving project objectives if certain assumptions materialize or not. This paper presents the purpose of sensitivity analysis and the steps that must be followed in order to perform a sensitivity analysis as well as a numeric example.*

**KEY WORDS:** *investment project, NPV, IRR, sensitivity analysis, base-case, key variables, sensitivity indicator, switching value*

### **1. INTRODUCTION**

The financial and economic benefit-cost analysis of investment projects is based on forecast of quantifiable variables. The values of these variables are estimated based on the most probable forecasts, which cover a long period of time. The values of these variables for the most probable outcome scenario are influenced by a great number of factors, and the actual values may differ considerably from the forecasted values, depending on future developments. It is therefore useful to consider the effects of likely changes in the key variables on the viability (EIRR - economic internal rate of return and FIRR - financial rate of return). We can do this performing sensitivity analysis.

The viability of projects is evaluated based on a comparison of its internal rate of return (FIRR and EIRR) to the financial or economic opportunity cost of capital. Alternatively, the project is considered to be viable when the Net Present Value (NPV) is positive, using the selected EOCC or FOCC as discount rate. Sensitivity analysis focuses analyzing the effects of changes in key variables on the project's IRR or NPV, the two most widely used measures of project worth.

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In the economic analysis of the projects, there are also other aspects of project feasibility which may require sensitivity analysis. These include:

1. demand analysis: to assess the sensitivity of the demand forecast to changes in population growth, per capita consumption, prices, etc.
2. least cost analysis: to verify whether the selected least-cost alternative remains the preferred option under adverse conditions
3. sustainability analysis: to assess possible threats to the sustainability of the project
4. distributional analysis: to analyse whether the project will actually benefit the poor.

Sensitivity analysis is particularly concerned with factors and combinations of factors that may lead to unfavourable consequences. These factors would normally have been identified in the project (logical) framework as „project risks” or “project assumptions”. Sensitivity analysis tries to estimate the effect of achieving project objectives if certain assumptions do not, or only partly, occur.

## **2. THE PURPOSE OF SENSITIVITY ANALYSIS**

Sensitivity analysis is a technique for investigating the impact of changes in project variables on the base-case (most probable outcome scenario). Typically, only adverse changes are considered in sensitivity analysis. The purpose of sensitivity analysis is:

1. to help identify the key variables which influence the project cost and benefit streams
2. to investigate the consequences of likely adverse changes in these key variables
3. to assess whether project decisions are likely to be affected by such changes
4. to identify actions that could mitigate possible adverse effects on the project.

## **3. PERFORMANCE OF SENSITIVITY ANALYSIS**

Sensitivity analysis needs to be realized in a systematic manner. To meet the above purposes, the following steps are recommended to be followed:

1. identify key variables to which the project decision may be sensitive
2. calculate the effect of likely changes in these variables on the base-case IRR or NPV, and calculate a sensitivity indicator and/or switching value
3. consider possible combinations of variables that may change simultaneously in an adverse direction
4. analyze the direction and scale of likely changes for the key variables identified, involving identification of the sources of change.

**Step 1: Identifying the key variables.** The base case project economic analysis incorporates many variables: quantities and their inter-relationships, prices or economic values and the timing of project effects. Some of these variables will be predictable or relatively small in value in the project context. It is not necessary to investigate the sensitivity of the measures of project worth to such variables. Other variables may be less predictable or larger in value. Variables related to sectorial policy and capacity building may also be important. As they are more difficult to quantify, they are not further considered hereafter but should be assessed in a qualitative manner.

As a result of previous experience (from post-evaluation studies) and analysis of the project context, a preliminary set of likely key variables can be chosen on the following basis:

1. variables which are numerically large, ex. investment cost
2. essential variables, which may be small, but the value of which is very important for the design of the project
3. variables occurring early in the project life, ex. investment costs and initial fixed operating costs, which will be relatively unaffected by discounting
4. variables affected by economic changes, such as, changes in real income.

**Table 1. Base Case of an Investment Project**

Economic statement	PV	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
	@12%										
Benefits	2,104	0	283	339	396	453	509	566	566	566	566
Costs:	1,978	1,889	61	61	61	61	61	61	61	61	61
-Investment	1,687	1,889	0	0	0	0	0	0	0	0	0
-O&M	291	0	61	61	61	61	61	61	61	61	61
Net cash flow	126	-1,889	222	278	335	391	448	505	505	505	505

**Step 2 and 3: Calculation of effects of changing variables.** The values of the basic indicators of project viability (EIRR and ENPV) should be recalculated for different values of key variables. This is preferably done by calculating sensitivity indicators and switching values. The meaning of these concepts is presented in table 2 as well as a sample calculation.

**Table 2. Use of Sensitivity Indicators and Switching Values**

	Sensitivity Indicators	Switching Value
Definition	<p><b>1. Towards the Net Present Value</b> Compares percentage change in NPV with percentage change in a variable or combination of variables.</p> <p><b>2. Towards the Internal Rate of Return.</b> Compares percentage change in IRR above the cut-off rate with percentage change in a variable or combination of variables.</p>	<p><b>1. Towards the Net Present Value</b> The percentage change in a variable or combination of variables to reduce the NPV to zero.</p> <p><b>2. Towards the Internal Rate of Return.</b> The percentage change in a variable or combination of variables to reduce the IRR to the cut-off rate (=discount rate).</p>
Expression	<p><b>1. Towards the Net Present Value</b>  <math display="block">SI = \frac{(NPV_b - NPV_1) / NPV_b}{(X_b - X_1) / X_b}</math>           where:  <math>X_b</math> – value of variable in the base case  <math>X_1</math> – value of the variable in the sensitivity test  <math>NPV_b</math> – value of NPV in the base case  <math>NPV_1</math> – value of the variable in the sensitivity test</p>	<p><b>1. Towards the Net Present Value</b>  <math display="block">SV = \frac{(100 \times NPV_b) (X_b - X_1)}{(NPV_b - NPV_1) X_b}</math>           where:  <math>X_b</math> – value of variable in the base case  <math>X_1</math> – value of the variable in the sensitivity test  <math>NPV_b</math> – value of NPV in the base case  <math>NPV_1</math> – value of the variable in the sensitivity test</p>

	<p><b>2.Towards the Internal Rate of Return</b></p> $SI = \frac{(IRR_b - IRR_1) / (IRR_b - d)}{(X_b - X_1) / X_b}$ <p>where:  <math>X_b</math> – value of the variable in the base case  <math>X_1</math> – value of the variable in the sensitivity test  <math>IRR_b</math> – value of IRR in the base case  <math>IRR_1</math> – value of the variable in the sensitivity test  <math>d</math> – discount rate</p>	<p><b>2.Towards the Internal Rate of Return</b></p> $SV = \frac{(100 \times NPV_b)}{(NPV_b - NPV_1)} \times \frac{(X_b - X_1)}{X_b}$ <p>where:  <math>X_b</math> – value of variable in the base case  <math>X_1</math> – value of the variable in the sensitivity test  <math>IRR_b</math> – value of IRR in the base case  <math>IRR_1</math> – value of the variable in the sensitivity test  <math>d</math> – discount rate</p>
Calculation example	<p><b>1.Towards the Net Present Value</b>            Base Case:            Price = <math>P_b = 300</math>  <math>NPV_b = 20,912</math>            Scenario 1:  <math>P_1 = 270</math> (10% change)  <math>NPV_1 = 6,895</math></p> $SI = \frac{(20,912 - 6,895) / 20,912}{(300 - 270) / 300} = 6.70$ <p><b>2.Towards the Internal Rate of Return</b>            Base Case:            Price = <math>P_b = 300</math>  <math>IRR_b = 15,87\%</math>            Scenario 1:  <math>P_1 = 270</math> (10% change)  <math>IRR_1 = 13,31\%</math>  <math>d = 12\%</math></p> $SI = \frac{(0,1587 - 0,1331) / (0,1587 - 0,12)}{(300 - 270) / 300}$ <p>= 6,61</p>	<p><b>1.Towards the Net Present Value</b>            Base Case:            Price = <math>P_b = 300</math>  <math>NPV_b = 20,912</math>            Scenario 1:  <math>P_1 = 270</math> (10% change)  <math>NPV_1 = 6,895</math></p> $SV = \frac{(100 \times 20,912)}{(20,912 - 6,895)} \times \frac{(300 - 270)}{300} = 14.9\%$ <p><b>2.Towards the Internal Rate of Return</b>            Base Case:            Price = <math>P_b = 300</math>  <math>IRR_b = 15,87\%</math>            Scenario 1:  <math>P_1 = 270</math> (10% change)  <math>IRR_1 = 13,31\%</math>  <math>d = 12\%</math></p> $SV = \frac{(100 \times (0,1587 - 0,12))}{(0,1587 - 0,1331)} \times \frac{(300 - 270)}{300}$ <p>= 15,1%</p>
Interpretation	<p>a) percentage change in NPV respectively            b) percentage change in IRR above the cut-off rate (12%) is larger than percentage change in variable: price is a key variable for the project</p>	<p>A change of approximately 15% in the price variable is necessary before the NPV becomes zero or before the IRR equals the cut-off rate.</p>
Characteristic	<p>Indicates to which variables the project result is or is not sensitive. Suggests further examination of change in variable.</p>	<p>Measures extent of change for a variable which will leave the project decision unchanged.</p>

The switching value is, by definition, the reciprocal of the sensitivity indicator. Sensitivity indicators and switching values calculated towards the IRR yield slightly different results if compared to Sis and SVs calculated towards the NPV. This is

because IRR approach discounts all future net benefits at the IRR value and the NPV approach at the discount rate  $d$ .

In the base case, the ENPV is 126 and the EIRR is 13.7 percent. The sensitivity of the base case ENPV has been analyzed for (adverse) changes in several key variables, as follows:

1. an increase in investment cost by 20 percent
2. a decrease in economic benefits by 20 percent
3. an increase in costs of operation and maintenance by 20 percent
4. a delay in the period of construction, causing a delay in revenue generation by one year

Proposed changes in key variables should be well explained. The sensitivity analysis should be based on the most likely changes. The effects of the above changes are summarized in table 3.

**Table 3. Sensitivity Analysis – Numerical Example**

Item	Change	NPV	IRR %	SI (NPV)	SV(NPV)
Base Case		126	13.7		
Investment	+20%	-211	9.6	13.3	7.5%
Benefits	-20%	-294	7.8	16.6	6%
O&M costs	+20%	68	12.9	2.3	43.4%
Construction delays	one year	-99	10.8	NPV 178% lower	
SI = sensitivity indicator, SV = switching value					

Combinations of variables can also be considered. For example, the effect on the ENPV or EIRR of a simultaneous decline in economic benefits and an increase in investment cost can be computed.

**Step 4: Analysis of effects of changes in key variables.** In the case of an increase in investment costs of 20 percent, the sensitivity indicator is 13.34. This means that the change of 20 percent in the variable (investment cost) results in a change of 266 percent in the ENPV. It follows that the higher the SI, the more sensitive the NPV is to the change in the concerned variable.

In the same example, the switching value is 7.5 percent which is the reciprocal value of the SI x 100. This means that a change (increase) of 7.5 percent in the key variable (investment cost) will cause the ENPV to become zero. The lower the SV, the more sensitive the NPV is to the change in the variable concerned and the higher the risk with the project.

At this point the results of the sensitivity analysis should be reviewed. It should be asked: 1. Which are the variables with high sensitivity indicators; 2. How likely are the (adverse) changes (as indicated by the switching value) in the values of the variables that would alter the project decision?

#### 4. CONCLUSIONS

The paper presents two concepts: sensitivity indicator and switching value, used to perform a sensitivity analysis as well as the meaning of them. Sensitivity indicators and switching values are calculated for the NPV and IRR, as we can see in the numerical example, so we can analyze the effects of changes in key variable and minimize the project risk.

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## **INNOVATION - THE POSITIVE EFFECT OF THE CRISIS**

**MIHAELA IONECI** \*

**ABSTRACT:** *The current crisis has reopened the discussions about the state's intervention in the economy and about the possibility of replacing the capitalist system, because the role played by the state is no longer consistent with the characteristics of this system. The state's intervention in the economy could be directed towards other aspects, regardless of the accepted economic system. A state that truly favours innovation represents the desired result.*

**KEY WORDS:** *crisis, state, capitalism, change, innovation*

The current crisis which occurred in the U.S., considered as an example of capitalism, has also reached in a relatively short period of time and the economies in the most developed capitalist countries because of the interdependencies between them and the U.S. economy.

The crisis was the moment in which voices were heard portending the end of the capitalist system. Giving up this system would imply the existence of another one which, at least in theory would seem better. The superiority of capitalism over socialism has already been demonstrated, thus a substitution between them would not make sense.

Paul Samuelson said: "The mechanism of *the market economy* has emerged victorious from the fight with the mechanism of *command economy*, based on the bureaucratic leadership of the centre. But the communist societies were not defeated by the pure capitalism, based on a liberal conception and on the absence of the state from the economy, but by the mixed economy: the market economy with the changes it has undergone as a consequence of the application of the monetary and fiscal policies designed to control the crisis and the inflationary phenomena" [4].

The recent events have led to a new approach to the role of the state. Currently, the way in which the state intervenes in the economy is much wider than the interventions to reduce the imbalances generated by the free market.

However, during the current period "the state will count less as an economic agent, but it will enhance its functions regarding the prudential regulation of markets

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and the protection of the free competition. The state will become a free state. Reconsidering the state's role in the economy does not mean a weakening of power, but an increase of its efficiency and authority" [5].

Before this crisis, in the specialized literature there were different classifications of the types of states according to their involvement in the economy. One of these classifications is presented in the following table.

**Table 1. Types of state in terms of its involvement in the economy**

Type of stat	Predominant feature
Protector	Creates and protects the legal framework and the market institutions
Productive	Counteracts the shortcomings of the market mechanisms
Negotiator or corporate	Mediates the concessions within the economic policies
Bureaucratic or exploiter	Engages directly in the management of the economy, gaining autonomy by achieving certain own economic targets in favour of bureaucracy

Source: Ciucur, D.; Popescu, C.; Popescu, I.; Popescu Fundulea, A.M. - „Fundamente ale planificării strategice”, Editura Economică, București, 2003, p. 12

The multitude of views on the role of the state does not change with anything the importance it holds, in particular in the economic field. The State performs the following functions [1]:

- The allocative function
- The distributive function
- The regulative function
- The stabilizing function

We can thus say that the state has an important role in the economic and social life, its interventions, as well as its public goods that it provides for the collective consumption are important in the economic development of any country.

The functions performed by the state, as well as other interventions made in the economy should be designed in such a way as to lead to development, to stimulate progress in all areas.

According to the American economist Paul Samuelson the four wheels of the locomotive of progress are:

- Human resources (job offer, education, discipline, motivation);
- Natural resources (land, minerals, fuels, quality of the natural environment);
- Formation of capital (machines, factories, roads);
- Technology (science, engineering, management, entrepreneurship).

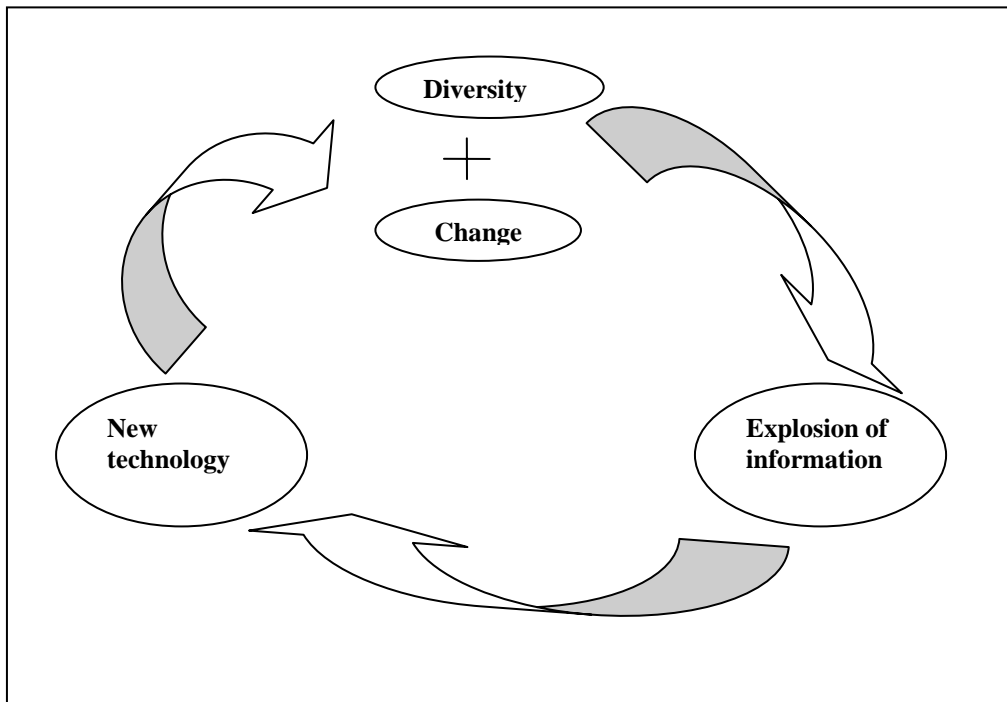
Although not diminishing the importance of other elements necessary to progress, nonetheless Samuelson pays more attention to technological innovation. The discovery of a new way to produce when everything is changing gives an opportunity in the economic environment. Edmund Phelps, Nobel Prize laureate, completes



Samuleson's idea by stating: "The worst thing is to stop innovation in a period of deep recession."

Usually, in periods of crisis, changes occur in all areas, but by exploiting them one may reach advantageous developments. Trying to overcome the crisis leads to changes in the technologies used so far, to trying to increase productivity with a smaller amount of labour force.

To better illustrate the relationship between diversity, change and technology I propose the following figure.



**Figure 1. The virtuous circle: diversity - change - technology**

The State's intervention in the economy should aim at favouring the creation of this new technology and not only to infuse huge amounts of money in order to avoid bankruptcies (the most convincing example being that of the U.S.A.). This intervention of the U.S. in order to avoid bankruptcies excludes free market, competition, some of the characteristics of capitalism. Giving up capitalism is not the best idea, even if it is not a perfect model, but a perfectible one, with certain limitations: inflation and unemployment, but which are not specific only to this model; increasing the number of the poor; social equity appears only as desideratum, profit being the key word; the rich have power and thus can decide.

Thus, together with the other existing types of state, I consider opportune the existence of the innovative state, which supports through its interventions the virtuous circle: diversity - change - technology.

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## **RISK MANAGEMENT IN ELECTRONIC DATA TRANSMISSION**

**ALIN ISAC, MIHAELA BELU, IMOLA DRIGĂ \***

**ABSTRACT:** *Information society development is possible using advanced computer infrastructure but also software such systems, particularly the Internet. The content of the work we have addressed some key elements for implementation of risk management in electronic data transmission operations of legal persons and / or individuals using the Internet, from the few elements that disrupt the activities of information such as computer viruses or attacks. An important part presents the necessity and effects of operations on the Internet standardization, the use of digital certificates and electronic signatures by default.*

**KEY WORDS:** *risk management, electronic data transmission, computer viruses, electronic signature, digital certificate*

### **1. RISK CONCEPT**

In a competitive economy, any legal entity subscribes to the idea that risk and uncertainty are always present in all economic activities. The difference between the two concepts is important mainly in the process of decision making, because the set of economic factors and phenomena that affect the results of the system functioning can have different degrees of uncertainty or risk.

Uncertainty implies an ambiguous anticipation of elements so that a forecast of what might happen cannot be made. Thus, in case of uncertainty, ulterior evolutions of processes and probabilities are unknown, unlike in the case of risky situations which derive from uncertainty and which can anticipate events that might happen without providing an exact forecast of possible results.

Studying the economic literature regarding the risk reveals the lack of a unique opinion concerning the definition of the risk in favour of several senses of this notion. The term of risk (*periculum, risk, riesiko, rischio*) can be found in any language and it

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is defined by the Romanian Explanatory Dictionary as “a possibility to find oneself in a dangerous situation, having to face a difficulty or to suffer a loss.”

Thus, the first independent approach regarding risk can be found in *the classic theory* of economists like Rastrighin and Raisberg; in their opinion the risk is limited to a mathematical expectation of the losses which can occur when choosing one of the possible variants, known as a “possible loss”. *The neoclassical theory of the risk* promoted by economists like Marshal and Pigon in the 30s shows that the purpose of the managerial activity of a company is “the amount of expected profit and the variable degree of the possible risk”.

In specialized literature there are a great number of definitions for the term risk in which the authors try to find new equivalents in the investment activity. In the Management Dictionary published in Paris in 2001 it is mentioned that the risk comprises four essential ideas such as: *the idea of menace or danger, the idea of cost, the idea of possible degree of the situation and the idea of intended presentation of a danger* determined in order to get an advantage. In 1983, in the definition given for the country risk, the Organization for Economic Co-operation and Development asserts that the risk reflects the possibility that an event forecasted with a certain probability can materialize and influence negatively the economic processes of investments.

The complexity of the risk category has challenged a series of well known Romanian specialists to define this term. Starting from a direct connection between investment and risk, academician Emilian M. Dobrescu defines the risk as a probable analysis of the possibility to obtain favourable or unfavourable results in a business, of a future event which is likely to happen and can bring about certain losses, while in specialized dictionaries, the authors consider the risk as being a future event which might result in losses.

In economy, the risk can be characterized according to the factors which produce it and according to its degree, having in view the company’s ability to adapt itself and to respond efficiently to any changes that occur in the company’s environment. Transposing the science of management and the valuable elements specific to management in the field of pragmatic management activity implies a classification of the economic risk in several categories.

The classification starts from *the possibility of the forecasting degree* of the risk and it points out two important types, such as *predictable risks*, which are determined by factors that can be predicated so that their effects would be eliminated or reduced through appropriate measures and *unpredictable risks* which, unlike the first category, are determined by factors that cannot be forecasted and reducing their effects is very difficult, expensive and most of the times impossible.

The types of risk are various and their occurrence is related to the type of activities, therefore risks can fall into the following categories:

- *economic risks*, determined both by the evolution of the company’s environment and by the quality of the economic activity carried out within the company (the risk of increasing inflation, the economic risk or the exploitation risk, the investment risk, etc.);

- *financial risks* due to accessing and using financial resources (insolvency risk, the risk of reducing profitability, the risk of running into heavy debts and losing autonomy);
- *commercial risks* associated with purchase and selling operations of the company on the domestic and foreign market (the price risk, the transportation risk, the sale risk);
- *production risks*, generated by technological and organizational malfunctions which occur during production processes (the risk of not meeting the expected quality indicators, the risk of not turning out expected quantity of products, the risk of exceeding the allowed quantity of consumables, the risk of rejected products, the risk of industrial accidents, etc.);
- *political risks* which derive from changing the strategy, the tactics and the current actions of political factors in that particular country, in countries with whom the company has direct connections and in great international corporations (the risk of reducing imports/exports, the risk of limiting currency transfers, the risk of forbidding the product in certain states, etc.);
- *social risks*, determined by the relationship with the company's employees and their behaviour (the risk of disappointing the employees, the risk of enormous expenses with the labour force, etc.);
- *judicial risks* related to the effect of national and sometimes international legislation upon the activities of the company (the risk of losing of damaging the products, the risk of not cashing in the amounts of money corresponding to the economic operations, the risk of losing the property, the risk of paying additional taxes);
- *natural risks* owing to natural disasters or to other major causes where the natural factors have a decisive weight (fire risks, earthquake risk, flood risk, etc.).

Many specialists believe that according to their *content and nature*, risks can be divided into *commercial* and *non-commercial risks*. The first category is based mainly on the price risk, the currency risk, the inflation risk, credit sale risk, the risk of not meeting the contract clauses, etc, while non-commercial risks refer to different natural disasters, the state of war, political and legislative instability, etc.

According to their location, risks can be structured as *internal risks*, located within the company and related to its functions, the most important of them being the risks of the human capacity factor, the production risks, product logistics risks and *external risks* which can be found within the outside environment of the company that is involved in international transactions and they materialize in contract risks, conjuncture risks and political risks.

Regardless of the type of risk, in order to avoid the negative effects which may occur, the manager must consider all action modalities, among which the most significant are:

- *avoiding risks* - it implies giving up the decision options for which a materialization looks uncertain;
- *reducing risks* - by laying good foundations for decisions and for the decisional process, avoiding thus foolish decisions based on insufficient information;

- *standing/assuming the risks* - is recommended when the potential loss is too small to have unfavourable consequences upon the company's activity;
- *transferring the risks* - in the charge of an insurance company.

## **2. E-GOVERNMENT SERVICES RISK MANAGEMENT**

Risk management seeks, on the one hand, the monitoring and the management of all risks and of risk factors which can be identified, and on the other hand, the extent of the use of risk management techniques on all risk types, starting from those likely or recurring, to catastrophic ones. Risk management has gained new meanings during the last decade due to the transition towards information society and to the use of Internet.

The original purpose of Internet was to provide a communication environment and a free exchange of information, therefore it cannot be stated that this operating environment is safe and without risks for users. From this perspective, even if the implementation of information technologies in public sector organizations is considered an opportunity for governmental services, the process is comprehensive and it involves a complex diagnostic and identification of risks which occur while using these technologies.

Thus, the implementation of risk management in public administration should be based on achieving the objectives of supporting the development and distribution of e-Government services, namely: the development of information and digital content infrastructure necessary to implement electronic governance at the national level and the coordination of National e-Government projects with pan-European or regional projects and also the improvement of the quality and efficiency in supplying electronic public services, based on the simplification of administrative procedures and on transposing them into electronic format.

Specialists consider that, regardless of the methodology chosen for good risk management in e-Government services, there are several elements that should be taken into account and that must be obeyed such as: the implementation of *national electronic registers*, the increase of the performances of employees from public administration in information and communication technology, and the auditing and certification of quality and general performance of all e-Government services.

## **3. RISK FACTORS IN E-GOVERNMENT SERVICES**

### **3.1. Computer Viruses**

Most of information technology users face the harmful computer viruses, which represent different types of attack on computers. A computer virus is a program that can reproduce itself and it can spread from one computer to another. Computer viruses are micro-programs, difficult to detect, hidden in other programs, lying in wait to cause system failure (blocking the system, unexpected messages or commands, other destructive actions).

If in 1990 there were only 300 known viruses, today the number has reached around 80,000; further estimations show an impressive growth of their number. Thus, due to their increased number and to the technological possibilities of creating others viruses, this is a serious risk for Internet users from any field.

### 3.2. Computer Attacks

As computer networks have evolved in more complex and more accessible structures, security threats have increased dramatically. New problems of security occur every day in currently used applications, in operating systems or for the network equipment that allows hackers to commit attacks. Along with emphasis on the dependence on information technology, the consequences of these attacks are more and more disastrous - from stopping production and negative publicity to the disclosure of confidential information.

The report "Managed Security in the Enterprise", published in March 2009 by Symantec Corporation, an American company, has highlighted the need for additional protection from cyber attacks, which are constantly increasing and intensifying (figure no.1). This report shows that 88% of 1,000 interviewed subjects said they had been the target of a cybernetic attack in the past 2 years, and 30% of these attacks were successful.

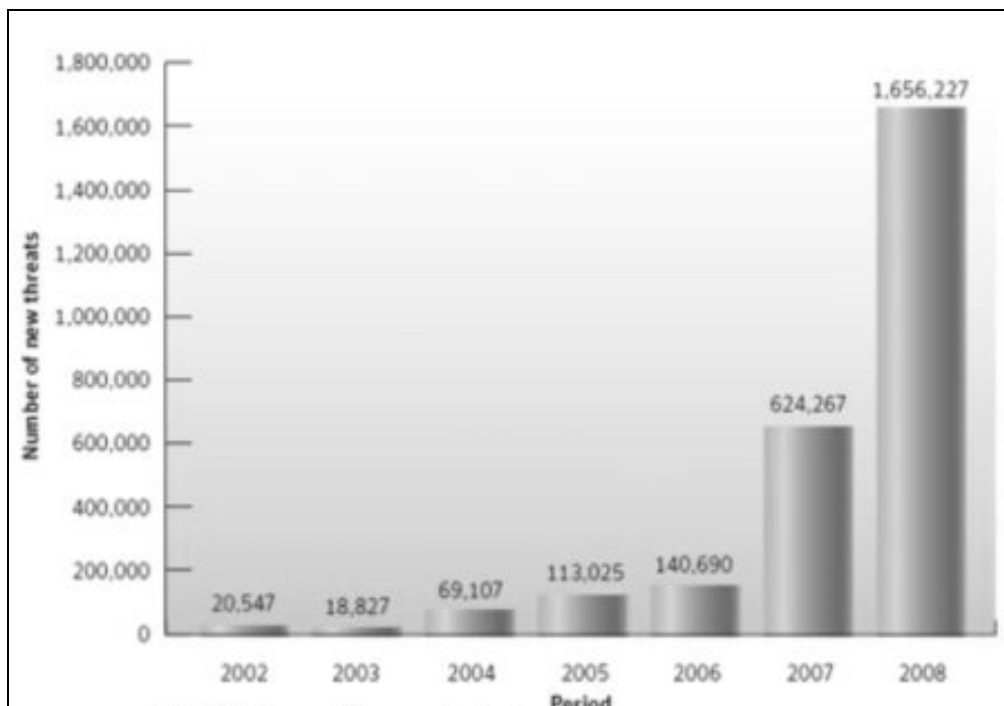


Figure 1. New malicious code signatures

Almost all subjects (97%) have suffered various forms of losses including downtime (46%), theft of data related to customers or employees (31%) and theft of confidential data of the company (25%).

Regardless of the computer threat, of the field of activity or of the type of information technology used, it is necessary that each company is protected by updating antivirus software, updating the firewall, implementing technologies for detecting interferences and by implementing management vulnerability systems within networks.

#### **4. INTERNET STANDARDIZATION AND SECURITY**

Given that over 90% of a business activity is dependent on information technology, it is very important to be aware of the risks that occur in operating or managing information systems. Within the information society, information means power, therefore it must be protected by appropriate means, that is to say by optimum security solutions.

The Romanian market for security solutions increased last year by 55.9%, reaching 19.92 million dollars, mainly due to the development of the hardware market, to the appearance of several computer threats and viruses, and also because the population became aware of the information security. However, more than 64% of Romanian companies spend annually less than 1000 dollars for the purchase and implementation of IT security solutions and only between 15 and 20% of the companies really invest in virtual protection. Worldwide, the importance of IT security systems is much greater, especially with regard to data security.

In a study conducted by International Data Corporation (IDC) it is shown that worldwide, the largest weight of 75.5% of the total of security expenditures, has been attributed to data security solutions and to threat management. In this context, the following standard, SR ISO / IEC 17799:2006 "Information technology. Security techniques. Information security management system", has been published in order to stand as a model for establishing, implementing and improving security management in a company and also to serve as a practical guide for the development of some organizational security standards and effective security management procedures.

Therefore, any company that uses computers should apply this standard and it should develop an IT security strategy, starting from the following objectives:

- ensuring that the Internet and local networks are protected;
- there are effective techniques of managing security techniques and updating them;
- information - the undisclosed capital of the company - must be protected from both unauthorized internal or external use and against modifications;
- the process of receiving information from external sources must be done through decryption and authentication;
- the access rights of users must be defined;
- the email system, the management of encryption keys must be easily and securely managed, etc.



## **5. LEVERAGE RISK MITIGATION - REQUISITE FOR INCREASING THE EFFECTIVENESS OF E-GOVERNMENT**

For the Management of companies that operate in unstable environments with a strong random characteristic, the principles for making decisions must be encompassing; therefore, refining data structures and the methodology for managing them requires the use of the newest developments in computer technology. In this context and under the conditions of globalization and intensive use of the Internet, especially in relations with customers - suppliers or other business partners – it is necessary to find the appropriate tools for ensuring an information security management. As far as risk management within e-government is concerned, two of the modern features that characterize the security of Internet communications are the electronic signature and the digital certificate.

### **5.1. The Electronic Signature**

Generally, an electronic signature is a piece of information that identifies the sender of a document and it is stored on a secure magnetic device. According to Law no. 455 of 18 July 2001 regarding electronic signatures, it refers to electronic data which is attached to or logically associated with other data in electronic form and it serves as a method of identification. According to this law and to other European regulations, an electronic signature can be valid only if it meets the following requirements: it authenticates the person who signs the message or the record, thus it is unique to the person making the signature; it associates the document with a person, thus making it impossible for anyone to forge; it should be an affirmative act that which states that the electronic transaction was legal.

An electronic signature is applied to a document which was sent using computers and software, such as:

- MS Word for contracts, documents, notifications, etc.;
- MS Excel for financial statements, salaries, etc.;
- Adobe Acrobat for modified Word documents of higher quality and greater security of information;
- expert data base programs used for documents from the public and local administration sector;
- documents resulting from processing tax and accounting data such as annual financial statements, tax returns, etc.).

### **5.2. The Digital Certificate**

A digital certificate is a file protected by a password, which includes a variety of information such as: name and e-mail address of the holder of the digital certificate, a public key that can be used to verify the digital signature of the owner and the validity of the digital certificates. Certification Authorities (CA) collect information on a particular company or person, and later they release a new digital certificate.

Digital certificates are used for online authentication, and they are similar to the way people identify themselves with the driving license or the birth certificate. Some technologies (SET, SSL and Authenticode) have entered the competition for the digital certificates.

## 6. CONCLUSIONS

As a European country Romania is required to align the objectives of the Lisbon strategy and the i2010 initiative "An European Information Society for economic growth and employment" in which one of the priorities is to promote an information society through a comprehensive set of online data transmission services. Thus, trends that are evident for the time period immediately following have the jump from static web to dynamic and interactive web development methodologies to target and streamline internal processes to determine efficiency and shared services, standards for consistent use of information technologies and communication.

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## **COMPETITIVENESS AND STRATEGY FOR AUTOMOBILE INDUSTRY IN EUROPE**

**NICOLETA ISAC** \*

**ABSTRACT:** *The auto sector is often credited as the engine room of Europe. The European Union is the homeland to a competitive and innovative automotive industry that generates activity throughout the economy - from materials and parts supply, to R&D and manufacturing, to sales and after-sales services. In the second half of 2008, against the backdrop of fierce competitiveness and progress on sustainability, the economic downturn hit the industry. The banking crisis stalled economies; consumers and businesses struggled to access credit. Private individuals held off purchasing new cars and businesses began to fight for survival. Commercial vehicles continued their sharp downturn in the first quarter of 2009. The drop in passenger car registrations recovered somewhat to a still formidable minus 15%, supported by the introduction of fleet renewal incentives in a number of EU member state.*

**KEY WORDS:** *competitiveness, management, strategy, automobile industry, market*

### **1. INTRODUCTION**

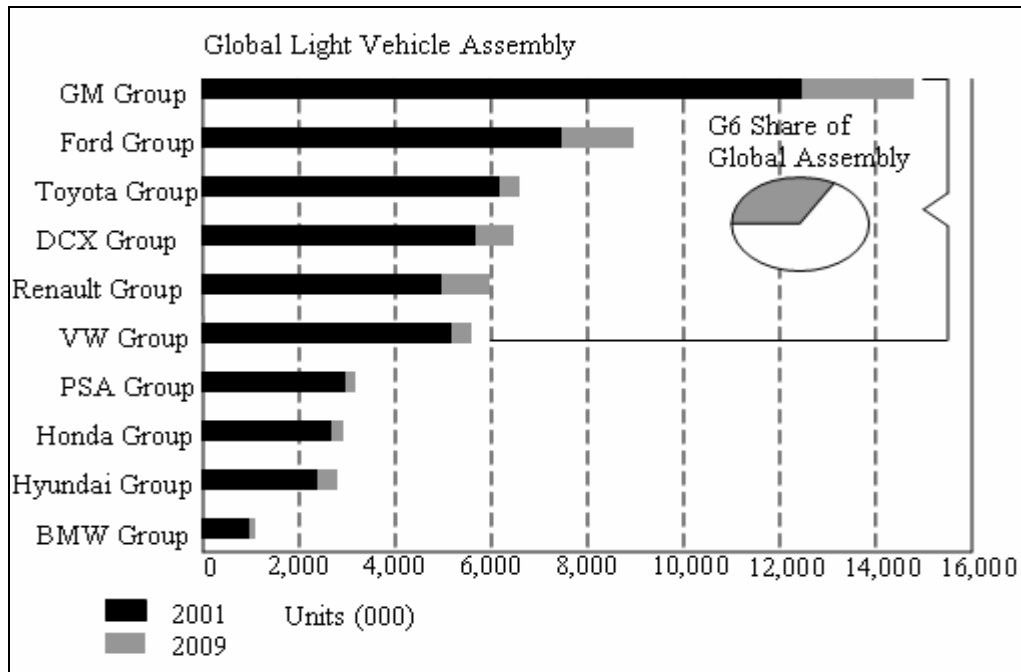
For the past five years the automotive industry has focused on scale strategies and sizing to survive. Vehicle manufacturers and suppliers have consolidated significantly. Manufacturers now manage a collection of brands. Managing those multiple and unique brands will command more of their effort as they shift production and assembly assets into the supply community.

Today the industry is dominated by a group of nine global VBEs, which together represent over 90% of global light vehicle output. The top six accounts for more than 80% of this output, as shown in Figure 1.

Consolidation has created global supply networks and integrator capabilities in the quest for competitive advantage. The consolidation among automakers, however, pales in comparison to the pending consolidation of suppliers. By 2010, there will be no more than 20 to 30 major systems suppliers globally. Yet as other sectors have already demonstrated, shareholder value has not been, and will not be, assured on the basis of globalism - or on any notion that bigger is automatically better.

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Source: PricewaterhouseCoopers AUTOFACTS

**Figure 1. Consolidation: Creation of „Vehicle Brand Enterprises”**

But Europe relies on a strong automotive sector. Further financial and economic pressure on the sector will affect the European economy as a whole; 2.2 million people are employed directly in automotive manufacturing; an additional 9.8 million rely on it for their jobs in closely related sectors. The real multiplier, in terms of employment in the wider economy, is still higher. ACEA members generate a turnover of €51 billion, and total industry exports are worth €7 billion. Around €378 billion in taxes come from vehicles, reinforcing the sector's reputation as the engine room of Europe.

Prospects for 2009 and 2010 are still unclear, but signs are not positive. More than 1,000 plant stoppage days had been planned for the first quarter of 2009 and pressure on employment is mounting. Overall, 2009 vehicle production may drop by as much as a quarter and commercial vehicle production by at least 50%.

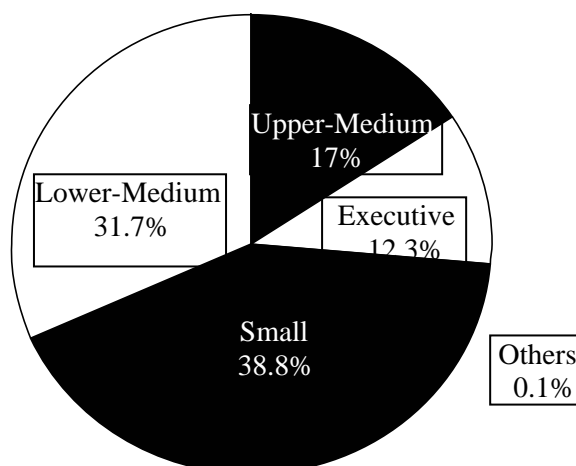
## 2. MARKET DEMAND

In Western Europe, only five countries posted new car growth, Finland (+11.2%), Portugal (+5.7%), Belgium (+2.1%), Luxembourg (+2.0%) and Switzerland (+1.0%). Among the five major markets, Spain reported the steepest fall in demand in its history (-28.1%), while Italy (-13.4%) and the UK (-11.3%) fell by more than 10%. Across Europe, new car demand fell 7.8% to 14.7 million units. In the final quarter it crashed 19.3%.

Consumer choices reflected concerns about the economy. Market penetration of small cars was the highest ever at 38.8%; SUVs penetration which had peaked in 2007 at 9.9% fell back to 9%, with the most dramatic fall in France from 7.2 to 4.6%. Average engine size fell to 1706cc, from 1740cc a year earlier, while average power output, which had risen steadily since 1990, fell to 86 from 87 KW. More than half of all new cars sold were diesel models (52.7%).

Commercial vehicle registrations were down 9% across Europe, the sharpest downturn since 1993. Truck registrations, down 4% overall, suffered most in new member states (-21.1%). Light commercial vehicle demand (LCVs), up 5.1% in new member states, was dragged down by performance in Western Europe (-12%) to end 10.4% down overall. Bus and coach registrations rose 12.1% over the year, but in December they fell 7.5%.

By March 2009, government fleet renewal schemes had been introduced in 11 countries to boost flagging markets and help sustain the transition to 'greener' cars. In Germany, new car sales rose by an encouraging 21.5% in February. Effects were also notable in other markets, such as France, Italy and Slovakia.



Source: European Automobile Industry Report, [www.acea.be](http://www.acea.be) based on Global Insight Data

**Figure 2. The car market in segments I 2008**

### 3. VEHICLES IN USE

According to the latest ANFAC (Spanish automobile association) report, there were 251.5 million vehicles on the roads in the enlarged EU at the end of 2007. Of these, almost 220 million (87%) were cars. That reflected a 0.5% drop on 2006 figures, primarily due to an 11.6% decrease in the German fleet from 46.6 to 41.2 million cars.

The European car fleet is concentrated in five main markets (Germany, Italy, France, UK and Spain) in which diesel penetration is now around 30%. Across the enlarged EU, there is a high proportion of older cars on Europe's roads. According to ANFAC, 30% of cars are older than 10 years. In some new member states, the average

age of a car is up to 14 years, emphasising the importance - economic, environmental and safety - of strong measures to encourage fleet renewal

#### 4. ECONOMIC BACKGROUND

Table 1. GDP Growth Forecasts

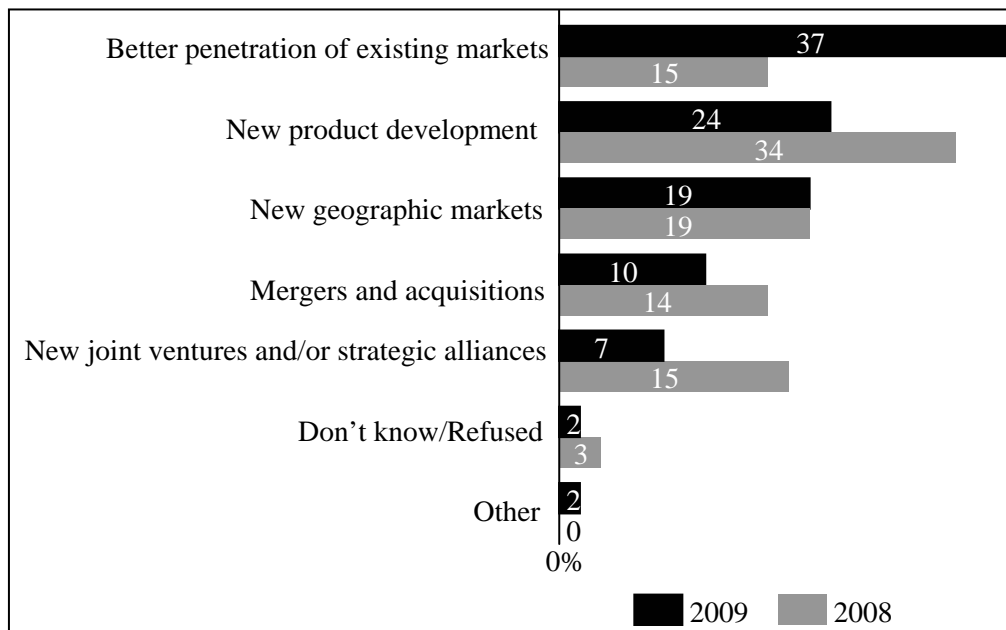
	2009	2010
€ eurozone	-1.9%	0.4%
EU27	-1.8%	0.5%
US	-1.8%	2.3%
Japan	-1.7%	1.1%

The Eurozone is now officially in recession following two successive quarters of negative growth. The trade deficit is rising and positive employment trends are not reflected in auto manufacturing which has started to report significant job losses. The overall situation in financial markets remains uncertain, despite massive injections of liquidity from governments and central banks. Endorsed in November, the Commission's European Economic Recovery Plan aims to prevent a downward spiral.

However, economic forecasts for 2009 have been revised downwards with GDP expected to drop in the Eurozone by 1.9% and in the EU27 by 1.8%. Modest growth of 0.4% and 0.5% is expected in 2010. Despite interest rate cuts, falling oil prices (\$146 a barrel in July 2008 to \$44.5 in January 2009) lower commodity prices and inflation which is now 1.1% from a high of 4% in July 2008, business and consumer confidence remains low. Since mid-2007, the Commission's business and industrial confidence indicators have been falling while its December 2008 consumer confidence indicator was the lowest it had been since reporting began in 1985.

#### 5. FORECASTS

Production and sales figures from the final quarter of 2008 reveal the scale and speed with which the industry has been affected by the economic downturn. Markets across Europe suffered, forcing a slowdown in production and job losses at vehicle manufacturing plants and across the component supply chain. Forecasts in this uncertain time are very difficult, albeit both consumer and business confidence is low. Most manufacturers do not expect the situation to improve until 2010. If trends seen in the final quarter of 2008 and into the first few months of 2009 continue, passenger car production could decline by a quarter and commercial vehicle production by at least 50%, reflecting a dramatic drop in orders from business customers. The next figure presents which one of these potential opportunities for business growth as the main opportunity to grow business in the next 12 months.



Source: PricewaterhouseCoopers 12<sup>th</sup> Annual Global CEO Survey 2009

**Figure 3. Automotive CEOs concentrate on existing markets to grow**

## 6. CONCLUSIONS

The future viability of the global automotive sector hinges on its ability to secure sources of credit and to "right-size" its operations, while being responsive to the evolving preferences of its customers.

A number of big vehicle manufacturers have been forced to seek government assistance—a move that has generated considerable controversy. Proponents argued that the economic fallout from allowing the industry to fail would be catastrophic; critics maintained that the industry operates with an outdated business model, and that any government support would only postpone their inevitable insolvency.

*More industry consolidation and collaboration may be down the road.* A number of automotive CEOs are considering more collaborative arrangements. Forty percent of those surveyed say they favour joint ventures and strategic alliances over other routes to growth.

*Managing your supply chain: The key to competitive advantage.* Eighty-one percent of CEOs think that efficient sourcing and supply chain management is a key source of competitive advantage.

*Re-evaluating the business model.* Most automotive CEOs have also been cutting costs and re-evaluating their business models, as they struggle to balance the immediate demands of survival with the need to develop an approach that will position them to take advantage of the economic recovery.

As they work to differentiate themselves in a changing industry, automotive companies face continuous business challenges. Some of these challenges can be

opportunistic, such as globalizing the business, which can position them to capture new, emerging markets. Others, such as meeting regulatory requirements, can be costly and time consuming and may or may not add value to the products and services.

Current challenges can be grouped into three major areas with specific challenges in each area:

- *Growth/innovation*: To improve the customer experience, optimize the value net, globalize the business, drive product differentiation, and drive organization change;
- *Productivity*: To improve quality and reduce warranty, meet regulatory requirements, increase employee productivity, leverage information insights, and increase business flexibility;
- *IT/business resilience*: To optimize the IT environment, enhance business resilience and security, and manage risk and compliance. An automotive company's ability to analyze and respond to these challenges without losing sight of its strategic priorities will have a significant impact on its success in this industry.

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## **MONEY LAUNDERING THROUGH OFFSHORE AREAS**

**ROXANA ISPAS** \*

**ABSTRACT:** *In the present study we have started from the premise that from the analysis of the "money laundering", the money resulted from this is circulating in the whole world, through some geographical and institutional channels. Starting from the characteristics of "tax haven", we have made a parallel between it and the financial paradise. In the second part of the work we have explored offshore areas, adding the methods for placement of revenue in those countries and the necessary conclusions.*

**KEY WORDS:** *shadow economy, illegal economy, the legal economy, the latent economy, evasion from payment of taxes, manual labour, the fiscal method, criminal business, money-laundering, legalization of the means acquired in the illegal way, investment of money resources, stratification of money resources, integration of money resources, the prevention of shadow economy and money-laundering, fight against money-laundering*

If we look at the phenomenon of money laundering, there results that whatever the criminal nature of the source of origin, the "dirty" money move through certain geographical and institutional channels worldwide open to crime. Clearly there are privileged areas in this financial universe, where large transactions can be performed without any possibility of control. Using banks, the criminal appeals most times to those located in the so-called "tax havens". In a strict sense, almost every country in the world can be considered a tax haven because, in one form or another, the companies and the foreign individuals are given various incentives to encourage investment and promote the economic growth. The term "tax haven" is often incorrectly used.

To describe a country in this regard, the term financial secrecy jurisdiction should be used. A certain degree of financial and banking secrecy is characteristic of all the states. Almost all the states require a certain level of protection for banking and commercial information, but most of them will not preserve this information in case of an investigation conducted by statutory bodies from a foreign country. A banking and financial secrecy jurisdiction will almost always refuse the violation of its own laws on

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banking secrecy, even when it could be about a serious violation of the laws of a country.

The following are considered tax havens: Panama, Cayman Islands, and The Commonwealth of the Bahamas, Bermuda, The Channel Island, The Island of Man, Liechtenstein, Montserrat, and The Netherlands Antilles<sup>1</sup>.

Gheorghe Nistoreanu and Costica Paun add to the tax havens Singapore, Hong Kong and Switzerland<sup>2</sup>. The major financial scandals emerged in recent years are marked by the same feature:

- the criminal formations take full advantage of all the facilities offered by financial havens and offshore banking centres (outside the country of residence) to launder illicit profits, something which impedes the criminal investigation in this area;
- the emergence of tax havens has been determined in some cases by the lack of internal resources, which has been compensated by the state by providing tax incentives to companies and financial institutions in order for them to establish their headquarters in that country.

Thus, it has come to a situation where almost half of the global financial flows are developed through offshore channels: banks, insurance companies, mutual funds, foundations and holdings<sup>3</sup>.

An ideal financial haven has the following features:

- there are no arrangements to exchange information with other countries; international corporations can be created with minimum formalities;
- providing bank secrecy for these corporations;
- very harsh laws for the breach of bank secrecy;
- a highly developed tourist activity which may justify cash inflows;
- use a universal currency, preferably U.S. dollars, as the local currency;
- a government relatively invulnerable to external pressures;
- a high degree of economic dependence in financial services;
- availability of modern communication systems (telephone cable, telex) that bind them to other countries;
- a favourable geographical location for business trips to rich neighbouring countries<sup>4</sup>.

Tax havens are ultimately an important component of organized crime. They are used for laundering money from a variety of illegal activities (drug trafficking, tax evasion, smuggling<sup>5</sup>).

The financial havens place at the disposal of the foreign investors a wide range of services, without being obligated to disclose the origin of the money, from international corporations registration and ending with banking operations that are not subjected to the authorities. Although bank secrecy and financial paradise are two

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<sup>1</sup> Voicu Costica, op. cit., p.171-173

<sup>2</sup> Nistoreanu Gheorghe, Paun Costica, op. cit., p.251

<sup>3</sup> Ciobanu Petrut, op. cit., p.41

<sup>4</sup> The Narcotics Police officer's Manual, Bucharest, Ministry of Internal Affairs, 1993, p.100

<sup>5</sup> Bujor Valeriu, Pop Octavian, op. cit., p.17-19

distinct concepts, they share the legitimate purposes and commercial reasons. At the same time, they offer unlimited protection to criminals willing to do business at any price. It should be added that the country is considered a tax haven by foreign companies and individuals who are offered incentives for their investments, but the local people will not perceive the state policy in the same way because the government levy taxes on personal income, taxes on imports and exports, taxes on inheritances and donations, taxes on property, etc.

Petruț Ciobanu<sup>6</sup> underlines within the financial havens the so-called “bank heavens”, i.e. those countries more interested in banking secrecy than tax reduction. These “bank heavens” are in fact countries with strong economic potential which provides various facilities for substantial capital contributions from other countries.

The characteristics of these tax havens are especially attractive to recyclers of funds because they provide a wall of secrecy on transactions, so that the owner of a company incorporated in the tax haven may not be associated with the flow of funds. Moreover, modern communications and banking systems of the countries that have tax havens allow the rapid movement of funds. All the types of corporations registered in the tax havens - generic companies, offshore banks, captive insurance companies, etc. - can be used to recycle the funds in all the stages of money laundering: placement, stratification and integration.

In Eastern Europe one of the most common schemes is the money laundering through offshore areas. For example, the illegal income is placed in an account of a bank. The depositor, concluding a fictitious loan agreement with an operator of the offshore area, transfers this money to the borrower’s account. The latter, in turn, concludes a loan agreement with a third operator. The assignment of claim is performed, the third party transferring the money in a bank, for example in Switzerland or Austria into the account of the “money launderer”.

The offshore territory is dedicated to international financial centres and to some banking transactions. Offshore areas are a powerful source that absorbs international organized crime, operating as a channel of capital exploitation in the country, money laundering and tax evasion. They have a dominant role in the laundering process, being widely used.

Offshore areas are characterized primarily by the absence of records relating to the de facto rulers of companies, the legislative prohibition on disclosure of information on these areas, their obvious reluctance to cooperate, on the grounds that in most areas the tax evasion is not an offence of money laundering. In some states, internal laws prohibit operations through the financial institutions in the offshore areas; in others the law does not prohibit such operations. In the states where the national currency is always subject to inflation, the legislature may establish limitations on the currency exchange in order to impede the achievement of its stronger currency. Offshore areas are usually the ones providing services for foreign currency conversion. In the states with a stable currency, the participation in offshore banking is usually allowed.

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<sup>6</sup> Ciobanu Petrut, op. cit., p.41

The distinctive feature of the offshore is the privacy. Moreover, most offshore areas do not recognize judgments of foreign courts. The placement of the revenues in these areas is carried out through various methods, such as:

- the physical transportation - illegally obtained currency may be placed in offshore areas through luggage, intermediaries, etc.;
- bank transfers;
- checks sent by mail or handed personally;
- trustworthy persons, the accountant - transferring money from the trust account, and then another person transfers it to the offshore area;
- telegraph services (Western Union, American Express, etc.) - can be made through transfers without requiring precise identification of the consignor and through the application of passwords the identity of the beneficiary can be avoided.

Once arrived in the offshore areas, the revenues are layered and are to be subjected to reinstatement.

The most common methods for replacing the income in the country of origin are<sup>7</sup>:

- *fictitious loans* - fictitious corporations can open bank accounts abroad, and then the checks are sent by post to the original state as fictitious credits from these companies;
- *fictitious investors* - illegal business is organized in the state of origin and fictitious investors usually located abroad are used for capital granting;
- *fees* - are paid for finding investors for the pursuit of business, negotiations for the purchase of buildings etc.;
- *checks and transfers; physical transfer.*

These methods can be applied both separately and in aggregation. At the same time, other methods can be highlighted, such as:

- customers presented by a subsidiary, branch or other foreign bank, established in the country where the manufacturing activity or the drug trafficking is an important component of the economy;
- the use of letters of credit or other financial methods to transfer money to countries that do not meet the customer's usual business;
- customers that carry out large and systematic transactions, including electronic transfer, which can not be clearly identified as good faith or customers receiving large and systematic payments from countries that are normally associated with the production, processing and manufacturing drugs, with terrorist organizations prescribed "tax havens", the composition of large balances that do not meet the normal turnover of the client and subsequent transfers to accounts held abroad;
- unexplained electronic transfers of funds on an inner or outer basis or without passing through an account;

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<sup>7</sup> Mutu, Maria, Off-shore - between Legal and Illegal // National Law Magazine, no.7/2003, p.36-37

- frequent requests for issuing travelling checks, foreign currency drafts or other negotiable instruments;
- payment frequency of the travelling checks and other negotiable instruments, especially if they come from abroad.

The countries, the territories, the cities or the areas with typical features of financial havens are<sup>8</sup>:

- *Europe*: Andorra, Cyprus, Gibraltar, Isle of Man, Channel Islands, Liechtenstein, Luxembourg, Malta, Monaco;
- *Asia and Pacific*: Cook Islands, Hong Kong, Macao, Marshall Islands, Nauru, Samoa, Singapore, Bahrain, Lebanon;
- *Africa*: Liberia, Mauritius, Seychelles;
- *Caribbean Sea and Central America*: Antigua, Bahamas, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Costa Rica, Panama.

We will make a short presentation of the most representative tax havens as they are catalogued by a UN report from 1999<sup>9</sup>.

*Panama* quickly became an important international tax haven and banking centre. By adopting a very least demanding law on corporate establishment in recent years more corporations have been established in Panama (about 50,000) than all other tax havens in the Caribbean / Central America together. Except for an annual fee of \$ 100 there is no tax on foreign entities, no requirement to declare income and no supervision by the government. There is no minimum requirement on capital invested, no requirement to maintain records and no stipulation on the frequency and scheduling corporation appointments, as there is no need to indicate the location of any corporate records that someone may keep. To these, a banking law which allows numbered and coded bank accounts is added<sup>10</sup>. According to several experts in tax planning and consulting, offering advice on selection and use of tax havens, bank and corporate secrecy laws in Panama make it an ideal haven.

*The Bahamas Islands* form an independent British colony located in the Caribbean Sea about 30 minutes flight from the U.S. east coast. In the Bahamas there are over 350 different banks, including most of the major banks around the world. About 95% of the total volume of financial transactions that take place here is related to international transactions for foreigners. Bank accounts are easily opened and can be created even by post.

There are no constraints on the currency or the currency exchange for the foreign funds that can be transferred easily to and from the country<sup>11</sup>. The bank secrecy is strictly applied by banks and governments that depend on them.

*Liechtenstein* is an independent country located between Switzerland and Austria. The bank secrecy is applied more strictly than the one in Switzerland. Until recently trusts could be set up to protect the assets. Unlike most trusts, Liechtenstein's

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<sup>8</sup> United Nations Organization Report / Synthesis Documentation no.1/2000, Bucharest, Ministry of Internal Affairs, 2000, p.57

<sup>9</sup> Ibid

<sup>10</sup> Floricel Constantin, International Financial-Monetary Relations and Techniques, Bucharest, Didactica si Pedagogica Publishing House R.A., 1995, p.186

<sup>11</sup> Floricel Constantin, op. cit., p.187

"Anstalt" is a trade body able to perform various activities, which can ensure the person who transfers his ownership of assets to the trust the revocability of the transfer. Most experts<sup>12</sup> consider Liechtenstein and Switzerland interchangeable in terms of tax havens.

But it is acknowledged the fact that corporate traditions of secrecy in Liechtenstein provide probably the superiority of Swiss banking. Sophisticated foreign investors have created a financial nightmare by using secret bank accounts in Switzerland, on behalf of the corporations incorporated in Liechtenstein.

While some small states have certainly attracted the "dirty money", the defiant attempt to attract illegal profits was initiated by the *Seychelles*, which, in the '90s, recorded an economic growth by unconditionally offering citizenship to all those who deposited at least 10 million dollars in the banks of these islands. Under the pressure from the United States and other members of the international community, the Seychelles gave up selling its sovereignty.

One of the tax havens criticized for the lack of any discrimination related to its customers is *Antigua*. In 1996, an American Senate report commented that nobody drew more "dirty" money than Antigua, with a banking industry lacking regulations, which did not apply the reporting requirements, but penalized the disclosure of bank secrecy. The number of banks in Antigua increased by 75% in 1995, any person having a capital of \$ 1 million could open a bank, and many of them were nothing more than a simple room with a fax<sup>13</sup>.

The authorities in Antigua tried to downplay the European Union Bank when the bank managers 'disappeared' with the amount of 8 million U.S. dollars, suggesting that they had taken steps to prevent the occurrence of such situations. However, they failed to explain convincingly how a country with a population of about 70,000 inhabitants could ensure adequate supervision of the many existing institutions and financial services on the island.

Until there will be such a capacity, the changes in Antigua will be purely cosmetic. A clear example of how bank secrecy laws encourage this practice is the rule whereby an officer, director, shareholder, agent or attorney of a bank may provide information relating to the affairs of a client only when there is a written order of the court Justice of Antigua. What is quite interesting is that this order may be issued only in connection with a proven offence.

*Bermuda* is another tax haven - a former British colony, with long traditions of international financial centre. It boasts with a large community of professionals in the financial business (lawyers, accountants, bankers, insurance agents), with experience in the field of relations with foreign investors. The Bermuda's financial system is old, stable and respected throughout the world and the telecommunications network is modern and efficient. The Group of Bermuda Islands is located just 350 miles off North Carolina, and enjoys good air links with the United States and Europe. Here there is no control over the foreign exchange and any amount of money can be placed or removed from the country. The Banks of Bermuda offer a wide variety of accounts

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<sup>12</sup> See: Voicu, Costica, op. cit., p. 180; Popa, Stefan, Cucu, Adrian, op. cit., p.53, etc.

<sup>13</sup> Information and Documentation Bulletin, no.4/2000, Bucharest, Ministry of Internal Affairs Publishing House, 2000, p.24

and services (current accounts, savings, trust and custody, trust accounts, investment management, brokerage services, enforcement services, management and corporate administration, management of real estate properties and real estate credit services).

There is no code of laws governing banking secrecy. But the existing bank secrecy acts as a consequence of the British common law, which is strictly observed by the banking community.

Banks in Bermuda are somewhat restrictive in terms of acceptance of new customers, at least compared to other tax havens in the Caribbean basin. In general, they prefer that new clients are recommended by a professional community member (not necessarily local professionals). However, with bank references and proper identity documents, anyone can open an account in his/her own name. Bermuda law allows the easy creation and operation of the so-called captive insurance companies.

It is interesting to note that in Bermuda there are only four banks (The Bank of Bermuda, the National Bank, Bermuda Provident Bank and The Bank of NT Butterfield and Son) and two major firms of lawyers who handle all or almost all financial transactions on the island. All these entities have their headquarters in the capital city.

*The Channel Islands* are a group of islands located in the Channel between Britain and France. They form an independent country and govern. Because of their unique position in relation to UK and EU, they have become an important offshore banking centre for customers in Europe and worldwide. Many major international banks have branches here. Only two of the eight islands are on the list of tax havens: Jersey and Guernsey.

Bank accounts are easily opened, personally, by proxy or by post. For foreigners there are no monetary or currency exchange restrictions. The telecommunication installations of the islands are absolutely modern, but all air routes to the islands should pass through London or Paris.

*Isle of Man* is a small island (227 square miles), situated in the Irish Sea between Great Britain and Ireland, under British possession, which enjoys a high degree of autonomy which allows it to operate as tax haven. There is no monetary control and, like any other tax haven, the telecommunications equipment and capabilities of the Isle of Man are excellent.

Air traffic is conducted by England and Ireland. Like Bermuda, the Isle of Man law is particularly interesting for the establishment and operation of captive insurance companies. On the island there are 45 different banks. By contrast, a recent report states that there is only one hotel which offers rooms with private bathrooms. The purchase of corporations in the Isle of Man (Man) is easy and cheap and, thus, is a means often used only for opening accounts elsewhere in the world, in the name of a company offered by the corporation from Man.

*Cayman Islands* (Grand Cayman, Little Cayman and Cayman Brac) are located south of Cuba and are served by several major airlines that offer systematic voyages from Miami, Houston and other cities in the United States whose number is rapidly growing. The main activity on the island of Grand Cayman is the international banking activity, the island having approx. a bank for every 30 inhabitants. The image of Cayman as a "tax haven" state is vigorously promoted by governments and private

economic sector. The legislation and the regulations in force have been deliberately designed to ensure and enhance the country's financial and corporate reputation. The law of banks and trusts and the law of confidential relations are among the most severe and restrictive in the world. Not only that disclosure is a crime, but the request for information is against the law.

Cayman has all the other feature of a successful tax haven, including: a superior telecommunications system, no currency or foreign exchange restrictions, representation of all major international banks and local specialists in international tax. Cayman boasts, also, with its specialized trusts in the establishment and administration of foreign corporations. In 1992, 2930 new corporations were constituted in the Cayman Islands, bringing to 16,712 the number of existing corporations, while the Cayman Islands population amounts to 17,000 people.

*Montserrat* is an island with an area of 40 square miles located in the Leeward archipelago, situated in the eastern Caribbean, about 250 miles from Puerto Rico. It is a self-governing British colony. While the telecommunications system is modern, there are no direct air flights to the United States, thus, links with the neighbouring islands are necessary. The main activity of the tax haven of Montserrat is financial of the Class B banks, which are very easy to open and to keep secret due to local banking laws, carefully prepared for this purpose. Although there are superficial rules in monetary and foreign exchange field, their application is very vague, if not ignored, so that import or export of funds is made easy.

Some promoters / experts in tax havens have complained of the relatively higher cost of Class B banks established in Montserrat, a situation which is due at least in part to the new fees recently introduced by the government. Another complaint concerns the presence of only two major Class A banks in the island (Barclays Bank International and Royal Bank of Canada). In May 1984, Montserrat revoked the operating licenses of 22 banks of class B. This decision was considered to be the result of non-payment of the license fee, following the recent increase imposed by the government. In all probability, the same banks have moved elsewhere.

*The Netherlands Antilles* stretch along the Caribbean Sea, with two groups of three islands each, placed at a great distance between them (St. Martin, St. Eustatus and Saba), located about 50 miles east of Puerto Rico (Curacao, Aruba and Bonaire) and about 50 miles off the coast of Venezuela. The Netherlands Antilles is a Member State/partner of the Kingdom of the Netherlands (together with the Netherlands and Suriname), but exercises full autonomy in the internal affairs of the state.

More important as tax havens are Curacao, where the capital of the Netherlands Antilles is located, Willemstad and St. Martin, half being under French possession. For many years, the Netherlands Antilles enjoyed an advantage over other financial secrecy jurisdictions, due to an old tax treaty concluded by the Netherlands with the United States and the United Kingdom. Simply put, this treaty provides that corporations in the Netherlands Antilles, which have investments in the United States are either tax exempt or pay lower taxes than those imposed on profits earned by the companies of other countries.

This preference explains the dominance of corporations in the Netherlands Antilles (2544 new companies were created in 1983), which own real estates and other



assets or investments generating profits in the United States. This also explains why a corporation NV (Naamzloe Vennootshappen, the name of the insurance company with limited liability of the Netherlands Antilles) is usually part of a well-thought plan of tax evasion in a tax haven.

Agreements resulting from the recent negotiations between the United States and the Netherlands Antilles on the treaty will effectively put an end to the position of advantage gained through the Treaty by the Netherlands Antilles. The Netherlands Antilles offers modern and efficient services of telex, telephone and mail, a large network of international banks and direct air flights to New York and Miami. A wide variety of entities can be created with lower costs within a short time (2-4 weeks).

Corporate Confidentiality is ensured by applying the Dutch civil law system and the use of "bearer shares" in case of corporate ownership. Bank secrecy is strictly observed even in the absence of specific legislation in this area. Exemptions from any monetary and foreign exchange restrictions are normally granted to any corporation set up by foreigners. Like their great rival, the Cayman Islands, the Netherlands Antilles has developed laws and regulations to attract investors in the market of tax havens because the position obtained through the Treaty has provided a significant sector of this market.

*Switzerland* is not a "tax haven". Although the words "bank account in Switzerland" have become synonymous with "secret bank account" and although Switzerland is undoubtedly the most stable, secure and picturesque place to keep the money in secret, the fact is that it is not a "tax haven". The taxes for the Swiss people are high and the taxes on the income earned by foreigners in Switzerland amounts to 35%.

Of course, through the Swiss banks arrangements for investment abroad can be made to avoid the high taxes in Switzerland, such profits are transferred again in safe Swiss bank accounts.

Swiss banks offer an incredible range of services in addition to the regular banking services, including that of acting as agents of brokerage, traders in precious metals, investment managers and even travel agents for their clients. Banking secrecy and all commercial or economic transactions are a normal state of affairs in Switzerland. Laws relating to banking are part of the country's constitution and are taken very seriously.

Swiss make every effort to ensure the confidentiality of their customers' banking operations, down to the use of envelopes without heading; mailbox addresses that change frequently, personal messaging and sending the mail from France, Italy or Germany to foreign customers, to avoid the Swiss postmark.

Although the Swiss corporate law provides sufficient privacy to meet the needs of any foreign investor, there are too many other cheaper, more accessible and quicker places to set up corporations. Recently, by applying a mutual assistance US-Swiss treaty, the investigators who have worked using the appropriate channels of the Ministry of Justice and the State Department have been able to acquire data and documentation on accounts in Switzerland of American criminals.

The Swiss themselves feel disappointed and embarrassed by the abuses committed by foreign criminals through their banking system. They fear the potential

threat posed on the integrity of the system by the millions of dollars of "easy money", which might tempt the employees, otherwise reliable, from the Swiss banking network.

In May 1984, a national referendum was held which proposed mitigation bank secrecy to allow the foreign law enforcement officials the access to documents related to foreign offenders. The referendum was not approved, but the mere fact that such a proposal was made and put to vote was a step forward to the right direction.

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## **DEVELOPMENT OF PRIVATELY MANAGED PENSION FUNDS IN THE CONTEXT OF PENSION REFORM**

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**ABSTRACT:** *The development of privately managed funded pension provision reflects some trends in societies, like for instance richer societies which might favour more responsibility and choice for individuals, or the expectation that diversifying risks through funded pension might achieve higher returns than GDP growth, while it also means inevitably higher risks. With the development of privately managed funded pensions, the question of the sharing and regulation of risks becomes relevant due to the fact that such schemes may also be expected to provide pension adequacy for lower income groups.*

**KEYWORDS:** *private funded pensions; pensions reform; pensions schemes; mandatory private pension; voluntary private pension*

### **1. INTRODUCTION**

The role and development of private funded pension provision is very diverse and some important decisions remain to be made, notably regarding the organization of the pay-out phase.

Further analysis appears necessary, on the basis of indicators, to assess the impact of the development of these schemes on future pension levels. In particular in the later two types of schemes private provision (be it mandatory or not) need to be analyzed in terms of coverage and amount of contribution to better understand the impact on adequacy and indirectly on sustainability. Moreover financial risks and security might also impact on future benefits. Coverage might be less of an issue in mandatory schemes but this also need to be analyzed in a context of evolving labour markets and changing societal risks leading to longer periods of non-contribution to pension schemes.

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Such reforms need to develop a comprehensive approach covering all types of pension schemes, since the ageing challenge is common to all pension systems: all pension systems need to compensate for the decline in employment of older workers and the continuous increase in life expectancy. Pay as you go systems are directly affected by population ageing as their future contribution base is shrinking while the number of beneficiaries is increasing. In funded systems, the increase in life expectancy also implies some imbalance: if contributions are not increased and/or people do not retire later, benefits would also be lower.

Further analysis appears necessary, on the basis of indicators, to assess the impact of the development of these schemes on future pension levels. In particular in the later two types of schemes private provision (be it mandatory or not) need to be analyzed in terms of coverage and amount of contribution to better understand the impact on adequacy and indirectly on sustainability. Moreover financial risks and security might also impact on future benefits. Coverage might be less of an issue in mandatory schemes but this also need to be analyzed in a context of evolving labour markets and changing societal risks leading to longer periods of non-contribution to pension schemes.

## 2. THE IMPACT OF THE MANDATORY PRIVATE PENSIONS DEVELOPMENT

Financial security upon retirement can be supported through diversification of obtaining pensions, a pension scheme that is based on several components. Reform of pension system in Romania allowed besides the public pension system, called Pillar I, which is a distributive system based on solidarity between generations (regulated by Law 19/2000 on public pension system and other social insurance rights, with subsequent amendments and supplements) to implement a private pension system that records the contributions of participants in individual accounts, based on capitalization, investment and accumulation of these contributions. Private pension system is implemented in two forms:

- mandatory private pension (pillar II) regulated by Law 411/2004 on privately managed pensions, as republished;
- voluntary private pension (pillar III) regulated by Law 204/2006 on voluntary pensions.

**Table 1. Characteristics of pensions types in Romania**

Pension type	Contribution type	Type of fund management	Age of persons participating in the system
Public pension (Pillar I)	Compulsory	Public	All employees aged over 45 years old, and optionally those aged between 35 and 45 years old
Mandatory private pension (Pillar II)	Compulsory	Private	All employees aged under 35 years old and optional ones aged between 35 and 45 years old
Voluntary private pension (Pillar III)	Voluntary	Private	Employees aged up to 60 years old

In May 2009, 4,325,094 participants contributed to private pension funds and the number of participants enrolled in the Registry of participants was 4,752,942 persons (table no. 2). The number of participants increased in May 2009 by 0.8% from the previous month and 35.4% compared to May 2008, representing 86% of the total employees in Romania. Degree of concentration retains the same values recorded in previous months, the weights of the first three privately managed pension funds -69% of participants and funds within the first 5 - 82% (figure 1).

**Table 2. Pillar II Number of participants enrolled in the Registry of participants**

Mandatory private pension fund	31.05. 2008	31.12. 2008	31.01. 2009	28.02. 2009	31.03. 2009	30.04. 2009	31.05. 2009
AIG	261,47	282,54	285,12	288,65	291,70	293,93	295,22
ARIPI	389,95	427,16	431,88	438,07	443,37	447,05	449,59
AZT VIITORUL TAU	1.065,87	1.158,21	1.170,68	1.185,62	1.199,06	1.208,81	1.213,56
BCR	124,17	145,03	148,12	151,14	153,68	155,93	157,59
BRD	99,32	107,41	108,46	109,78	110,98	111,87	112,42
EUREKO	264,33	287,04	289,87	293,10	296,23	298,48	299,46
ING	1.380,56	1.504,29	1.520,21	1.541,66	1.558,86	1.571,17	1.578,84
KD	7,58	8,11	8,19	8,26	8,35	8,41	8,28
OTP	20,61	22,12	22,33	22,52	22,75	22,92	22,83
PENSIA VIVA	306,20	332,53	335,84	339,88	343,71	346,42	347,61
PRIMA PENSIE	17,42	20,69	21,04	21,33	21,62	21,81	22,04
VITAL	131,60	141,99	143,37	145,20	146,76	147,89	148,93
<b>TOTAL</b>	<b>4.156,32</b>	<b>4.531,86</b>	<b>4.580,79</b>	<b>4.642,00</b>	<b>4.693,93</b>	<b>4.731,54</b>	<b>4.752,94</b>

Net assets of the 14 pension funds, administered by the 14 directors authorized by CSSPP in Pillar II, was in May 1.437.225.124 Lei, 8% higher than April 2009 and approximately 17 times higher than May 2008.

Also regarding the net assets, the degree of concentration was maintained in May 2009, top three funds have recorded 70% of the total, and the top five funds 84%.

In May 2009, transferred contributions worth about 113 million lei to 3.413 million participants. In these months contributions were transferred to 28% of total participants in the Registry of participants. Maintaining the last year and the first months of this year trend, the number of empty accounts in Pillar II continued to decline in May representing 9% of total registered participants accounts.

Average contribution / participant were in May 2009, as the previous months, 26 lei. If we relate to the number of participants for which contributions were paid in May 2009 average contribution was 33 RON, which represented approximately 1.72% of gross wages in March 2009.

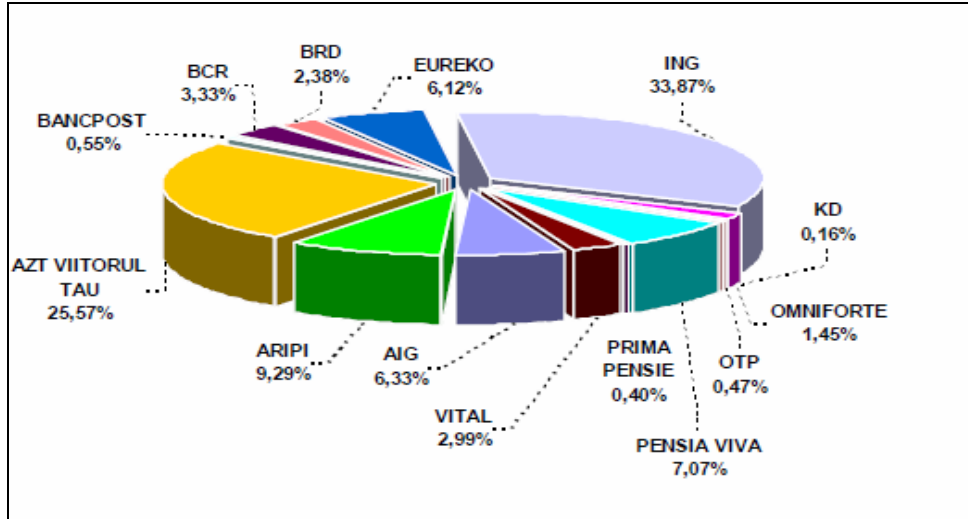


Figure 1. Pillar II Participants % of total-May 2009

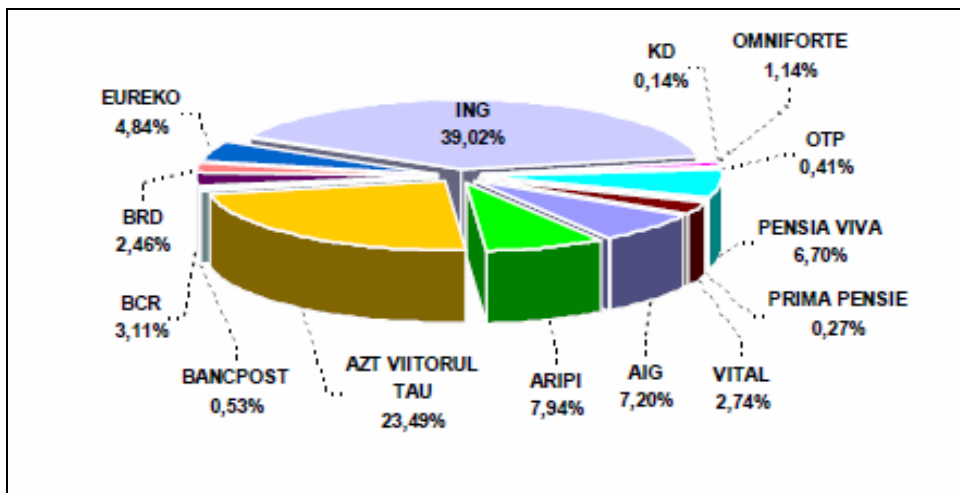


Figure 2. Pillar II % of total net assets-May 2009

In May, of all participants registered in the Register of Participants - 4,752,942 people, 64% were aged up to 35 years and 36% aged over 35 years old (table 3). Regarding the gender structure, 52% of the participants were male and 48% female, in both cases, gender and age, maintaining the values recorded in previous months (table 4).

Contribution to private pension funds, currently 2%, is deducted from monthly gross income, which represents the basis for individual social security contribution.

During May 2009, private pension fund managers continued to invest mainly in low-risk assets, as in 2008 and the first months of 2009. Thus, 53.39% of the assets

of privately managed pension funds were government securities, in constant decline over the previous months.

**Table 3. Pillar II Participants in the register-age structure-May 2009**

Mandatory private pension fund	31.05.08		31.12.08		31.01.09		31.05.09	
	until 35 years	over 35 years	until 35 years	over 35 years	until 35 years	over 35 years	until 35 years	over 35 years
AIG	162,33	99,14	177,18	105,36	178,83	106,28	184,94	110,28
ARIPI	201,48	104,72	281,75	145,42	284,89	146,99	295,97	153,62
AZT VIITORUL TAU	691,11	374,76	753,96	404,25	761,39	409,29	783,35	430,20
BCR	13,92	9,72	86,93	58,10	89,00	59,12	94,68	62,91
BRD	62,29	37,03	67,92	39,50	68,59	39,87	71,04	41,38
EUREKO	255,31	134,64	187,56	99,48	189,47	100,40	195,66	103,80
ING	86,31	45,29	966,68	537,61	974,97	545,25	1.000,37	578,47
KD	171,15	93,17	5,13	2,98	5,19	3,00	5,26	3,02
OTP	4,75	2,83	14,21	7,91	14,36	7,97	14,67	8,16
PENSIA VIVA	40,44	23,17	220,76	111,77	222,99	112,86	230,46	117,15
PRIMA PENSIE	13,12	7,49	13,59	7,10	13,85	7,19	14,48	7,55
VITAL	11,21	6,20	93,74	48,25	94,64	48,73	97,93	51,00
<b>TOTAL</b>	<b>2.683,42</b>	<b>1.472,90</b>	<b>2.929,04</b>	<b>1.602,82</b>	<b>2.958,45</b>	<b>1.622,34</b>	<b>3.048,96</b>	<b>1.703,99</b>

**Table 4. Pillar II Participants in the register-gender structure-May 2009**

Mandatory private pension fund	31.05.08		31.12.08		31.01.09		31.05.09	
	Female	Male	Female	Male	Female	Male	Female	Male
AIG	128,80	132,67	137,48	145,06	138,63	146,49	143,63	151,59
ARIPI	186,61	203,35	202,41	224,75	204,58	227,30	213,24	236,36
AZT VIITORUL TAU	515,78	550,09	554,46	603,75	560,13	610,55	581,21	632,35
BCR	58,60	65,56	67,97	77,06	69,46	78,66	74,17	83,42
BRD	46,72	52,60	50,06	57,35	50,54	57,91	52,52	59,90
EUREKO	126,78	137,55	136,12	150,92	137,38	152,48	142,08	157,39
ING	701,46	679,10	754,09	750,20	761,36	758,85	790,73	788,12
KD	3,43	4,15	3,63	4,48	3,66	4,52	3,70	4,58
OTP	9,30	11,30	9,92	12,20	10,01	12,32	10,29	12,54
PENSIA VIVA	148,89	157,31	159,73	172,79	161,21	174,63	166,85	180,76
PRIMA PENSIE	8,01	9,40	9,63	11,06	9,79	11,25	10,30	11,74
VITAL	61,89	69,71	66,18	75,81	66,82	76,56	69,55	79,38
<b>TOTAL</b>	<b>2.037,88</b>	<b>2.118,43</b>	<b>2.196,37</b>	<b>2.335,49</b>	<b>2.218,69</b>	<b>2.362,09</b>	<b>2.303,82</b>	<b>2.449,13</b>

In May 2009, approximately 73.7% of the assets of privately managed pension funds were placed in the country, and the remaining approximately 26.7% were foreign investments.

### 3. CONCLUSIONS

The role and development of private funded pension provision is very diverse and some important decisions remain to be made, notably regarding the organization of the pay-out phase.

Pensions' reforms need to develop a comprehensive approach covering all types of pension schemes, since the ageing challenge is common to all pension systems: all pension systems need to compensate for the decline in employment of older workers and the continuous increase in life expectancy. Pay as you go systems are directly affected by population ageing as their future contribution base is shrinking while the number of beneficiaries is increasing. In funded systems, the increase in life expectancy also implies some imbalance: if contributions are not increased and/or people do not retire later, benefits would also be lower.

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## **FORMAL FINANCIAL SERVICES FOR RURAL SMALL SAVERS: A CASE STUDY OF ORISSA, INDIA**

**JYOTIRMAYEE KAR, PRAFULLA K. DASH \***

**ABSTRACT:** *Preference of the small savers varies across the markets. Yet, generally they opt for easily accessible and security of funds. Informal financial services appear to be much ahead the formal ones both in terms of accessibility and security in catering to the needs of the rural small savers. What constrains them in going for formal small saving? Some issues are examined in this article.*

**KEY WORDS:** *financial services, rural India, rural savers*

### **1. INTRODUCTION**

Rural India is a paradox. This encompasses a total population of 740 million, inhabiting in 7,000,000 villages, in a variety of regions and consumer groups. There are a vast number of villages that are rapidly being engulfed via sub-urbanization, with a sizeable proportion of the rural population engaged in non-agricultural activities. With the advent of technological development, a large number of villages are reaping the fruits of an agricultural revolution, through improved methods of cultivation and diversified farming practices, and as a result are experiencing near urban income level. On the other hand, there are also thousands of villages that still remain inaccessible, without electricity or basic sanitation facilities, where the population enjoy no steady source of income and are regularly exposed to the perils of famine, flood or cyclone.

On the whole rural poverty in India has alerted the world. It is generally believed that rural India is poverty stricken. The ruralites, after meeting their subsistence are left with very little income to save. But records reveal that that rural saving to income ratio at 30 per cent is quite high, even higher than their urban counterparts. A study carried out by Forte, a research agency in India set up by the Dutch insurance and banking group, ING, reveals that rural awareness for some variety of saving and insurance schemes are quite high. Mostly, rural people go for life insurance as a means of long term saving to meet long term goals like purchasing land,

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consumer durables or for family functions like marriage of a daughter. In contrast their urban counterparts save in life insurance schemes for availing tax rebate. This contrast reveals that the rural people go for long term savings primarily for asset building or consumption expenditure. The first is for securing the future income risk while the second is a status symbol.

Status symbol is optional. But income risk is an unavoidable part of development. This may be resulted by external shocks like economic fluctuations and climatic change or internal, individual specific shocks like illness and cause severe hardship. Rural households are more vulnerable to these. They are exposed to a variety of risks like crop failure resulted by drought, flood and cyclone, death or illness of the livestock, policy shocks like fluctuating prices of agricultural produce, labour problem and land related issues.

Rural households adopt different type of strategies to avoid severe income and consumption shortfalls caused by risk. Asset building like purchase of land, draught animals and other livestock and cash in hand are the primary ones. Often they go for small savings. This article examines the constraints the households face in adopting these strategies and suggest policy framework to expand the ability of the households and communities to cope with severe income and consumption vulnerability caused by risk in the rural economy of India. It has taken a sample of rural households from Mayurbhanj, a tribal dominated district of Orissa to examine the issue. Present exercise contains eight major sections. After the introductory note the second section highlights savings in rural India. The third focuses on network of the formal financial institutions, especially banks, in India. The fourth section assesses whether formal financial institutions are averse to rural savers while the fifth one examines the response of the rural small savers to formal financial institutions. The sixth one contains an empirical study and the seventh part discusses findings of the same and comes up with certain policy suggestions based on that. The last one is the conclusion.

## **2. SAVINGS IN RURAL INDIA**

Nearly 70 per cent of the ruralites are able to save, but more than 50 per cent save in the form of assets like land, livestock or utensils. In many poor countries poor people value savings so much that they are willing to pay to save. Roving deposit collectors in many countries charge a fee to accept cash from the clients- typically 6 per cent of the average money balances. (CGAP, Portfolio, 12/2007)

Financial services to the poor have always remained supply driven, rather, credit driven. Savings has always played a second fiddle. The beginning was the agricultural credit. The image of the poor was small and marginal farmers and they were given soft loans. Then came the era of micro-enterprises and view of the poor was changed to women entrepreneurs who were given large sums of working capital in groups with joint liability of repayment. But it remains unclear how well formal financial institutions cater to the needs of the poor. So far as saving is concerned, these institutions have a perception that poor do not save. This may be inferred from the low prevalence of saving mechanisms like accounts in the financial institutions and because demand data for saving remains highly suppressed. The most compelling evidence of

demand for saving services comes from the prevalence of deposit collectors to whom clients regularly pay some premium to hold their money. Just as the existence of a moneylender reflects demand for credit among the poor, widespread use of informal saving services and physical assets signal demand for formal savings mechanism. However, this demand could be tapped only when the formal service providers can offer the clients a more attractive value propositions than they can obtain informally.

SHG movement in India has been harnessing the ability of the poor to save. Yet they have not succeeded in catering to the saving needs of the poor. In a survey of SHGs in the tribal dominated district of Mayurbhanj in Orissa, it was observed that the group members of SHGs prefer to contribute only the stipulated amount to the SHG fund. They are not willing to offer larger amount to be saved in the fund, firstly because all the members are not capable of doing so, and secondly, they doubt the ability of the team leaders to manage funds and felt that large unmanageable funds may lead to difference among the group members and ultimate break-up of the group. Therefore, demand for saving services continues to remain unheeded.

### **3. BANKING NETWORK IN INDIA**

Indian banking sector is gradually moving away from rural to the urban area. Over the last six to seven years rural bank branches have exhibited a declining trend. But this is not very disheartening. Even though branch networking has grown urban centric the few ones operating in the rural areas have been performing remarkably with magnifying volumes of business. Share of the rural bank branches which was nearly 50 per cent in June 2000 has come down to 44.60 per cent in 2006, with an absolute number of 32,709 and 30,754 in the respective years. This speaks of growing aversion of the banks towards rural set up and much against the dictates of the RBI they are closing down rural branches to move to the urban areas.

The actual scenario is somewhat different. There could be two possible explanations for this. Firstly, due to increased urbanization rural areas are being submerged in the urban township or being transformed into urban areas with diversified socio-economic scenario. Secondly, bank branches when located in areas with a population below 10,000 were categorized as rural branches. With increased immigration of workforce in response to the development needs, population volume is increasing in the rural areas and rural branches are being rechristened as urban ones.

Despite such branch shifting the banks are growing pro-ruralite. Credit deployment in the farm sector over a two year time of 2004-06 has increased from Rs 90,541 crore to Rs 1,72,292 crore, almost by 90 percent. But this does not speak of increased encompassing of the ruralites because branch networking as well as credit deployment is much less than the demand for the same. In a recent speech RBI Deputy Governor, Ms Usha Thorat, observed that, on an average, population served by a bank branch has increased from 13,711 persons in 1991 to 15,209 in 2001 and subsequently to 15,680 in 2005. In March 2007, each bank branch in India, on an average, was serving 15,900 persons and the figure in case of Orissa is 16,500 (Economic Survey of Orissa, 2007) While the branches in the rural areas have been serving 13,462 persons in 1991, 15,667 in 2001 and 16,650 in 2005, the figures for the urban branches are

14,484 in 1991, 14,137 in 2001 and 13,619 in 2005. This speaks of increased demand for bank branches in rural areas (Data Source: Business Line, an e-paper from Hindu group of Publications, May, 04, 2007).

The rural economy is prospering. With increased remittances from the urban dwellers and shift of agriculture from subsistence crops to cash crops and commercial crops like horticulture and floriculture, savings from rural India has escalated by 30 per cent over these years. Booming economic activities has also attracted private sector banks as well as non-banking financial companies. They have eyed the rural economy to mobilize savings and strengthen their capital base.

#### **4. ARE FORMAL FINANCIAL INSTITUTIONS AVERSE TO RURAL SAVERS?**

Saving Assessments conducted by the Consultative Group to Assist the Poor (CGAP) has probed the problems faced by the formal financial institutions in extending saving services to the rural poor. These features are more or less prevalent world wide. Firstly, saving programmes need a more sophisticated managerial acumen than credit services. Mobilization of saving requires more capable staff and a well knitted system. These inputs often increase the cost of the saving services as an efficient management demands higher remuneration. No doubt, supervision of small funds may pose a problem. Formal institutions could go beyond the existing norms and design supervision accordingly. Extension of financial services at a lower cost could be achieved by opening up branches in grocery stores, medicine stores or even with grain dealers. Such a step has been successful in Mexico and Philippines.

Secondly, formal financial institutions often face the problem of excess liquidity. This makes them disinterested for mobilizing savings, especially poor people's saving which is short term, unstable and costly. In Orissa credit-deposit ratio is very low (64 on March 2007), in comparison to the all-India average (75). This is caused by lack of suitable lending opportunities which also causes excess funds with the Micro-Finance Institutions. Less developed countries like Uganda also experience such problems (CGAP Survey).

In the third case, formal financial bodies, when in need, are able to get funds from the apex bodies like the RBI. Resource crunch is met by borrowing from other source which is more convenient. These funds crowd out deposits, more so from the poor depositors. Another important limitation which restricts saving mobilization is the payment system. The formal institutions often lack accessible locations to extend payment services and accept deposits. Practice of swiping cards in machines installed in retail shops and access to banking services like deposits and withdrawal has been successful in many countries (Ivatury, 2006).

It has also been observed that banking regulations that necessitate expensive infrastructure requirement discourage rural branch networking. This increased cost limits operation of the units in the rural areas. Moreover, the worldwide effort to combat money laundering and financing terrorism are making small transactions unviable for the financial institutions (Isern et al, 2005). Public private partnership, which could broaden outreach of the banks is severely restricted and regulated under

the coverage of safety. In the Indian financial system there is no institution which concentrates on acceptance of deposits only. When two jobs, deposit mobilization and credit supply are to be taken up by the same institution, the former gets marginalized.

## **5. ARE RURAL SMALL SAVERS AVERSE TO FORMAL FINANCIAL INSTITUTIONS?**

Preference of the small savers varies across the markets. Yet, generally they opt for easily accessible and secured of funds. Accessibility can be two dimensional: physical accessibility or proximity and financial accessibility or affordability. In this sense affordability also reflects liquidity.

If a bank branch is located within five kilometers of a saver's residence it is said to be close proximity. On an average, in 2007, there are 0.015 bank branches per square kilometre in the district of Mayurbhanj and for the state of Orissa the figure is 0.018. These branches comprise the totality of commercial banks, both public sector and private sector, cooperative, and regional rural banks. Moreover, each bank branch serves nearly 13457 persons in the state while the district figure is quite encouraging, 4182. This, however, is not surprising. This poverty stricken and tribal dominated district has large number of bank branches. A research finding has observed that in Philippines the correlation between the number of subsistence poor and the number of people per branch of deposit taking institutes in different groups across the regions was 0.68. In Mexico, the correlation between the number of people per branch and the level of marginalization across the states was 0.62 (CGAP Focus Note No 37, September, 2006). Across the districts of Orissa as well the correlation between percentage of poor people below the poverty line and the number of people served by a bank branch is 0.59. In proximity aspect informal sources of saving far out-compete the formal institutions. Small savers have found no substitute for saving at home like cash in earthen piggy banks or wooden box. They also prefer to keep cash with a relative or a well known villager. Saving in this form is always liquid. With easy access it carries no extra cost to the saver in terms of time or travel.

Affordability measures transaction cost of saving. This comprises travel cost plus wages sacrificed during the visit to a bank branch. Small savers pay some service fee to the deposit collector to hold their money or save the same in the bank. At times this amount converts the interest proceeds to around a negative 5 per cent. All these costs taken together make formal saving unaffordable by the poor, who ultimately opt for informal saving. This apart the threshold cost of deposit like the amount needed for opening an account, the minimum balance etc. are often much excess of what the poor can afford. A CGAP study reveals that the threshold cost decrease as branch density, i.e., number of branches per population increases. So widening the branch network could be a possible option. In the affordability aspect also small savers prefer low cost informal saving.

Informal saving is risky. There is loss due to fire, theft or other hazards. Money saved in the form of livestock or land may face value reduction. Formal banking is also not free of risk so far as bank failure or absconding of the depositor along with people's money is concerned. Studies have observed that informal saving is far riskier

than the formal ones (Wright and Mutesasira, 2002). Even though risky, informal saving outweighs formal saving. It is a common notion in behavioural finance that individuals underestimate familiar risks or those risks they perceive to be under control, while unfamiliar risks which are not perceived to be under their control are treated as high risks. Therefore, poor undermine the risks associated with cash at home, savings in the form of utensils or livestock, which they are well acquainted with since childhood. These risks seem to be less when compared with saving in an unknown institution with unfamiliar system. In this aspect also small savers prefer informal saving. 'Insecurity' in formal saving arises because of many instances. The much accepted 'Peerless' failed at one time. There are also instances where companies come up with a wide range of products, varying from utensils and decorative items to TV sets and motorbikes, collect savings from the people with the assurance that the product will be given to them when their saving will accumulate after 6 to 7 months. These agencies often fly by midnight and the small savers in rural areas, who are not very knowledgeable about banking practices, lose faith in the practice of deposit collection. True, this is deliberately malicious. The rural small savers are ignorant about the reputation of the FIs. Even if they know they find it difficult to access them. They are averse to the procedural delay and documentation involved in creating a savings account and withdrawing money from the same.

## **6. MODEL SPECIFICATION**

The small savers save to cope with future risk. Formal markets are not interested in insuring high risk small savers. The reasons are both theoretical as well as policy specific. Bell (1998) and Besley (1994, 1995) have investigated details of these reasons. Informal saving, in the form of assets, is readily responsive to high risk conditions. But a common adverse shock reduces the value and makes the terms of trade adverse for these. Secondly, lumpiness of assets restricts marketability, for which the poor cannot protect themselves easily against adverse shocks. Holding saving as cash in hand or with some trusted person are also not risk free. In this event small saving come up as self insurance and help in smoothening income in the advent of shock. Then what constrains them in going for formal small savings?

### **6.1. Data Specification**

A survey was conducted by the present researcher to assess the impact of microfinance on the economic position of the poor in Baripada. Data were also collected on saving along with credit position of the household. A sample of 200 households, comprising SHG members (62%) and non-members (38%) were included. It was observed that, on an average, the sample households were saving nearly 39 percent of their income. It was also observed that almost all the sample respondents were more interested in informal saving like, saving cash or in kind like livestock, utensils or land. The survey encompassed only female respondents as primarily, they are the members of SHG. They were asked about the family particulars and other details, enlisted in Table 1.

**Table 1. Mean Values for Demographic and Economic Characteristics of the Sample**

Sl No	Variables	SHG Members	Non-Members	Total
1	Total Annual Income (Rs)	43,000	36,000	41,000
	i. Primary Income (Rs)	34,000	33,000	33,050
	ii. Secondary Income (Rs)	9,000	3,000	7,250
2	Annual Saving (Rs)	18,000	15,500	16,700
3	Asset Position (Rs)	23,500	25,000	23,700
4	Indebtedness (Rs)	20,500	14,000	18,700
5	Dependents	6	5	4
6	Earners	3	3	3
7	Education (Years of Schooling)	9	9	9
8	Transaction Cost of Saving (per cent)	12	18	14

The sample households, on an average, had an annual income of Rs 41,000. Families with SHG membership were able to earn some more income from the productive activities undertaken by some of the SHGs but this income was highly fluctuating. Most of the sample households had agriculture as their primary occupation and their proportion with SHG membership was 65% and for non-members it is 70%. The rest were daily wage earners or small shop owners, mainly with family business. Almost all the sample households had some secondary occupation like working as wage earner or doing small businesses. But income from all these sources was highly fluctuating.

Dependency load is almost equal for both SHG members and non-members. This indicates that apart from him each earner has to support at least two more persons. Average education measured as years of schooling is equal for both the groups, 9 years. Asset position which has taken into account homestead land, agricultural land, livestock and other agricultural implements was marginally higher (Rs 25,000) for the non-members than for the SHG members (Rs 23,500). It was also observed that among the SHG members 32 per cent expressed their preference for formal saving while for the non-members the percentage was 24. When enquired about the reason, the members expressed distance, high transaction cost, and low accessibility to be the major reasons for not going for formal savings.

## 6.2. The Model

In formal institutional saving restraints, like high transaction cost, security of funds, and distance of the formal institutions etc., to be encountered are many. Low access and less perceived safety in formal saving make the small savers averse to formal saving and substitute informal saving for this. To test the hypothesis a saving model is build up. Transaction cost of saving incorporates all the three aspects: affordability, accessibility and safety. It also considers the interest earnings and payment to the deposit collector. Various socio-economic parameters along with transaction cost are taken as the independent variables. Amount of informal saving is regressed on these factors. Formal saving is not considered as very few respondents

had this. Compulsory contribution to SHG groups was also not included as these are equal for all. The model is:

$$S_i = \alpha + \beta_1 Y + \beta_2 A + \beta_3 \text{Edn} + \beta_4 \text{Indbt} + \beta_5 \text{E/D} + \beta_6 \text{Os} + \beta_7 \text{TC} + \varepsilon_1 \quad (1)$$

Details of the parameters are enlisted in Table 2.

**TABLE 2. Variables in the Study**

Sl No	Variables	Denotation	Definition
1	Income	Y	Annual Income
2	Asset	A	Family Investment plus Real Estate
3	Education	Edn	Highest Education in the household
4	Indebtedness	Indebt	Amount of Loan plus Interest
5	Dependent Earner Ratio	D /E	Number of dependents each earner has to support
6	Secondary Occupation	Os	Income from Secondary Occupation
7	Transaction cost of Deposit	TC	Amount spent for moving to the bank for a deposit

### 6.3. Empirical Results

Details of the regression results are given in Table 3.

**Table 3. Regression Coefficients with Saving as the Dependent Variable**

Variables	Model I (SHG)	Model II (Non-SHG)
Intercept	31.23	26.11
Income	48.31*	56.14*
Asset	36.33*	47.24*
Education	6.38	4.93
Indebtedness	8.94*	7.55*
Dependent Earner Ratio	- 6.57	-9.85
Secondary Occupation	9.54*	8.56
Transaction cost of Deposit	22.54*	17.93*
$\bar{R}^2$	0.78	0.82
Number of cases	124	76

\* stands for statistical significance maximum up to 10 per cent

In the sample survey income and asset possession bears positively significant correlation with informal saving. Education coefficient is not significant for saving by the sample household. A nationwide survey in Mexico revealed that the level of usage of informal instruments for saving decreases with increase in education and income level (Bolano, 2005). Present survey evidenced that increased income level induces increased possession of landed property and livestock like cows and goats. Moreover it was also observed that with larger asset possession they go for more assets as they



consider these to be more income earning and valuable than bank deposits. Indebtedness forces the respondents to save more. Those with increased loan were also going for larger informal saving like cash in hand as they can use it for immediate repayment. As expected, transaction cost of formal deposit encourages small savers to opt for more informal saving. On observation, it was observed that interest earning was not that very alluring to the small savers. On adjustment with transaction cost the amount accrued often became negative.

## **7. ANALYSIS AND POLICY SUGGESTIONS**

This exercise has underlined income, asset possession, indebtedness and transaction cost of formal saving to be statistically significant factors to influence savings in the informal form. But the formal financial institutions have to out-compete the informal ones to extend the web of saving facility. Undoubtedly, increase in income and indebtedness increases savings. Improved asset position also induces the small savers to increase saving for debt repayment. But apart from these economic parameters the formal financial institutions could reduce transaction cost of deposit to broaden the reach. Members of SHGs could save because they are able to earn some income out of the productive activities of the SHGs. The financial institutions, due to their inherent features, are not able to serve the small savers in rural area. Small savers, on the contrary opt for informal saving as they perceive it to be less costly. Considering the demand supply constraints and opinion of the small savers in one of the lagged areas in Orissa some policy suggestions could be made for encompassing the savers in the out reach of the formal financial bodies.

Small savers, not only in the district but in the state as a whole, are not very much acquainted with formal banking services. The banking professionals have to take care of this. Incorporation of Microfinance institutions (MFIs), NGOs and SHGs in the process of deposit mobilization could be of much benefit to both the savers as well as bankers. Earlier MFIs in India were functioning primarily as credit institutions and were not permitted to collect savings. In January 2006, RBI, recognizing the gap between the demand for and supply of saving services, permitted deposit mobilization by the MFIs and christened them as 'banking correspondents'. This has opened up a new avenue of collaboration between formal financial institutions and MFIs/NGOs. Even the rural moneylenders, with detailed information about rural clientele could be appointed as banking correspondents. Such a step, while meeting savings needs of the poor, will be advantageous for both the parties; as the financial institutions can broaden their resource base with access to new markets by incurring a little transaction cost and MFIs, NGOs and even rural moneylenders could have a broadened portfolio with a variety of financial products and gain a new source of income. And the rural poor will have a varied and robust channel of saving which will help them in coping with income risk and consumption risks with ease. Companies like 'Sahara India' have been a great success in this aspect. This model of deposit mobilization which collects daily savings from the small shop owners could be encouraged to encompass small savers as well. Existing customers could install confidence among the new ones.

Very often the small savers find opening of a bank account and operating the same to be an uphill task. They are also not able to judge the financial risks involved in different saving instruments. Some of the members even requested me to open the account on their behalf. The benefit would be they could hand over their savings to me and take it back when they are in need and thus avoid going to the bank. Banks could adopt a public education campaign in general and a client education programme in particular to familiarize them with the variety of saving instruments.

To out-compete informal saving formal institutions should offer affordable and secured saving services. Practice of interest slabs on the basis of income and asset position of the households could be adopted. Such a scheme is already there in the credit market and these could be modified on the basis of client preference and client needs. Mostly small savers are agriculturists or daily wage earners. Monthly saving schemes practiced by the banks do not fit into their earning pattern. They would rather prefer a daily or annual saving scheme and formal institutions should look into their choice. A credit linked small saving scheme in which the small savers could be able to borrow after depositing some amount could favour them.

## 8. CONCLUSION

Small savers do not find formal financial institutions to be comfortable to deal with. They prefer informal saving which is not able to meet their demand in the event of risk. This group, with their special requirement, needs special treatment from the formal bodies. If the latter could look into the intricacies and design saving mechanism accordingly, it could not only extend risk coverage to the small savers but also extend a broadened financial base to the formal institutions and the numerous banking correspondents.

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## **GROWTH AND FORECASTS OF FDI INFLOWS TO NORTH AND WEST AFRICA - AN EMPIRICAL ANALYSIS**

**GULSHAN KUMAR, NEERJA DHINGRA \***

**ABSTRACT:** *The developing countries of Africa are in severe hunger of FDI inflows as these are receiving a meager 2.8 percent share of global FDI inflows and just 10 percent of aggregate FDI inflows to the developing world. The present study is an effort to examine the growth of FDI inflows to the two largest recipient regions of Africa, through the computation of compound annual growth rates by fitting an exponential function estimated by ordinary least square method. The study detected that during the last three decades, the growth of FDI inflows remained highest for Algeria and Cape Verde, in Northern Africa and West Africa respectively. Both these countries also remained ahead of the others, in their respective regions in growth of FDI as percentage of gross fixed capital formation. The forecasts of FDI inflows to the representative countries of North and West Africa have been generated by using Double Exponential Smoothing model for the period 2009 to 2020. The adequacy of the model is tested by computing autocorrelation coefficients and Ljung-Box Q statistics. The study revealed that in the ensuing decade, Egypt is expected to grow at the fastest pace as far as FDI inflows are concerned.*

**KEY WORDS:** *double exponential smoothing, compound growth rates, forecasts, auto correlation coefficients, Ljung-Box Q-Statistics*

*JEL Classification: F21, F47*

### **1. INTRODUCTION**

African countries, eager to achieve high rate of economic growth, are trying their level best to accelerate the rate of capital formation. An increase in investment is no doubt, crucial for the attainment of sustained growth and development in the region. But the levels of income in these countries are so low that additional saving and investment are hard to be generated domestically and this requires mobilization of international financial resources. Given the unpredictability of aid inflows, low share

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of Africa in world trade (2.34 percent of world exports and 2.22 percent of world imports in the year 2003), high volatility of short-term capital flows, and the low savings rate of African countries (less than 20 percent), the desired increase in investment has to be achieved through an increase in FDI inflows (Dupasquier and Osakwe, 2005). FDI is viewed as a major stimulus to economic growth in developing countries because of its perceived ability to deal with major obstacles such as shortages of financial resources, technology and skills (Mwilima, 2003). FDI is welcomed and indeed actively sought by virtually all the African countries. For this reason they have made considerable efforts over the past decades to improve their investment climate. They have liberalized their investment regulations and have offered incentives to foreign investors. However, the expected surge of FDI into Africa as a whole has not occurred (Odenthal and Zimny, 1999). Africa received FDI inflows to the tune of US\$ 1953 million in the year 1981 which was just 2.88 percent of global inflows and 8.12 percent of the aggregate inflows of developing countries. In the year 2008, with an amount of the order of US\$ 52982 million, although Africa's share in the FDI inflows of developing countries rose marginally to 10 percent but the share in the global inflows remained restricted to 2.88 percent only (World Investment Report 2008). Present study is an effort to access the trends in growth and ascertain the prospects of FDI in the North Africa and West Africa, the regions which have garnered the maximum share of FDI inflows to Africa during the last few decades.

## 2. OBJECTIVES

The study has been conducted keeping in mind the following objectives:

1. To examine the trends in growth of FDI inflows to North Africa and West Africa.
2. To detect the share of FDI inflows in the gross fixed capital formation in North and West Africa.
3. To generate the forecasts of FDI inflows to the major recipient countries of North Africa and West Africa.

## 3. DATABASE AND METHODOLOGY

The present study is based on secondary data and is confined to the period of twenty seven years i.e. 1981-1982 to 2007-2008. The required data have been extracted from World Investment Report UNCTAD (2008). For the purpose of analysis, whole developing Africa has been divided into five regions viz. North Africa, West Africa, Central Africa, East Africa and Southern Africa. Out of these five regions, two major recipient regions have been selected by adopting percentage share approach. To calculate the compound annual growth rates (CAGRs), first of all, an exponential function has been fitted as shown below:

$$Y_t = \beta_0 \beta_1^t e^{ut} \quad (1)$$

Here  $Y_t$  is dependent variable,  $\beta_0$  and  $\beta_1$  are the unknown parameters and  $U_t$  is the disturbance term. If we present equation (1) in the logarithmic manner it assumes the following form:

$$\log Y_t = \log \beta_0 + \log \beta_1 + U_t \quad (2)$$

Equation (2) makes use of Ordinary Least Square Method of regression. The compound rate of growth ( $gr_c$ ) has been computed by taking antilog of estimated regression coefficient, subtracting 1 from it and multiplying by 100, as shown below:

$$gr_c = (\text{A.L.} \hat{\beta}_1 - 1) \times 100 \quad (3)$$

Where  $\hat{\beta}_1$  is a regression estimate for  $\beta_1$ . To check whether the growth rates are significant or not Student's t-test has been applied which is as follows:

$$t = \frac{\hat{\beta}_1}{s(\hat{\beta}_1)} \sim t(n-2) \text{ d.f} \quad (4)$$

Where  $\hat{\beta}_1$  is the regression estimate,  $s(\hat{\beta}_1)$  the respective standard error (Gupta and Kumar, 2006, p.297; Sidhu and Kumar, 2006, p.124). The forecasts have been generated by applying Double Exponential Smoothing - also known as Holt Exponential Smoothing model. Since Double Exponential Smoothing model is best suited to address the type of data which exhibits either an increasing or decreasing trend over time. Moreover, in Double Exponential Smoothing model past observations are given exponentially smaller weights as the observations get older. In other words, recent observations are given relatively more weight in forecasting than the older observations. Exponential smoothing is frequently the only reasonable time series methodology in large forecasting systems (Gardner, 1985, p.23). Two equations associated with Double Exponential Smoothing are as follows (<http://www.itl.nist.gov/div898/handbook/pmc/section4/pmc434.htm>).

$$f_t = \alpha \cdot Y_t + (1 - \alpha)(f_{t-1} + b_{t-1}) \quad (5)$$

$$b_t = \gamma \cdot (f_t - f_{t-1}) + (1 - \gamma) \cdot b_{t-1} \quad (6)$$

where:  $Y_t$  is the observed value at time  $t$ ,  $f_t$  is the forecast at time  $t$ ,  $b_t$  is the estimated slope at time  $t$ ,  $\alpha$  (Alpha) is the first smoothing constant, used to smooth the observations,  $\gamma$  (Gamma) is the second smoothing constant, used to smooth the trend.

To adjust level at time  $t$ , the trend of the previous period  $b_{t-1}$ , is added to the last smoothed value of level component as shown by equation (5). Then equation (6) is used to update the trend component, which is expressed as the difference between the

last two smoothed values. Since there might be some randomness remaining, the trend is modified by multiplying the trend in the past period ( $f_t - f_{t-1}$ ) with  $\gamma$  and adding that to the previous estimate of the trend multiplied by  $(1-\gamma)$  (Gupta and Kumar, 2008, p.30; <http://www.itl.nist.gov/div898/handbook/pmc/section4/pmc434.htm>).

The one-period-ahead forecast is given by:

$$F_{t+1} = f_t + b_t \quad (7)$$

The m-periods-ahead forecast is given by:

$$F_{t+m} = f_t + mb_t \quad (8)$$

Equation (7) is used to forecast the value for one period ahead and finally equation (8) was used to forecast ahead. For initialization process, grid search procedure was used on the software SPSS (version 7.5) and the values of two smoothing parameters  $\alpha$  and  $\gamma$  were obtained. Only those values of  $\alpha$  and  $\gamma$  were selected which corresponded to the lowest figure of accuracy measure used. The best value for the smoothing constant is the one that results in the smallest sum of the squared errors given by the following equation:

$$\text{Sum of Square of Errors (SSE)} = \sum e_t^2 = \sum (Y_t - \hat{Y}_t)^2 \quad (9)$$

#### 4. ADEQUACY OF THE DOUBLE EXPONENTIAL SMOOTHING

Before generating forecasts it is imperative to check the adequacy of the forecasting technique used. Present study confirms the appropriateness of DES model to generate forecasts by making use of two identification techniques namely autocorrelation function and Ljung-Box Test. Exponential smoothing when allied to appropriate identification technique constitute an even stronger competitor method to alternative univariate forecasting procedures (Chatfield, Koehler, Ord, Synder, 2001). To test the hypothesis of randomness as a measure to confirm the adequacy of the model used, autocorrelation coefficients and Ljung-Box Q statistic of residuals have been calculated.

#### 5. AUTOCORRELATION COEFFICIENT

The autocorrelation (Box and Jenkins, 1976) function has been used for the purpose of detecting non-randomness in data. Autocorrelations of residuals were worked out as under:

$$r_k(e) = \frac{\sum_{t=1}^{n-k} e_t \cdot e_{t+k}}{\sum_{t=1}^n e_t^2}; k=1,2,\dots,l \quad (10)$$

Computed values of auto correlation coefficient,  $r_k(e)$  and the lag  $k$  were displayed graphically to depict autocorrelation function (ACF) also known as correlogram. The 95% confidence interval for residual ACF was obtained by using Bartlett's approximation while calculating standard errors (Bartlett, 1946; Gupta, Kumar, 2008, p.31; and <http://www.itl.nist.gov/div898/handbook/pmc/section4/pmc434.htm>). Residual ACF, which lies within the 95% interval taken as insignificant and insignificance of ACF, implies adequacy of DES to generated forecasts.

## 6. LJUNG-BOX TEST

Out of a large number of tests of randomness we have selected Ljung-Box test which can be used to test multiple autocorrelation coefficients and instead of testing randomness at each distinct lag, tests the overall randomness based on a number of lags. For this reason, it is often referred as portmanteau (French word which refers to a coat rack that can hold many items of clothing on its hook) test. In this test we have considered the whole set of the values all at a time to see whether they are significantly different from zero. Ljung-Box Q statistics was computed from the model's residuals by using the following equation:

$$Q = n(n+2) \sum_{k=1}^L r_k \frac{(e)^2}{n-i} \quad \text{For } i = 1 \text{ to } k \quad (11)$$

Where  $Q$  is Portmanteau test statistic,  $n$  is the sample size,  $L$  is the number of lags being tested. Non-significance of  $Q$  test is taken to imply that the generated residuals could be considered as white noise, thereby indicating the adequacy of estimated model (Gupta and Kumar, 2008, p.31; <http://www.itl.nist.gov/div898/handbook/pmc/section4/pmc434.htm>).

## 7. LIMITATIONS OF THE STUDY

Present study is limited to FDI inflows to two major recipient regions of Africa. However, the outflows from these regions are not the part or parcel of this study. While assessing the growth and generating the forecasts, the negative inflows where ever detected, were taken as zero. Moreover, the study compares the position of only two largest recipient regions.

## **8. DISCUSSION AND RESULTS**

The discussion has been divided into three sections. Section I examines the growth of FDI inflows to the largest recipient regions in Africa and detects the relative position of their respective countries. Section II traces the share of FDI inflows in the gross fixed capital formation in the countries of largest recipient regions. Section III is devoted to the generation of forecasts of FDI inflows to the major recipient countries of North Africa and West Africa.

The tides of FDI fluctuated up and down through the African countries over the last three decades with no distinct tendency to rise or fall. Another interesting fact is that the FDI inflows received by the continent have not been spread evenly among all the regions. In the year 2007-08, Africa received FDI to the tune of US \$ 52982 million and out of this, the largest chunk of 42.30 percent has been garnered by North Africa only and second largest share of the order of 29.35 percent has been attracted by West Africa. (Refer Table 1). The aforementioned trend can be observed even when the average for the last twenty seven years is taken. The perusal of Table 1 clearly indicates that on the average, North Africa shared 36 percent of aggregate inflows received by Africa and West Africa was successful in attracting 30.27 percent. Southern Africa garnered a share of the order of 21.64 percent whereas Central Africa and East Africa have attracted meager share to the tune of 7.51 percent and 4.82 percent respectively. This shows that the major recipients of FDI in the continent in the last three decades have been two regions- North Africa and West Africa. A detailed comparative study of FDI growth in the respective countries of these two regions has been exercised in the subsequent analysis.

North African countries which are more or less taken as Arab countries have witnessed enormous rise in the FDI inflows although there has been severe fluctuations in FDI inflows received by some of them. On conspicuous observation of Table 2, we find that in North African region, during the period 1981-82 to 2007-08 the highest growth in FDI inflows has been experienced by Algeria, to the tune of 31.89 percent. It is followed by Sudan which has experienced FDI growth of 29.19 percent. The FDI growth in case of Morocco has also been quite significant i.e. 20.45 percent. Libya and Tunisia had moderate growth rates of 12.29 percent and 9.47 percent respectively. It is interesting to note that Egypt, which is otherwise garnering the lion's share in this region, in absolute sense has least compound annual growth rate to the tune of 6.03 percent only.

In West African region the picture is quite different from that in North African region as here some countries have experienced nil or even negative growth. It is obvious from Table 3 that in West Africa, Cape Verde witnessed the highest compound annual growth in FDI inflows during the period 1981-82 to 2007-08, to the tune of 26.23 percent followed by Ghana and Mauritania with 20.46 and 20.02 percent respectively. Nigeria, the largest recipient of this region had a compound annual growth in FDI inflows of the order of 11.67 percent. Mali experienced a significant growth in FDI inflows to the tune of 19.52 percent during the period of last twenty seven years.



**Table 1. FDI inflows to Different Regions of Africa**

Year	North Africa		West Africa		Central Africa		East Africa		Southern Africa		Africa aggregate	
	Inflows in million US \$	Percent Share in Aggregate	Inflows in million US \$	Percent Share in Aggregate	Inflows in million US \$	Percent Share in Aggregate	Inflows in million US \$	Percent Share in Aggregate	Inflows in million US \$	Percent Share in Aggregate	Inflows in million US \$	Percent Share in Aggregate
1981-82	427	21.85	947	48.48	325	16.64	43	2.21	211	10.81	1 953	100
1982-83	315	15.20	903	43.52	307	14.81	45	2.19	504	24.29	2 074	100
1983-84	425	32.16	430	32.47	208	15.72	29	2.18	231	17.47	1 323	100
1984-85	911	48.31	297	15.76	61	3.24	16	0.85	600	31.84	1 885	100
1985-86	1 453	59.47	472	19.30	488	19.99	58	2.39	- 28	-1.15	2 443	100
1986-87	1 124	63.49	139	7.85	109	6.14	65	3.65	334	18.87	1 770	100
1987-88	1 028	42.07	815	33.35	235	9.62	149	6.09	217	8.87	2 443	100
1988-89	1 464	48.28	754	24.88	250	8.26	21	0.71	542	17.88	3 032	100
1989-90	1 650	35.15	2 730	58.16	- 93	-1.98	99	2.11	307	6.55	4 693	100
1990-91	1 116	39.77	1 553	55.37	-1	0.00	133	4.74	4	0.15	2 805	100
1991-92	914	25.81	1 367	38.60	22	0.62	90	2.55	1 148	32.42	3 542	100
1992-93	1 596	41.56	1 401	36.50	161	4.20	99	2.57	582	15.17	3 840	100
1993-94	2 412	44.31	2 122	38.98	218	4.00	133	2.44	560	10.28	5 443	100
1994-95	2 277	37.30	2 787	45.66	- 59	-0.96	219	3.58	881	14.43	6 105	100
1995-96	1 228	21.72	1 861	32.90	- 104	-1.84	401	7.09	2 269	40.13	5 655	100
1996-97	1 468	24.65	2 615	43.90	1	0.01	338	5.68	1 535	25.76	5 957	100
1997-98	2 749	24.92	2 718	24.64	- 103	-0.93	808	7.32	4 861	44.06	11 033	100
1998-99	2 973	30.94	2 127	22.13	742	7.72	811	8.44	2 957	30.77	9 611	100
1999-00	3 332	27.62	2 427	20.12	585	4.85	972	8.06	4 749	39.36	12 064	100
2000-01	3 408	35.24	2 182	22.56	552	5.71	1 058	10.94	2 471	25.55	9 671	100
2001-02	5 461	27.44	2 075	10.42	1 565	7.86	1 044	5.24	9 760	49.03	19 905	100
2002-03	3 873	26.54	2 913	19.96	2 143	14.69	1 020	6.99	4 643	31.82	14 592	100
2003-04	5 262	28.11	3 364	17.97	3 244	17.33	1 309	6.99	5 541	29.60	18 719	100
2004-05	6 441	35.74	3 790	21.03	2 685	14.90	1 388	7.70	3 715	20.62	18 020	100
2005-06	12 235	41.53	5 652	19.19	3 466	11.77	1 535	5.21	6 571	22.31	29 459	100
2006-07	23 155	50.61	15 766	34.46	3 232	7.06	2 324	5.08	1 278	2.79	45 754	100
2007-08	22 415	42.31	15 553	29.35	4 084	7.71	3 867	7.30	7 063	13.33	52 982	100
Average		36.00		30.28		7.51		4.83		21.64		

Source: 1. World Investment Report, (UNCTAD) 2008. 2. Author's own calculations on the basis of World Investment Report (UNCTAD) data

Table 2. FDI inflows to North Africa

Year	Algeria	Egypt	Libya	Morocco	Sudan	Tunisia
1981-82	13	753	0	59	19	327
1982-83	0	294	0	80	17	371
1983-84	0	490	0	46	6	209
1984-85	1	729	0	47	9	141
1985-86	0	1 178	119	20	0	139
1986-87	5	1 217	0	1	0	86
1987-88	4	948	0	60	12	103
1988-89	13	1 190	98	85	2	76
1989-90	12	1 250	125	167	3	92
1990-91	0	734	159	165	0	89
1991-92	80	253	92	317	0	173
1992-93	30	459	99	424	0	584
1993-94	0	1 207	58	491	0	656
1994-95	0	1 133	0	551	99	566
1995-96	0	595	0	332	12	378
1996-97	270	636	0	322	0	351
1997-98	260	887	0	1 207	98	365
1998-99	607	1 076	0	400	371	668
1999-00	292	1 065	0	1 364	371	368
2000-01	438	1 235	141	422	392	779
2001-02	1196	510	0	2 808	574	486
2002-03	1065	647	145	481	713	821
2003-04	634	237	143	2 314	1 349	584
2004-05	882	2 157	357	895	1 511	639
2005-06	1081	5 376	1 038	1 653	2 305	782
2006-07	1795	10 043	2 013	2 450	3 541	3 312
2007-08	1665	11 578	2 541	2 577	2 436	1 618
CAGR (1981-2008)	31.89*	6.03*	12.29*	20.45*	29.19*	9.47*
Rank of CAGR	(1)	(6)	(4)	(3)	(2)	(5)

Source: 1. World Investment Report UNCTAD (2008), 2. Author's own calculations on the basis of World Investment Report (UNCTAD) data

Note: 1. Figures in parentheses show the ranks. 2. Highest numeric figure has been assigned rank 1 and relatively lower figures are given ascending ranks. \* Significant at 5 percent level of significance.

Burkina Faso, Gambia and Guinea witnessed the CAGR of the order of 15.22, 15.21 and 14.49 percent respectively. Togo, Senegal, Sierra Leon and Cote d'Ivoire also saw moderate growth. But a striking feature is that, in case of Liberia there are wild fluctuations in FDI inflows during this period and the growth rate was negative of the order of -4.46 percent. Another astonishing feature is that, in West Africa, Saint Helena is the country which is totally untouched by FDI till now.

The study indicates that the FDI inflows growth in both North and West regions have not been satisfactory. African countries have still a long way to as far as FDI inflows are concerned. Even when we look at the potential and performance indices of inward FDI prepared by UNCTAD, these countries do not show positive picture. A two by two matrix formed to compare FDI potential and performance scores depict four quadrants. The position of various countries of North Africa and West Africa has been shown in Table 4.

**Table 3. FDI inflows to West Africa**

Amount in US \$ million

Year	Benin	Burkina Faso	Cape Verde	Côte d'Ivoire	Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Mauritania	Niger	Nigeria	Saint Helena	Senegal	Sierra Leone	Togo
1981-82	2	2	0	33	2	16	0	0	288	4	12	0	542	0	34	8	10
1982-83	0	2	0	47	0	16	0	0	313	2	15	28	431	0	28	5	16
1983-84	0	2	0	38	0	2	0	0	49	3	1	1	364	0	0	2	1
1984-85	0	2	0	22	0	2	1	2	36	10	9	1	189	0	29	6	0
1985-86	0	0	0	29	0	6	1	1	0	3	7	0	486	0	0	0	16
1986-87	1	3	0	71	0	4	8	1	0	0	4	18	193	0	0	0	6
1987-88	0	1	3	88	1	5	13	0	39	0	2	15	611	0	0	39	7
1988-89	0	4	1	52	1	5	16	1	290	7	2	7	379	0	1	0	13
1989-90	62	6	0	18	15	15	12	0	656	6	3	1	1 884	0	18	22	9
1990-91	62	0	0	48	14	15	18	2	225	6	7	41	1 003	0	57	32	23
1991-92	121	1	2	19	8	20	39	2	8	1	2	15	1 124	0	0	8	6
1992-93	78	3	0	69	13	23	20	6	0	0	7	56	1 157	0	22	0	0
1993-94	1	3	4	175	11	125	3	3	0	4	17	0	1 878	0	0	0	0
1994-95	14	18	2	118	9	233	0	0	17	17	3	0	2 287	0	67	0	16
1995-96	8	10	26	212	15	107	1	0	5	111	7	14	1 271	0	35	7	32
1996-97	13	16	29	269	18	120	24	1	0	43	0	2	2 191	0	5	1	14
1997-98	14	10	12	415	21	82	17	11	214	70	0	17	1 642	0	177	2	19
1998-99	33	4	9	380	24	167	18	4	190	9	0	0	1 210	0	60	0	19
1999-00	39	8	62	324	49	244	63	1	256	2	15	0	1 178	0	153	1	32
2000-01	60	23	43	235	44	166	10	1	21	82	40	8	1 310	0	63	39	41
2001-02	44	6	13	273	35	89	2	0	8	122	77	23	1 277	0	32	10	64
2002-03	14	15	39	213	43	59	30	4	3	244	67	2	2 040	0	78	10	53
2003-04	45	29	34	165	15	105	83	4	372	132	102	11	2 171	0	52	9	34
2004-05	64	14	68	283	49	139	98	2	237	101	392	20	2 127	0	77	61	59
2005-06	53	34	82	312	45	145	105	9	0	224	814	30	4 978	0	45	83	77
2006-07	53	34	131	319	71	636	108	18	0	83	155	51	13 956	0	220	59	77
2007-08	48	600	177	427	64	855	111	7	42	360	153	27	12 454	0	78	81	69
CAGR (1981-2008)	10.52*	15.22*	26.33*	11.70*	15.21*	20.46*	14.49*	7.32*	-4.46*	19.52*	20.02*	5.67*	11.67*	0	7.47*	6.55*	10.91*
Rank of CAGR	(11)	(5)	(1)	(8)	(6)	(2)	(7)	(13)	(16)	(4)	(3)	(15)	(9)		(12)	(14)	(10)

Source: 1. World Investment Report UNCTAD (2008). 2. Author's own calculations on the basis of World Investment Report (UNCTAD) data

Note: 1. Figures in parentheses show the ranks. 2. Highest numeric figure has been assigned rank 1 and relatively lower figures are given ascending ranks. \* Significant at 5 percent level of significance

**Table 4. Position of North African and West African Countries in Inward FDI Potential and Performance Matrix**

Country	1988-90	1999-01	2000-02	2001-03	2002-04	2003-05	2004-06
Algeria	3rd	4th	4th	4th	3rd	3rd	3rd
Egypt	2nd	3rd	3rd	4th	4th	2nd	2nd
Libya	3rd	3rd	3rd	3rd	3rd	3rd	3rd
Morocco	4th	2nd	2nd	2nd	2nd	2nd	4th
Sudan	4th	2nd	2nd	2nd	2nd	2nd	2nd
Tunisia	3rd	4th	2nd	1st	3rd	3rd	1st
Benin	2nd	4th	4th	4th	4th	4th	4th
Burkina Faso	4th	4th	4th	4th	4th	4th	4th
Cape Verde	-	-	-	-	-	-	-
Côte d'Ivoire	4th	4th	4th	4th	4th	4th	4th
Gambia	4th	2nd	2nd	2nd	2nd	2nd	2nd
Ghana	4th	4th	4th	4th	4th	4th	4th
Guinea	4th	-	4th	4th	4th	4th	2nd
Guinea-Bissau	-	-	-	-	-	-	-
Liberia	-	-	-	-	-	-	-
Mali	4th	2nd	2nd	2nd	2nd	2nd	4th
Mauritania	-	-	-	-	-	-	-
Niger	3rd	4th	4th	4th	4th	4th	4th
Nigeria	3rd	4th	4th	2nd	2nd	4th	2nd
Saint Helena	-	-	-	-	-	-	-
Senegal	4th	4th	4th	4th	4th	4th	4th
Sierra Leone	2nd	4th	4th	4th	4th	2nd	2nd
Togo	3rd	2nd	2nd	2nd	4th	4th	2nd

Source: FDI Indices, World Investment report, (UNCTAD)

Note: 1st Quadrant: Front runners (country with high FDI Potential and High Performance), 2nd Quadrant: Above Potential (country with Low FDI Potential and high Performance), 3rd Quadrant: Below Potential (country with High FDI Potential and low Performance), 4th Quadrant: Under Performance (country with Low FDI Potential and low Performance), ( - ) Not Available

The table elucidates that almost all the countries of North Africa and West Africa fall in 4th quadrant indicating poor potential as well as poor performance in attracting FDI. Some countries like Morocco, Sudan, Gambia, Mali, Sierra Leone and Togo have found place in 2nd quadrant showing high performance despite their low potential. Tunisia is the only country which has twice figured amongst the front runners indicating high potential as well as high performance. Even the largest recipients in absolute sense like Egypt and Nigeria have not fared satisfactorily as regards as potential and performance of FDI inflows.

Various reasons have been accounted for poor performance and potential of FDI inflows in Africa. A major reason which deters foreign investors to invest in Africa is the high degree of uncertainty which is manifested in terms of political instability and lack of policy transparency. Macro economic instability like incidence

of currency crashes, double digit inflation and excessive budgetary deficit discourage FDI to a great extent (Onyeiwu, Shrestha, 2004). Inhospitable regulatory environment has led to high cost of entry. Low GDP growth rate and the resultant small markets make it difficult for foreign investors to exploit economies of scale. The absence of adequate supporting infrastructure such as power supply, transport, telecommunication also has discouraging impact. High degree of protectionism, ineffective marketing strategy combined with weak governance and high level of corruption put strong constraints in the way of global investors (Dupasquier, Osakwe 2005).

Gross fixed capital formation (GFCF) is like life blood for the growth and development of an economy. Higher percentage of FDI in GFCF is a signal of its importance as a potent stimulator of capital formation. The growing importance of FDI inflows in African economy can be judged from rising ratios of FDI inflows as a proportion of GFCF from 1.7 percent in the year 1981-82 to as high as 21.3 percent in the year 2007-08, showing a CAGR to the tune of 10.46 percent (Refer Table 5). North Africa is not behind aggregate Africa as here also, FDI as percentage of gross fixed capital formation escalated from 1 percent in 1981-82 to 20.4 percent in 2007-08, showing a CAGR equal to 10.33 percent. A glance at Table 5 conveys that in Algeria, FDI has assumed importance in gross fixed capital formation (GFCF) in recent years as the percentage of FDI to GFCF has soared from .1 percent in 1981-82 to 5.1 percent in 2007-08, showing a CAGR of 22.44 percent, the highest in the region. In case of Sudan, FDI is playing a great role in formation of capital as its percentage has risen from 1.0 percent in 1981-82 to 22.9 percent in 2007-08, registering a CAGR of 22.29 percent. It is interesting to note that Egypt has the highest percentage of FDI in GFCF in absolute sense, it was 15.8 percent in 1981-82 and became 42.7 in 2007-08. However, this percentage has been wildly fluctuating during the whole period and as such the growth has taken place by .92 percent only.

As far as the importance of FDI inflows in GFCF of West Africa is concerned with the perusal of Table 6, it can be observed that in 1981-82 at aggregate level in West Africa, FDI inflows contributed just 2.5 percent to GFCF, but with passage of time this share grew to a considerable figure of 45.2 percent in 2007-08. The CAGR for the study period found to be 10.59 percent which is almost equal to the CAGR registered by North Africa and even whole Africa. The highest CAGR, 25.90 percent was found in the case of Cape Verde in which the share of FDI in GFCF escalated from nil in 1981-82 to 33.8 percent in 2007-08, showing a CAGR of 25.90 percent. Nigeria and Gambia had considerable high percentage of FDI to GFCF in the year 2007-08 and the CAGR in case of both the countries in the last twenty seven years was 12.73 percent and 10.93 percent respectively. Mali and Mauritania also had significant FDI as percentage of GFCF and experienced CAGR of 13.31 percent and 13.25 percent respectively. Sierra Leone and Liberia proved inconsistent as far as the ratio of FDI as proportion of GFCF is concerned. With wild fluctuations in the ratio of FDI as a proportion of GFCF, the CAGR in these countries has been 9.44 percent and 1.86 percent respectively. The whole analysis reveals that the importance of FDI as a contributor to Gross fixed capital formation has certainly increased in case of aggregate Africa, North Africa and West Africa.

**Table 5. Inwards FDI inflows as percentage of Gross Fixed Capital Formation in North Africa**

Year	Algeria	Egypt	Libya	Morocco	Sudan	Tunisia	North Africa Aggregate	Africa Aggregate
1981-82	0.1	15.8	0.0	1.2	1.0	12.5	1	1.7
1982-83	0.0	5.1	0.0	1.6	1.1	13.4	0.8	2
1983-84	0.0	8.1	0.0	1.1	0.5	8.1	1.1	1.4
1984-85	0.0	11.0	0.0	1.3	0.7	5.7	2.4	2.4
1985-86	0.0	16.2	2.2	0.6	0.0	5.9	3.8	3.3
1986-87	0.0	15.7	0.0	0.0	0.0	3.8	2.7	2.3
1987-88	0.0	9.4	0.0	1.3	0.7	4.9	2.5	3.1
1988-89	0.1	12.6	3.1	1.6	0.1	3.7	3.9	3.8
1989-90	0.1	13.3	3.6	2.7	0.3	4.0	4.4	5.8
1990-91	0.0	8.2	4.0	2.2	0.0	3.0	2.8	3.1
1991-92	0.7	3.2	2.5	4.3	0.0	5.5	2.7	4.1
1992-93	0.2	5.9	2.8	5.6	0.0	13.8	4.3	4.2
1993-94	0.0	13.7	1.2	6.8	0.0	16.0	6	6.1
1994-95	0.0	11.4	0.0	7.4	7.0	13.4	5.8	7.1
1995-96	0.0	5.4	0.0	4.0	0.9	8.7	3.1	6.2
1996-97	2.3	4.5	0.0	3.8	0.0	7.7	3.4	6.1
1997-98	2.4	5.9	0.0	14.7	7.5	7.8	6.3	10.9
1998-99	4.9	6.4	0.0	4.3	21.1	13.6	6.2	9.2
1999-00	2.5	6.2	0.0	13.7	22.7	7.0	6.8	11.8
2000-01	3.9	7.3	3.3	4.4	18.6	15.4	6.9	9.6
2001-02	9.6	3.4	0.0	30.0	25.1	9.3	11.4	20.3
2002-03	7.6	4.4	5.5	4.7	25.0	15.3	7.8	14.5
2003-04	3.9	1.8	6.2	18.4	42.2	10.0	9.8	15.2
2004-05	4.3	16.9	7.1	5.9	35.4	9.9	10.1	11.8
2005-06	4.7	32.2	14.4	9.8	41.3	12.1	16.2	16.3
2006-07	6.3	49.8	23.0	13.0	42.2	45.5	25.1	21.4
2007-08	5.1	42.7	25.3	12.2	22.9	19.6	20.4	21.3
CAGR-(1981-2008)	22.44*	.92**	9.76*	11.22*	22.29*	4.21*	10.33*	10.46*
Rank of CAGR	(1)	(6)	(4)	(3)	(2)	(5)		

Source: 1. World Investment Report UNCTAD (2008). 2. Author's own calculations on the basis of World Investment Report (UNCTAD) data.

Note: 1. Figures in parentheses show the ranks. 2. Highest numeric figure has been assigned rank 1 and relatively lower figures are given ascending ranks. \* Significant at 5 percent level of significance. \*\* Insignificant at 5 percent level of significance.

**Table 6. Inwards FDI inflows as percentage of Gross Fixed Capital Formation in West Africa**

Year	Benin	Burkina Faso	Cape Verde	Côte d' Ivoire	Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Mauritania	Niger	Nigeria	Senegal	Sierra Leone	Togo	West Africa Aggregate	Africa Aggregate
1981-82	0.8	0.9	0	1.6	7	10	0	0	160.3	1.1	6.3	0	1.6	8.4	4.7	4.1	2.5	1.7
1982-83	0	0.8	0	2.9	1.9	13.6	0	0	162	0.7	7.3	6	1.7	6.8	2.8	8.3	3	2
1983-84	0	0.8	0	3.1	0	1.9	0.2	0	26.8	1.6	0.7	0.4	2.4	0	1.1	1	2.2	1.4
1984-85	0	0.8	0	2.5	0	0.8	0.3	3.8	21.4	5.2	3.7	1.2	2.2	7.7	3.9	0	2.6	2.4
1985-86	0	0	0	3.5	0	1.4	0.5	2.8	0	1.3	3.6	0	6.4	0	0	9.6	4.3	3.3
1986-87	0.6	0.7	0	6.5	0	1	2.8	2.7	0	0	2.5	7.2	3.6	0	0	2.4	1.4	2.3
1987-88	0	0.3	2.9	7.4	8.3	1	3.6	0.3	32	0	0.9	4.7	19	0	65.8	3.1	10	3.1
1988-89	0	0.7	0.6	4.4	2.3	0.9	3.8	1.5	251.6	1.8	1.2	2.5	11.3	0.1	0	5.3	8.8	3.8
1989-90	33.2	1.1	0.2	1.8	23.9	2.1	3	1.3	677.7	1.6	1.9	0.3	68.6	2.3	13.3	2.6	33.9	5.8
1990-91	25.2	0.1	0.2	5.3	23.7	1.9	4	6.3	558.8	1.1	4.9	13.9	21.5	5.9	36.1	5.5	15.2	3.1
1991-92	46.9	0.1	1.4	2.1	13.3	2.3	6	8.6	27.1	0.2	1.3	6	25.2	0	7.8	2.2	13.3	4.1
1992-93	25.7	0.5	0.3	7.3	16.7	2.5	3.6	10	0	0	2.2	23.7	28.2	1.9	0	0	13.7	4.2
1993-94	0.4	0.5	2.5	20	11.6	8.8	0.5	4.5	0	0.8	6.5	0	41.5	0	0	0	19.6	6.1
1994-95	5.3	3.8	1.2	13.8	13.4	19	0	0.8	125.9	3.3	1.3	0	80.1	9.5	0	17.4	33.5	7.1
1995-96	2.1	1.8	13.8	15.6	14.9	7.8	0.2	0.1	32.7	14.7	3.2	7.3	50	3.9	10.3	18.5	20	6.2
1996-97	3.5	2.8	15	16.3	17.8	8.4	4.6	1.7	0	7	0	1	77.2	0.5	0.5	8.5	25.8	6.1
1997-98	3.5	1.6	6.1	25.5	25.2	5	3.5	19.7	707.8	11.7	0	7.5	39.7	19.4	2.9	14.7	23.9	10.9
1998-99	7.7	0.7	5.3	21	30	10	3.7	34.7	506.6	1.7	0	0	35.7	5.2	0.2	8.1	19.1	9.2
1999-00	8.8	1.3	30	17.7	62.6	15.3	8.7	3	673.4	0.4	7.9	0.1	32.4	13.3	1.2	14.5	21	11.8
2000-01	14	3.5	26.5	17.9	58.9	13.8	1.6	2.2	54.7	16.5	16.7	3.8	27.7	6	384.9	19	19	9.6
2001-02	9.6	0.9	7.1	26.3	35.1	6.3	0.3	1.2	30.9	21.2	31.3	8.8	38.2	2.9	17.8	29.5	20.1	20.3
2002-03	2.5	2.1	17.3	18.3	55.2	4.8	6	7.7	10.6	38.7	26.6	0.8	49.2	5.9	13.2	19.6	25.3	14.5
2003-04	6.4	3.1	13.2	12.8	21.1	6	19.3	8.7	967.9	17.4	28.8	3	32.3	3.6	10.5	10.7	21.6	15.2
2004-05	8.1	1.2	20	19.1	44.6	5.6	18.5	4.7	390.2	11.9	56.2	4.3	20.3	4.2	74.7	15.7	17.5	11.8
2005-06	6.3	2.7	21.9	18.3	37.3	4.6	23.4	19.8	0	26.4	97.8	5.6	36.7	2	104.8	18.8	21.3	16.3
2006-07	5.8	2.4	30.3	17.9	57.8	19.4	20	35.1	0	7.6	19.5	7.7	88.5	9.1	69.2	16.7	52.7	21.4
2007-08	4.6	37	33.8	21.2	40.2	22.3	13.7	12.4	41.6	30.1	19	3.5	69.6	2.7	81.7	13.3	45.2	21.3
CAGR - (1981 - 2008)	3.0*	9.13*	25.90*	10.15*	10.93*	7.60*	12.81*	9.0*	1.86*	13.31*	13.25*	1.0*	12.73*	.90*	9.44*	8.19*	10.59*	10.46*
Rank of CAGR	(13)	(9)	(1)	(7)	(6)	(12)	(4)	(10)	(14)	(2)	(3)	(15)	(5)	(16)	(8)	(11)		

Source: 1. World Investment Report UNCTAD (2008). 2. Author's own calculations on the basis of WIR (UNCTAD) data.

Note: 1. Figures in parentheses show the ranks. 2. Highest numeric figure has been assigned rank 1 and relatively lower figures are given ascending ranks. \* Significant at 5 percent level of significance

Uncertainty and ambiguity are the parents of failure. Any economic policy which is not based on predicted or forecasted estimates may prove catastrophic because of its non-compliance to the situation in hand. Forecasting is a necessary input to planning. It can empower the planners because its use implies that they can modify the variable, now, to alter or to be prepared for future. This enables them to formulate the economic policy which can affect the future value of variable the way, they wish it to be. A prediction is an invitation to introduce the best desirable changes in the existing system (Walonick, 1993). Present study endeavors to generate the forecasts of FDI inflows to the major recipient countries of North Africa and West Africa for the period 2009-2020 and in order to detect the major recipient countries, percentage share of different countries in their respective region has been used.

**Table 7. Percentage Share of Different Countries in Aggregate FDI Inflows to North Africa**

Year	Algeria	Egypt	Libya	Morocco	Sudan	Tunisia	North Africa Aggregate
1981-82	1.13	64.27	0.00	5.00	1.65	27.95	100
1982-83	0.00	38.60	0.00	10.46	2.21	48.74	100
1983-84	0.06	65.15	0.00	6.13	0.84	27.82	100
1984-85	0.09	78.61	0.00	5.07	0.98	15.25	100
1985-86	0.03	80.87	8.19	1.37	0.00	9.54	100
1986-87	0.41	92.99	0.00	0.04	0.00	6.56	100
1987-88	0.33	84.21	0.00	5.29	1.04	9.13	100
1988-89	0.89	81.30	6.69	5.78	0.14	5.20	100
1989-90	0.73	75.78	7.59	10.13	0.21	5.57	100
1990-91	0.03	64.00	13.86	14.39	0.00	7.73	100
1991-92	8.75	27.66	10.05	34.66	0.00	18.89	100
1992-93	1.88	28.76	6.21	26.57	0.01	36.57	100
1993-94	0.00	50.02	2.41	20.36	0.00	27.21	100
1994-95	0.00	48.23	0.00	23.45	4.22	24.10	100
1995-96	0.00	45.20	0.00	25.21	0.91	28.67	100
1996-97	17.09	40.28	0.00	20.38	0.03	22.22	100
1997-98	9.23	31.48	0.00	42.85	3.47	12.97	100
1998-99	19.43	34.46	0.00	12.82	11.88	21.41	100
1999-00	8.43	30.79	0.00	39.42	10.72	10.63	100
2000-01	12.85	36.25	4.14	12.39	11.51	22.85	100
2001-02	21.46	9.15	0.00	50.37	10.30	8.73	100
2002-03	27.50	16.70	3.74	12.43	18.42	21.21	100
2003-04	12.05	4.51	2.72	43.99	25.64	11.10	100
2004-05	13.69	33.49	5.54	13.89	23.46	9.92	100
2005-06	8.84	43.94	8.48	13.51	18.84	6.39	100
2006-07	7.75	43.37	8.69	10.58	15.29	14.30	100
2007-08	7.43	51.65	11.34	11.50	10.87	7.22	100
Average	6.66	48.21	3.69	17.70	6.39	17.39	
Rank	(5)	(1)	(6)	(2)	(4)	(3)	

Source: Author's own calculations on the basis of World Investment Report (UNCTAD) data.

Note: 1. Figures in parentheses show the ranks. 2. Highest numeric figure has been assigned rank 1 and relatively lower figures are given ascending ranks.



**Table 8. Percent Share of Different Countries in Aggregate FDI Inflows to West Africa**

Year	Benin	Burkina Faso	Cape Verde	Côte d'Ivoire	Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Mauritania	Niger	Nigeria	Saint Helena	Senegal	Sierra Leone	Togo	West Africa Aggregate
1981-82	0.22	0.25	0.00	3.43	0.24	1.70	0.00	0.00	30.18	0.39	1.30	0.00	56.84	0.00	3.60	0.79	1.05	100
1982-83	0.00	0.22	0.00	5.26	0.03	1.81	0.00	0.00	34.66	0.17	1.66	3.13	47.71	0.00	3.11	0.52	1.79	100
1983-84	0.00	0.43	0.00	8.08	0.00	0.52	0.08	0.00	10.57	0.68	0.30	0.26	78.49	0.00	0.00	0.37	0.31	100
1984-85	0.00	0.54	0.00	7.04	0.00	0.65	0.23	0.74	11.72	3.26	2.76	0.47	61.26	0.00	9.42	1.90	0.00	100
1985-86	0.00	0.00	0.00	5.31	0.00	1.02	0.20	0.26	0.00	0.53	1.27	0.00	88.46	0.00	0.00	0.00	2.97	100
1986-87	0.35	1.01	0.00	22.83	0.00	1.39	2.71	0.26	0.00	0.00	1.45	5.68	62.34	0.00	0.00	0.00	1.97	100
1987-88	0.01	0.16	0.34	10.63	0.18	0.57	1.56	0.01	4.68	0.00	0.20	1.80	74.19	0.00	0.00	4.79	0.87	100
1988-89	0.00	0.48	0.08	6.65	0.15	0.64	2.02	0.09	37.32	0.91	0.25	0.89	48.71	0.00	0.15	0.00	1.67	100
1989-90	2.27	0.21	0.01	0.68	0.54	0.55	0.45	0.02	24.03	0.23	0.13	0.03	69.02	0.00	0.67	0.82	0.34	100
1990-91	4.02	0.03	0.02	3.12	0.91	0.95	1.15	0.13	14.50	0.37	0.43	2.63	64.53	0.00	3.66	2.09	1.46	100
1991-92	8.79	0.04	0.13	1.35	0.58	1.45	2.82	0.15	0.61	0.09	0.17	1.10	81.76	0.00	0.00	0.55	0.41	100
1992-93	5.34	0.21	0.03	4.75	0.89	1.55	1.36	0.40	0.00	0.00	0.48	3.88	79.62	0.00	1.48	0.00	0.00	100
1993-94	0.06	0.14	0.16	7.87	0.50	5.62	0.12	0.15	0.00	0.19	0.76	0.00	84.42	0.00	0.00	0.00	0.00	100
1994-95	0.49	0.66	0.08	4.20	0.31	8.32	0.01	0.02	0.62	0.62	0.10	0.00	81.65	0.00	2.39	0.00	0.55	100
1995-96	0.43	0.53	1.41	11.38	0.81	5.72	0.04	0.00	0.25	5.99	0.37	0.78	68.31	0.00	1.88	0.39	1.72	100
1996-97	0.49	0.59	1.04	9.80	0.67	4.37	0.87	0.04	0.00	1.58	0.00	0.09	79.74	0.00	0.20	0.02	0.53	100
1997-98	0.50	0.36	0.43	15.27	0.76	3.01	0.64	0.42	7.86	2.56	0.00	0.61	60.35	0.00	6.50	0.07	0.68	100
1998-99	1.54	0.21	0.41	17.86	1.11	7.87	0.84	0.21	8.94	0.42	0.00	0.00	56.86	0.00	2.84	0.00	0.92	100
1999-00	1.62	0.33	2.54	13.34	2.04	10.04	2.61	0.03	10.56	0.09	0.62	0.01	48.53	0.00	6.31	0.02	1.31	100
2000-01	2.73	1.06	1.99	10.74	1.99	7.59	0.45	0.03	0.95	3.77	1.83	0.39	59.92	0.00	2.88	1.78	1.90	100
2001-02	2.11	0.30	0.61	13.14	1.71	4.30	0.08	0.02	0.40	5.87	3.70	1.10	61.56	0.00	1.54	0.47	3.06	100
2002-03	0.46	0.52	1.32	7.30	1.47	2.02	1.03	0.12	0.10	8.37	2.31	0.08	70.03	0.00	2.68	0.36	1.83	100
2003-04	1.33	0.87	1.00	4.92	0.44	3.13	2.46	0.12	11.07	3.93	3.03	0.34	64.55	0.00	1.56	0.26	1.00	100
2004-05	1.68	0.38	1.79	7.46	1.30	3.67	2.58	0.04	6.25	2.66	10.33	0.52	56.11	0.00	2.03	1.61	1.57	100
2005-06	0.75	0.49	1.16	4.43	0.64	2.06	1.49	0.12	0.00	3.18	11.57	0.43	70.76	0.00	0.63	1.18	1.09	100
2006-07	0.33	0.21	0.82	2.00	0.45	3.98	0.68	0.11	0.00	0.52	0.97	0.32	87.39	0.00	1.38	0.37	0.48	100
2007-08	0.31	3.86	1.14	2.74	0.41	5.50	0.71	0.05	0.27	2.31	0.98	0.17	80.07	0.00	0.50	0.52	0.44	100
Average	2.56	0.52	0.61	7.80	0.67	3.33	1.01	0.13	7.98	1.80	1.73	0.91	68.26	0.00	2.05	0.70	1.11	
Rank	(5)	(15)	(14)	(3)	(12)	(4)	(10)	(16)	(2)	(7)	(8)	(11)	(1)		(6)	(13)	(9)	

Source: Author's own calculations on the basis of World Investment Report (UNCTAD) data.

Note: 1. Figures in parentheses show the ranks. 2. Highest numeric figure has been assigned rank 1 and relatively lower figures are given ascending ranks.

The FDI inflows to North Africa have escalated manifolds since 1981-82. (Refer Table 1) However the increased FDI has not flown in equal magnitudes to various countries of the region. A glance at Table No.7 illustrates that in North Africa, during the last twenty seven years, Egypt has been successful in garnering 48.21 percent (on the average) of aggregate inflows received by North Africa. On the second place both Morocco and Tunisia emerge with 17.70 percent and 17.39 percent share in the aggregate inflows to North Africa. Algeria, Sudan and Libya account for meager share of 6.66 percent, 6.39 percent and 3.69 percent respectively. It is quite clear that Egypt, Morocco and Tunisia can represent the whole North Africa as far as FDI inflows are concerned because these together account for more than two third shares (83.30 percent) of its FDI inflows.

Regional disparities of FDI inflows are all the more acute in case of West African countries. The perusal of Table 8 confirms Nigeria's strongest position as the major recipient among the West African countries. It alone attracted 68.26 percent (on the average) of aggregate FDI inflows received by West Africa during the period 1981-82 to 2007-08. Liberia and Cote d' Ivoire which received 7.98 percent and 7.8 percent of the aggregate inflows of West Africa are no where near to Nigeria in receiving the FDI inflows. Hence, only Nigeria represents the West Africa as far as FDI inflows are concerned because it accounts for more than two third shares.

Present study generates the forecasts of FDI inflows to the leading four countries namely Egypt, Morocco, Tunisia and Nigeria on the assumption that forecasting for these countries implies forecasting for whole North and West Africa.

Before applying Double Exponential Smoothing (DES) model to generate the forecasts of the four major recipient countries, its adequacy has been tested and the results have been highlighted in Table 9.

**Table 9. Initial Values and Optimum Smoothing Parameters for Level and Growth Components**

Country	$f_0$	$b_0$	$\alpha$	$\gamma$	SSE
<b>Egypt</b>	544.82692	416.34615	1.000000	0.800000	24246986.8
<b>Morocco</b>	10.57692	96.84615	1.000000	1.000000	8081173.914
<b>Tunisia</b>	302.17308	49.65385	0.300000	0.000000	7131433.9
<b>Nigeria</b>	312.92308	458.15385	1.000000	0.000000	92765199.62

Source: Author's calculations on the basis of UNCTAD data using the software SPSS version 7.5

Note:  $f_0$  - Initial value for level component,  $b_0$  - Initial value for growth component,  $\alpha$  - Optimum value for smoothing parameter for trend,  $\gamma$  - Optimum value of smoothing parameter for growth, SSE - Sum of square of errors

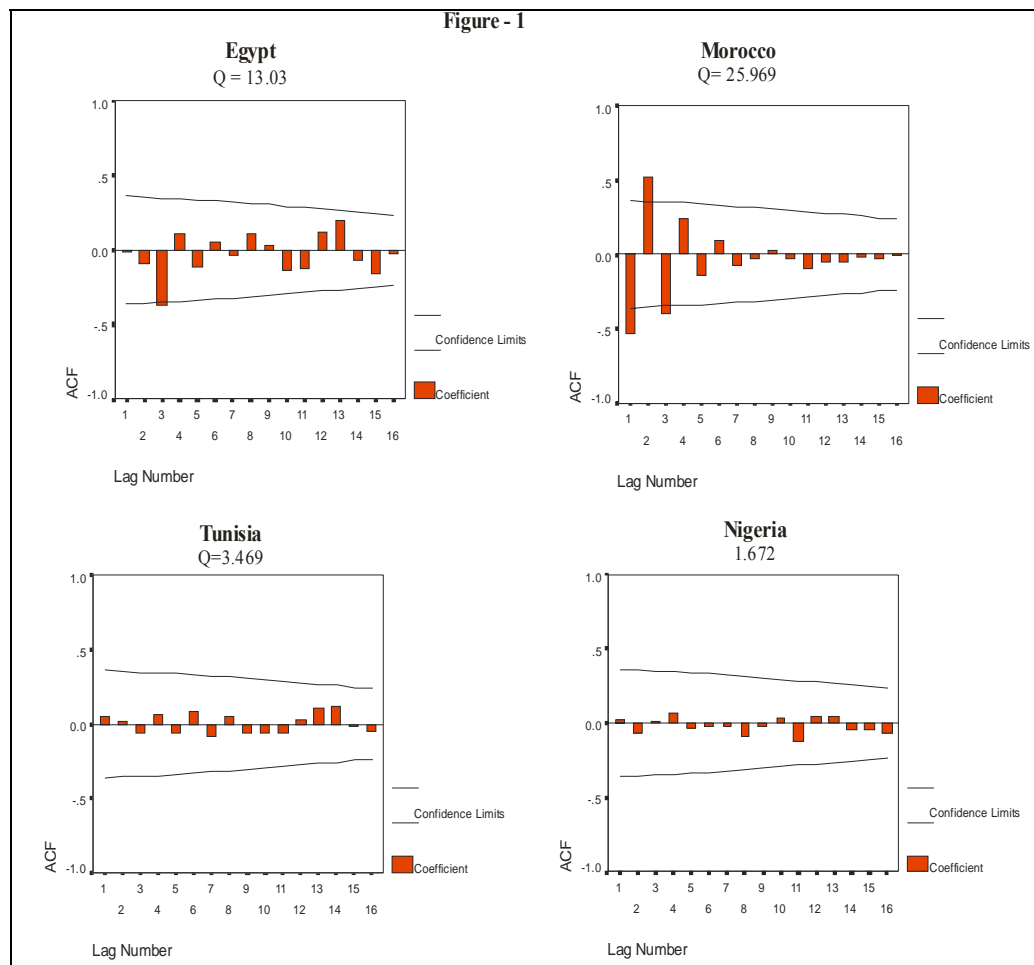
## 9. SMOOTHING PARAMETERS

Initial values and optimum smoothing parameters for level and growth components in case of all the four countries under study have been computed. Only those values of  $\alpha$  and  $\gamma$  are considered optimal which ensure the lowest error. The optimum values of smoothing parameters  $\alpha$  (alpha), is equal to 1.0 in case of Egypt, Morocco and Nigeria and it is less than 1 in case of Tunisia i.e. 0.3. The value of  $\gamma$

(gamma), is .8 in case of Egypt, 1.0 in case of morocco. For Nigeria and Tunisia it has come out to be zero.

## 10. ADEQUACY OF THE MODEL

The adequacy of DES model is ensured by computing auto correlation functions (ACF) of residuals and by applying Ljung-Box Q statistics. Figure -1 depicts ACF among all the residuals and the values of Q-statistics for all the representative countries.



**Figure 1.**

The values of Q- statistics in case of all the countries are found to be insignificant at 5 percent level of significance. The non-significant of Q- statistics ensures the adequacy of DES model used to generate the forecasts. A careful glance of Figure 1. reveals that in case of all the countries, these were all (as a group) with in

specified limits. This confirms the adequacy of DES model to make prediction regarding future prospects of FDI inflows to the representative countries of North Africa and West Africa.

**Table 10. Forecasts of Foreign Direct Investment in Representative Countries of North and West Africa**

	in US \$ million			
<b>Year</b>	<b>Egypt</b>	<b>Morocco</b>	<b>Tunisia</b>	<b>Nigeria</b>
2008-2009	13667.49	2456.11	1672.43	12912.15
2009-10	15756.98	2641.45	1722.08	13370.31
2010-11	17846.47	2826.79	1771.74	13828.46
2011-12	19935.96	3012.13	1821.39	14286.62
2012-13	22025.45	3197.47	1871.04	14744.77
2013-14	24114.95	3382.81	1920.70	15202.92
2014-15	26204.44	3568.15	1970.35	15661.08
2015-16	28293.93	3753.49	2020.01	16119.23
2016-17	30383.42	3938.83	2069.66	16577.38
2017-18	32472.91	4124.17	2119.31	17035.54
2018-19	34562.40	4309.51	2168.97	17493.69
2019-2020	36651.89	4494.85	2218.62	17951.85
<b>CAGR (2008-2020)</b>	<b>9.15*</b>	<b>5.60*</b>	<b>2.60*</b>	<b>3.03*</b>

Source: Author's calculations on the basis of UNCTAD data using the software SPSS version 7.5

Note: \* Significant at 5 percent level of significance.

The forecasts of FDI inflows to the representative countries for the period 2009-10 to 2019-20 are depicted in Table No. 10. Perusal of this table, confirms that by the year 2020, Egypt may maintain its top position in North Africa as it expected to receive FDI inflows to the tune of US \$ 36651.89 million, anticipated to rise from the expected amount of US \$ 13667.49 million in the year 2009, showing a CAGR of 9.15 percent, significant at five percent level of significance. In Morocco, the amount of FDI anticipated in the year 2009 is US \$ 2456.11 million and is expected to touch the amount of US \$ 4494.85 million in 2020 with a CAGR of 5.60 percent, significant at five percent level of significance. FDI inflows to Tunisia are expected to grow at the rate of 2.60 percent during the period 2009-2020, reaching the amount US \$ 2218.62 million in the year 2020. Nigeria stands good chance of receiving an amount of FDI inflows of the order of US \$ 17951.85 million in 2020, with the CAGR equal to 3.03 percent for the ensuing decade.

The analysis suggests that prospects for FDI in North Africa and West Africa appear to be positive as the projections indicate. Improvements in the regulatory framework for FDI can certainly brighten the prospects of FDI inflows in the countries of Africa. Most African countries have concluded bilateral investment treaties (BITs) and double taxation treaties (DTTs) with other countries. For instance Egypt has signed as many as 50 BITs and Tunisia has concluded maximum number of DTTs (Odenthal, Zimny, 1999). However, because of the negative image of Africa as a whole, it may not be sufficient to make bilateral and multilateral agreements only.

The African countries seriously require improvements in governance, development of infrastructure, rationalization of macro economic management to

enhance their positive image. At the same time they must strongly combat negative forces like political unrests, uncertainty of policies, currency volatility, debt overhang and capricious regulatory environment so that the competitiveness and FDI potential are not undermined.

## 11. CONCLUSION

African countries have before them an important task of reversing the dismal FDI trend which they are facing currently. Africa is receiving a meager 2.8 percent of global FDI inflows and just 10 percent of aggregate FDI inflows to the developing countries. Present study concludes that out of five regions of Africa, only North Africa and West Africa have better standing in receiving FDI and these two account for one third share each, of the aggregate inflows attracted by aggregate Africa. During the last three decades, in North Africa highest growth in FDI inflows was experienced by Algeria followed by Sudan and Morocco. In West Africa, Cape Verde witnessed highest growth followed by Ghana and Mauritania. It is interesting to note that in case of growth of FDI as percentage of gross fixed capital formation; again Algeria and Cape Verde have attained first rank in their respective regions. The leaders in quantum of FDI inflows in Northern and Western regions during the last three decades have been Egypt, Morocco, Tunisia and Nigeria. Out of these Egypt is expected to grow in FDI inflows at the fastest pace during the ensuing decade.

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## **STRATEGIES FOR FINANCING OF THE ROMANIAN HIGHER EDUCATION IN THE CONTEXT OF PERFORMANCE INCREMENT IN EDUCATION**

**ADRIAN MĂCRIȘ, MARIA MĂCRIȘ \***

**ABSTRACT:** *Romanian system of education is confronted today, and even more in the future, with real challenges that regard quality, performance and competitiveness. In this way, through this paper, an analysis was made regarding the improvement of the financing strategies for the higher education, starting from a series of methodological aspects proposed by CNFIS for years 2008 and 2009. Thereby, premises were shaped for the elaboration of a future methodological version that can be applied in 2010.*

**KEY WORDS:** *university autonomy, financing sources, quality indicators in higher education, financing algorithm*

The statement of the European Commission named “*The Role of Universities in a Europe of Knowledge*” emphasizes the fact that “the universities are unique” as they are part of all the three processes that the society of knowledge depends on in order to develop: “the production of new knowledge, its transmission through education and training, its dissemination through technologies of information and communication”. On the other hand, the Council of Europe Parliamentary Assembly through the Recommendation 1762 (2006) restates the importance of the Magna Charta Universitatum and analyses the role of universities in nowadays Europe, considering academic freedom and university autonomy to be fundamental requirements of any democratic society. The Assembly invited the Ministers Committee to demand the recognition of academic freedom and university autonomy as conditions for obtaining the right to become a member of the Council of Europe. University autonomy is a fundamental concept that is extremely complex and rich in meanings and it cannot be materialized in just a simple legislative article. The National Council for the Financing of Higher Education (CNFIS) sustained this process through demarches made in the direction of modernizing the financing strategy of the system of Romanian higher education, starting from the premises that a real autonomy cannot be built in the

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absence of a genuine transfer of responsibilities on the use of financial resources, demarche that is doubled by a permanent concern for the rise in quality of the educational process and in the stability of the whole education system.

The financing of the universities is done considering their effective activity, which is expressed in the most direct way, through the performances in the students training and research. The responsibilities for using the funds, as well as the liberty to elaborate own strategies for optimizing the expenses, belong to the universities management. Each year CNFIS completes a proposal regarding the budget for the following year, using for this a large range of estimation methods. For year 2008, one of these estimations had in view the perspective of gradually reaching the average European level of financing of the higher education for the years to come. At the same time, CNSIF pointed out with consistency the importance of sustaining a mixed financing (one of "multisource" type) for the higher education system. This strategic direction is one of the main orientations today at the level of European Union, emphasizing the fact that it is important for "the public authorities to acknowledge the higher education and the research as strategic investments, and the public financing must be a major source for their sustaining." Since the Romanian higher education system must integrate in the European space of higher education, on the terms of a European and global competition, further financial efforts are necessary for its support.

In order to ensure the objectivity and transparency of the process of yearly distribution of the budgetary allocations to universities, it is used a mathematical formula that in the most direct way derives from the fundamental principle that the resources follow the student. This is a rigorous formula that allows the universities to estimate their available resources, but it is also flexible enough to facilitate the supporting of the strategic imperatives of the higher education through successive adjustments of the values of the entrance amounts and those of other system parameters. Introduced in 2002, the quality component of the financing algorithm met a fast development both regarding the weight in the total amount of financing, and the complexity of the system of indicators that was used. The two main pillars of the algorithm, that create the conceptual premises in which the new strategy of financing the Romanian higher education develops, are the allocation of a part of the funds to universities taking into consideration the number of students, the differentiate allocation, respectively, generated by the quality component. The value of the financing algorithm is given not only by the conceptual dimension or by the refinement of the adopted solutions, but also by the fact that the modernizing of the financing strategy is done without introducing major interferences in the system.

The methodology adopted by CNFIS for year 2008 was part of a gradual and permanent modernizing process of the financing strategy, of implementation of strategic directions from a national and European level, with the mention of a stability of the system. The periodical updating of the distribution methodology brought some important changes through the objectivity of the used information and the adjustment of some quality indicators, taking into consideration the strategic requirements of the moment. On the other hand, some of the formulated options considered separately or together, can offer solutions for the application of new legislative requirements, but keeping the fundamental principle previously stated, namely that the resources follow



the student. The proposals stated by CNFIS, during the plenary meeting of the Council on December 14<sup>th</sup>, 2007, validated the necessity of maintaining a certain stability of the financing system by keeping the value of the equivalency coefficients and that of the cost coefficients, as follows: a) at the same level as in 2007, as well as the growth of the weight of the quality component from 25% (2007) to 30% (2008) as a result of the growing requirements regarding the quality and competitiveness of the Romanian universities after January 1<sup>st</sup>, 2007. This growth has in view: the stimulation of the development of the teaching staff from the point of view of educational process, by the rise with 1% of the percentage allocated to the group of *Teaching staff* (distributed in the total of quality indicator IC-3, the number of assigned lecturers compared to the unitary equivalent number of students, as to support the performance potential of the teaching staff); b) the growth with 2,5% of the share allocated to the group of *Impact of scientific research regarding the educational process* (distributed to IC6 indicator, the level of performance in the scientific research, through an extra percentage of 2%, this way offering the greatest share to this indicator, and to IC8 indicator, the Percentage ratio between the value of the research-designing contracts and the total of university incomes), emphasizing the part regarding the results of the research which affects the education process, especially the last two study cycles, namely those of MA and PhD); c) equivalency coefficients as well as cost coefficients should remain constant, in order to maintain a stability of the increase with 0.5% of the share held by the Material base, distributed for the importance of the expenses for IC11 indicator, Amount of the expenses for acquisition of books, magazines and textbooks per number of students (budgeted and fee payers), in order to stimulate and support the universities in using e-learning instruments and virtual libraries; d) at the level of the group of indicators regarding *University Management* it is introduced an increase with 1% distributed for the stimulation and support of the achievement of extra budgetary incomes that could be used for development (for IC15 indicator, the share of the extra budgetary incomes spent for development in the total amount of the university incomes); e) the indicator regarding the *Total quality of academic and administrative management*, an incentive-type quality indicator, for development purposes, remained constant for year 2008, its impact still being low. So we can consider that the financing methodology for 2008 brings a plus of coherence and stability when it comes to the quality component, leaving important directions regarding the improvement for the years to come, opened, especially when it comes to the development component.

The methodology submitted by CNFIS for 2009 represents a new stage in the process of gradual and permanent modernizing of the financing strategy, of implementation of the strategic national and European directions, with the keeping of a certain stability of the system. There is no final change conceptually speaking, and the total share of the component allotted considering the quality aspects remains unchanged. The discussions that took place during the CNFIS plenary meeting on November 17<sup>th</sup>, 2008, on the basis of the initial analysis which were done at the level of the commissions of the Council but also that of the signals received from some institutional partners (MECI, universities), led to the elaboration and approval of some changing proposals regarding the version applied in the previous year, these becoming a unitary proposal for financing methodology regarding universities for 2009, which

are presented below. As a starting point we make reference to the fact that for the established professions the students registered in the finishing years (V, VI) are assigned, starting with academic year 2009-2010, equivalency coefficients correlated with those used for the students in the second cycle of study, registered in the other fields. This change affects in an attenuate manner the financing during this financial year, the effect appearing only for the last three calendar years. At the same time, when it comes to the medical field, this measure is doubled with the extension of resident studies financing to the entire period. The main changes regard the assembly of quality indicators through the transformation of some weights among groups or inside the same group, but also through the introduction of some indicators previously used or even the introduction of new indicators. Thereby, even if the total weight of *the first group (teaching staff)* remains the same, in which it appears a first change by the reintroduction of the indicator regarding the balance between the number of teachers and the unitary equal number of students (budgetary and fee payers), the role of the university teachers being underlined when it comes to the assurance of a high quality degree of the education process. *The second group* (the impact of scientific research) is reinforced by the increase with one percentage of the weight (to the detriment of the fourth group which still has the highest weight). *The third group (material base)* only knows some clarifications through the reformulation of the first indicators in the group and the confirmation of the complete renunciation to the final indicator (regarding the number of computers in the property of the university, with 0 weight for a few years). But the latter is integrated in *the fourth group (university management)* and has in view the ability of the universities to use the funds received from the budget for investments, having a weight of 0.5% in the total of Primary Financing. It overtakes some of the effects regarding the ability of the universities to direct the extra budgetary funds towards development, its weight being halved when the funds allocated from the budget for this purpose had lately a higher weight.

One of the important changes of the set of indicators is the introduction of a group dedicated to permanent education, having a complex indicator (IC 17), even though it appears this year in a temporary form (with 0 weight, without influencing the financing). Without offering a practical proposal regarding the indicator definition, the present methodology indicates the main directions had in view for future development of the indicator. This step also represents a link with the future version of the methodology, which begins to shape, even though it can only be applied in 2010.

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## **CHARACTERISTIC FEATURES OF THE SYSTEM OF HEALTH SOCIAL INSURANCES IN ROMANIA AFTER 1990**

**MARIA MĂCRIȘ, GABRIELA SLUSARIUC,  
FLAVIUS HOHOI \***

**ABSTRACT:** *The topic approached by this paper targets in its first part a short history of health social insurances in Romania after 1990 as well as the implementation of this system according to the new demands. Further a series of aspects specific for the organization and functioning of the Health Insurances Center of the district of Hunedoara are analyzed; among them we should mention the following ones: the main responsibilities of this institution, the specific objectives, and the elements of the system of health insurances system. At the same time, an analysis of the evolution of the incomes and expenditures of the institution during the period 2001-2008 is done as well as a structure of the expenditures for medical services financed by FNUASS in 2008.*

**KEY WORDS:** *system of health social insurances, sanitary reform, insured persons, medical services, unique national fund of health social insurances*

### **1. HISTORY OF ROMANIA'S HEALTH SOCIAL INSURANCES**

Until the issuing of the Law of health social insurances no. 145/1997, the system of health protection was centrally coordinated by the Health Ministry owing to the 41 District Sanitary Directions and the Sanitary Direction of the Municipality of Bucharest; it included a network of hospitals, polyclinics, medical units, and other sanitary units. At the same time, there were a series a hospitals, institutes, and national highly specialized centers directly subordinated to the Health Ministry, as well as parallel medical networks subordinated to the Ministry of Transports, The Ministry a National Defense, The Ministry of Internal Affairs, the Ministry of Labor and Social Protection, and the Romanian Intelligence Service, that provided medical services and had as a responsibility the care taking of a certain category of the population.

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During the period 1990-1998 a dualist system was used: financing from the State budget and complementary financing owing to a special health fund (the Government's Order no. 22/1992), as well as external financing – loans from the World Bank (Law no.79/1991), PHARE funds, and donations. The beginning of the sanitary reform in Romania has implied the re-organization of the health services and of the system of health services financing. In July 1997 the Law of Health Social Insurances no. 145 was adopted by Romania's Parliament and promulgated by the President of the country. It took into consideration Bismarck insurances model comprising compulsory health insurances, based upon the principle of solidarity, and functioning within a decentralized system. The law was in force beginning with January the 1<sup>st</sup>, 1999; yet, it witnessed a period of transition during 1998 when the District Sanitary Directions and the Health Ministry administrated insurance funds. Consequently, beginning with January the 1<sup>st</sup>, 1999, and according to the law, the health insurances centers also began to function as autonomous public institutions administrated by the representatives of the insured persons and the employers through the Administration Councils.

## **2. IMPLEMENTATION OF THE SYSTEM OF HEALTH SOCIAL INSURANCES**

Law no.145/1997 of the health social insurances, the first norm act that has introduced the principles of health social insurances, brought a series of new data having a democratic character (compulsory inclusiveness of the population in a unitary system of social protection, free choice of one's doctor, of one's sanitary unit, and of the health insurances center, offer of a definite package of medical services stipulated by the basic contract, financing through contributions and State subsidies, financial balance, decentralized functioning, and solidarity, in collecting and using the funds, equity, easiness in getting medical services). From an administrative point of view, "health insurances are organized by the National Center of Health Insurances - CNAS, by the district health insurances centers, and the center of the Municipality of Bucharest, and by territory offices"; the management level was represented by CNAS – the general assembly of the representatives and the administration council, chosen by the general assembly of the representatives, having a president and a vice-president chosen among its members; in case of the district centers we dealt with the representatives assembly and the administration council.

The health social insurances centers should have, according to Law no.145/1997, their own management level chosen according to a secret vote for 5 years and should have included the representatives of the insured persons and of the employers. The insured persons and the employers used to chose 2 representatives for each 10 000 insured persons, according to representative groups as follows: employees, professionals, farmers, retired persons, unemployed persons, pupils and students, and household persons. The law also stipulated elections for the general assembly of the representatives according to a set of electoral rules elaborated by the central electoral board; at the level of the districts and of the Municipality of Bucharest, on the basis of

the electoral set of rules, district electoral boards would have functioned approved by the central electoral board and having similar components.

### **3. CHARACTERISTIC FEATURES OF THE ORGANIZATION AND FUNCTIONING OF THE HEALTH SOCIAL INSURANCES CENTER OF THE DISTRICT OF HUNEDOARA**

The system of health social insurances represents the main system of financing the protection of population's health that enables the access to a package of basic services for those who are insured. Under the circumstances of the sanitary policy initiated by the Government through the Ministry of Public Health, the National Center of Health Insurances has planned to settle the problems of the system of health social insurances starting a real reform of the system integrated within the sanitary reform.

The Health Insurances Center of the District of Hunedoara is a public, autonomous and juridical institution, of local interest, without any lucrative purpose; it has its own budget and is subordinated to CNAS; it administrates the unique national fund of the health social insurances observing the norms elaborated by the National Health Insurances Center and providing the functioning of the system of health insurances at a district level. The Health Insurances Center of the District of Hunedoara, when exerting its responsibilities given by the law and the Statute, implements and observes the general policy and strategy settled by the National Health Insurances Center for the system of health social insurances system within the margins of its competence. The Health Insurances Center of the District of Hunedoara was founded on February the 1<sup>st</sup>, 1999, according to Law no.145/1997. The Health Insurances Center of the District of Hunedoara includes 436 881 insured persons, a number that, when compared with the total number of the district's population of 472 284 inhabitants, represents 92.50%; out of it 325 059 inhabitants belong to the urban environment – 74.40%, and 111 822 inhabitants to the rural environment - 25.60%.

CAS Hunedoara has begun its activity with 30 employees whose number has increased due to the diversification of the services offered to the insured persons; today it counts 85 employees.

The main *responsibilities* of CAS Hunedoara are the following ones: it administrates, together with CNAS, the Unique National Fund of Health Social Insurances (FNUASS); it controls the observation of the right of the insured persons to medical services, medicines, and sanitary stuff, non-discriminatorily, under the stipulations of the law; it takes part in the evaluation of the doctors and of the sanitary staff that can be admitted to work within the system of health social insurances; it collects FNUASS' s contributions for the natural persons others than those for which the incomes' collecting is done by ANAF; it administrates its own budget; it registers, up-dates, and reports the data regarding the insured persons towards CNAS; it elaborates and publishes the yearly report and the activity plan for the year to come; it makes use of all legal means in order to improve contributions' collecting for FNUASS; it freely provides data, consultancy, and assistance regarding the health social insurances and the medical services to the insured persons, employers, and the medical services suppliers; it administrates the assets of the insurances center,

according to the legal stipulations; it negotiates, contracts, and discounts the medical services contracted with the medical services suppliers according to the basic contract and to the implementation methodological norms; it discounts the cost of the services contracted and provided to the insured persons in the benefit of the medical services, pharmaceutical services, and medical devices meant to correct and recover organic or functional deficiencies or to correct certain physical deficiencies, according to reporting forms settled on the basis of the Order of the President of the National Health Insurances Center; it monitors the number of medical services provided and the level of their cost; it can organize auctions with a view of contracting certain services belonging to the package of services according to the basic contract; it questions the insured persons in order to evaluate their degree of satisfaction and the interest they show for the quality of the medical services; it provides according to its competence the implementation of the international documents regarding the health field agreed by Romania with other countries; it provides the confidentiality of the data according to the legal acts in force; it has other responsibilities stipulated by the acts in the health field.

Nowadays, the Health Insurances Center of the District of Hunedoara has as a responsibility the providing of the equality of chances of the citizens guaranteeing the non-discriminatory access to basic medical care. With a view of improving the quality of medical care, the institution encourages competition among medical services suppliers looking to provide a proper financing of all the fields of medical assistance within the margins of the approved budget in order to meet to a larger extent the needs of the district's insured persons; this preoccupation represents the main objective of CAS Hunedoara.

The specific *objectives* of the Health Insurances Center of the District of Hunedoara have targeted the following aspects: a) the increase of the degree of collecting the incomes of FNUASS according to the stipulations approved in case of natural persons; b) the increase of the degree of collecting the debts in case of natural persons; c) the share of expenditures as compared with the approved stipulations; d) the diminishing of the share of administration, functioning, and capital expenditures within the total sums collected at the district level; e) the implementation of a system of evaluating the degree of satisfaction through sociological enquiries; f) the strict selection, according to performance and professional fame, of the medical services suppliers noticing the existence of the criteria of access of the insured persons to the medical services suppliers and medical products suppliers; g) the control of the reported data for medical services with a view of discounting them within the strict margins of the legal stipulations; h) observation of paying terms stipulated by the contracts of services supplying according to assistance fields; i) monthly and quarterly monitoring of the expenditures in order to remain within the limits of the budget allocated sums both regarding medical services and the budget for its own activity; j) intensifying the evaluation of efficiency and efficacy of the decisional and execution factors of the institution at the level of certain programs, activities, and actions, in using financial, material, and human resources in order to accomplish the objectives and to get envisaged results.

The elements of the health insurances system that represent a permanent preoccupation of CAS Hunedoara are mainly the following ones:

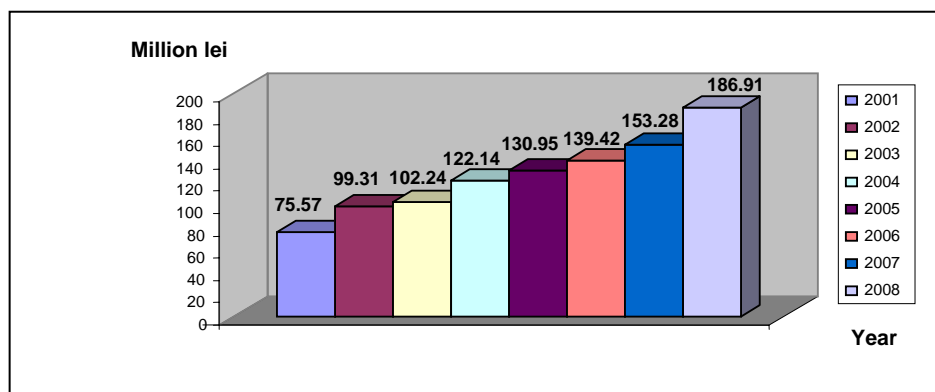
- *Insured persons* - towards whom all the efforts of those who work within the system of health insurances target. The insured person is the one who pays, consequently that person is the main beneficiary.
- *Medical and pharmaceutical services suppliers*. The doctors and the pharmacists are the engine of the whole system. The reform's entire activity and success depends on them. The bridge between the insured person and the medical system is represented by the family doctor. He/she is the insured person's „lawyer” in whatever health matter.
- *The Health Insurances Center*. The main task of the insurances centers is to distribute the funds so that each insured person, irrespective of his/her possibilities, can benefit from the medical assistance required in order to maintain his/her health. In fact, the insurances centers buy the services required by the insured persons.

During 2008 the incomes of FNUASS represented 186 905 461 lei, the percent of gathering the incomes as compared with the budget stipulations representing 66.7%.

The analysis of the last years dynamics of the incomes' evolution one can notice an ascendant trend as follows:

**Table 1. The evolution of the incomes of CAS Hunedoara during the period 2001-2008**

	2001	2002	2003	2004	2005	2006	2007	2008
Total incomes (million lei)	75.57	99.31	102.24	122.14	130.95	139.42	153.28	186.91

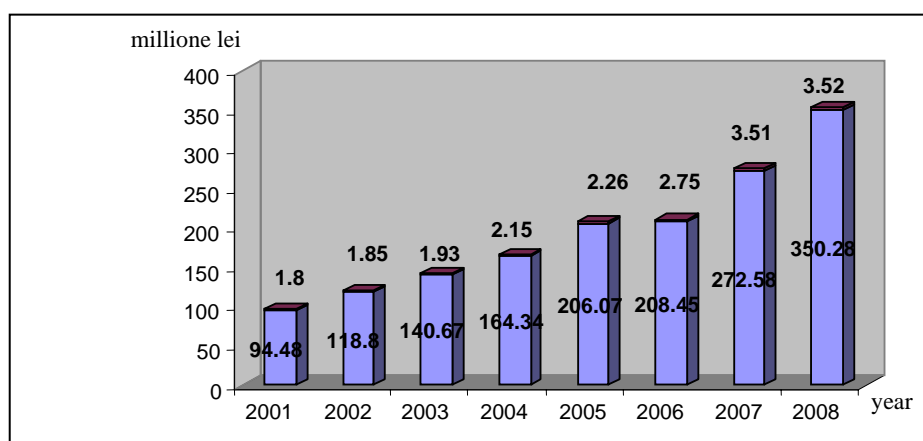


**Figure 1. Evolution of the incomes of CAS Hunedoara during the period 2001 – 2008**

Analyzing the expenditures' evolution of the last years dynamics one can notice an ascendant trend from 94.48 million lei in 2001 to 355.21 million lei in 2008, and the administration expenditures of the fund from 1.8 million lei to 3.52 million lei as follows:

**Table 2. Evolution of the total expenditures of CAS Hunedoara out of which administration expenditures during the period 2001 - 2008**

	2001	2002	2003	2004	2005	2006	2007	2008
Total expenditures (million lei)	94.48	118.80	140.67	164.34	206.07	208.45	272.58	350.28
Administration expenditures (million lei)	1.8	1.85	1.93	2.15	2.26	2.75	3.51	3.52



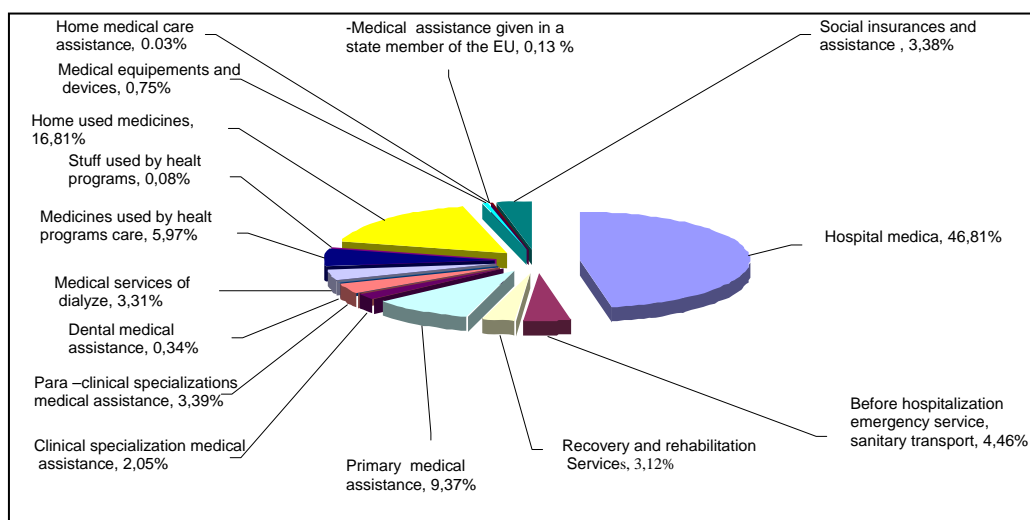
**Figure 2. Evolution of the total expenditures out of which administration expenditures of CAS Hunedoara during the period 2001 - 2008**

In 2008 the structure of the medical services financed by the Unique National Fund of Health Social Insurances is displayed in the figure below. One can notice that the hospital remains the place where the most important amount of resources is used while providing the most expensive medical services; such facts determine a modern management approach capable of allowing the increase of efficiency and of the quality of the supplied services. At the same time primary medical assistance and medicines assistance at home witness an ascendant trend being a priority of the health services reform. As compared with 2001 new medical services have emerged: home medical care in 2006 and medical assistance given in a state member of the European Union in 2007 which play an increasing part.

In order to improve the quality of the medical act with a view of a better use of human resources and in order to gain doctors' interest for the activity supplied and the relation with the patients, in order to increase the insured persons' degree of content and to improve population's access to medical services, it is necessary to have financial support, to know legislation in force, and to observe financial discipline and medical deontology. The whole activity of CAS Hunedoara has been based upon the quantitative and qualitative efficiency of the medical, pharmaceutical, and devices services given to the insured persons in order to improve the health condition of the population living in the district of Hunedoara, to facilitate the access to health services



through a better discovery of less favored social groups, the improvement of the mutual relations with all the “actors” of the system in order to better know the field of health social insurances in Romania.



**Figure 3. Structure of the expenditures of medical services financed by FNUASS, the district of Hunedoara during 2008**

**Table 3. Structure of the expenditures of medical services financed by FNUASS during 2008**

Medical and social assistance services in case of illnesses and invalidity given in 2008	Sum million lei	%
Hospital medical assistance	164.05	46.81%
Before hospitalization emergency services and sanitary transport	15.63	4.46%
Recovery and rehabilitation services	10.93	3.12%
Primary medical assistance	32.84	9.37%
Clinical specializations medical assistance	7.17	2.05%
Para-clinical specializations medical assistance	11.89	3.39%
Dental medical assistance	1.2	0.34%
Dialyze medical services	11.6	3.31%
Medicines used by the health programs	20.92	5.97%
Stuff used by the health programs	0.297	0.08%
Medicines used at home	58.91	16.81%
Medical devices and equipments	2.64	0.75%
Home medical care	0.12	0.03%
Medical assistance given in a state member of the EU	0.46	0.13%
Social insurance and assistance	11.83	3.38%
Total expenditures for medical services in 2008	350.487	

The Health Insurances Center of the District of Hunedoara has given clear and specific messages regarding population's health insurances targeting general information and a favorable opinion regarding the institution's image as well as the implication of the decisional factors in attracting funds in the system in the benefit of the insured persons; the specific objectives of the organization have had as a goal the increase of the performance of medical services suppliers and the access to medical services of all the insured persons; the objectives have targeted:

- The increase of technical efficiency through properly using the limited resources, waste elimination, and the decrease of the costs of supplied services;
- The increase of allocation efficiency through maximizing the value given by the resources that have been spent, resources allocation depending on results and the impact upon the health condition expressed in life years gained, the improvement of life quality, the improvement of the access to priority services;
- The increase of the access of less favored groups through a resources distribution centered on those who mostly need services and have limited access;
- The adaptation of the structure of medical services to the demands and expectations of their users so that public services should meet patients' expectations.

During the next period we consider that the main acting directions are the following ones:

- Improvement of acute patients' hospitals and setting up hospital integrated ambulatories. Such an objective can be implemented through: the diminishing of the number of hospital beds, the diminishing of the number of externalized cases, and the increase of the number of cases cured in ambulatory and the increase of the rate of surgery activities in surgical departments up to about 80 %;
- Development of home medical care services;
- Development of multifunctional rural centers.

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## **ECONOMIC VALUE ADDED – INDEX OF COMPANIES’ INTERNAL PERFORMANCE**

**MARIANA MAN, EMILIA VASILE \***

**ABSTRACT:** *Value added displays various opportunities for measuring and evaluating performance; it is the key element in determining certain indices that create value having a major significance within a company’s activity, either quoted or not on capital market. In case of quoted companies, value creation is the main criterion of performance evaluation by shareholders whose strategic objective is maximizing present and future profits. In order to carry out such an objective, the value created for shareholders can be measured through a system of indices that allow the determination of the value created during a financial exception or as compared with a certain reference period. The economic index Value Added (EVA) is relevant in quantifying a company’s capacity of creating value for capital suppliers.*

**KEY WORDS:** *performance, economic value added, invested capital, capital cost, net operating profit after taxes, weighed average cost of capital, real economic profit*

### **1. INTRODUCTION**

EVA is the mostly encountered index of measuring economic profit. It is an index of measuring internal performance of companies being promoted by Stern Steward American consulting company. Eva index is relevant in quantifying the capacity of a company of creating value for capital suppliers; capital cost represents the index of the average efficiency expected by investors under similar risk circumstances.

EVA can be determined both at the global level of a company and at the level of various organizational sub-divisions, irrespective of the fact that the company is quoted or not on the capital market. The index allows the calculation of a company’s performance during periods shorter than a year as it is expressed according to the accounting exploitation result.

Capital owners and potential investors are not interested in getting a positive EVA during short periods or yearly, but in constantly maintaining or even in

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increasing economic profit. EVA has a predictive importance as its evolution reflects the growth or not of the shareholders' wealth.

## 2. CALCULATION OF EVA

The index can be easily determined in case the following data are known: net operating profit after taxes, capital employed, and capital cost. EVA is also called "economic income". As compared with "accounting income", EVA has a higher informational value as it not only considers the profits generated by the use of the company's active assets but also the associated cost of invested capital.

- The most employed EVA formula is the following one:

$$\text{EVA} = \text{NETOPERATINGPROFIT AFTERTAXES} - (\text{EMPLOYEDCAPITAL} \times \text{CAPITALCOST})$$

*Net operating profit after taxes NOP* is determined by subtracting profit taxes ( $T_p$ ) from exploitation result ( $R_{\text{exp}}$ ):

$$\text{NOP} = R_{\text{exp}} - T_p$$

Exploitation result ( $R_{\text{exp}}$ ) is determined by subtracting exploitation expenditures ( $Ex_{\text{exp}}$ ) from exploitation incomes ( $I_{\text{exp}}$ ):

$$R_{\text{exp}} = I_{\text{exp}} - Ex_{\text{exp}}$$

*Capital cost* includes the cost of the company's own capital and the debt's cost. It is a weighed average cost ( $C_{wa}$ ) of the costs of employed financing sources. It is determined as a weighed arithmetic mean of the cost of the company's own capital and of the cost of loaned capital:

$$C_{wa} = \frac{C_o}{C_i} \times P_f + \frac{D}{C_i} \times i \times (1 - t)$$

Where:

$C_o$  = Company's own capital;

$C_i$  = Invested capital;

$P_f$  = Rate of financial profitableness;

$D$  = Long term debts;

$i$  = Interest rate;

$t$  = Taxes.

- Another formula employed when calculating EVA starts with the fact that this index represents *real economic profit* as it regards the whole capital used for financing:

$$\text{EVA} = (P_i - C_{wa}) \times C_i$$

Where:

$P_i$  = rate of profitability of total invested capital.

The following idea emerges out of this formula: the investor is going to require a profitability of invested capital able to overpass its cost in order to get economic value added.

- In case one decomposes the above formula in order to see the factors it depends on, the result is the following one:

$$EVA = \left( P_i \times N_a \times \frac{1}{Ra} - C_{mp} \right) \times C_i$$

where:

$P_i$  = Rate of incomes profitability;

$N_a$  = Number of rotations of total active assets;

$Ra$  = Accounting structure rate that reflects the share of invested capital within total assets.

Accordingly, economic value added is not an independent index; it can be the result of other rates calculated within a company's economic and financial analysis.

### 3. EXAMPLE REGARDING THE CALCULATION OF EVA ACCORDING TO THE DATA SUPPLIED BY YEARLY FINANCIAL SITUATIONS

In order to exemplify we are going to focus upon a company that displays the following simplified accounting balance sheet and profit and loss account:

**Table 1. Simplified accounting balance sheet:**

Indices	Amount (Lei)
A. Fixed assets	775 000
B. Circulating assets	400 000
C. Advance payments	-
D. Short term debts	283 000
E. Net circulating assets, namely net current debts	117 000
F. Total assets minus current debts	892 000
G. Long term debts	380 000
H. Provisions	-
I. Advance incomes	-
J. Capital and reserves	512 000
I Subscribed given capital	150 000
IV Reserves	215 000
VI Result of exercise	147 000

**Table 2. Simplified profit and loss account:**

	Indices	Amount (Lei)
1.	Financial result ( $V_{\text{exp}}$ )	1 300 000
2.	Exploitation expenditures ( $E_{\text{exp}}$ )	1 025 000
3.	Exploitation result ( $R_{\text{exp}}$ )	275 000
4.	Financial incomes	-
5.	Financial expenditures	100 000
	- interest expenditures	100 000
6.	Extraordinary incomes	-
7.	Extraordinary expenditures	-
8.	Gross result	175 000
9.	Taxes (16%)	28 000
10.	Net result	147 000

Further we are going to determine the indices required in order to calculate EVA:

1. Exploitation result ( $R_{\text{exp}}$ ):  $R_{\text{exp}} = 275.000$  Lei

2. Profit taxes ( $T_p$ ):  $T_p = 28.000$  Lei

3. Net operational profit ( $NOP$ ):  $NOP = R_{\text{exp}} - T_p = 247000$  Lei

4. Tax share (t):  $t = \frac{T_p}{R_{\text{exp}}} = 0.10$

5. Invested capital ( $C_i$ ):  $C_i = C_o + D = 512000 + 380000 = 892000$  Lei

6. Profitableness of invested capital ( $P_i$ ):  $P_i = \frac{NOP}{C_i} = \frac{247.000}{892.000} = 27.69\%$

7. Company's own capital ( $C_o$ ):  $C_o = 512000$  Lei  
Share within total invested capital = 57.40%

8. Profitableness of the company's own capital ( $P_f$ ):

$$P_f = \frac{NOP}{C_o} = \frac{247000}{512000} = 48.24\%$$

9. Long term debts (D):  $D = 380000$  Lei  
 Share within total invested capital = 42.60%

10. Interests expenditures ( $Exp_{int}$ ):  $Exp_{int} = 100000$  Lei

11. Interest rate (i):  $i = \frac{Exp_{int}}{D} = \frac{100000}{380000} = 26.31\%$

12. Weighed average cost of capital ( $C_{wa}$ ):

$$C_{wa} = \frac{C_o}{C_i} \times P_f + \frac{D}{C_i} \times i \times (1 - t) = \frac{512000}{892000} \times 48.24\% + \frac{380000}{892000} \times 26.31\% \times (1 - 0.10) = 37.77\%$$

13. Economic Value Added (EVA):

$$EVA = (P_i - C_{wa}) \times C_i = (27.69\% - 37.77\%) \times 892000 = -89913.6 \text{ Lei}$$

#### 4. CONCLUSIONS

Economic Value Added is not an independent index. It can be the result of other rates calculated within a company's economic and financial analysis.

The main *advantages* of this index are the following ones:

- It is an index measuring a company's internal performance relying upon value;
- It reflects in absolute manner the value yearly added or destroyed according to the point of view of the investor;
- It a manner of choosing the most promising financial investment;
- It is a manner of protecting investors against the destruction of the value they detain;
- It is an index that tends towards maximizing.

EVA can be chosen in order to analyze the performance of a company as it matches the principle according to which value can be created only in case an investment brings to its investors not only a positive result but a result superior to the one expected by the investors. EVA intends to be a performance index of management. Under such circumstances, a company can get a profit when destroying value in case such a profit is inferior to the one it should achieve.

EVA is a measuring device of the value created by a company for its shareholders, calculated a posteriori according to *ascertained data*, easily being considered as an index of a company's *internal performance*. This is one of the *shortcomings* of the index as the value of a company also depends on its future development abilities.

Consequently, certain authors recommend the calculation of Eva according to the following relation:

$$\text{PERFORMANCE} = \text{GLOBAL RESULT} - \text{COST OF COMPANY'S OWN CAPITAL}$$

Theoretically, they have reached the notion of global result of the exercise according to the relation:

GLOBAL RESULT OF THE EXERCICE	=	NET RESULT OF THE PROFIT AND LOSS ACCOUNT	+/-	ADJUSTMENTS IN ORDER TO MAINTAIN CAPITAL	+/-	OTHER VARIATIONS OF COMPANY'S OWN CAPITAL NOT ASCERTAINED IN THE RESULT OF THE EXERCICE
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Defining performance through the net result of the exercise or through global result is a matter of vision. Global result reflects performance only to the extent to which it notices the incomes and the losses that comprise economic benefits and does not consider the surplus resulting out of increasing active assets' prices.

Global result is future directed as it considers not only achieved incomes but also possible future ones. Global result already includes the cost of financing the company by third parties. Consequently, in order to determine performance from the point of view of the shareholders (as EVA shows) one should subtract the cost of a company's own capital from global result.

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## **THE INCONSISTENCY AND THE IMPERATIVE CHANGE IN ROMANIAN TOURISM**

**MIRELA MAZILU** \*

**ABSTRACT:** *The inconsistency and even the lack of a strategy in tourism, the lack of promotion for Romania abroad, and the expensive and poor services are some of the problems which managers present within the “Private Government” meeting on tourism have identified as needing immediate rehabilitation for the re-launching of the market in Romania.*

*Motto: “Give me the peace to accept the things I cannot change, the courage to change the ones I can, and the wisdom to be able to distinguish among them.” - Marcus Aurelius.*

**KEY WORDS:** *Romanian tourism, current situation, expected results*

The inconsistency and even the lack of a strategy in tourism, the lack of promotion for Romania abroad, and the expensive and poor services are some of the problems which managers present within the “Private Government” meeting on tourism have identified as needing immediate rehabilitation for the re-launching of the market in Romania. But, unfortunately, without a “strategy nothing happens. We suffer from inconsistency, because, each time when ministers change, what was started before, it was changed”, declared Nicolae Demetriade, the former owner of Happy Tour, the biggest travel agency at a local level and the president of World Travel. The change and the inconsistency of a plan for the re-launching of tourism are observed by more and more actors involved in the development of tourism.

We talk about tourism as we have talked about agriculture for 15 years as being a priority, but we have to admit, tourism has never been a priority either for the central, local authorities or for the governments. If we take a look at the political platforms of the parties, we will always see three lines about tourism. There is a strategy, but it is not applied.

According to the representatives in tourism, the re-founding of the former National Agency for Tourism (ONT) on a structured based on the partnership between the public and the private and the adoption of the Master Plan for tourism as a law of tourism would ensure the maintenance and the application of the strategy on a long

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term, regardless of the political affiliation of the Government. "I have said even since then that the Master Plan which all of us have elaborated for two years will remain somewhere in a drawer, if it was not turned into a law of tourism. This agency of tourism should lobby for it and change this Master Plan into a law of tourism, because it is the only way in which it can be implemented, and a law survives the electoral cycles. As long as it is voted in Parliament, we understand that all the parties involved have agreed to it, so, any government would there be, this medium and long term Master Plan would be continued, and we need this continuity."

The re-launching of tourism in Romania and the attraction of a larger number of foreign tourists would bring supplementary benefits, in the opinion of many tourism managers, but with many and necessary changes.

According to the National Institute of Statistics (INS), 45.5% of the number of arrivals and 29.9% of the tourists spending the night within the tourist accommodation structures, from January to September 2007, were recorded in Bucharest and in the county residence cities, except Tulcea. On a second place, there are the treatment resorts with 25.5% tourists spending the night and 10.6% arrivals, followed by the seaside resorts, except for Constanta, with 24.1% tourists spending the night and 14.2% arrivals, and the mountain resorts with 10.2% tourists spending the night and 13.9% arrivals. For example, Bucharest and the county residencies represented, in the first months of 2008, 45.5% of arrivals in the tourist accommodation structures, on the second place being the other resorts and tourist circuits (14.7%), followed by the seaside area (14.2%), the mountain resorts (13.9%), the treatment resorts (10.6%) and the Danube Delta (1.1%).

The total of the arrivals recorded in the tourist accommodation structures within the first nine months of the year was of 5418.2 thousands, rising with 12.6% in comparison with the similar period of 2007.

The Romanian tourists' arrivals in the tourist accommodation units represented 77.3% of the total number of arrivals, while the foreign tourists represented 22.7% of the total number of arrivals, almost equal proportions with the ones from the period January-September 2007, as shown by an INS statement.

According to the Institute's data, the increasing percentages were recorded in all types of tourist accommodation structures, except for inns, pupils' camps and the tourist halting places.

The number of tourists spending the night recorded within this period in the accommodation structures was of 16472.2 thousands, 8.7% more than in the first nine months of 2007.

The Romanian tourists spending the night in the accommodation structures represented 82.5% from the total number of tourists spending the night, while the foreign tourists represented 17.5% from this total number.

Significant risings of the number of tourists spending the night in the accommodation structures were recorded in the following types: tourist houses, hostels, youth hotels, urban tourist hostels, rural tourist hostels.

At the same time, INS states that there were recorded reductions in comparison with the similar period of the previous year in pupils' camps, camping facilities and bungalows.

The index of net use of the accommodation places was 37.1% on the total structures for the period January-September 2007, increasing with 2.8% in comparison with the corresponding period of the previous year. The high indexes of the accommodation unit usage for the first nine months of 2007 were recorded in the cruise ships accommodations (90.9%) and hotels (44.5%).

The arrivals of foreign tourists in Romania, recorded at the customs checkpoints, were of 5738.2 thousands for the period January-September, increasing with 27.3% in comparison with the corresponding period of the previous year.

The majority of the foreign visitors comes from countries situated in Europe (90.4%). 61.7% of the foreign visitors total in Romania come from the countries of the European Union.

The departures of Romanian visitors abroad, recorded at the customs checkpoints, were 8458.6 thousands in the first nine months of the year, increasing with 23.6% as opposed to the corresponding period of the previous year. The means of road transportation were preferred by the Romanian visitors for travelling abroad (80.1% of the total number of departures).

In September 2007, as opposed to September 2006, the arrivals as well as the number of tourists spending the night in the accommodation structures recorded an increase with 11.4% and 7.2%.

The management of change represents the way in which we have to approach the process of change so that this should have the best results.

Change is a continuous process, and many changes take place without our intervention (the wear, the aging etc.). There are defined changes, which can be achieved or not, from various reasons.

In order to understand the change, we must understand the factors that influence it. Generally, there are 6 categories of factors which produce changes at the level of tourism policies: workforce, technology, the political world, the social trends, the competition, the economic "shocks".

The change is a process which needs the involvement of all the employees and its assumption.

The underestimation of the human potential, of the creativity and of the competencies of the employees can turn out to be an impediment for change.

What are the stages of the change process?

Generically speaking, the stages are the following:

- the establishment of the purposes and of the expected results in tourism after the change;
- the comparison between the current situation and the expected results;
- the definition of the necessary activities for the realisation of the future status;
- the elaboration of the strategy for the administration of the transition.

We must draw the attention towards the fact that the change in tourism needs another strategy than the incremental one (the continuous improvement), because the success from the past can be the greatest obstacle of all sometimes. But, is there a need of foreign investors, of a new strategy and of trained people for this change, but especially for the acceptance of the new and of the sustainable things in Romanian tourism? Or do we wait again for the helpful interventions of the state?

In the study “Critical Issues in Tourism”, the American specialists, as well as other authors, consider that there are 7 main forms of state intervention in tourism: coordination, planning, legislation, investment, stimulation, socialising and protection. Youell Ray states in his study that the national authority’s functions, from an English point of view, would be to: establish, promote, achieve, ease, inform, legislate, finance, consult and classify. All these forms and functions allow a wide range of actions through which the tourist industry can be encouraged, supported and developed, using various tools and specific strategies.

The development of tourism, like any other economic activity, means also uncertainty, especially because of the rapid and profound changes in the business sector. Extremely serious negative consequences can be avoided through a rigorous planning of tourism, but this process is extremely difficult and complex. However, there are many barriers in the achievement of the tourist planning, among which there are the complexity and the diversity of the industry and of the governmental organisations in direct and indirect connection with the tourist activity (for instance, banks, shops etc.), the seasonal character of the tourist activity, the high cost due to the detailed analysis of resources and researches of the market which must be performed, and last but not least the people’s mentality, especially of those in the private sector, who are mainly against the planning.

The most efficient way of planning is through the involvement of the public sector (the government) as well as of the private sector in this process, the democratisation of the planning process facing two major obstacles: the inability of the local organisations to offer a viable model of planning and the impossibility of ensuring a high rate of consultancy for the local community members.

The tourist policy, which should be consistent and imperative, for the Romanian tourism medium and long term revival will have to aim the following priority objectives:

- the reduction of taxation;
- the continuous treatment of the international tourism as an export activity;
- the exemption from taxation of the reinvested profit on a certain period;
- the continuous perfection of the legislation and of the institutional frame in order to harmonise it with the dispositions of the World Organisation of Tourism and with the ones of the European Union;
- the involvement of the state in supporting financially the investments in tourism, especially of those of public interest (infrastructure), as well as in the international and internal promotion;
- the development of the specialised professional education system and of the professional reorientation of the unemployed workforce from the other economic sectors; the constitution of a network of education institutions integrated in the European network of tourism and hotels educational institutions;
- the correlation of the tourism development programs and projects with the regional development programs (transportation, telecommunications, the landscape design etc.);

- the special attention regarding the surveys – a useful tool for the hotels managers in order to maintain and increase the quality of the services.
- The enforcement of quality brands, in order to increase the competitiveness on the tourist market and in order to acknowledge the quality of the tourism services.

In short, the following represent an imperative necessity for Romania:

- To urgent the creation of the “Tourist Brand of Romania”, program for which 20-30 millions of euros are available, its elaboration having started in April of 2008;
- The World Organisation for Tourism has criticised the current slogan of Romanian tourism, because it does not transmit the essence of Romania for its potential visitors. These are surprised by the fact that their expectations about this country have been exceeded. The challenge with which Romanian tourism is struggling is to show the whole world, before they come to our country, how many beautiful things and experiences it can offer. Romania will benefit, until 2013, from European funds of 50 million euros for tourist promotion and information programs, through the Regional Operational Program.
- The purpose of the Master Plan is to identify the vulnerable points of the Romanian tourism, and then to elaborate restructuring plans through the identification of the financial resources and through the formation of a tourist market which can efficiently compete on the world market.
- In the next 10 years, the Romanian tourism will generate services of over 11 milliard euros, as it is estimated by the World Council of Tourism. According to the study performed by the Peacock Hotels Company, in the capital of our country new hotel projects with a total of 6200 rooms will be built in the following years. Bucharest is an attractive target and represents a great potential of development in comparison with the other cities in Europe regarding the level of occupation as well as the level of the net tariff obtained, as it is estimated by the World Council of Tourism. The preliminary data reveal that, in 2007, 500 new rooms were inaugurated, in 2008, 2000 were expected to be inaugurated, and by 2011 other 5000.

An important component of planning is the tourist prognosis. This has many types and can consist of three possible scenarios: optimistic, intermediary and pessimistic. Under the name of “Tourism 2020”, OMT has elaborated a long term quantity prognosis for the tourist demand, evaluating its development until 2020.

Also, in a report of the National Council of Tourism in France, presented in 2000, there is a prognosis of the macroeconomic tendencies in the evolution of the French tourist offer until 2020.

In conclusion, the change affects any kind of company including the multinational ones. It is a mistake to start from the premise that if one is extremely organised and is already on a high position, one will not be affected. On the contrary, there are more things to do and more often, because it is not difficult to reach the top, but it is harder to keep that place!

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## **THE CASH-FLOW STATEMENT – BETWEEN TRUE AND MANIPULATION**

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BOGDAN COTLEȚ\***

**ABSTRACT:** *Financial statements aim is to assure an efficient dialogue between the company and the external operators interested in having a good perspective of the entity. Information about the cash flows, as component of financial statements, is useful in providing users of financial statements with a basis to assess the ability of the entity to generate cash and cash equivalents and the needs of the entity to utilize those cash flows. The objective of our paper is to present the main informational valences of cash-flow statement for investors and also to show the potential “make-up actions” made to give wrong information about a company for the decision makers. For this purpose we will use a research methodology based on a research study by questionnaire on a sample of small and medium enterprises.*

**KEYWORDS:** *cash-flow, financial statements, decisions, manipulation*

### **1. INTRODUCTION**

The objective of financial statements is to provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions. Financial statements should be understandable, relevant, reliable and comparable. Reported assets, liabilities and equity are directly related to an organization's financial position. Reported income and expenses are directly related to an organization's financial performance.

Financial statements are intended to be understandable by readers who have "a reasonable knowledge of business and economic activities and accounting and who are willing to study the information diligently. Financial statements of companies provide a representative overview of a business' financial condition in short and long term. The financial statements present the relevant information of a business company, presented

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in a manner or form easy to understand. There are four basic financial statements presented by all Romanian companies as well like European Union companies: balance sheet, income statement, statement of cash flow, equity statement and a set of notes to the financial statements.

One of the most important components of financial statements is the Cash Flow Statements (CFS). The CFS allows investors to understand how a company's operations are running, where its money is coming from, and how it is being spent. Here you will learn how the CFS is structured and how to use it as part of your analysis of a company. A company can use a cash flow statement to predict future cash flow, which helps with matters in budgeting future activities. For investors, the cash flow reflects a company's financial health: basically is better to have more cash available for business operations. However, this is not a hard and fast rule. Sometimes a negative cash flow results from a company's growth strategy in the form of expanding its operations.

By adjusting earnings, assets and liabilities, the investors can get a very clear picture of what some people consider the most important aspect of a company: how much cash it generates by the company and, particularly, how much of that cash stems from main operations of this enterprise. It seems that every year another top athlete is exposed in a doping scandal. But these are people who are trained since birth to believe that all that matters is their performance, so they naturally take a risk on anything likely to increase their chances of winning. Companies similarly indoctrinated to perform well at all costs, also have a way to inflate or artificially "pump up" their earnings - it's called cash flow manipulation.

Our paper purpose is to present the main informational valences of cash-flow statement for investors and also to show the potential "make-up actions" made to give wrong information about a company for the decision makers.

## **2. THEORETICAL BACKGROUND**

Businesses are all about trade, the exchange of value between two or more parties, and cash is the asset needed for participation in the economic system. For this reason, while some industries are more cash intensive than others, no business can survive in the long run without generating positive cash flow per share for its shareholders. To have a positive cash flow, the company's long-term cash inflows need to exceed its long-term cash outflows. An outflow of cash occurs when a company transfers funds to another party. Such a transfer could be made to pay for suppliers and creditors, employees, or to purchase long-term assets and investments, or even pay for legal expenses and lawsuit settlements. It is important to note that legal transfers of value through debt, like a purchase made on credit, is not recorded as a cash outflow until the money actually leaves the company. A cash inflow is of course the exact opposite; it is any transfer of money that comes into the company's possession. Typically, the majority of a company's cash inflows are from customers, banks and investors who purchase company equity from the company. Occasionally cash flows come from sources like legal settlements or the sale of company real estate or equipment.



Also it's very important to note the distinction between profit and positive cash flow just because a company is bringing in cash does not mean it is making a profit and vice-versa. For all Romanian companies there are two important parts of a company's financial statements: the balance sheet and the income statement. The balance sheet gives a one-time snapshot of a company's assets and liabilities and the income statement indicates the business's profitability during a certain period. Over that the big enterprises (with more of 50 employees, 7.300.000 euro value of assets or turnover bigger than 3.750.000 euro) have to elaborate other two important parts of financial statements: cash flow statement and statement of changes in equity.

Cash flow statement is determined by looking at three components by which cash enters and leaves a company: core operations, investing and financing. Calculating the cash inflows and outflows caused by core business operations, the operations component of cash flow reflects how much cash is generated from a company's products or services. Generally, changes made in cash depreciation, inventory, accounts receivable and accounts payable are reflected in cash from operations. That's why cash flow is calculated by making certain adjustments to net income by adding or subtracting differences in revenue, expenses and credit transactions resulting from transactions that occur from one period to the next. These adjustments are made because non-cash items are calculated into net income of companies and total assets and liabilities. So, because not all transactions involve actual cash items, many items have to be re-evaluated when calculating cash flow from operations. That's why, depreciation which is not really a cash expense; it is an amount that is deducted from the total value of an asset that has previously been accounted for. That is why it is added back into net sales for calculating cash flow. The only time income from an asset is accounted for in CFS calculations is when the asset is sold.

Changes in accounts receivable on the balance sheet from the beginning of the year to the final of the year must also be reflected in cash flow. If accounts receivable increase from one accounting period to the next, the amount of the increase must be deducted from net sales because, although the amounts are considered revenue, not cash. If accounts receivable decreases, this implies that more cash has entered the company from customers paying off their credit accounts.

An increase in inventory, on the other hand, signals that a company has spent more money to purchase more raw materials. If the inventory was paid with cash, the increase in the value of inventory is deducted from net sales. A decrease in inventory would be added to net sales. If inventory was purchased on credit, an increase in accounts payable would occur on the balance sheet, and the amount of the increase from one year to the other would be added to net sales.

The same logic holds true for taxes payable, salaries payable and prepaid insurance. If something has been paid off, then the difference in the value owed from one year to the next has to be subtracted from net income. If there is an amount that is still owed, then any differences will have to be added to net earnings. Cash changes from investing are usually cash out item, because cash is used to buy new equipment, buildings or short-term assets such as marketable securities. However, when a company divests of an asset, the transaction is considered cash from investing.

Changes in debt, loans or dividends are accounted for in cash from financing. Changes in cash from financing are considered cash in when capital is raised, and they're considered cash out when dividends are paid. On the other hand, if a company issues a bond to the public, the company receives cash financing; however, when interest is paid to bondholders, the company is reducing its cash for calculating cash in financing.

Cash flow is often considered to be one of the cleaner figures in the financial statements. Companies benefit from strong cash flow means being more attractive and getting a stronger rating. After all, companies that have to use financing to raise capital, be it debt or equity, can't keep it up without exhausting themselves.

Always we can compare the situation of some companies with an athlete or weight lifter. Every year another top weight lifter is exposed in a doping scandal. But these are people who are trained since birth to believe that all that matters is their performance, so they naturally take a risk on anything likely to increase their chances of winning. Romanian enterprises, similarly indoctrinated to perform well, also have a way to inflate or artificially "pump up" their earnings - it's called cash flow manipulation. Here we look at how it's done, so you are better prepared to identify it.

The corporate muscle that would receive the cash flow accounting injection is operating cash flow (OCF). It is found in the cash flow statement, which comes after the income statement and balance sheet.

Companies can bulk up their statements simply by changing the way they deal with the accounting recognition of their outstanding payments, or their accounts payable. When a company has written a check and sent it to make an outstanding payment, the company should deduct its accounts payable. While the check is on the way, a cash-manipulating company will not deduct the accounts payable with complete honesty and claim the amount in the operating cash flow as cash on hand.

Companies can also get a huge boost by writing all their checks late and using overdrafts. This boost, is a result of how generally accepted accounting principles treat overdrafts: they allow, among other things, for overdrafts to be lumped into accounts payable, which are then added to operating cash flow. This allowance has been seen as a weakness of IFRS, but until the accounting rules change, you'd be wise to scrutinize the numbers and footnotes to catch any such manipulation.

Another way a company might increase operating cash flow is by selling its accounts receivable. The agency buying the accounts receivable pays the company a certain amount of money, and the company passes off to this agency the entitlement to receive the money that customers owe. The company therefore secures the cash from their outstanding receivables sooner than the customers pay for it. The time between sales and collection is shortened, but the company actually receives less money than if it had just waited for the customers to pay. So, it really doesn't make sense for the company to sell its receivables just to receive the cash a little sooner - unless it is having cash troubles, and has a reason to cover up a negative performance in the operating cash flow column. Also a subtle form of increasing operating cash-flow performance is capitalization of expenses.

A company has to spend money to make products. The costs of production come out of net income and therefore operating cash flow. Instead of taking the hit of

an expense all at once, companies capitalize the expense, creating an asset on the balance sheet, in order to spread the expense out over time - meaning the company can write off the costs gradually. This type of transaction is still recorded as a negative cash flow on the cash flow statement, but it is important to note that when it is recorded it is classified as a deduction from cash flow from investing activities, not from operating cash flow. Certain types of expenditures - such as purchases of long-term manufacturing equipment - do warrant capitalization because they are a kind of investing activity.

The capitalization is questionable if the expenses are regular production expenses, which are part of the operating cash flow performance of the company. If the regular operating expenses are capitalized, they are recorded not as regular production expenses but as negative cash flows from investment activities. While it is true that the total of these figures - operating cash flow and investing cash flow - remain the same, the operating cash flow seems more muscular than that of companies who deducted their expenses in a timely fashion. Basically, companies engaging in this practice of capitalizing operating expenses are merely juggling an expense out of one column and into another for the purpose of being perceived as a company with strong core operating cash flow. But when a company capitalizes expenses, it can't hide the truth forever. Today's expenses will show up in tomorrow's financial statements, at which time the stock will suffer the consequences.

### **3. METHODS AND RESULTS**

In order to discover and confirm the hypothesis regarding the elaboration and manipulation of cash flow statement, during the year 2009 we performed a survey on a representative sample of 70 companies in Timis County, which in 2008 applied European Accounting Directives.

Based on this survey we received answers from the heads of financial-accounting departments regarding a series of questions about Romania applying the European Directives in the field of financial statements in general and cash flow statement in particular.

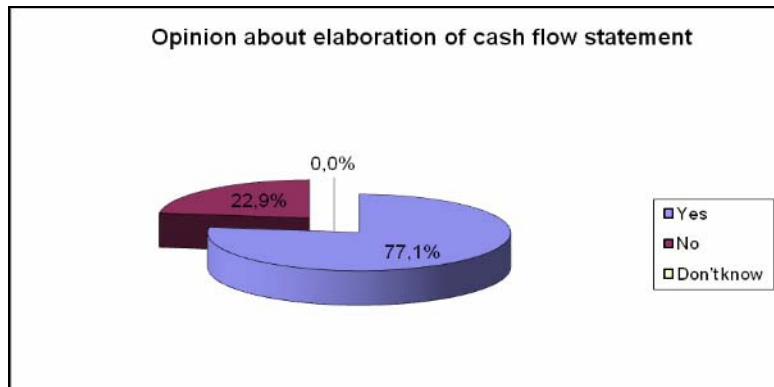
The main questions were: Do you elaborate the cash flow statement for the last year? Do you think the fulfil of cash flow statement is useful for your company or not? Which are the main users for your cash flow statement? Which are the main reasons for bad cash flow in your company? Which are the main methods to manipulate the cash flows presented in your financial statements? Do you think the forecast of cash flow statement will be useful for your company?

By these questions we tried to question financial controllers from Timis County about their experience about elaborating and used the cash flow statement in improving managerial performance.

We examined also some particular aspect or technique of manipulate the cash flow presented by Romanian companies.

Based on our survey, we registered the following results:

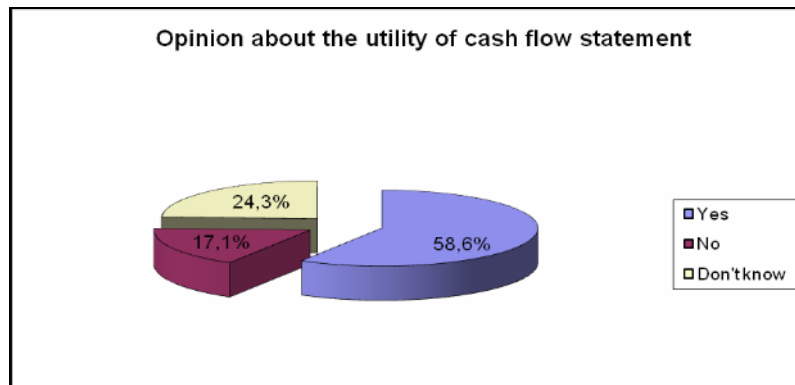
1. Do you elaborate the cash flow statement for the last year?



**Table 1. Presentation of cash-flow by financial statements**

As we can see there are a large number of companies (77%) which elaborate every year the cash flow statement. This sector is represented by large enterprises from Timis County which is obliged by Romanian law to elaborate and present the cash flow statement and a small part of SMEs which are subsidiaries of multinational companies. A smaller part of respondents (23%) represented by SMEs don't elaborate cash flow statements for their activity because they don't see the advantages of this statement for the future of their company.

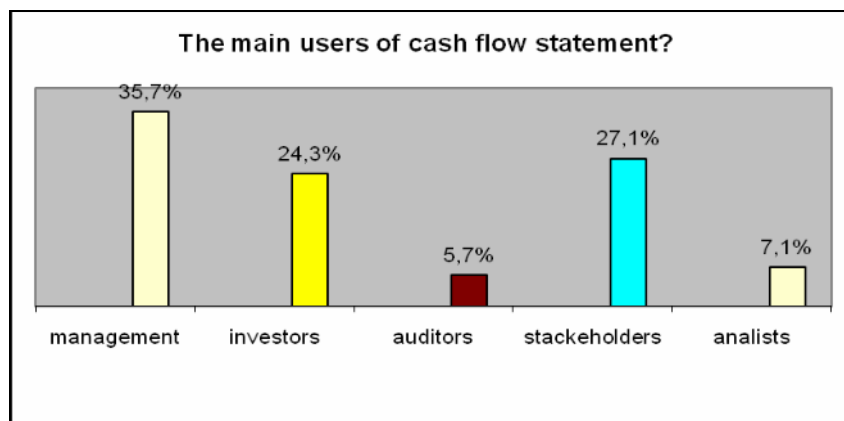
2. Do you think the presentation of cash flow statement is useful for your company or not?



**Table 2. The utility of cash flow statement**

As we can see from our research almost half from our respondents don't realize the importance of cash flow statement for the good way of their company. The main reason can be the lack of tradition in presentation of this component of financial statements. Romanian companies elaborated cash flow statement since 2001 when Romania applied accounting regulation in compliance with International Accounting Standards. This point of view can be wrong seeing the actual conditions of international financial crisis when the liquidity of companies is very low.

3. Which are the main users for your cash flow statement?



**Table 3. Users of cash flow statement**

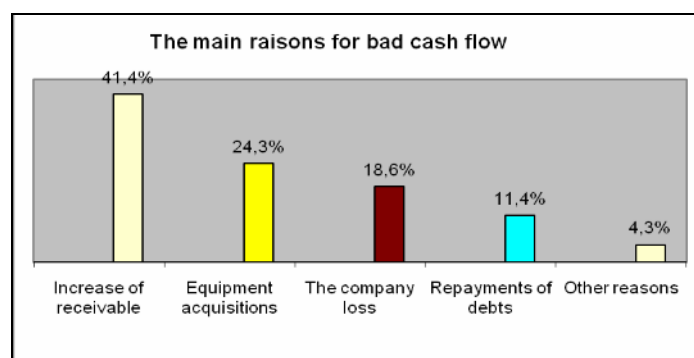
As we can see from our empirical study the main important users of the cash flow statement are the manager’s stakeholders and investors.

The managers want to know which the status of the company cash is in order to organize the future payments to suppliers and the future acquisitions or long time investments.

The stakeholders of companies want to see the actual situation of cash-flow in order to evaluate the different ways for the distribution of company’s profit.

One of the main index for investors and creditors is the situation of cash-flow. The cash flow information should enable investors to predict the dividends or interest they want to distribute in the future and to evaluate the potential risk of a given investment. The presentation of cash flow is also important to evaluate the liquidity, solvency and financial flexibility of companies. In this way the investors and creditors will make rational decision regarding a company.

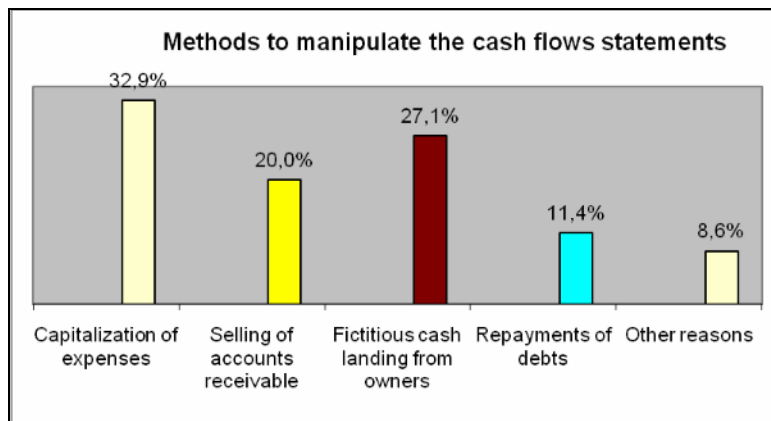
4. Which are the main raisons for bad cash flow in your company?



**Table 4. Raisons for bad cash flow**

The main reason for bad cash flow reported by a company is often represented by the inadequate management of receivables. These problems can also conduct to insolvability or to the fail of companies. For the companies which are in development some periods can show a negative cash flow because of the equipment acquisitions which can be very expensive. But if these equipments are productive in the near future they will generate positive cash flow for these companies. The company loss in crisis periods has also a direct negative influence on cash flow reported by companies and the relation between company loss and negative cash flow is stronger than the relation between the profit and positive cash-flow.

5. Which are the main methods to manipulate the cash flows presented in your financial statements?



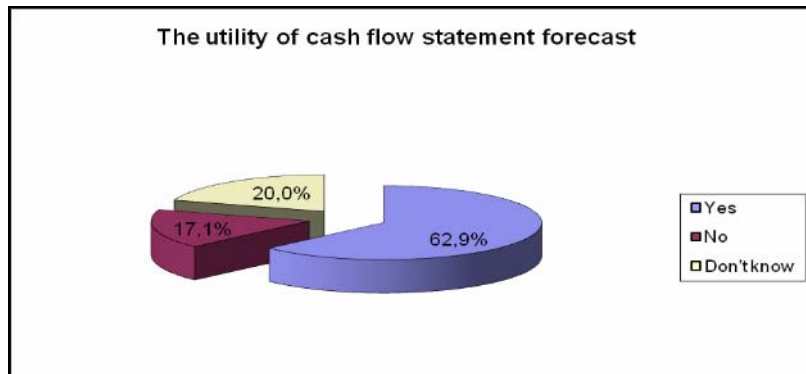
**Table 5. Methods to manipulate the cash flows statement**

The management of companies whose are on the market to sell wants to provide usually positive cash flow from operating activity. That's why a big number of companies (33%) try to "manage the expenses" and capitalize them in order to transfer cash out from operating activity to investing activity. Also to positives the general cash flow of companies the owners can landing their own company in a fictitious way at the end of the year, in order to report positive cash flow for that financial year.

6. Do you think the forecast of cash flow statement will be useful for your company?

The objective of projections is to make a reasonable forecast of a firm's future cash flow performance and probable financial condition that will allow you to answer questions such as: will the firm be able to pay back its current debt obligations out of future cash flow?, how much additional financing will the firm need to finance its future growth?, what is the firm's future debt capacity?, What is the maximum amount of debt that can be serviced out of cash flow, given the firm's other needs, such as working capital, plant expenditures, and so on?

That's why a big number of companies (63%) answered that the forecast of the cash-flow statement is a very important tool for the decision-makers.



**Table 6. The utility of cash flows statement forecast**

#### 4. CONCLUSIONS

The advantage of a cash flow statement, when used in conjunction with the rest of the financial statement, is that it provides information that enables users to evaluate the changes in the net assets of an enterprise, its financial structure (including its liquidity and solvency) and its ability to affect the amounts and timing of cash flows in order to adapt to changing circumstances and opportunities. Cash flow information is useful for assessing the ability of an enterprise to generate cash and cash equivalents and it also enables users to develop models to assess and compare the present value of future cash flows of different entities. It also enhances the comparability of the reporting of operating performance by different entities because it eliminates the effects of applying different accounting criteria for the same transactions and events. Historical cash flow information is often used as an indicator of the amount, timing and certainty of future cash flows. It is also useful in checking the accuracy of past assessments of future cash flows and for examining the relationship between profitability and net cash flow and the impact of changing prices.

Cash is one of the major lubricants of business activity, but there are certain things that cash flow doesn't tell us. It doesn't tell us *the profit earned or lost* during a particular period: profitability is composed also of things that are not cash based. This is true even for numbers on the cash flow statement like "cash increase from sales minus expenses", which may sound like they are indication of profit but are not.

As it doesn't tell the whole profitability story, cash flow doesn't do a very good job of indicating the overall *financial well-being of the company*. Sure, the statement of cash flow indicates what the company is doing with its cash and where cash is being generated, but these do not reflect the company's entire financial condition. The cash flow statement does not account for liabilities and assets, which are recorded on the balance sheet. Furthermore accounts receivable and accounts payable, each of which can be very large for a company, are also not reflected in the cash flow statement.

On the other hand, the cash flow statement is a compressed version of the company's checkbook that includes a few other items that affect cash, which shows how much the company spent or collected from the repurchase or sale of stock, the

amount of issuance or retirement of debt and the amount the company paid out in dividends. Being considered to be one of the cleaner figures in the financial statements cash flow statement is sometime the object of manipulation. Companies try to report big positive cash flow and the benefit from strong cash flow means being more attractive and getting a stronger rating. After all, companies that have to use financing to raise capital, be it debt or equity, can't keep it up without exhausting themselves.

Respected financial professionals, demonstrate that it's a lot harder to manipulate cash flow from operations than it is earnings per share, but the interest of management can be very strong in that manners to "make-up" other face for their company.

Over all cash flow statement is very necessary for decision makers because it measures the actual money paid out or received by a company over a certain period of time. This measure excludes non-cash accounting charges like depreciation. And, more importantly, cash flows are objective. There is no value judgment about when and how revenues are recognized, the cash flow statement only recognizes the actual cash that passes into or out of a business. To this point we have looked at past and present performance, evaluating existing financial statements and existing cash flows. In our days it is time to look to the future. Forecasting cash flows is notoriously difficult, but it is still an extremely valuable exercise to prepare a prediction of what a company's financial statements may look like in the future in order to prepare the competition with the concurrence.

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## **FINANCIAL RATIOS – REVEAL HOW A BUSINESS IS DOING?**

**MIRELA MONEA \***

**ABSTRACT:** *The paper aims to present the main financial ratios which provide a picture about company's profitability, its financial position, use of its assets efficiency, its long-term debt financing. Discussion is focused on: profitability ratios, short-term financial ratios, activity ratios, long-term debt ratios or dividend policy ratios. Also, will try to answer at the following main questions: What financial ratios analysis tells us? What the users of these needs to know?*

**KEY WORDS:** *ratios, financial analysis, financial statement, financial ratios, profitability, liquidity, activity ratios*

### **1. INTRODUCTION**

Accounting is the process of collecting, analyzing and reporting financial information.

The raw material of financial analysis is considered financial statement and with help of ratios analysis can be revealed profitability, liquidity, activity ratios or financing and debts burden ratios of one company.

Financial statement analysis it is an helpful techniques which have no significance only by reading the financial statement, being necessarily to calculate financial ratios, interpreting those financial ratios, and also, by using other techniques of financial analysis, such us horizontal analysis which reveals additional information about financial strengths and weaknesses, or vertical analysis which shows financial situation within a single accounting period.

The information contained in the financial statements is used and presents interest for different categories of users like: managers, investors, suppliers and other trade creditors, stockholders, financial analysts, government agencies. A number of financial ratios can be computed from the information contained in the financial statements.

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Financial ratios show financial relationship by dividing one financial item by another, and are an important tool for management, permitting a space comparison to place the company in her environment.

It is recommended that after financial ratios calculation to compare those ratios with a standard.

Financial ratios analysis is used to find an answer of the following main questions: is activity profitable, has the company enough money to pay its obligations, how higher is wages level of its employees, company use its assets efficiently, has company a gearing problem.

## 2. PROFITABILITY RATIOS

Profitability ratios measure income relative to sales and resources, determining the ability of a company to generate earnings and effective employment of resources. It is considered that a company is doing well when a profitability ratio has a higher value relative to the same ratio from a previous period.

The main profitability ratios to which have to be considered are the following:

- Gross Profit Margin;
- Net Profit Margin;
- Operating Profit Margin;
- Return on Assets;
- Return on Equity.

Gross profit margin measures the gross profit earned on sales taking into consideration company's costs of goods sold, excepting other costs. Gross profit is the profit we earn before we take off any administration costs, and this has a higher value than net profit.

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Turnover}} \times 100 \quad (1)$$

Turnover = Sales

Gross Profit = Sales – Cost of Sales

An average value of gross profit margins vary from industry to industry, or type of company within an industry.

Net profit margin shows what percent of profit is made from sales. Similarly with the gross profit margin, net profit margin varies from business to business, or type of company within an industry. Net Profit = Gross Profit - Expenses

$$\text{Net Profit Margin} = \frac{\text{Net Profit}}{\text{Turnover}} \times 100 \quad (2)$$

Operating profit margin reveals the return from standard operations, excluding the impact of extraordinary items, or how much profit earned a company from standard operations, being defined by dividing operating profit to turnover. Operating profit = sales – costs of goods sold.

$$\text{Operating Profit Margin} = \frac{\text{Operating Profit}}{\text{Turnover}} \times 100 \quad (3)$$

Return on assets is a measure of how effectively the company's assets are being used to generate profit.

$$\text{Return on Assets} = \frac{\text{Net Profit}}{\text{Total Assets}} \times 100 \quad (4)$$

Return on assets indicates the capital intensity of the company, being useful to take into consideration the idea of trying to convert assets into profit.

Return on Equity measures the rate of return on the ownership investments. It measure company's efficiency at generating profits from each monetary unit or net assets, being one of the most financial ratio, showing how well a company uses investments to generate earnings growth. It is an important ratio for owners and potential investors.

$$\text{Return on Equity} = \frac{\text{Net Profit}}{\text{Shareholder Equity}} \times 100 \quad (5)$$

### 3. LIQUIDITY AND SOLVENCY RATIOS

Liquidity ratios shows company's ability to pay off short term obligations as they come due, to convert short term assets into cash to cover debts.

The main ratios which have to be considered are: general liquidity; intermediate liquidity; immediate liquidity; solvency ratio.

General liquidity is in accordance with working capital being considered a well indicator of company's ability to pay off her bills and debts. Liquidity ratios are of particular interest to those extending short term credit to the company. This ratio is known like current ratio or working capital ratio.

$$\text{General liquidity} = \frac{\text{Current Assets}}{\text{Current Liabilities}} \quad (6)$$

The current assets used in the general liquidity ratio are inventories, accounts receivable, short term investments, cash. In the industrial field where there is a long production life cycle, this ratio has to be almost 2 (or 200%). A value under unit (<1) indicates that short term debts are not cover by current assets and working capital has a negative value. Short term creditors prefer a higher value of this ratio since it reduce their risk, and shareholders prefer a lower value so that more of the company's assets are working to grow the business.

Intermediate liquidity - the normal level is almost 0.8-1 (or 80% - 100%) and show company's ability to cover short term debts. The higher this ratio is, the better is the position of the company. This ratio is known like quick ratio.

$$\text{Intermediate liquidity} = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}} \quad (7)$$

Immediate liquidity reveals company's ability to pay off current obligations with cash (including short term investments). A normal level of this ratio is 0.2-0.3 (or 20% - 30%). This ratio is known like cash ratio.

$$\text{Immediate liquidity} = \frac{\text{Cash} + \text{Short term Investments}}{\text{Current Liabilities}} \quad (8)$$

Immediate liquidity ratio excludes all current assets except the most liquid cash and short term investments, and it is considered the most conservative liquidity ratio.

Solvency ratio shows company's ability to face with medium and long term liabilities. This ratio measures company's financial security relative to its creditors and financial institutions. The normal value of this ratio has to be higher than 1.5.

$$\text{Solvency ratio} = \frac{\text{Total Assets}}{\text{Total Liabilities}} \quad (9)$$

#### 4. ACTIVITY RATIOS

Activity ratios tell us how well a company is managing its assets, and help financial statement users to evaluate levels of output generated by assets. The assessment of activity ratios helps us to understand the overall level of efficiency at which a business is performing.

The activity ratios are useful, especially when these are compared with standards taking into account industry averages.

The main ratios which have to be considered are:

- Total Assets Turnover;
- Fixed Assets Turnover;
- Current Assets Turnover;
- Inventory Turnover and Inventory Period;
- Receivables Turnover and Average Collection Period;
- Working Capital Turnover.

Generally, all these activity ratios can be express in number of rotation of one item through turnover (how quickly an item is generated sales), or in terms of the number of days needed by one item to generate sales.

Total assets turnover compares the turnover with the assets that the company has used to generate that turnover, reflecting the efficiency of assets utilization, or otherwise how well the company management is using its total assets to generate sales.

Total assets are split in fixed assets and current assets, so we can take about the ratios which take into consideration that element, and could be built others two activity ratios, as follow: fixed assets turnover and current assets turnover.

$$\text{Total Assets Turnover} = \frac{\text{Turnover}}{\text{Total Assets}} \quad (10)$$

Fixed assets turnover show how well the company is using its fixed assets to generate sales, and it is calculate by dividing turnover to fixed assets (11). The higher is the value of the fixed assets ratio turnover the better.

$$\text{Fixed Assets Turnover} = \frac{\text{Turnover}}{\text{Fixed assets}} \quad (11)$$

Current assets turnover show how well the company is using its current assets to generate sales, and it is calculate by dividing turnover to current assets (12). Also, regarding the current assets there can be split, and we can calculate similar ratio such as inventory turnover, or receivable turnover.

$$\text{Current Assets Turnover} = \frac{\text{Turnover}}{\text{Current Assets}} \quad (12)$$

Inventory is a very important asset that must to be managed. The inventory turnover ratio shows how effective the company management is managing inventory. This activity ratio could be express also through cost of goods sold in a time period divided by the average inventory level during a period. Inventory period (14) is defined by dividing average inventory level to turnover, being expressed in days (15).

$$\text{Inventory Turnover} = \frac{\text{Turnover}}{\text{Average Inventory}} \quad (13)$$

$$\text{or Inventory Turnover} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}} \quad (14)$$

$$\text{Inventory Period} = \frac{\text{Average Inventory}}{\text{Turnover}} \times 365 \quad (15)$$

Receivable turnover indicates how quickly the company collects his accounts receivables being defined by dividing annual credit sales to accounts receivable (16). Often, the receivable turnover is expressed in terms of the number of days that credit sales remain in accounts receivable before they are collected. This number of days is known as the average collection period (17).

$$\text{Receivable Turnover} = \frac{\text{Annual Credit Sales}}{\text{Accounts Receivable}} \quad (16)$$

$$\text{Average Collection Period} = \frac{\text{Accounts Receivable}}{\text{Annual Credit Sales}} \times 365 \quad (17)$$

These ratios can be used to determine whether the company is having trouble collecting on sales it provided customers on credit. Average collection period helps monitor the effectiveness of credit management policy and also, helps the company budget for cash flows.

Working capital turnover ratio - the relationship between turnover and working capital, show how effectively working capital is being used in terms of the turnover. There is no ideal values regarding this ratio, but the higher is the better.

$$\text{Working Capital Turnover} = \frac{\text{Turnover}}{\text{Working Capital}} \quad (18)$$

## 5. DEBT RATIOS

Debt ratios show how company is using long term debt, providing to the users indication of the long term solvency of the company, and how debt are used to finance the company, and how well these debt are managed.

The main debt ratios which have to be considered are: Debt to Total Assets; Debt to Equity; Interest Coverage.

Debt to total assets shows the proportion of assets finance by debt, and is express as a percentage, being calculated by dividing total debt to total assets. A debt to total assets ratio of 50 percent expressing that half of the assets are financed with debt.

$$\text{Debt to Total Assets} = \frac{\text{Total Debt}}{\text{Total Assets}} \times 100 \quad (19)$$

Debt to equity ratio is defined dividing total debt to total equity.

$$\text{Debt to Equity} = \frac{\text{Total Debt}}{\text{Equity}} \quad (20)$$

Interest coverage ratios reveal how well company's earnings can cover the interest payments on its debt, and express a measure of safety, being expressed as a multiplier.

$$\text{Interest Coverage} = \frac{\text{Earnings Before Interest and Taxes}}{\text{Interest Expenses}} \quad (21)$$

## 6. DIVIDEND POLICY RATIOS

Dividend policy ratios are useful for investors, and these ratios are relatively simple both to use and to understand. Investors, especially, are concerned with the return provided by their investments. They need information to help them to assess the ability of the company to pay dividends. The basic dividend policy ratios which

investors are interested in are the following: Earnings per Share; Dividends per Share; Dividend Yield; Dividend Cover; Price/Earning Ratio.

Earning per share is one of the fundamental dividend policy ratios, expressing the average amount of profits earned per ordinary share issued, being calculated as follow:

$$\text{Earnings per Share} = \frac{\text{Pr ofit available to equity shareholders}}{\text{Averagenumber of issued equity shares}} \quad (22)$$

Dividend per share ratio is similar with first one and shows how much the shareholders were actually paid by way of dividends, and is calculated by dividing total amount of dividends paid to equity shareholders to the average number of issued equity shares.

$$\text{Dividends per Share} = \frac{\text{Dividends paid to equity shareholders}}{\text{Averagenumber of issued equity shares}} \quad (23)$$

Dividend yield ratio allows investors to compare the latest dividend they received with the current market value of the share as an indicator of the return they are earning on their shares.

$$\text{Dividend Yield} = \frac{\text{Dividends per Share}}{\text{Share Price}} \quad (24)$$

Dividend cover ratio tells us how easily a business can pay its dividend from profits. A high dividend cover means that the company can easily afford to pay the dividend and a low value means that the business might have difficulty paying a dividend.

$$\text{Dividend Cover} = \frac{\text{Net profit available to equity shareholders}}{\text{Dividends paid to equity shareholders}} \quad (25)$$

Price/Earning Ratio is a vital ratio for investors, which gives us an indication of the confidence that investors have in the future prosperity of the business.

$$\text{Price/Earnings Ratio} = \frac{\text{Share price}}{\text{Earnings per share}} \quad (26)$$

## **7. CONCLUSIONS**

Financial ratios are useful to indicate company's performance and financial situation. To be significant most of the financial ratios must to be compared to company's forecast, to historical values of the same company, to a value which is considered an optimum value for the company's activity sector, or ratios of similar companies. Some ratios by themselves may not be representative, and should be

viewed as indicators or combined with others ratios to give us a picture about company's situation. Financial ratios have to satisfy different needs for information for the different users. Users are interested by information that focuses on the financial position, performance, activity assets utilization, company's financial structure, its liquidity and solvency, and its capacity to adapt to changes in the environment in which it operates. Financial ratio analysis can also help users to check whether a business is doing better in one period (current financial exercise) than it was last period, and it can tell them if one business is doing better or worse than other businesses doing and selling the same things.

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## THE DEMAND FOR ECONOMIC GOODS

CLAUDIA MUNGIU-PUPĂZAN \*

**ABSTRACT:** *Satisfying the most needs of the consumer is done/achieved with economic assets. Each good has substitutes: using other goods where the original cost of using asset increases. The needs are desires. If needs are analyzed carefully, it is found to have various emergencies. People buy more or less a good since the price they have to pay reduced or increased. The concept of needs projects the concept of demand in the application that links quantities that are purchased by the sacrifices made to achieve these quantities [7]. While human needs seem to be limitless, a desire can be satisfied only at a certain price, which means that people moderate their demands. This phenomenon is not surface and superficial. Rather it is deep and usually is given the status of law: law of demand.*

**KEY WORDS:** *the demand, the individual demanding, the market demand, income change, the prices, consumer preferences*

### 1. INTRODUCTION

The law of demand expresses the existence of inverse relationship between the quantity purchased by people from a particular economic good and the price must pay. At higher prices it buys less, at lower prices will purchase greater quantities of a particular economic good. Usually, the explanation given to *inverse relationship* between the quantity required and the price is the following: when the price of the good increases, the buyer seeking to save it and use the substitution with other goods cheaper. If the price falls, effort-saving move to other property and the product is used to substitute goods more expensive [8].

### 2. THE DEMAND AND THE QUANTITY ASKED

Although, in general, changes in demand based on price change are reversed, there is the possibility of a positive influence of price on demand, which seems to

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express exceptions to the law of demand. Atypical behaviour of the demand occurs in several situations:

- a) *the effect of anticipation*. When an asset price increases and this causes an increase in the quantity purchased of that good in anticipation of further price increases. But this is not an exception to the law of demand. Anticipation of higher prices, due to first increase in price, increased demand for that product. Consumers buy more today to be able to buy less in future. No higher price, but changing expectations is the leading consumers to buy more today. They are guided by the idea to make reservations before the price increase further. Price drop may be accompanied by decreasing demand, consumers prefer to buy at lower prices also in the next period.
- b) *the effect of income*. Sometimes, it believes that the law of demand checks only for normal goods and luxury goods (luxury goods) are exceptions. A decrease in the price of luxury goods does not result in an increase in demand since these goods remain accessible only to certain categories of buyers;
- c) *the effect of snobbery* that is manifested in the case of buyers who want to show the consumer that belong of a higher social class and purchase goods becoming more expensive. In this case, it buys some goods for their price high, not low, in order to impress with high purchasing power;
- d) *the effect of incomplete information*. In the absence of better information, quality of products is determined by price. A higher price seems to indicate a higher quality. But there are situations where the same quality goods have different prices and demand is greater for the more expensive;
- e) a demand form are manifests atypical for "*Giffen paradox*". Poor families allocate most of their income to purchase the basic foodstuffs. Price increases for these products has the effect of the increase and not decrease the demand for them. Demand drops for other goods.

Corresponding to this situation, Giffen named the paradox that bears his name: "In these given circumstances, usually after a commodity price increases lead to decreasing demand manifests its inverse, ie the price increase may be accompanied by increased demand.

"Giffen paradox" can be explained based on two general effects of increasing the price of a good: on the one hand, there is increasing the amount required of other goods whose prices have not increased (*substitution effect*), and on the other hand, it manifests the reduced of real income (*income effect*). If the price of a lower good increases, and the effect of income is greater than the effect of substitution, the quantity required increases.

Depending on *the level to which expresses* a demand for a good can be seen in several ways: the individual demanding expressing the relationship between the amount requested by a consumer and its price of the product; the market demand expresses the relationship between the amount requested from a good to the market

level and its product price. The market demand is obtained by adding "horizontal" the quantities required by consumers in each price level.

It is assumed that product market X is represented by three consumers: A; B; C. The quantities purchased by each consumer every day, in relation to price, are shown in Table 1, and the market demand in Table 2.

**Table 1. Individual demand of consumption**

Quantities from good X acquired by consumers A, B, C.	Sale price (u.m. / Q)					
	12	10	8	4	2	1
$Q_A$	0	5	10	20	25	30
$Q_B$	0	12,5	25	50	62,5	75
$Q_C$	0	2,5	5	10	12,5	15

**Table 2. Market demand**

p	$Q_p=Q_A+Q_B+Q_C$	$Q_p$
12	$0 + 0 + 0$	0
10	$5 + 12,5 + 2,5$	20
8	$10 + 25 + 5$	40
4	$20 + 50 + 10$	80
2	$25 + 62,5 + 12,5$	100
1	$30 + 75 + 15$	120

**The demand for a particular company.** This demand directly affects the production of selling company and shows the production that respective firm can sell at various possible prices and is expressed as income obtained.

### 3. THE DEMAND AND QUANTITY ASKED SHOULD NOT BE CONFUSED.

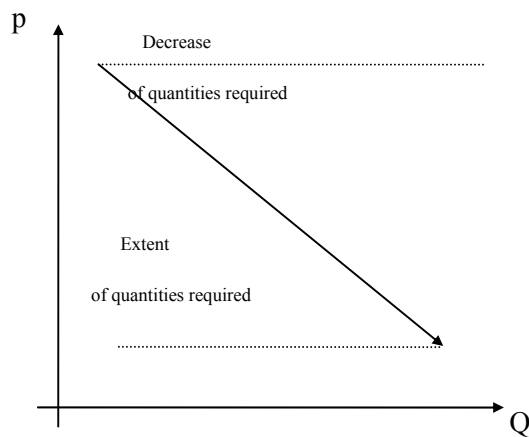
In economic theory, the demand is a specific relationship between two variables, price and quantity. *The demand is always a range of prices and a range of amounts that people would like to buy at those prices.*

*A movement along the string (line/curve) represents a change in the quantity required and no a change in demand.* The amount requested increases or decreases as the price - decreases or increases, but demand remains unchanged, since the demand is the entire curve. In order to increase demand, should something happen to enable consumers to buy at any price a larger quantity of goods, ie to move right and up the entire demand curve.

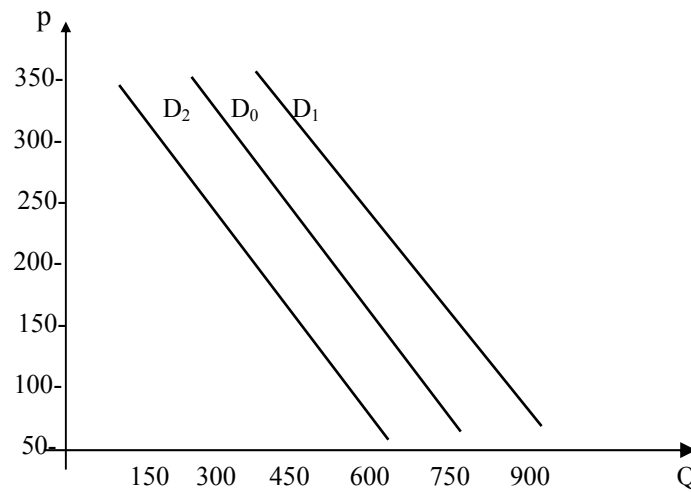
**Table 3. The scale demand for good “X”**

Unit price of good (P)	Required quantity (D)
350	200
300	300
250	400
200	500
150	600
100	700

The shift of the demand curve shows that a larger amount or less will be required at each possible price. The phenomenon of increase or decrease the demand can be represented by a scale and a graphic.

**Figure 1. Increase and decrease of quantities required****Tabel 4. Increase and decrease of demand for good “X”**

Unit price	Initially demand	Increase demand	Decrease demand
(P)	(D <sub>0</sub> )	(D <sub>1</sub> )	(D <sub>2</sub> )
350	200	300	100
300	300	400	200
250	400	500	300
200	500	600	400
150	600	700	500
100	700	800	600



**Figure 2. Demand modified**

Modification of demand pressures in the same direction simultaneously both the price and quantity required. Moving the plane of the demand curve, right or left is the result of changing some economic factors and outside economy factors named *demand conditions*, such as:

- modify the money income of consumers;
- adjust the price of other goods;
- changes in the number of customers;
- changes tastes (preferences) of consumers;
- forecast on the evolution of prices and income opportunities for substitution of goods;
- feature of the need to satisfy.

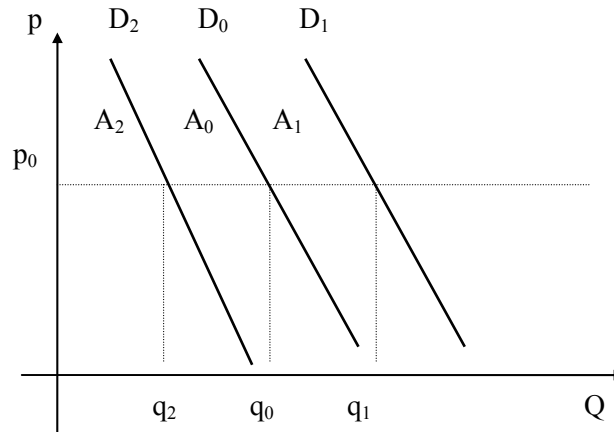
All these factors combine to determine the demand for a particular good, and the relationship that is established between the change in price and the quantity required.

Normally, *income change* entails moving the demand curve to the right or left as income increases or decreases.

In turn, *a change in the prices of other goods* is a source of change in demand. In this case however, the situation is different, as goods are substitutable or complementary. *If goods are interchangeable* between asset price changes and developments demand a good B, there is a positive relationship. *If additional goods*, the relationship is negative.

Evolution of demand by income and price changes in goods substitutes is represented in Figure 3. By increasing income or reducing the price of other goods has been a shift in demand curve from  $D_0$  to  $D_1$  and above the price  $p_0$ , the amount purchased increases from  $q_0$  to  $q_1$ .

If the income is reduced or increased prices of other goods, the demand curve moves to  $D_2$  and the amount purchased at the same price  $p_0$  is  $q_2$ , unchanged for the good considered.



**Figure 3. Evolution of demand to substitutable goods.**

As long as demand does not change, the price and quantity required are moving in opposite directions. The only changes that not lead to the change in demand for a good price is the *good price*.

If a combination of the above factors determines the more people to want the respective good, the demand for it will grow. An increase in demand increases the required quantity and the price, in this case "so when demand is high and when demand is declining will be a lesser amount required by higher prices and not lower prices" [7].

The demand is resulting from the interaction of several factors: consumer needs, prices of goods, disposable income of consumers. The consumption need, or wish to receive a good utility, is the first factor which causes *the appearance* of demand.

Consumer need makes the demand to be a rational act, the result of a calculation, and one conditioning. The demand is directly proportionate to the needs existing in society and is influenced by the environment in which it manifests (imitating other consumer demand or is stimulated by the manufacturer by advertising).

In most cases the needs exceed the possibilities to satisfy needs. *The demand usually falls below consumption needs*. The situation is caused by the limited nature of resources that determine the possibilities of production and limited level of buyers incomes, leading to some needs remain unsatisfied.

The disparity that exists between need and demand derives from the fact that demand is a market category (it satisfy the provisions of sale - purchase involving bilateral transactions), while consumption needs can occur and cover in a certain proportion also outside the market, through self-consumption.

Although the needs and demand is a direct connection, the need is the source of demand, she automatically not becomes demand. For the need to turn into demand are necessary appropriate available revenues. In addition, the individual must be willing to pay the price demanded by the seller.

It is recognized generally that demand is decreasing function of price. This derives from the rational consumer behaviour that seeks to maximize utility, in order to obtain maximum utility allowed level from his income.

Consumer needs no matter how intense it is, can be satisfied only when is the corresponding income. *In the absence of revenue, need not turn in demand.* Being ignored the other factors, *the demand varies with income level in the same direction.* In addition to factors previously analyzed, the demand is influenced by other factors including tastes (preferences) to consumers, the economic situation, consumer expectations and demographic variables.

#### 4. CONCLUSIONS

The demand depends on *consumer preferences* considerable extent formed under the influence of various factors:

- age;
- gender;
- family structure;
- occupation;
- tradition, etc.

Consumer behaviour studies, conducted in terms of tastes, have revealed, first, that human desires are insatiable no matter how practical it would increase disposable income and, on the other hand, tastes are extremely diverse. If the first part determines the *increase in demand* for good, the second issue determines *the diversification of goods*.

In relation to consumer tastes two events occurs:

- *the tendency to imitate;*
- *snobbery.*

The first issue is that some consumers are shaping their demand for some goods according to the request of others persons. Such behaviour is known as the *effect of imitation*.

The snobbery effect is found at that category of consumers to witch quantity required is inversely proportional to the amount required by others. It represents the expression of the desire of consumers to distinguish themselves from other consumers.

There are products whose demand is influenced by the *economic situation*. The intermediate goods and final goods belong to durable goods category which has sensitive demands to the change of temporary factors.

In addition, consumer demand is influenced by *consumer expectations* about price trends. A prediction of inflation will lead to purchases made in advance, also an anticipation of some reduction in income encourages the savings and current demand decreases.

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## **EXPLORATORY STUDY ON ROMANIAN EDUCATIONAL SERVICES IN THE CONTEXT OF UE POSTINTEGRATION. THE NEEDS FOR PROFESSIONAL DEVELOPMENT OF THE STAFF OF THE FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION**

**CLAUDIA-MIHAELA NICOLAU \***

**ABSTRACT:** *The interest that triggered this paper came from the will to identify the most stringent needs for professional development that human resources (didactic staff) working in educational services in universities have to face, following the legal, institutional, and functional changes that took place in the recent years in the Romanian system of higher education.*

**KEY WORDS:** *educational services; needs for professional development; professional development*

### **1. INTRODUCTION**

Universities give special attention to the training programs for their staff, in order to ensure both a high standard for the level of their educational services and that the new staff will adopt the values of the organization.

In the present stage of development of Romanian society, several changes and challenges have emerged in what concerns educational services, and staff management started to focus more and more on developing its resources - the didactic staff. "The consequences are clear: the training programs will not be aimed only at pedagogical, didactic or technical development.

Besides improving their didactic performance, teachers will have to become better colleagues, good team members and, if possible, even "happy workers", meaning employees that work for pleasure and professional satisfaction. The report sent to UNESCO by the International Education Commission in the 21<sup>st</sup> century stated in this respect that the piers of education in this new millennium will be "learning to know, learning to be, learning to act, and learning to live with the others".

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## 2. METHODOLOGY

### 2.1. Scope and objectives of the study

In this exploratory study as a case study/ monograph, the analysis will focus on the university educational services provided by the Faculty of Economics and Business Administration (FEEA) of “Alexandru Ioan Cuza” University of Iași.

An important aspect that directly concerns and affects the didactic staff of FEEA is represented by the implementation of the Bologna system. This moment has already had and will still have a high impact on the activity of the didactic staff of FEEA. Like any implemented change, it brought several modifications in the activity plan and in the attributions of each teacher. One of the most important changes was aimed at re-organizing the chairs as functional units/ the two departments and reformulating the curricula by eliminating some disciplines that no longer create skills and habits useful for the labor market.

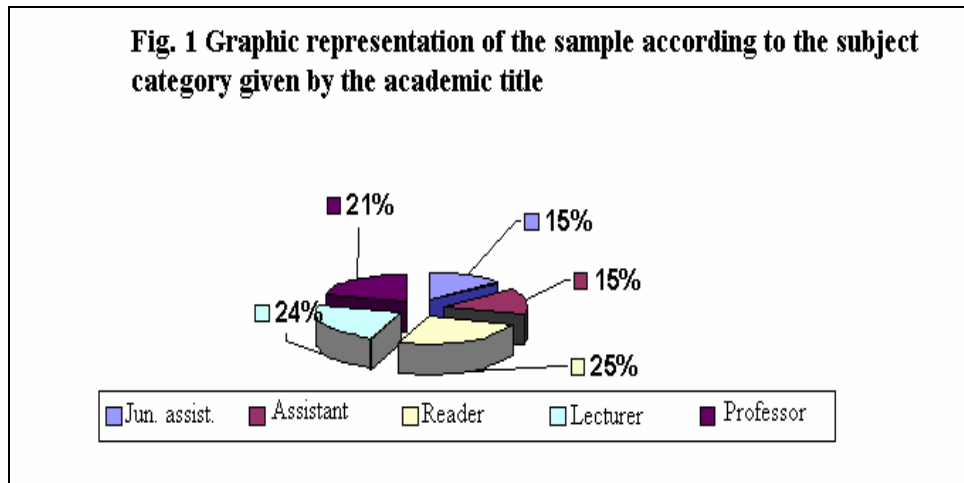
In order to meet its declared purpose, this research is directed at the following *specific objectives*:

- To identify the needs for professional development of the investigated population;
- To classify the needs according to the typologies presented in literature;
- To create and apply a questionnaire whose items allow the classification of the investigated population according to general criteria (e.g. age, gender) as well as to specific criteria (e.g. academic title of the subject, connected responsibilities fulfilled, didactic experience, department in which the subject activates etc.), and also to support the mentioned objectives.

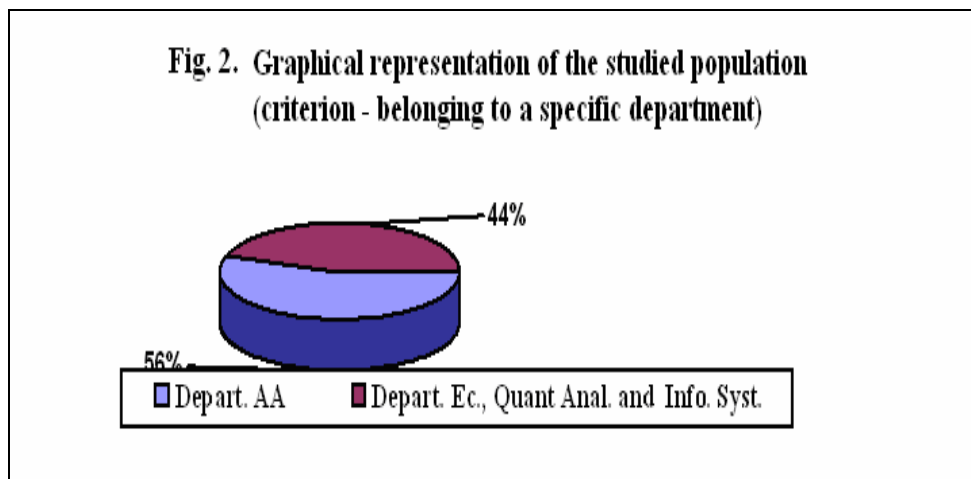
The study has an exploratory nature and is aimed at analyzing the needs for professional development of the didactic staff of FEEA; the methodology used is *quantitative analysis*, with research techniques such as systematization, simple grouping (using a single characteristic), tabling, and graphic representation.

### 2.2. Presentation of the studied population

*The subjects* of this exploratory study have been selected randomly from the didactic staff of the Faculty of Economics and Business Administration of Iași. In order to obtain a representative sample, “*stratified sampling*” has been used; the research instrument (in this study – the questionnaire) has been applied to: 10 junior assistants, 10 university assistants, 10 readers, 10 lecturers and 10 professors; in total - 50 members of the didactic staff. The final sample was made up of 34 members of the didactic staff of FEEA, because of the difficulties encountered during the application of the questionnaires.



**Figure 1. Graphic representation of the sample according to the subject category given by the academic title**



**Figure 2. Graphical representation of the studied population (criterion - belonging to a specific department)**

For this research, the sample used has been random, stratified and simple, and the selected collectivity was structured in homogenous sub-groups according to a single characteristic – *the academic title of the subjects*. The technique used for collecting the data for this research was the questionnaire, applied through direct contact with the subjects classified in the investigated reality.

### 2.3. The methodology for data collection

The current research is difficult to include in a single economic or business administration discipline, as it is an *interdisciplinary research*, between the

management of human resources (the monograph is based on the human resources of FEEA) and service management (the monograph is centred on higher educational services). *The analytic research* of the professional development of the didactic staff of FEEA is an applied management research, using a combined inductive – deductive approach.

The research strategy used by the exploratory study is *the casual quantitative analysis* (the monograph is based on a sample of members of the didactic staff of FEEA) in order to collect the data. *The stages* of this scientific approach are the following:

- Collecting the data by applying the research instrument – a questionnaire made up of 24 questions, applied to the 34 subjects in the final sample;
- Processing the data resulted from the quantitative analysis through systematization, tabling, graphical representations of the data obtained, etc.;
- The preliminary/final analysis (correlating the data obtained with the objectives set prior to the research) and generalizing the resulting data.

This analytical research method for data collection has been chosen because it allows a better measurement, quantification and systematization of the data obtained, and because of the population analyzed in this study, the time economy in implementing the research instrument has been an advantage.

The research instrument used in this explanatory analytical study has been complex, combining the *real data questionnaire* (the first part) and the *opinion questionnaire*, which had the role to investigate the subjects' opinion on the given topic - the needs for professional development, as well as the attitudes towards the Romanian educational system as a whole, the subjects' motivation and interest in taking part in professional development programs (in order to meet the needs for professional development), etc.

The research instrument applied – the questionnaire – can be included in the general category of the *opinion questionnaire, self-administered* (by the investigated subject) and includes both semi-open and semi-closed questions.

Questionnaires have been applied and filled in individually by the didactic staff of the university. The subjects have been told about the scientific and anonymous nature of the research; participation in the study has had a voluntary basis. After the subjects agreed to participate, they have been informed about the need to fill in the blanks in the questionnaire in a personal manner. Questionnaires have been applied between June 2-9, 2008, in two ways: the questionnaire was filled in either instantly, or left with the subject and taken back the following day.

The body of the questionnaire regarding the analysis of the needs for professional training of the didactic staff involved in educational services included, for complexity purposes, the following question categories: introductory questions; intermediary questions; filter questions; open questions; factual (identification) questions: items referring to general criteria such as gender and age; ordering scales (quantitative; qualitative; on intervals: the item referring to the age criterion).

When drawing the questionnaire, which included 24 items, the objectives set prior to the research have been taken into account, which can be expanded directionally as follows:

*I. The built profile of the investigated population:**- Tracing the profile of the investigated population:*

- According to *general criteria* such as gender and age;
- According to *specific criteria* such as: academic title of the subject, responsibilities connected to the didactic activity, didactic experience (measured in number of years of didactic activity), the department in which the subject activates, and the importance of the job for each subject;

*II. The needs for professional development of the didactic staff:**- Tracing the needs for professional development inclusion in the typology:*

- Needs for professional development at an organizational level;
- Needs for professional development required by the job: multiple choice;
- Needs for professional development at an individual level: multiple choice.

**2.4. Presentation of the results**

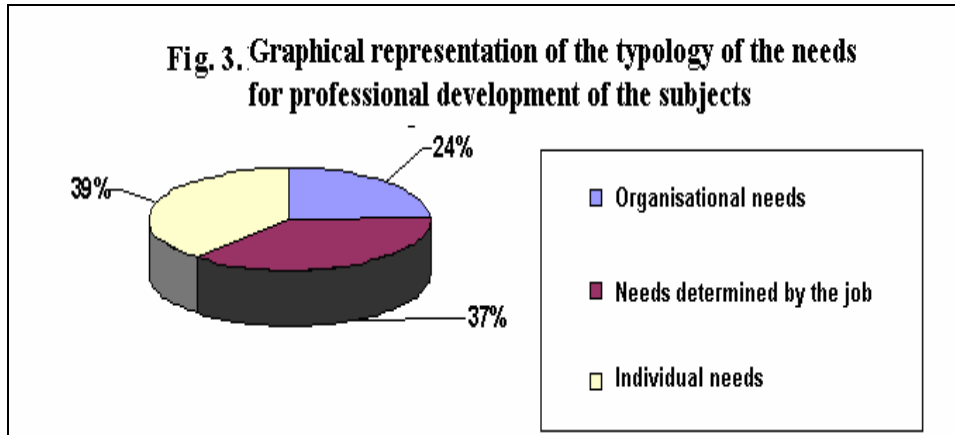
In order to identify and present the requirements/ needs that determine the application of methods of professional development, items 6 and 7 (Item 6: Which of the following competences are the most useful to you in your teaching activity?; Item 7: In what field have been included the development programs in which you participated?) of the corpus of the research instrument have been used. In completing this stage of the exploratory study, the typology mentioned in the specialized literature will be used (Bogáthy, 2004: 117 – 119), as follows:

- *Needs for professional development at an organizational level:* general competences such as professional ethics and the ability to work in an interdisciplinary team;
- *Needs for professional development required by the job:* basic knowledge in the taught field, pedagogical/ didactic methodology and the ability to evaluate students;
- *Needs for professional development at an individual level:* the ability to apply the theoretical knowledge and to adapt it to various contexts.

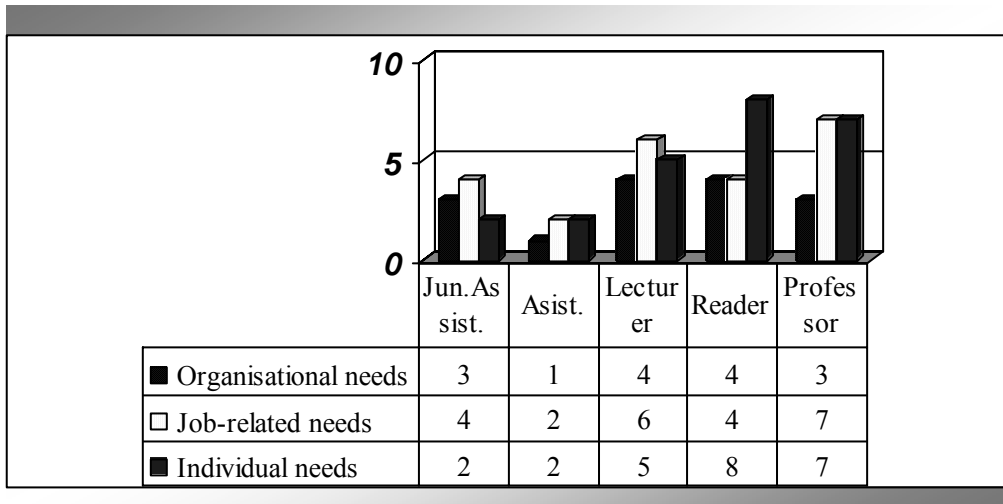
The fast rhythm of the changes – due to the implementation, in 2005, of the Bologna system, and to the attempt of the educational offer to align to the standards of the European Union or to the transformations that take place on the present labour market, to the appearance of new teaching methods, procedures and techniques, imposes more and more the concept of professional training.

Another way of looking at the needs for professional training of the teaching staff of FEEA refers to the object of the report: individual, organizational, or related to the job/ function.

From the graphical representation above it results that the subjects questioned (the didactic staff of FEEA) feel, while performing their job, the need to develop at an individual level in a proportion of 39%, 37% of the subjects face needs related to their job and only 24% face organizational needs.



**Figure 3. Graphical representation of the typology of the needs for professional development of the subjects**



**Figure 4. Graphical representation of the needs for professional training of the subjects, according to their academic title**

The percentages reported by the didactic staff according to the criterion of the academic title reveals mostly the same situation:

- *Organizational needs* have the lowest frequency of occurrence with the respondents, irrespective of their academic title, but more predominant with university assistants;
- *Job-related needs* have the highest frequency in the total of 39% in the case of university professors;
- *Individual needs* have the highest frequency in the total of 37% in the case of lecturers.

### 3. CONCLUSIONS AND LIMITATIONS OF THE RESEARCH

“Alexandru Ioan Cuza” University of Iași, as a promoter of socio-cultural values, has been subject to a series of transformations (the Bologna system, the reform system inspired by the educational policy of the governments in the last 19 years, etc.), and FEEA has followed closely the steps towards ensuring and improving the quality of the entire educational process.

In this context of institutional/ functional transformations, the necessities/ needs for professional training of the didactic staff of FEBA come from three directions:

- *Needs for professional development at an organizational level* (general competences such as professional ethics and the ability to work in an interdisciplinary team): felt by 24% of the subjects questioned during the research, especially by the *readers and lecturers*;
- *Needs for professional development required by the job* (basic knowledge in the taught field, pedagogical/ didactic methodology and the ability to evaluate students): felt by 37% of the subjects questioned during the research, especially by the *university professors*;
- *Needs for professional development at an individual level* (the ability to apply the theoretical knowledge and to adapt it to various contexts): felt by 39% of the subjects questioned during the research, especially by the *lecturers*.

This study also faced a series of *limitations* that we will present in what follows. First of all, *limited access to the subjects* (especially to assistants and junior assistants) because of their busy schedule, of the large amount of work per subject (because the academic year 2007 – 2008 has combined the graduation of two generations of students), and of the refuse to collaborate, which has lead to applying the content analysis on a smaller number of teachers than the one initially established (the sample initially established was made up of 50 staff members, while the final one included only 39 members).

The limitations of the research were also determined by the *methodology* used, as follows:

- The exclusive use of quantitative analysis methods (a more efficient presentation of this exploratory study would have meant using more qualitative methods – e.g. applying an interview guide on the analyzed population);
- The research instrument used – the questionnaire (limited in length), used because of the limited access in time to the subjects.

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## **FACTORS INFLUENCING THE ZIMBABWE STOCK EXCHANGE PERFORMANCE (2002-2007)**

**KOSMAS NJANIKE, PENSION KATSURO,  
MICHAEL MUDZURA \***

**ABSTRACT:** *This paper assesses the factors that influenced the Zimbabwe Stock Exchange's performance from 2002 to 2007. The study seeks to identify and define the major drivers of the bourse during this period and use them to guide an investor on the ZSE or any other stock exchange in a developing economy. Despite the shrinking of the economy since 2000, the stock market inversely reacted to the factors that affected the economy negatively. The ZSE was driven mainly by speculation as investors sought to hedge against hyperinflation. The decline of the Zimbabwe economy during that period caused capital flight to the stock market pushing prices up hence huge profits. The real factors that affect share investment and the stock market in general were addressed, giving insight to the stock investors. The study recommends that stock investors should keep track of the general and unique factors that have an impact on their investments.*

**KEY WORDS:** *ZSE Performance, Speculation, Hedging, Investment, Inflation*

### **1. INTRODUCTION**

The ZSE performed extra ordinarily well despite the expectations of the economist and stock market analysts who perceived it to crumble together with the economy. The stock market actually outperformed any of its previous achievements in the economy even though many investors were sceptical. The stock market's unusual performance was beyond the economist and analyst predictions whose perception was that it would go down with the economy. Factors such as speculation and the need to hedge investments against inflation have played a bigger role to upgrade the performance of the ZSE. The hyper inflationary conditions discouraged many investors without a deeper technical knowledge as to whether investing in such an economy can

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yield anything tangible. Fear and greed influenced the decision made by other investors in disposing and acquiring stocks on the bourse.

The fact that investment on its own needs critical understanding of the major drivers of the ZSE performance creates the need to clarify how and why these factors should be considered. A lot of investors do not know how to interpret prevailing factors that constantly arise in the stock market. Many end up making impulse decisions due to panic after hearing information that they do not know its significance to the stock market. The research gives informative literature for insight to investors on factors and drivers to be considered in their dealings on the any stock exchange in the world. The study is set to clarify major factors driving the ZSE performance, thus giving investors the most needed information on the effects of such drivers. It may act as a guideline to those investors who do not know when to sell and buy shares. The paper also gives information on the benefits of the stock exchange investment in any economy and hence potential investors making informed decisions to produce optimal results. The research identified and defines the major drivers of the ZSE. It then assesses the effects brought about by these drivers on the performance of the bourse.

## **2. RESEARCH QUESTIONS**

The paper thus strives to provide answers to the following questions:

- What are the main factors that affect the stock market performance?
- Why was the ZSE performing extra ordinarily well in an economy that was melting down?

## **3. METHODOLOGY**

To answer the research questions, case study research was conducted. This paper used direct observation, questionnaires, unstructured interviews, and document review to gather data. Data for the research was gathered from financial consultants, economists and bank managers based in Harare, Zimbabwe. The research is a study designed to explore the problems bedevilling the stock exchanges in developing markets with ZSE as the case study. Questionnaires, personal interviews and document review were used to obtain data for this study. A sample of six asset managers, ten stockbrokers and four research analysts was used to gather information for this research. Five volunteer stockbrokers reviewed the questionnaire for readability, clarity, and completeness. In addition, a faculty member specializing in banking issues examined the questionnaire.

## **4. LITERATURE REVIEW**

A stock exchange is essentially a market place for stocks and bonds; with stockbrokers earning a small commission on each transaction they make (Farlex, 2003). According to Ibrahim and Aziz (2003) the performance of a stock market can be affected by influence. Influence can be defined as a power to affect persons or events based on prestige thus causing something without any direct or apparent effort.

Influence is basically causative factor that exert pressure on a person or events to drive them to perform in a certain way (Seyhun, 1998). A factor is anything that contributes casually to a result and drives a certain performance in an event (Wikipedia, 2008).

Asquith and Mullins (1983) maintain that the payment of a liberal portion of earnings in dividends adds the attractiveness of a stock. Shiller (1991) also recognized that this involves a curious paradox: Stock value increases when taking away value from the capital and surplus fund, i.e the more the shareholders subtract the larger is the value placed upon what is left. Shiller further argues that it is safe to purchase stocks, not only because of their intrinsic value or expected future dividends but because they can be sold to someone else at a higher price. A significant stream of prior research in the United States of America has empirically documented that unexpected increases (decreases) in regular cash dividends generally elicit a significantly positive (negative) stock market reaction (Fama, 1981 and Petit, 1992). Since managers have some information that outside investors do not have, dividend policy is a costly-to-replicate vehicle for conveying positive private information to the market players (Miller and Rock, 1985). Bhattacharya (1979) stated that dividend increases convey information about the firm's current and future cash flows that has an impact on the stock market performance. Serletis (1993) documented that dividend cuts are followed by earnings increases, consistent with dividend cuts marking the end of a firm's financial decline and beginning of its re-structuring. Stock dividends or bonus issues effectively award existing shareholders a free share of common stock for all shares currently owned. Bonus issues constitute a finer slicing of a given value and should have no direct wealth effects to shareholders if they do not have cash flow implications (Seyhun, 1986). Petit (1992) found that there is a positive stock price response to stock dividend (and stock split) announcements. Dhakal et al (1993), provide empirical evidence that is consistent with firms employing stock dividends and stock splits in order to shift share prices to an optimal trading level. Shiller (1991) states that dividend movement is not nearly enough to rationalize stock price volatility, this therefore means that expectations about future dividends can not be responsible for stock price movement.

According to Serletis (1993) there are two competing hypothesis on the effect of money supply on stock prices. The monetary portfolio hypothesis suggests that as a result of changes in the money supply, investors adjust the proportion of their asset portfolios represented by the money balances to establish new equilibrium positions with respect to their other various assets. These new equilibrium positions are established through changes in the prices of other various assets. The second hypothesis is the efficient market hypothesis. The quantity theory of money assumes that an increase in the money supply is expected to create excess supply of money balances and, in turn, excess demand for shares (Dhakal et al, 1993). This in turn, would result in an increase in the price of shares. Reisman (1999) stated that the increase in demand for stocks is a result of repeated pouring into the market of large sums of new and additional money. According to Farma (1981), this implies that monetary changes lead to stock prices based on the assumption that all relevant information known about the money supply is fully reflected in the share prices. Empirical evidence supports this theory that there is a direct casual relationship

between money supply and stock prices (Ibrahim and Aziz, 2003). Jensen and Runback (1983) documented that an increase in the quantity of money exerts its positive effect on stock prices only when the increase is concentrated in the stock market and has not yet sufficiently spread throughout the rest of the economic system.

Inflation has been described by Lee (1992) as not the rise of prices but rather is the undue increase in the quantity of money, which operates ultimately to cause a rise in prices. Research into inflation and stock market returns has mostly documented a negative casual relationship between the two, especially for developed economies, due to the theory that high and variable inflation rates add to uncertainty which directly effects investment through reduced confidence and thus lowers stock prices (Fama, 1981; Lee, 1992). Choudhry (2001) has investigated the relationship in India a developing country and documented that a positive relationship between current stock market returns and current inflation is possible during short horizons under conditions of high inflation. Caporale and Jung (1997) reject Fama's hypothesis for the negative relationship and deemed that the relationship remains a puzzle. According to Caporale and Jung (1997), financial economies hold that stock represents a hedge against inflation. This was backed up by Fisher and Statman (1997) who suggest that identifying macro variables that influence aggregate equity returns may indicate hedging opportunities for investors. Taylor and Allen (1992) argued that once inflation begins to substantially raise prices, it would undermine the capital formation and result in a badly depressed stock market.

Fama (1981) explained Efficient Market Hypothesis (EMH) as the reflection of information in security prices. The EMH asserts that financial markets are "informationally efficient" and stocks already reflect all known information and therefore are unbiased in the sense that they reflect the collective beliefs of all investors about future prospects. The strong form suggests that securities prices reflect all available information, even private information. Seyhun (1998) provides sufficient evidence that insiders profit from trading on information not already incorporated in prices. The semi-strong form asserts that security prices reflect all publicly available information. The availability of intraday data enabled tests which offer evidence of public information impacting on stock prices within minutes (Lease et al, 19994). The weak form of the hypothesis suggests that past prices or returns reflect future prices or returns which is consistent with technical analysis. Fama (1981) expanded the concept of the weak form to include predicting future returns with the use of accounting or macroeconomic variables. The reaction of stock market to announcement of various events such as earnings, stock splits and takeovers has been evidenced to be consistent with EMH (Jensen and Runback, 1983). Fisher and Statman(1997) in their analysis of the aggregate stock market argued that there is little, if any, correlation between the greatest aggregate market movements and public release of important information.

Shleifer and Summers (1990) came up with two types of investors in the market; 1) Rational speculators or arbitrageurs who trade on the basis of information and 2) Noise traders who trade on the basis of imperfect information. Since noise traders act on the imperfect information, they will cause prices to deviate from their equilibrium values. Edwards (1993) also investigated investor behaviour and discovered that most investors traded because of price changes rather than due to news

about fundamentals. Lease et al (1994) stated that high prices are sustained, temporarily, by investor enthusiasm rather than real fundamental factors. He further argues that stock prices are driven by self-fulfilling prophecy based on the similar beliefs of a large cross-section of investors.

Technical factors are a mix of external conditions that alters the supply and demand of company's stock (Coperale and Jung, 1997). These play a major role in determining the stock market performance. In financial theory interest rate as a measurement of time value of money is one of the determinants in stock returns. Titman and Warga (1989) state that changes in interest rates have earnings effects on firms. They maintain that the interest rates lead available cash to borrow to be less which in turn, decreases spending. When spending is getting less, earnings for the companies go down and their prices drop. Carter and Van Auken (1990) in their research concluded that when interest rate falls stock returns become more attractive and a shift from fixed –term investment instruments to shares was observed, leading market value of the shares to increase. They have discovered that expectations can reflect the prices of the futures and options written in equities.

In viewing the stock market performance, there are several other factors that mainly affect individual investors to invest and whose reaction also has great impact on the overall performance of the stock market. Potter (1991) identifies six factors: dividends, rapid growth, and investment for saving purposes, quick profits through trading, professional investment management and long term growth, as main factors that influence investors' decision to trade. Wong and Cheung (1999) argue that investors are primarily concerned with expectations about the future, considering earnings projections and historical data to be of high interest to investors. Many researchers have illustrated that the impact of the inflation, money supply, interest rates and speculation in conjunction with efficient market hypothesis are of paramount importance in determining the stock market performance.

## **5. RESULTS**

The data was acquired from fifteen questionnaires and five interviews from research analysts, stockbrokers and asset managers. Document review was also used to obtain data for this research. On the extent some factors contributed to the ZSE performance respondents were to mark on the given factors in a table, the factors that they think where of much influence to the stock market performance. The main objective was to enable the collection of data that would give the researcher a greater understanding on the extent of the impact that certain factors posed on the stock market. Respondents were supposed to rate the factors using rates that started from 5(five) –very strong to 1(one)-very weak. Majority of the respondents (67%) rated speculation 5(five) and inflation received 100% rating five and the same with depreciation of the Zimbabwean dollar. Money supply was rated five 58% of the respondents and 42% of the respondents rated the intensity of its impact 4(four). Government policies received a 41% for rating three and the remaining 16% rated it two. Individual firm performance received 50% for rating four and 41% for rating three and the last 9% for rating two.

The research found that public announcements also had an influence on the ZSE performance. When the government announced on the 29<sup>th</sup> of June 2007 that all prices were to revert to those prevailing on the 18<sup>th</sup> of June, the stock market plunged a massive 37% in two weeks. Price controls had negative effects on the stock performance. Retail and wholesale companies were heavily hit by these price slashes which then translated to their dismal performance during that period, hence the resultant effect on the whole stock market was unavoidable. The most affected stocks include OK Zimbabwe, Truworth, Edgars, Redstar and CFI.

On other factors that influenced the performance of ZSE the respondents suggested a number of them. Capital adequacy of listed companies was found to be influential on the ZSE. Majority of the respondents agreed that share repurchase by firms due to excess funds has an effect of souring up share price of that certain counter. Unavailability of other sources of finance or inability to access funds from the formal sector (banks) leading to many resorting their funds to the stock market has influence on the stock market. All respondents agreed that the need to store value of funds also drives the market.

Majority of respondents (90%) indicated that profit making is the major factor that influenced investors to buy stocks. Hedging against inflation has also been given much credit as one of the major drivers of investment in stock market. A few pointed that the need to invest for the future is also one of the main drivers to buy stocks.

Most response have shown that the selling of stocks is mainly stimulated by the need for profit realization, managing liquidity, having a bearish opinion, that is, expectations that prices would fall. Refocusing or redirecting investment due to poor performance of such stocks and also negative sentiments about the stock or economic outlook are some of the reasons given for the need to sell stocks.

Sixty seven percent of the respondents indicated that the liquidity nature of the stock market securities and their less risky nature to be one of the reasons why they find the stock market more viable than other forms of investment. The research found out that companies found it easier to use the stock market to meet the tax obligations and other commitments faster than if they had invested in other markets like the property market. It was said to be an investment option that provides a real rate of return at investor's disposal in a shorter space of time as compared to other investment options.

All interviewees have outlined global and regional trends to have an effect on the stock market. Global trends were found to be of greater effect on the general stock market performance of our own local stock market. Regional trends are also of paramount importance as they directly affect the stock market just as the global trends.

## **6. EFFECTS OF DIVIDEND ON ZSE**

Fifty eight percent of the respondents stated that dividend payment had an impact on the value of stocks as far as the investors were concerned. The research established that the dividend that had the greatest impact is the stock dividend, where the investor receives additional shares to the already held as per scrip offer, and yields positive returns for the investor. All respondents agreed that dividends boost investor

confidence in the counter as payment of such may indicate a sound financial and cash flow position of that company. It was also established that investors would want to associate with companies that guarantee profitability.

Contrary to what others felt others differed mainly because of the hyperinflationary environment that prevailed. It was ascertained that the inflationary environment frustrated most investors, as the cash dividends were too insignificant that they could not buy anything with such amounts. It was made clear that as the dividend is declared, it is normally paid three months after declaration which leaves it more vulnerable to the effects of hyper inflation. Therefore, dividends were less attractive to investors who think that stock dividends are worthwhile. It was also indicated that the impact of dividend payment is insignificant and do not show a direct relationship with the stock values. Many respondents indicated that investment on the bourse was not because they want to benefit from the dividends paid out but for capital gains.

## **7. MERGERS AND TAKEOVERS**

All respondents indicated that in mergers involving listed companies on the ZSE speculation drove the prices of share prices higher despite the performance of the new company formed. Majority of respondents (90%) concurred that takeovers enable the reduction of competition and operational overhead hence increase financial returns. The anticipated improvements in the operations of the resultant entity will contribute, among other factors, to increase the value of the share price in question. This applied to the merger of Kingdom Financial Holdings, Meikles Africa and Tanganda in 2007, where the share price for Kingdom-Meikles (resultant entity) increased significantly after the merger.

## **8. MONETARY AND FISCAL POLICIES**

All respondents agreed that monetary policy had a huge influence on the ZSE in the determination of money market rates. The interest rates marked on money market instruments have an effect of increasing or decreasing demand for the stock market securities, where this demand and supply is also the determinant of the stock prices. As observed in the literature review, a fall in interest rates causes a shift from fixed term investments to shares hence boosting the performance on the stock market in general. It was also highlighted that the increase in money supply in circulation can pose excess liquidity in the market that would obviously affect the ZSE performance positively as rates tumble. The increased injection of cash was of great effect in Zimbabwe combined with hyperinflation where most investors felt the need to store value of their money in stocks. Fiscal policy also had an impact on the ZSE. Many respondents (89%) concurred that Gross Domestic Product (GDP), Balance of Payments (BOP), Budget deficit and government expenditure would swing the stock index over the period under review. Tax implications also had influence on the performance of the stock market. One of the interviewees gave an example when

capital gains tax was first introduced in the stock market, trading volumes reduced significantly.

## **9. ZSE EXTRAORDINARY PERFORMANCE**

For the extra ordinary performance of the ZSE against the odds respondents gave a number of reasons. In a hyperinflationary environment, investors have seen the need to hedge against inflation, hence the positive correlation. On the other hand, uncertainty has contributed to some negative relationship being portrayed on the stock market. Respondents noted that the depreciation of the Zimbabwean local currency influenced the positive performance on the ZSE. In response to the skyrocketing inflation, depreciation of the local currency has seen most investors seeking to store value of their money in stocks.

Majority of respondents pointed out that the stock market remained free from severe government regulations made it be at full swing in most of its activities as it has remained uninterrupted unlike the banking sector. Investors gained confidence in the stock market since the banking sector long ceased to be a viable investment option due to regulatory and other monetary policy instruments that have a tendency to erode one's funds instead of yielding interest.

The research found out that investors saw the stock market as a viable investment option that would at least store value of money which the banking sector could not do. With the constant phasing out and introduction of new bearer cheques from the Zimbabwean economy, the stock market was very active especially during the month of November and December 2007. Respondents concurred that many investors did not want to lose out completely and the same time they could not go with the money to the bank as there were tight controls upon banking such funds at that particular time. The stock market was the way out as they would gain rather than lose out.

In favour of the stock markets, most respondents indicated that the stock market has been able to keep abreast with inflation unlike the other investment options. The foreign exchange market was also suggested as one possible investment option which yielded better results than the stock market. Due to the stringent regulations in the forex market with prevailing illegal parallel market it has been very risky for investors to take that as an investment option. The respondents also rated the property market lower than the stock market. This was mainly due to the liquidity nature of that type of investment as compared to the stock market. The ZSE was floating above the inflation rate as given by the interviewees but in USD terms the return for the stock market is not real.

## **10. DISCUSSION**

The majority of the respondents have made it clear that inflation and depreciation of the Zimbabwean dollar has had a greater impact on the stock market performance. This has been evidenced in the researches made by Choudhry (2001) who have deduced that inflation have a positive relationship with the stock market



returns in a hyperinflationary condition within short horizons. Although Fama (1981) have documented a negative relationship between inflation and stock market returns. Zimbabwe has proved to go along with Choudhry's findings where the inflation rate is escalating together with the stock prices. The main reason for all this could be the need to hedge against inflation as there has not been any other liquid means to store value in since 2000, where on the other hand banks have proved to be vulnerable to the threats posed by inflation.

Money supply on the other hand has been influencing the stock market performance in a rather similar manner as the inflation factor has been. This has been supported by many researchers who have documented that increased injections of money supply (M3) into the economy has an effect of rising stock prices as demand increase. Dhakal et al (1993) in his Quantity Theory assumes that an increase in money supply is expected to create excess supply of money balances and, in turn, excess demand for shares. The ZSE has benefited more from these huge cash injections.

The effect of price controls can also explain the rating for company performance 3(three), as it has also influenced the performance of the stock market as a result of these policies put in place during the year 2007. The effect brought about by company performance was felt within the market to an extent as production levels reduced to the government policies. The aspect of company performance though, has failed to completely dominate the ZSE performance on the affected counters due to speculative behaviour by other investors and different perceptions about the future of those particular counters.

The monetary policy had an effect of putting in regulations that would influence the activities of the stock market; these include the regulation put on the banking industry that barred the banking sector from stock trading. This meant they could not invest in shares as they used to, giving a negative impact on the overall performance of ZSE as demand for shares is reduced, hence the decline in prices.

The restrictions put across by the monetary policy authority that dual listed counters on ZSE were not tradable on any other stock market unless they were initially transferred to the ZSE from foreign stock markets. This made it rather unattractive to foreign investors who may be having arbitrage intentions. This has an effect of reducing activity on stock market which probably meant demand for shares was reduced with a certain percentage which would obviously affect share prices.

Share consolidation also has an effect on stock market performance as it reduces shares in circulation and provides convenience in the maintenance of the register. It also influences share price as it increases the price of that particular stock by a certain ratio of consolidation. Consolidation may frustrate the current holders of the stock if they are not all that informed about the meaning of the reduction in the number of shares and on the other hand, the increase in price may attract more investors to invest in the counter as it may appear that its performance has improved.

Speculation has been said to affect the ZSE performance in that it is responsible for price discovery. It also has been said to smoothen disparities in the market and hence they have an impact in the overall stock market performance. The performance of the related companies in the region, country or sector may as well determine the price of shares of the listed companies in that same industry. The effect

of the global, regional or sectorial trends can be constituted in the share prices of the locally listed shares through the EMH concept, where all the information in circulation is absorbed into the price. This also gives room for the speculative behaviour of investors as they will start to perceive the positive or negative returns upon the information received.

Profit making is of paramount importance to most investors as evidenced by Potter (1991) who said that investors need quick profits from their trading. In order for companies to meet their various obligations, including the payment of corporate taxes, the stock market normally slightly fall during such a period of tax payments by firms.

Dividends declared became insignificant due to value eroded by inflation. Cash dividend payments were found to be of little effect on price movements on ZSE unless it is stock dividend. Stock dividends are immune to inflationary pressures and insure growth and value to the respective shareholders. Counters known to offer scrip dividends are most likely to perform well especially when trading ex-div. The mergers and takeovers of listed companies on the ZSE influenced the performance of the bourse.

## **11. CONCLUSION**

The ZSE performance has been influenced largely by the monetary policies put forward by the Reserve Bank of Zimbabwe. Money supply played a major role in determining the stock market performance in many ways. The increase in money supply or liquidity in the economy would increase demand for stocks and attract more players. High inflation rates as documented by various researchers had a positive relationship with the stock market performance.

From the research conducted it shows that there is much credit given to the inflationary influence among others. Interest rates showed a significant impact on the price fluctuation on the ZSE as it has an effect of reducing or increasing price of stocks. An increase in interest rates showed a negative relationship with the stock market prices and vice versa. As interest rates in the money market increased, the stock market is negatively affected making the money market more attractive than the stock market.

The ZSE was also affected by information announcements and other various activities taking place. This included political news, monetary and fiscal policies that saw the stock marketing reacting to such. These announcements also caused volatility on the bourse. Speculators and noise traders abused and manipulated the stock market to profiteer or gain from the fact that they knew some information before it was made public. It is worthwhile for shareholders and investors to consider various factors and their effects on the value of stocks.

In as much as the Zimbabwe Stock Exchange is concerned, investors should always take the responsibility to determine whether they are really hedging against inflation or their investment is being eroded by the inflation. It is advisable to always follow up on the information circulating, establishing its effects on the stocks and taking necessary action to safe guard their investment.

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## **THE IMPACT OF EFFECTIVE CREDIT RISK MANAGEMENT ON BANK SURVIVAL**

**KOSMAS NJANIKE** \*

**ABSTRACT:** *A number of financial institutions have collapsed or experienced financial problems due to inefficient credit risk management systems. The study seeks to evaluate the extent to which failure to effectively manage credit risk led to Zimbabwe's banks' demise in 2003/2004 bank crisis. It also seeks to establish other factors that led to the banking crisis and to outline the components of an effective credit risk management system. The study found that the failure to effectively manage credit risk contributed to a greater extent to the banking crisis. The research also identified poor corporate governance, inadequate risk management systems, ill planned expansion drives, chronic liquidity challenges, foreign currency shortages and diversion from core business to speculative non-banking activities as other factors that caused the crisis. There is also need for banks to develop and implement credit scoring and assessment methodologies, review and update the insider lending policies and adopt prudential corporate governance practices.*

**KEY WORDS:** *credit, risk management, bank failure, bank survival*

### **1. BACKGROUND**

The year period 2003 to 2004 saw a number of banks being forced to close down in what was termed the Zimbabwean Banking Crisis and the main cause being poor credit risk management. In Zimbabwe the number of financial institutions declined from forty as at 31 December 2003 to twenty nine (29) as at 31 December 2004 and the impact of effective credit risk management on bank survival cannot be overemphasized. Some financial institutions were forced to close down and others were placed under curatorship.

The main cause of the banking crisis was poor credit risk management practices typified by high levels of insider loans, speculative lending, and high concentration of credit in certain sectors among other issues. The failure to effectively manage credit risk created similar problems in countries such as Mexico and Venezuela.

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This situation tends to be exacerbated by the failure of institutions to properly implement an effective credit risk management framework.

Financial institutions have faced difficulties over the years for a multitude of reasons, the major cause of serious banking problems continues to be directly related to lax credit standards for borrowers and counterparties, poor portfolio risk management, or lack of attention to changes in economic or other circumstances that can lead to a deterioration in the credit standing of a bank's counterparties (Gil Diaz, 1994).

The traditional role of a bank is lending and loans make up the bulk of their assets. In unstable economic environments interest rates charged by banks are fast overtaken by inflation and borrowers find it difficult to repay loans as real incomes fall, insider loans increase and over concentration in certain portfolios increases giving a rise to credit risk. Bank failures in Mexico were attributed to improper lending practices, lack of experience, organizational and informational systems to adequately assess credit risk in the falling economy (Gil Diaz, 1994). The same can be said about of banking crisis in Kenya in the 1980s and in Spain in the 1990s.

The study evaluates the extent to which failure to effectively manage credit risk led to bank' demise in the Zimbabwean banking crisis of 2004. Factors that led to bank failures in Zimbabwe are established in this study. The research will be limited to the analysis of the impact of effective credit risk management on bank survival.

## **2. RESEARCH QUESTIONS**

This study seeks answer the following questions: How did the failure to effectively manage credit risk lead to banks' failure in the Zimbabwe Banking crisis of 2004? What other factors led to bank failures in Zimbabwe? What are the components of an effective credit risk management system?

## **3. METHODOLOGY**

In order to find answers to the research questions useful different methods and instruments were used to collect data. The research data was collected over six months to June 2009. The researcher chose the survey as the appropriate research design for the study, and as such, questionnaires and interviews were used as research instruments. Some unclear or hanging issues in the questionnaires were clarified in interviews. A sample of 10 commercial banks randomly chosen was used in this analysis. Twenty questionnaires were used to gather data with two for each commercial bank chosen. A total of 10 interviews were held with the heads of credit or senior managers from those banks.

The questionnaire had 12 short questions designed for the bankers and or senior managers from those banks so that they would not have a difficulty in answering questions. The first two questions constituted the respondent profile. The two questions that followed formed the administrative section where the research was obtaining information about the financial institution. Question five up to the end of the questionnaire formed the main body from which the crucial data for the research was

obtained. Document review was also used to obtain as much data as possible for a comprehensive, detailed and informed analysis of the study.

#### **4. LITERATURE REVIEW**

According to the Reserve bank of Zimbabwe (RBZ) risk management operating document (2004), credit risk or default risk involves inability or unwillingness of a customer or counterparty to meet commitments in relation to lending, trading, hedging, settlement and other financial transactions.

Credit risk arises from uncertainty in counterparty's ability or willingness to meet its contractual obligations. Bessis (1998) also includes a decline in the credit standing of counterparty as part of credit risk. Credit risk management covers both the decision making process, before the credit decision is made, and the follow-up of credit commitments, plus all monitoring and reporting processes (Miller, 1996).

#### **5. CAUSES OF BANK CRISES**

Bank failures have been experienced in a number of countries that include Mexico, Venezuela, Spain, Kenya, United Kingdom, Sweden and Norway. Analysts' concurred that bank failures are caused by a combination of factors. Herrero (2003) identifies poor bank profitability, low net interest margins and low GDP as some of the causes of bank failure. He categorizes these factors into bank specific and macroeconomic factors. Among the bank specific factors are asset quality, management quality, earnings and liquidity as the key factors. As for the macroeconomic factors, high interest rates, low economic growth, adverse trade shocks, exchange rate movements and foreign liabilities are cited.

Hooks (1994) points out that deteriorating local economic condition for example inflation, interest and exchange rates cause bank failure. Hefferman (1996) asserts that macroeconomic factors worsened by regulations that are imposed on banks lead to bank failures.

Kane and Rice (1998) state that government intervention causes bank distress. They argue that when governments intervene in saving banks from failing, creditors and customers tend to rely on the government to protect their interest. This intervention is a disincentive for other institutions, creditors and customers to effectively monitor their interests in banks in an independent way.

Miller (1996) identifies the following situations, which can lead to bank failures: too many stringent rules causes bank to disregard the measures as superfluous; some dangers bank are exposed to may not be addressed properly in general laws; and a rigid system of rules can inhibit banks from selecting the most efficient means of achieving regulatory goals set for them and may serve as a disincentive for improvement.

The lower the bank's capital, the higher the probability of its failure (Goodhart 1998). As a bank's capital decreases, the higher its motivation for actions towards survival and this leads to more dangerous risk taking operations. Friedman (Hooks, 1994:37), postulates that bank failures arise because banks do not keep all their

deposits in statutory reserve funds. Some regulatory bodies exercise forbearance; however, this contributes to bank failures by permitting distressed banks to continue operating instead of liquidating them. The distressed banks, who are allowed to operate, face deterioration in their capital situation as they lack adequate funds.

Banking crisis mostly come from the absence of good managerial ideas in management decision making (Tay, 1991). Therefore, competence and focus play a major role in banking. Mismanagement, especially excessive risk taking, is the main cause of bank failure (Lepus, 2004).

Tay (1991) observes that even though bankers are accused of misconduct, it is difficult to prove that the negligence of management is the only cause of bank failure. Smith and Walter (1997, cited by Apea and Sezibera, 2002) states that fraud causes banks to fail as happened in the case of Banco Ambrosiano and Hersatt. They add that corruption and fraud have been the general causes of bank failure. Tay also argues that deregulation and mismanagement to fraud and corruption are the major causes of bank failure.

Marrison (2002) articulate that the main activity of bank management is not deposit mobilization and giving credit. Effective credit risk management reduces the risk of customer default. They add that the competitive advantage of a bank is dependent on its capability to handle credit valuably. Bad loans cause bank failure as the failure of a bank is seen mainly as the result of mismanagement because of bad lending decisions made with wrong appraisals of credit status or the repayment of non performing loans and excessive focus on giving loans to certain customers. Goodhart (1998) states that poor credit risk management which results in undue credit risk causes bank failure. Chimere (1998) concurs with Goodhart, but he goes on to suggest that a bad lending tradition leads to a large portfolio of unpaid loans.

This results in insolvency of banks and reduces funds available for fresh advances, which eventually leads to bank failure. Goodhart et al add connected lending to the causes of bank failure. Irregular meetings of loan committees, false loans, large treasury losses, high sums of unrecorded deposits and money laundering in large amounts, contribute to bank failure.

Kolb (1992) states that the failure of banks is mainly due to the risky credits they give. Irrespective of the extent of risk involved, effective credit risky loans they give. Irrespective of the extent of risk involved, effective credit risk management can reduce bank failures.

Herrero (2003) in his paper, *The determinants of the Venezuela Banking Crisis* argued that among the reasons for Bank Latino's failure was inappropriate lending practices, which allowed collateral to be used for multiple loans, poor loan quality and a high concentration of loans in one sector. De Juan (2004), argues that banking failures in Spain were caused by poor risk management especially credit risk which was aggravated by the concentration of the loan portfolio in the group to which the bank itself belonged.

High inflation and high interest rates cause economic activity to collapse, and resultantly the burden of serving debts denominated in domestic and foreign currency increases and banks' capitalization ratios fall (Gil-Diaz, 1994). Gil-Diaz asserts that poor borrower screening, credit volume excesses and the slowdown of economic



growth in 1993 in Mexico turned the debt of many into an excessive burden. As such non performing loans, which carry high risk started to increase rapidly. Kolb (1992) is of the opinion that unsound banks, that is, those with poor credit risk management systems become captive to insolvent debtors or carry a portfolio of loans to related borrowers, who have no intention of repaying their debts.

Politically directed lending leads to bank failures as dishonest and greedy leaders exploit the funds of banks as happened in the Philippines in the 1980s (Hussey and Hussey, 1997). In most cases governments direct banks to give loans to certain borrowers, thus discouraging banks to fully make their credit appraisals. The implication is that such loans are not paid off.

It is said if you cannot measure credit risk, then you cannot manage risk (Monetary Authority Singapore, 2003). The measurement of credit risk is of paramount importance in credit risk management. Davies and Kearns (1992) emphasizes that institutions should have procedures for measuring their overall exposure to credit risk as well as exposure to connected parties, products, customers and economic sectors. Bhatia (2005) emphasizes that a well structured Internal Risk Rating system facilitates determination of the obligor's risk profile and likely loan loss. Internal risk rating is an important tool for monitoring and controlling risk inherent in individual and portfolio credits of a bank or a business line.

The Central Bank of Kenya (2005) suggests that banks need to establish a system that enables them to monitor quality of the credit portfolio on a day to day basis and take corrective steps as and when deterioration occurs. The Authority stated that the bank's credit policy should explicitly provide procedural guidelines regarding credit risk monitoring.

At the minimum it should lay down procedure relating to the following:

- the risks and responsibilities of individuals responsible for credit risk monitoring;
- the assessment of procedures and analysis techniques;
- the frequency of monitoring;
- the periodic examination of collaterals and loan covenants;
- the frequency of site visits;
- and the identification of any deterioration in any loan.

## **6. RESULTS**

Responses were obtained from ten interviews held and twenty questionnaires distributed to different banking institutions. Majority of respondents (90%) agreed that the failure to effectively manage credit risk contributed to banks' demise in the Zimbabwe Banking Crisis of 2004. The remainder (10%) was of a different opinion as they cited poor corporate governance as the chief causal factor of the crisis. On how the crisis came to being respondents were asked why credit risk was high during the period in question. All mentioned that difficult macro economic environment had led to the chaos. Half (50%) mentioned incompetence of Board and senior management; 30% stated lack of adequate regulatory guidelines on credit risk; and 90% were of the

opinion that preoccupation with speculative activities by banks contributed to the closure of those institutions.

On whether the board of directors and senior management of many banks were aware of the credit risk their banks faced prior to the crisis. Seventy percent of the respondents agreed that the board and senior management were aware of the credit risks. They attributed their failure to effectively manage it to the following factors: preoccupation with speculative activities as the earnings in such activities was above the Return on Assets (ROA) of proper banking activities as the economic environment was deteriorating.

Other cited incompetence of these boards as they sometimes engaged in activities they had no previous experience before, for example derivatives trading. Thus, the boards and senior management of many banks were worried about surviving the challenging economic difficulties at the expense of proper risk management, hence poor corporate governance activities were rife. Thirty percent of respondents argued that the board and senior management were not aware of the credit risk they faced attributing it to incompetence.

All respondents agreed that effective credit risk management was very important to the survival of a bank. By adhering to the set guidelines on credit risk management by the regulatory bodies a bank reduces its compliance risk and as such it will be compelled to set aside adequate capital for its credit risk. A bank gains a competitive advantage if it manages its credit risk effectively achieved through diversified lending and the higher market share this is most likely to yield. On whether credit risk management has improved since the crisis, 60% of the respondents reported that the crisis had awakened banking institutions and risk management is now highly rated.

The remainder, 40% argued that banks have always been giving credit risk priority as the inherent risk and the most popular type of risk. They went on to suggest that banks, however, were now lax in their credit risk management, thus the high credit risk prior to the crisis. As the Reserve Bank of Zimbabwe (RBZ) had accused banks of improperly writing off bad loans respondents were asked about it. Majority (60%) of the respondents agreed that bad loans were written off without following the properly laid down procedures for doing so. These loans were usually of insiders and those of their related parties and/or sister companies, especially those denominated in foreign currency. Only 40% disagreed with the central bank arguing that the hyperinflationary environment caused loans to lose their real value and thus, their repayment was not a problem and as such writing off was not a problem.

On why indigenous banks were the only ones affected many respondents cited poor corporate governance as they argued that locally owned banks had shareholders as board members and this usually led to conflict of interest. This was very common among many locally controlled banks and this is against international corporate governance practices. It was also argued that indigenous banks lacked corporate ethics, norms and values that are the pillars of banking. Insufficient capital bases also contributed to this trend according to the respondents. As locally controlled banks faced difficulties they had no adequate capital to act as shock absorbers or buffers. Incompetence of board and senior management of many banks was also highlighted;

many banks had improperly constituted boards and senior management who were incapable of steering the banks. As such they ended up engaging in non banking activities in a bid to make short term, supernormal profits as they lacked oversight.

Besides an ineffective credit risk system of banks there are many other factors that contributed to the collapse of banks.

The following factors were mentioned:

- difficult macro economic environment;
- inadequate risk management systems;
- poor corporate governance;
- non performing insider loans;
- chronic liquidity challenges;
- diversion from core banking to speculative activities;
- foreign exchange shortages;
- rapid expansion drives;
- unsustainable earnings;
- creative accounting;
- insufficient regulatory framework.

All respondents agreed that effective credit risk management improve a banking institution's performance. They stated that a bank that manages its credit risk well is likely to lend too many sectors of the economy, thus it will have a diversified lending base and this will reduce its concentration risk. Moreover, a bank gains competitive advantage through proper credit risk management. The pricing of credit products is made easier by effective credit risk management as the bank is able to assess the client's risk profile. It was mentioned that effective credit risk management can lead to business growth through gaining of a larger market share by the bank and high profits and stability realized by the bank.

On the proper Credit Risk Management all banks stated that they had a well documented Credit Risk Management Policy as required by the central bank. The key areas covered in the credit risk management policies of many banks were similar with variations in terminology.

These areas are as follows:

- lending criteria;
- portfolio grading;
- management information systems;
- types of facilities, credit products and borrowers;
- identification, measurement, monitoring and control of credit risk;
- management of problem credits;
- organizational structure;
- concentration of lending;
- credit risk mitigation techniques;
- processes, policies and procedures;
- insider lending policies;
- pricing;
- security;

- approval processes and delegated limits;
- high risk areas;
- administration provisioning policy and grading system;
- measurement methodologies;
- credit risk modelling and scoring;
- key risk factors;
- risk reward;
- writing off policy;
- new products policy;
- risk assessment;
- Know Your Customer (KYC);
- periodic reviews; breach of limits;
- Chinese walls;
- delegation of authority;
- international exposure and controlling facility.

These areas allow for the wholesome management of credit risk by a bank, they address the critical areas in credit risk management. Banks are continuously developing new products in this sophisticated banking world in a bid to gain leverage over others and as such there is need for the continual development of strategies to manage credit inherent in these products. The study established that the most popular among these is the derivatives market which comprises of swaps, futures, forwards and options.

On the potential obstacles to the successful implementation of effective credit risk management systems by banks a number of them were highlighted.

These are as follows:

- lack of resources;
- disintegration of systems across departments;
- inconsistency of risk rating approaches;
- data management;
- stringent regulatory requirements.

Respondents agreed that many lessons were learnt from the banking woes. Poor credit risk management can lead to bank failure, thus effective credit risk management is very crucial for bank survival. Other respondents suggested that there is need for banks to manage risks in an integrated approach as one type of risk gives rise to another. It was also highlighted that credit risk management must go hand in hand with good corporate governance; and there is need for the Board and senior management of banking institutions to be independent from the shareholders.

During the period prior to the banking crisis the level of inflation was very high, interest rates unfavourable, economic was negative and the local currency depreciated on a daily basis. This alone presented banks with a challenging environment under which to survive, let alone make profits. Banks could not access cheaper funds from the central bank due to the liquidity shortages and/or Treasury bill holdings by the market. This shortage of funds from the central bank meant that banks had to source for open market funds which was costly. This increased competition for

funds on the money market which pushed rates up and the increase had systemic effects. By the end of 2004, ten banking institutions had been placed under curatorship and two were under liquidation.

## **7. DISCUSSION**

According to the Reserve Bank of Zimbabwe banks had weak underwriting and credit monitoring standards. This led to many credits turning bad, not only due to the obligors' unwillingness and inability to pay, but also the failure by banks to identify a decline in the credit standing of counterparty. Ill planned growth strategies contributed to excessive levels of non performing insider loans. These loans were given to sister companies locally, regionally and/or internationally. An investigation by Camelsa Chartered Accountants revealed that Trust Bank (still under curatorship) bank had significant non performing insider loans granted without formal loan agreements/facility letters and/or proper due diligence. The non performing insider loans led to the bank having liquidity challenges and exposed to higher default risk. One of the affected banks Royal Bank's directors spearheaded the approval of credits to companies in which they had interests.

In the case of Gemtree Investments two directors of Royal bank were also directors of the company; and Panalla Investments where two spouses of two Royal bank directors were directors of the firm. As a result of these insider dealings the bank realized operational losses which consequently led to the bank failing to meet the prescribed prudential capital adequacy ratios. Other failed financial institutions had similar problems. The liquidity gap widened due to the failure by the bank to attract significant deposits due to a bruised reputation. This was compounded by massive withdrawals, and speculation restricted maturity rollovers which worsened the banks' problems and ultimately leading to their failures.

Some banks disregarded set prudential lending limits to insiders and other related parties. In some cases interests was not even charged on insider loans and were eventually written off without Board approval. This led to problems as set rules were violated and regulations not followed thus giving rise to compliance risk and loan losses. The policies and procedures of proper credit risk management stipulate that credit must be made on an arms length basis irregardless of who the counterparty is. The central bank articulates that directors and/or senior management with potential conflict of interest should not be involved the approval of credits to related parties. This over concentration of risk was usually to related parties and this increased default, as well as hampering a wider positive credit impact on other economic activities for achievement of a broad based supply response.

The Reserve Bank of Zimbabwe (RBZ) pointed out what it terms "imprudent credit risk management practices" as being one of the major causes of the banking crisis of 2004. As many writers concurred with the RBZ on some of the causes bank failures many factors were highlighted. The most common of these were difficult macroeconomic environment, inadequate risk management systems, poor corporate governance, diversion from core business to speculative activities, rapid expansion, creative accounting, overstatement of capital, high levels of insider loans,

unsustainable earnings, chronic liquidity challenges, foreign currency shortages and imprudent credit risk management frameworks.

The skyrocketing level of inflation, unfavourable interest rates, negative economic growth, collapsing infrastructure, the closing down of factories and industry, depreciating local currency, and a tough political environment made life difficult, not only for the banks to survive, but for the economy at large. The income levels for banks were failing and so was the purchasing power of the populace. Hyperinflation swept away the interest rates that were charged by banks for loans and advances; hence the real income for banks was low if not negative in some cases.

The money market shortages in the last quarter of 2003 also catalyzed the banking crisis. Diversion from core business to speculative activities also caused chaos in the banking sector. Holding companies were being used to evade regulation as depositors' funds were being used to fund associate companies such as asset management companies or investment vehicles, which were not regulated. In some cases, notes the central bank, banks abused liquidity support from the central bank to fund non banking subsidiaries and associates' requirements. This meant that economic activity in the real sector was limited and in instances bank failure was inevitable.

Also a strong appetite for rapid expansion without proper systems and controls exposed many banks to greater risk of loss. Resultantly, the capital levels of these institutions could not sustain the excessive expansion programs. In some instances depositor's funds were being used to fund these expansion drives, against good corporate governance standards. Misrepresentation of the institution's financial condition was now popular. This was done through tampering with the information systems so as to conceal liabilities and losses by creating fictitious assets and understating expenses and liabilities.

Some banking institutions were overstating their capital levels by under providing for non performing loans, while others falsified transactions to conceal undercapitalization. In some cases, banks were involved in unethical practices involving use of depositors' and borrowed funds to create an illusion of adequate capitalization, thereby violating the Banking and Companies Acts. Financial institutions recorded high paper profits prior to the crisis.

This was as a result of revaluation of assets in line with inflation and exchange rate developments in the market. Some institutions engaged in non core activities which were unsustainable and non permissible due to increased competition and high operational costs in a bid to survive. The other issue was to do with foreign currency shortages in the economy. Some banks engaged in speculative activities in the foreign exchange 'black' market. This compounded the already fragile liquidity situation at these banks, hence exposing them to high liquidity risk.

As with all other areas of an institution's activities, the Board of Directors has a critical role to play in overseeing the credit management functions of the bank. The Basel Committee on Banking Supervision (1999) stipulates that the Board should develop a credit risk strategy or plan that establishes the objectives guiding the bank's credit granting activities and adopt the necessary policies and procedures for conducting such. The credit risk strategy and credit risk policies should be approved and periodically reviewed by the Board. The Board needs to recognize that the strategy

and policies must cover the many activities of the bank in which the credit exposure is a significant risk.

## 8. CONCLUSION

The results obtained from the research clearly support the assertion that poor credit risk management contributed to a greater extent to the bank failures in Zimbabwe. Therefore effective credit risk management is important in banks and allows them to improve their performance and prevent bank distress. The success of the systems depends critically upon a positive risk culture. Banks should have in place a comprehensive credit risk management process to identify, measure, monitor and control credit risk and all material risks and where appropriate, hold capital against these risks. Establishment of a comprehensive credit risk management system in banks should be a prerequisite as it contributes to the overall risk management system of the bank. There is also need for banks to adopt sound corporate governance practices, manage their risks in an integrated approach, focus on core banking activities and adhere to prudential banking practices.

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## **TAX TREATMENTS SPECIFIC TO INTRA-COMMUNITY COMMERCIAL TRANSACTIONS - TRIANGULAR OPERATIONS**

**LUCIA PALIU-POPA** \*

**ABSTRACT:** *Romania's EU accession made significant changes in the tax area imposed by the harmonization of national laws system of member countries. Thus it disappeared the concepts of export and import in the relationship between Member States, which are replaced by new notions, such as: intra-community acquisition (instead of import) and intra-community supply (instead of export). Given the changes occurring in the tax laws and their complexity, in this paper/work I proposed to approach the specific tax treatment inside-community with reference to triangular transactions.*

**KEY WORDS:** *tranzactions, tax treatment, triangular operations, intra-community delivery, inside-community acquisition, member state*

### **1. INTRODUCTION**

Taxation is the area that suffered most changes after Romania's EU adhere, the Tax Code matches up entirely after January 1, 2007 with the European legislation. Significant changes were made to **value added tax**, due both the abolition of customs duties owed and the need to harmonize national legislation with that legislation of Member States. Thus, *controlling the movement of goods within the Community* shall be carried out via the *VIES electronically system*, reporting intra-Community acquisitions in Romania shall be carried out after checking in advance the number of valid assigned numbers for value added tax of the supplier, in its Member State and if the operation was stated by the fiscal authorities, same procedure being applied for reporting intra-Community deliveries from Romania.

Economic operators registered for value added tax fails to pay VAT on intra-Community acquisitions by applying the *reverse charge*, that meaning the payment through the value added statement. The European rules have required the removal of value added tax exemption incompatible with the *acquis communautaire*, such as:

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elimination of value-added exemption on research and development, the commission for transactions on the commodity exchanges and for revenue securities companies for management and disposal of shares, equity, debt securities, the operations funded by grants provided by foreign governments and international organizations for veterinary medical care. From January 1, 2007 shall apply *special arrangements for value added tax*: small companies, travel agencies, gold of investments, second-hand goods, household services rendered by persons not established in the Community, as well as non-taxable persons established within the community.

*We conclude* that Romania's accession to the European Union imposed harmonize the national legislation with Community law, significant changes, as I said, registering in the tax area. At first glance the new procedures have a positive impact on businesses due to intra-community simplify transactions in goods, the elimination of customs issues and customs agents fees implicitly, by streamlining the logistics flow and by eliminating costs associated with cash flows as tax value added need not be paid to customs. However there are costs arising from the new legislation, concerning the implementation of its unit, primarily costs relating to costs incurred by changing accounting and information system, changes required to complete declarations required by the new legislative provisions relating to indirect taxes, expenses for book-keeping performed with complete, accurate and precise characters of all transactions in the pursuit, but also costs arising from fast adaptation to new regulations, finalized in increased costs of bookkeeping and tax services or staff training.

*Main advantage* retain the overall modernization of Romanian fiscal system and connect it to the European tax system and as *disadvantage* we talk about the transition costs incurred. Given the changes occurring in the tax laws and their complexity, in this paper I proposed to approach the specific tax treatment of intra-community transactions with reference to triangular transactions.

## 2. THE TAX TREATMENT OF TRIANGULAR OPERATIONS

Given the complexity of intra-community commercial transactions and tax laws, in this paper I proposed to approach the specific tax treatment of triangle transactions. In order to determine the tax treatment of these transactions, in terms of value added tax, we must answer the following *questions*: Is the operation made by a taxable person? Operation is in the area of value added tax? Where is the place of delivery/acquisition? Is the operation an exempt one? Which is the person who must pay the value added tax? *The triangular operation* is possible only if the three people involved in the transaction are recorded in taxable value added tax purposes in three different Member States, representing a sale from a trader in the Member State 1 for an entity in the State 2, which resell these goods further to a trader in Member State 3, the transport of goods directly from the State 1 in the State 3.

There are about *three different taxable persons* registered in *three different Member States* between take place *two transactions*, namely: *the first delivery* is made by a taxable person from Member State 1 to a taxable person registered in value added tax purposes in Member State 2, as buyer-reseller; *the second delivery* is made by the buyer-reseller from Member State 2 to a beneficiary person registered in value added

tax purposes in Member State 3. *The transport of goods* is made from Member State 1 in Member State 3. Schematically, a triangular operation, which takes place between the three taxable persons A, B, C, located in three different Member States is represented in Figure 1:

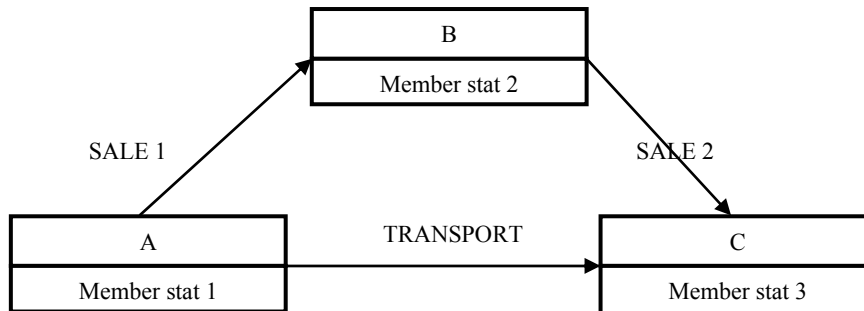


Figure 1. Triangular operation

To determine where each transaction takes place is necessary to determine the taxable persons involved, responsible for transportation to be carried out under contracts between the parties and other documents. *The transport contract relationship* can be settled between A and B or between B și C, relationship which implies a tax treatment different through value added tax.

**Situation I: The transport contract relationship is between A and B**

*a). Without applying the simplify measures:* In this case the triangular operation has the following *tax features*: delivery from the supplier (A) the buyer-reseller (B) is an *intra-Community supply with transport*, which takes place in the Member State 1, where transport begins, exempt from value added tax; delivery from the buyer-reseller (B) to the final beneficiary of the property (C) is a *delivery without transport*, taking place in Member State 3, where ending the transportation of goods; the buyer-reseller (B) conduct an intra-Community acquisition in the Member State 3, which is why it is required for value added tax in Member State 3, acquisition is followed by a local delivery to the final beneficiary (C), in Member State 3. It follows that Company B (buyer-reseller) must register for value added tax purposes in Member State 3 to make intra-Community acquisition in that Member State and to pay value-added tax for this delivery.

*b). By applying the simplification measures:* Simplification measures apply to prevent company B (buyer-reseller) to register for value added tax purposes in Member State 3. Thus, *the triangular operation by applying the simplification measures* in terms of the three taxable, considering Romania in each of the three Member States, require that certain *conditions*:

*b1). From supplier (A point of view), registered in value added tax purposes in Romania (member state 1)*

Intra-community delivery carried provider (A) in Romania is exempt from value added tax if it meet the following *conditions*: goods are transported from the Romania in another Member State (State 3) by the supplier (A) or the buyer-reseller (B); buyer-reseller (B) notify the provider his registration code for value added tax in

that other Member State (State 2); supplier (A) issues an invoice without value added tax to the buyer-reseller (B) and enter in the invoice this registration code for the company's value added tax B from Member State 2; supplier (A) records the delivery in the value added statement in Romania (Member State 1); buyer-reseller (B) is mentioned as a buyer of goods, on intra-Community summary statement submitted by the supplier (A), given the registration code for value added tax of the buyer-reseller (B) from Member State 2.

*The tax treatment of this operation:* 1. *The taxable persons:* Yes, Romanian seller; 2. *The taxable operations:* Yes, intra-community delivery of goods; 3. *Delivery place:* Romania (the place to start the transport, member state 1); 4. *Exemptions:* Yes, if are fulfilled the two conditions (it can be demonstrated the transport and communication the registration code for value added tax purposes of the purchaser of the other Member State); 5. *Tax obligation to pay:* Don't exist a person obliged to pay the value added tax, the operation being exempt.

*b2). In terms of buyer-reseller (B), registered for value added tax purposes in Romania (Member State 2).* The acquisition made by the buyer-reseller (B) in Romania is normally an intra-Community acquisition, but through the application of simplification measures for intra-Community acquisitions is not taxable in Romania, where the buyer-reseller (B) proves that his acquisition intra-community was subject to value added tax in Member State 3, where transport ends, and the buyer-reseller (B) meet the following *requirements*: not include the acquisition made in the Member State 1 in the chapter 'intra-Community acquisitions' of the statement of value added tax in the summary statement of intra-Community acquisitions; register the delivery made to the beneficiary of delivery (C) in the 'intra-Community supply exempt' chapter of statement of value added; mention in the summary statement for intra-Community deliveries supply exempt from tax the following data: registration code for value added tax purposes of the recipient of delivery (C) from the Member State 3; codul T în rubrica corespunzătoare pentru operațiuni triunghiulare; T code in the appropriate box for triangular operations; value of deliveries made; issue the invoice which will register: registration code for value added tax purposes of the buyer-reseller (B) in Romania; name, address and registration code for value added tax purposes of the recipient delivery (C) from the State 3; to specify in the frame of invoice of the fact that the beneficiary of delivery (C), from the Member State 3, is the person liable to pay VAT on the supply of goods made in other Member State and a reference to art. 28c (E) (3) of Directive 6<sup>th</sup>. Given the fact that under the rules to simplify the place of acquisition the property is in the Member State 3 (where transport ends), the Member State 2 will not approach the tax treatment, in terms of value added, of acquisition.

*b3). The delivery point of view (C) registered for value added tax in Romania (the member state 3).* Intra-Community acquisition made by the buyer-reseller (C) in Romania is not subject to VAT if the following *conditions* are met: the buyer-reseller (B) is settled in member state 2; the acquisition of goods is made by the buyer-reseller (B) in order to carry out a subsequent delivery of these goods; the recipient delivery (C) is a taxable or a non-taxable legal person registered for value added tax in Romania, according to art. 153 or art. 153<sup>1</sup> of Law no. 571/2003 regarding the Fiscal Code, with subsequent modifications and additions; recipient delivery (C) is required

to pay VAT on supplies made by the buyer-reseller (B), which is not registered for value added tax purposes in Romania (Member State 3); recipient delivery (C) include the acquisition made in the 'intra-Community acquisitions' chapter in the statement of value added, by applying the reverse charge mechanism, and summary statement for intra-community acquisitions of goods.

*Tax treatment of this operation:* 1. *The taxable persons:* Yes, final recipient; 2. *Taxable operations:* Yes, intra-community acquisition of goods; 3. *Acquisition place:* Romania (place to finish the transport); 4. *Exemptions:* No, operation is taxable; 5. *Tax obligation to pay:* Final recipient, it applies reverse taxation.

**Situation II: Relația Contract transport relationship is between B and C**

*a) Without applying the simplification measures:* In this case are met the following *tax features*: the delivery from the supplier (A) to the buyer-reseller (B) is a *delivery without transport*, taking place in the Member State 1, where goods are made available to the buyer-reseller (B). This operation is a *local delivery* made by the supplier (A) in the Member State 1. Buyer-reseller (B) may deduct VAT, charged by the supplier (A) only if it is registered for value added tax in Member State 1 (compulsory situation since made an intra-Community delivery in the State Member 1); supplies made by the buyer-reseller (B) to the final beneficiary of the property (C) is an *intra-Community supply with transport* which takes place in the Member State 1 (where transport begins). Delivery shall be exempt from value added tax if they meet two conditions: the final recipient (C) must hold a registration code for value added tax and the goods are delivered outside the State 1; the final beneficiary of the property (C) conduct an intra-Community acquisition in the Member State 3 (where transport ends), which is liable for VAT (reverse charge). If the final beneficiary (C) is not a taxable person or has not a registration code for valid value added tax in Member State 3, then the buyer-reseller (B) must to issue VAT invoice from the Member State 1 to the beneficiary (C). It follows that company B (buyer-reseller) is always required to register for value added tax in Member State 1 where it done a local purchase with value added tax and intra-Community supply of goods exempted from tax value added.

*b). The simplification measures not apply where transport is a contractual relationship between B and C.* The taxable persons involved in this triangular operation have the following *reporting obligations*: the supplier (A) shall report the transaction in its statement of value added tax as a local delivery to whom the supplier is the person liable to pay VAT in Member State 1; buyer-reseller (B) is required to register for value added tax in Member State 1; buyer-reseller (B) will report in value added tax bill a local purchase for he paid the value added tax to the supplier (A) in the Member State 1, value added tax which can be inferred, and an intra-Community supply exempt from value added tax to the final beneficiary (C); buyer-reseller (B) will report exempt intra-Community delivery to the final beneficiary (C) in the summary statement on intra-Community supplies of goods from Member State 1; final beneficiary (C) being the person liable to pay VAT for intra-Community acquisition made in Member State 3, shall report such acquisition in the statement of value added (reverse charge) and in the summary statement on intra-Community acquisitions. In the practical work may be encountered situations where delivery of goods to be made between three different people but they do not fall within the triangular operations

because of a taxable person established outside the European Union, for which their tax treatment is different.

### 3. CONCLUSIONS

The abolition of customs barriers between European Union Member States had the effect of the elimination of customs control of goods movement within the Community, putting his mark on international trade which no longer includes, from January 01, 2007, intra-Community transactions. Due to the complexity of intra-community commercial transactions in order to *determine the tax treatment* of these transactions, in terms of value added tax, must answer the following *questions*: Is the operation made by a taxable person? Operation is in the area of value added tax? Where is the place of delivery/acquisition? Is the operation an exempt one? Which is the person who must pay the value added tax? Since *the triangular operation* is possible only when the transaction involved three registered taxable persons for value added tax, in three different Member States to consider the situations where the supply of goods is made between three different people this operation is not under triangular operations because of a taxable person established outside the European Union, for which tax treatment is different. Assessment of the specific tax treatment of business transactions and intra-triangular default operations is particularly important in *determining the liabilities and reporting* on value added to the entities from different EU Member States.

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## **THE DEVELOPMENT PREMISES OF THE BANKING SYSTEM IN ROMANIA**

**NICOLETA-GEORGETA PANAIT \***

**ABSTRACT:** *The actual world economic crisis has proven once more that the banks are the primary force for an economic growth or for a recession. This major economic crisis has begun, in the first instance, at the banks level, there for in the banking system has developed a great void of banking liquidities. Many payments are done through banks and the lack of funds has slow down the payments, the loans, which led to a reduction of activity in the real economy for the companies, or even led to bankruptcy for one of them. The Romanian banks have their own liquidity strategies. Of course that the objective of all banks is maintaining and achieving a ratio and an optimum structure of assets and liabilities, so it may obtain a maximum value of incomes and a minimum value of negative effects of payments during rough situations.*

**KEY WORDS:** *resources, bank, liquidities, management, crisis*

### **1. THE RESOURCES MANAGEMENT IN THE ROMANIAN BANKING SYSTEM**

The banking resources management shows some particularities depending of the level of economic growth, the geographical area, the level of culture and civilization. The banking resources management depends also, by the knowledge of the first steps in development of banks and knowing the primary bearings of integration in the European banking system. The close-up view of the resources takes in consideration the essential element that the banks are first of all financial intermediates. So, most of the resources are drawn from the banks costumers, from depositors and from financial market. The actual world economic crisis, who affected specially the banks, made the specialists to discover the credits offered by the international finance and banking institutions. With the help of these loans can be set in motion and also relax the credit market, which is on the one hand the primary form of financing the economy and on the other hand a form of financing the companies.

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In the year 2009 Romania receives from the International Monetary Fund a loan of about 20 billion Euros, from which 6 billion are for National Bank of Romania to support the banks with funds, and then, the banks can finance the companies especially for achieving the investments objective. In Romania, the banking resources management starts also with the idea that these resources are created and used on two types of financing: • *The direct financing*, which implies bilateral transaction of funds between the companies that have a capital surplus and the companies that are in need of that capital. This type of financing is rarely used in Romania. The main cause is the small capital transacted on the stock exchange market. The bearer securities are not used for financing but for speculative means. Few companies buy shares, the bonds are transacted rarely, that's because there is a lack of resources in economy. So, this type of direct financing of companies through shares is very less used in Romania. • *The indirect financing* is used much more, that is to say a financial intermediary - more over banks - is interposing between the debtor and creditor. It can be told that through an efficient management, the banks succeed in transferring the debts and claims between companies. The banks can best manage to transform the due dates (financing on a large period of time started with liquidities) or to transfer the risk from investments to firms that have due resources and with a low level of risk, or even without risk.

The Romanian banking management pays attention to reduce the cost of transaction, because only in this way it may reach a low level of cost of the entire financing, so much at the bank level and at the credited company level also. This charge can be minimized mostly with having permanent banking liquidities in the banks (it is known that these have a low cost, because are drawn from resources on short term, actually from the companies' current bank accounts). The main objective of the management in the Romanian banking system is maintaining a good long term relationship with the costumers. To obtain this purpose, the banks must assure a heightened banking liquidity. The companies want to have business relations with banks, who would hold a high volume of liquid assets, which can be transformed into money rapidly. The banks achieve these liquidities primarily through money creation that can easily done through currency. This way the banks transform their debts into universal means of payment. The process of transforming assets into money has started in Romania also. In real terms, the banks convert claims, which have a low risk into means of payment with a high liquidity. This way, the banks have proven the ability of banking intermediary. The previous statement reckons on the fact that from one year to another the expenses with the means of payments grow in Romanian banks. So, these expenses were in the second place with the ratios: 11.6 % in 1995, 14.7 % in 2000 and 17.3 % in 2005, in the first place were the credit managing expenses. It could also be told that the banks succeed to diversify their activity, their products and services and the provenience of their incomes. Because of the new ways of financial intermediation development the banks' resources can be increased and managed more efficiently. Hereby, the banks carefully started transactions in the stock exchange. There for in Romania, the banks have started the process of training in banking intermediation. During the last years the transactions and the investments made by banks in securities have increased. Within this context the management of banking resources becomes



more complex considering that the banks' results become more unstable (the price fluctuation of shares in the stock exchange and interest ratio). The resources management in Romanian banks is strongly influenced by the capital structure. In 1991, when the banking reform started, the State of Romania was the only shareholder of all Romanian banks' authorised capital, in 2007, the first year after the Romania's adhesion to Europe Union, 88.2 % of the shares was owned by investors, and not by the Romanian State, it also has a growth tendency. Obviously, because the authorised capital is in the investors' hands, the Romanian banks have a large managing self-sufficiency, so the managing performance has increased. First of all the banking capital achieved a focusing unknown till nowadays. So, for a country with few financial resources like Romania, there are already two banks that each has the authorised capital bigger than 500 million USD.

The Romanian banks reduced the subprime credits so they achieved better performance in the resource management. Therefore, until the expansion of the actual economic crisis, non-prime loans achieved a value of 2.3 % from all the banking system, which sets Romania between the countries with a solid banking system. Considering that many of banks' resources are not "delivered" to Central Bank as Bank Reserves. This way, the non-prime loans ratio dropped and automatically it could start growing the loans given by banks, simultaneously, the banking assets ratio and solvability ratios have increased, and in the same time the general risk multiplier has been reduced. Regarding the risk issue, the management of Romanian banks has the primary objective to assure the liquidity of resources of all types. In the banking resources management the first component of these resources must be the costumers' deposits. These deposits have increased 2.7 times in last 10 years, sometimes the growth from one year to another was spectacular, because of the incomes growing during the years 2007-2008 (they have doubled) taking into consideration that the investments made by the public didn't have the same trend of development.

The management of Romanian banking resources makes sizable efforts to draw the intermediate management balances in the active circuit and first of all it wants to draw the Earnings before Interest, Taxes, Depreciation, and Amortization and the Gross Profit also. From one year to another the banks' Net Income increased from 242.7 million RON (the home currency of Romania) in 2003 to 1.2 billion RON in 2007, almost 6 times. Also in the same period of time the banks' Net Profit increased from 21 million RON to 319.6 million RON. We are aware that in that period of time the Romanian banks made only profit, so without losses. The Return on-assets ratio increased from 0.6 % in 2003 to 2.0 % in 2007.

$$\left( \text{ROA} = \frac{\text{Net Profit}}{\text{Total Asset}} \times 100 \right) \quad (1)$$

The Return on equity ratio was 22.7 (in 2007) towards 9.1 % in the year 2003.

$$\left( \text{ROE} = \frac{\text{Net Profit}}{\text{Total Capital}} \times 100 \right) \quad (2)$$

## 2. THE ROMANIAN BANKING SYSTEM

The financial resources of banks were sizably reduced, which in the market economy could mean sometimes a disaster, considering that the banks have always been the main paymaster for the industry, services, agriculture, construction. The banking system, in Romania, had a positive evolution in the last years, the banking system advance rapidly to the standards required by The World Bank, by The Basel II Agreement (2004) and by The Europe Union adhesion. Could be told that the Romania had rigorous fulfilled the international financial standards, there for the Romanian banking system supported better the country economy, but couldn't avoid the world economy crisis. The adhesion of Romania at the Europe Union had developed an intense training for the Romanian banking system regarding the exigent standards of the European banking system. First of all the Romanian banks had to apply the capital allocation coefficient. So, there is not even a single Romanian bank that has a ratio between the authorized capital and total assets lower than 16 %, this value is double from the one from Basel II Agreement.

Also, there are Romanian banks that have a capital allocation coefficient between 28 and 32 percent. In this case are the first two Romanian banks that, together, hold over 40 % of the total assets in the banking system. Another opportunity for the Romanian banks, in the last decade, is that other powerful foreign banks bought-out the stock holdings. So, the first Romanian bank, The Commercial Bank of Romania, was bought thought acquisition by the Austrian bank ERSTE BANK, and the second Romanian bank, Romanian Bank for development, was bought by the French group Groupe Société Générale. Overall, the Romanian bank system is owned 80 % by the foreign banks.

The third favourable premise (that slows down the economic crisis) was the heedful policy of the National Bank of Romania. This central bank operated, not only with a prudent surveillance of commercial banks, but through many ways like maintaining a high level (10 %) of the monetary policy rate, and the required minimal reserves for the non-governmental loans offered by the banks were also risen (between 20 and 30 percent), all of these measures taken hold down the credit. A major and final premise that must be taken in consideration underneath the financial resources of banking management is the granting of the 20 billion Euros credit by the International Monetary Fund and Europe Union. With this occasion, the International Monetary Fund representative, whom negotiated the loan (between March and May 2009) said: "fortunately, Romania has a relative healthy and well capitalized banking system".

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## **SOCIAL - ECONOMIC ASPECTS RELATED TO THE CONTEMPORARY VILLAGE WITHIN SARMIZEGETUSA AREA**

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ROXANA GHIȚĂ-PLEȘA, OANA DOBRE-BARON \***

**ABSTRACT:** *The sociological research whose results are given in this paper was conducted in the month of July 2009 in the rural community of Sarmizegetusa, located in Hunedoara County on the border with Caras-Severin County. There has been investigated a total of 174 households and the main issues addressed are the following ones: house and living conditions, family structure, household income, the comfort of the house.*

**KEY WORDS:** *income, house, family, conveniences, issues that make people worried*

The issues that stir currently the people living in the rural community of Sarmizegetusa are generally the same which worry the entire Romanian society. The main problems that trouble the vast majority of people are the raising prices and health related issues (Figure 1).

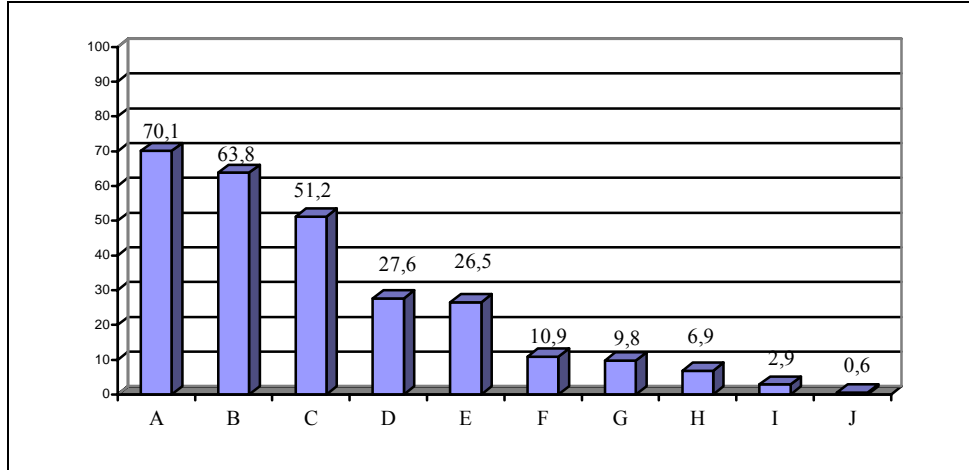
Slightly more than half of them are concerned about instability / economic crisis, linked of course to the subsequent price increase. A quarter of respondents perceive also the political instability, although this is more a distinct phenomenon in the case of Romania. Almost the same percentage holds the unemployment rate, but even though its proportions are increasing, we speak here about a rural community where the effects are felt to a lesser extent compared to the urban community; the villagers have other options related to agricultural activities which can ensure a minimum subsistence conditions.

A positive aspect would be that people are optimistic about the future of the village and of youth, the percentage of those who are concerned about these issues is below 10%. While future related issues concern most of the people, present life in the village is considered as being generally satisfying (Figure 2); only an insignificant

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percentage sees it as unsatisfying (6.3%) and most of the villagers consider it very pleasant and enjoyable (55%) and over a third doesn't consider life pleasant or unpleasant.



*A – price increase*

*B – health problems*

*C – economic instability*

*D – political instability*

*E – unemployment*

*F – juvenile offences / crimes*

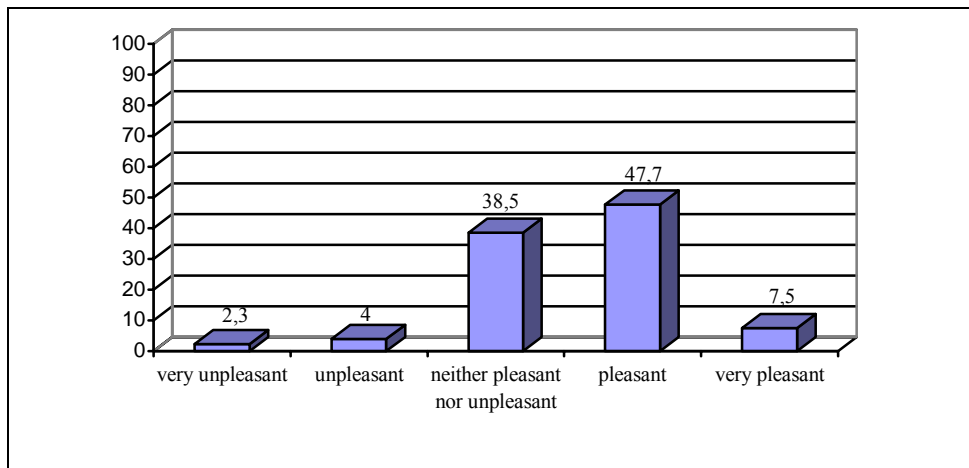
*G – problems related to the youth living in the village*

*H – problems related to the future of the vilage*

*I – problems related to property right*

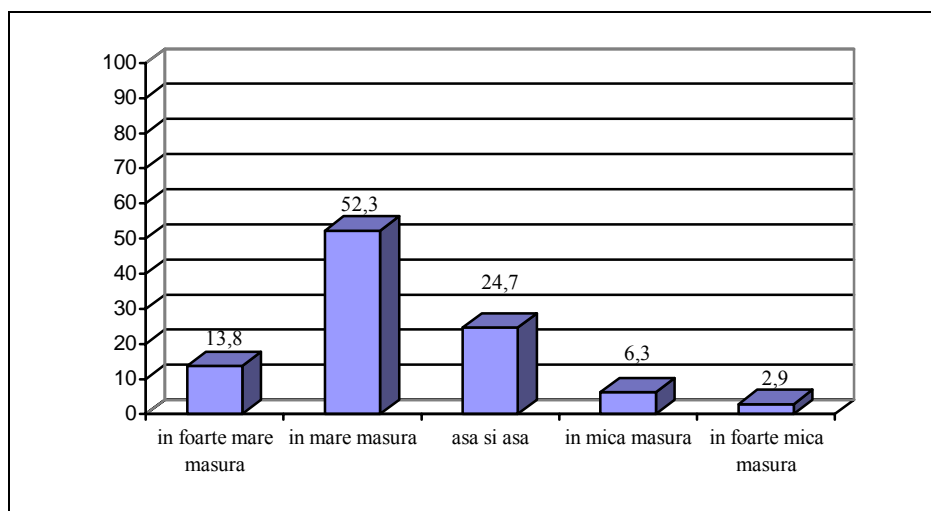
*J – others*

**Figure 1. The problems which most concerned about the people (%)**



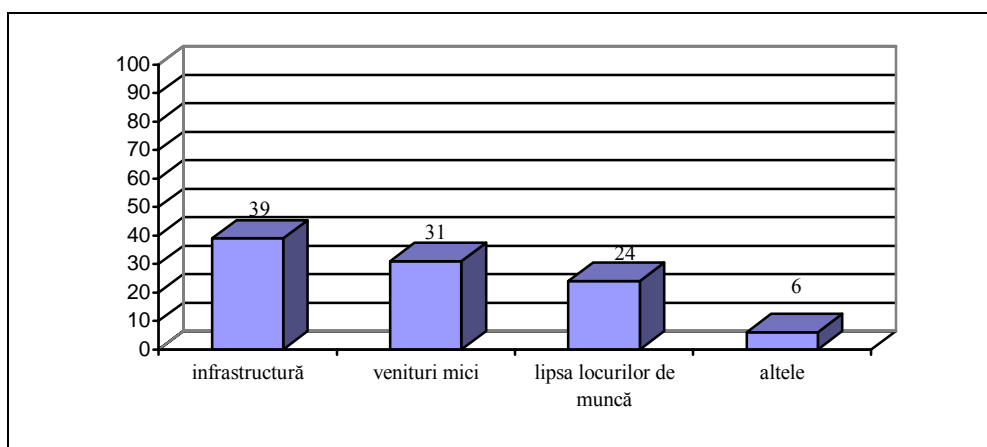
**Figure 2. Assessment of life today (%)**

The degree of satisfaction on life today is significantly correlated with how the society looks and over two thirds of respondents are satisfied with the appearance of the village (Figure 3).



**Figure 3. The degree of satisfaction on the look of the locality (%)**

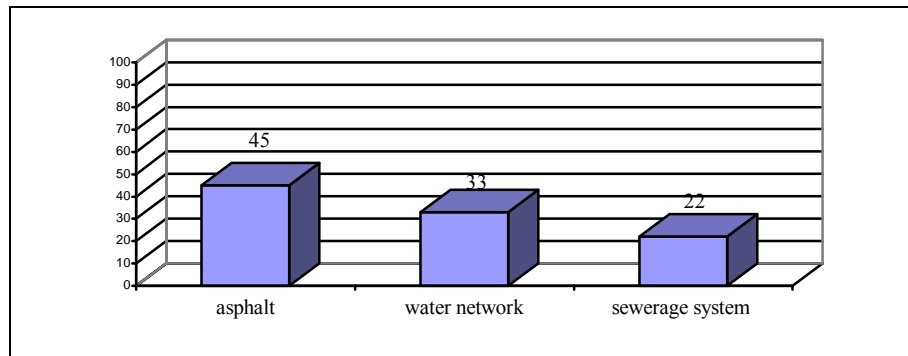
The main reasons for discontent are related primarily to infrastructure, low income and lack of jobs (Figure 4).



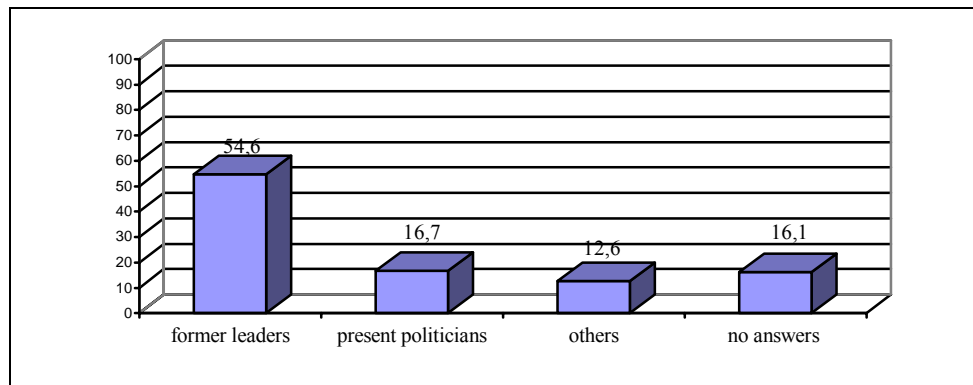
**Figure 4. The reasons why people are not satisfied with the life they are having in the village**

Figure 5 illustrates that infrastructure is by far the most pressing problem, the measures to be taken so as life of local inhabitants becomes more enjoyable point to infrastructure, i.e.: the arrangement and lay asphalt on roads; the drinking water network; the sewerage system.

The responsible persons for what has not been achieved so far are mainly the former local leaders, and, to a lesser extent, the political class (Figure 6).

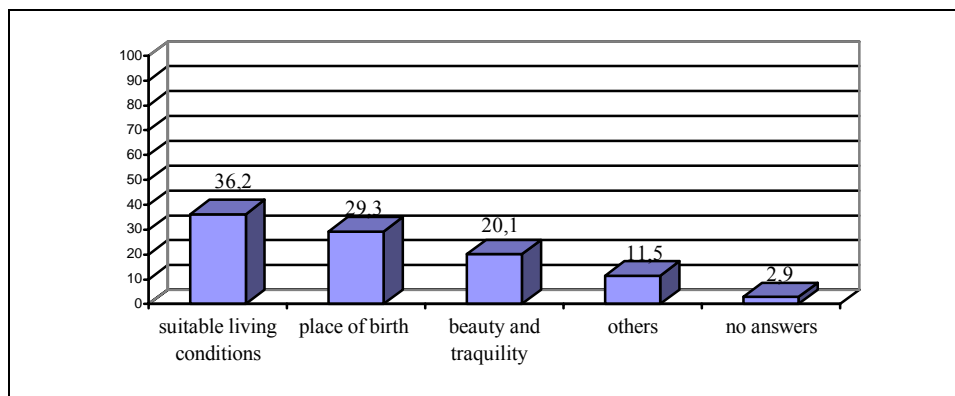


**Figure 5. Measures to be taken so as the local life becomes more pleasant (%)**



**Figure 6. Responsible persons for what has not been achieved in the village (%)**

Of course, there shall always be problems to be solved but, nevertheless, as suggested by data in Figure 2, the degree of satisfaction with the settlement is high, the reasons for this state of gratitude are the good living conditions but also the ancestral feeling displayed towards the birthplace and the beauty of the area (Figure 7.).



**Figure 7. The reasons why people are satisfied with their life in the village (%)**

In general, family incomes are relatively high in Sarmizegetusa rural community, over one third having over 2000 lei and more than half above 1500 lei, while 14.3% of the families situate within the ranges of up to 700 lei (Figure 8).

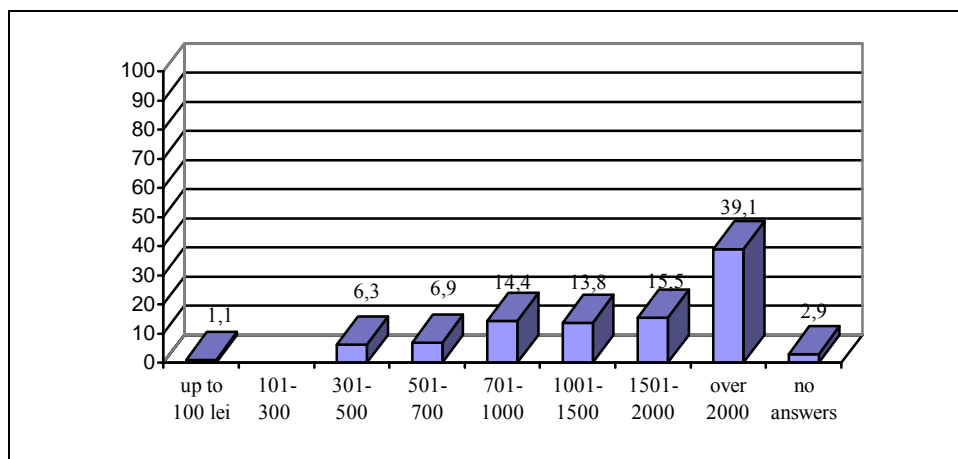


Figure 8. Household income (%)

Figure 9 shows the structure of the household in relation to the number of members; consequently, there can be noticed that most families consist of 3-4 persons (43%). One can say that the families of Sarmizegetusa are relatively numerous, although 38% of them have less than three persons. However, almost one fifth of them is made of more than four persons and those with more than two persons hold 62%. Compared to traditional rural family, the normal family living in Sarmizegetusa community, on average, is made of fewer members but, compared to other rural communities, it is higher than average.

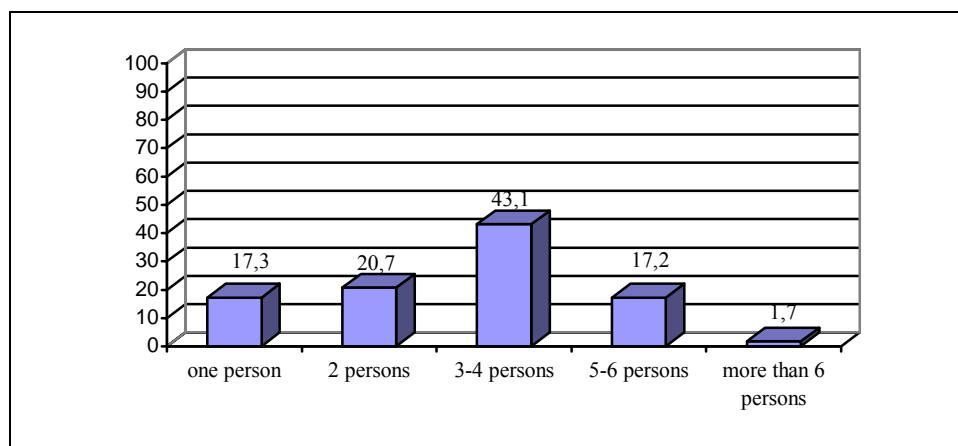
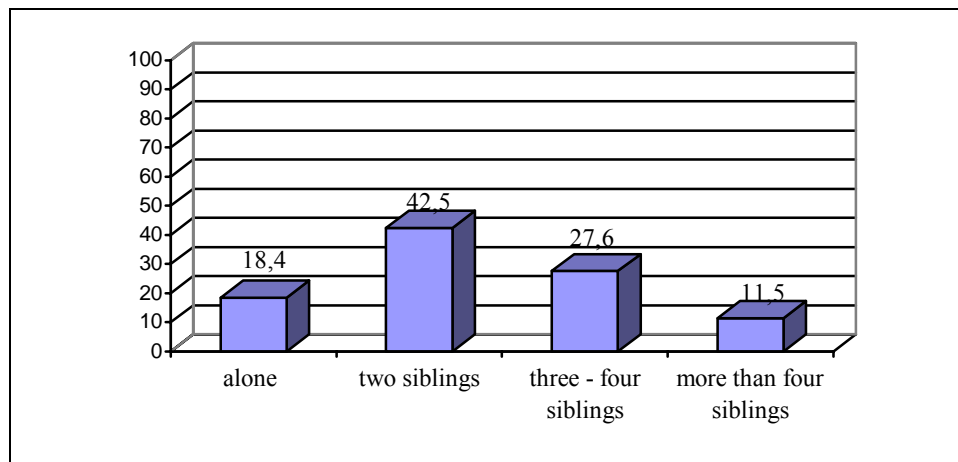


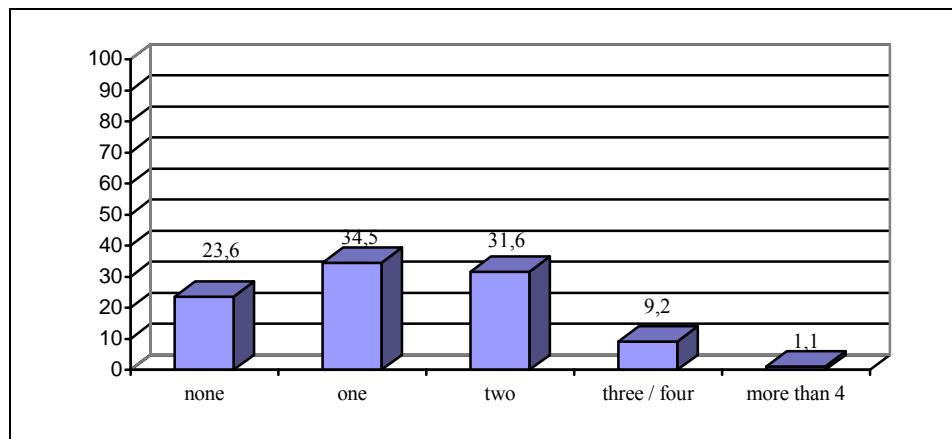
Figure 9. Number of persons per household (%)

Due to social and economic reasons, the tradition that says that young couples should have more children has been affected during the transition period, both in the whole Romanian society and, therefore, in the rural community.

Figures 10 and 11 show the situation of siblings in the family of origin and the number of children of respondents. After comparing the data from the two figures, it is quite clear that there is a downward trend in the number of children in families. Consequently, if the percentage of couples with more than two children (brothers - Figure. 10) in the family of origin more than is about 40%, the percentage of families own more than two children is nearly four times lower (about 10% - Figure 11).



**Figure 10. Number of siblings in family home (%)**



**Figure 11. Number of children in their own family (%)**

Also, the percentage of families of origin with two siblings, is 10% higher than that of their own families with two children and the percentage of families with one child is almost half that of their own families with a child.



It is undeniable that the comfort of country house increased after 1989 and this is quite normal, but today the village still faces some major problems that affect the life of villagers, the most acute being the infrastructure. The origin of the dwelling / house of those interviewed is mostly the heritage - the rate of two-thirds - and the actual contribution rate of one third (built or purchased by the owner) of those who hold them (Figure 12).

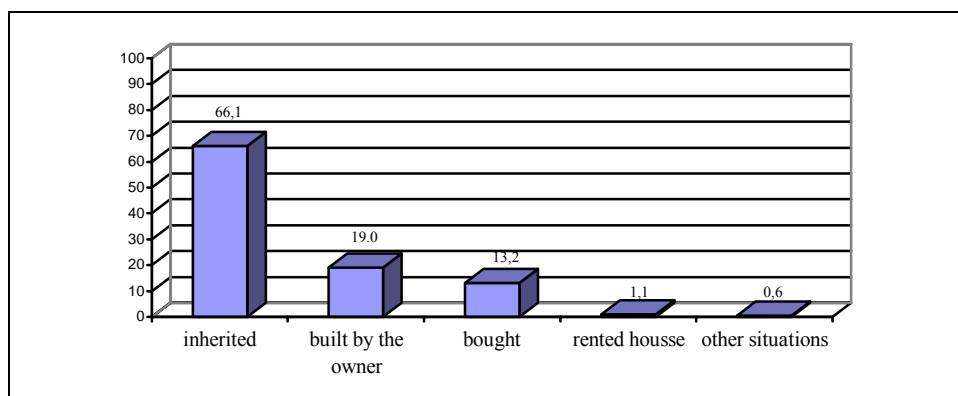


Figure 12. Where the house comes from (%)

The age of house (Figure 13) correlates with its origin, that is legacy; the overwhelming majority of houses are more than 20 years old and only a negligible percentage of houses are younger, aspect that shows that in the past 19 years there has been built very little. Of course, this situation can be explained to a certain extent and trend of young people to migrate to the city.

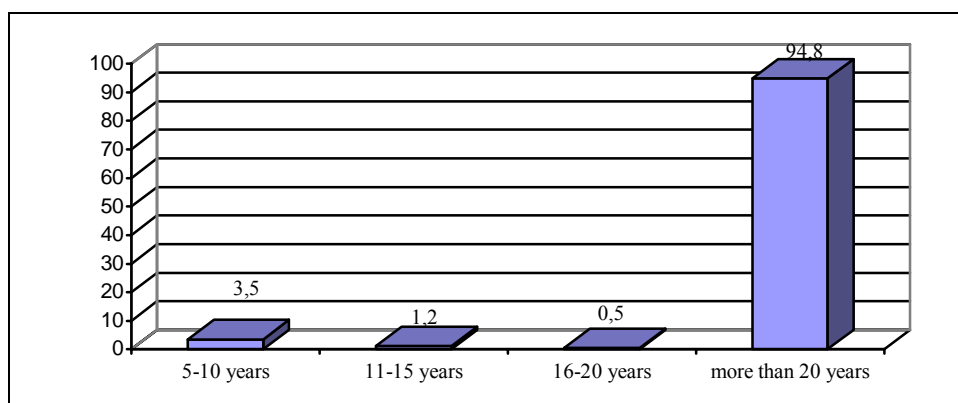
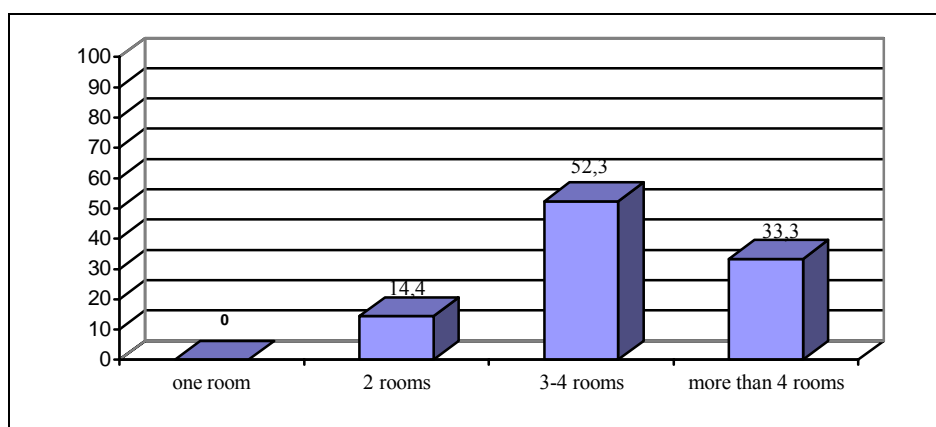


Figure 13. House age (%)

Housing in terms of floor space is very good; only 14% of houses having only two rooms and just more than half are with 3 - 4 rooms and one third are with more than 4 rooms (Figure 14).



**Figure 14. Housing (%)**

The material used for the building of houses is brick walling for the overwhelming majority of cases and roof is fully of tile, covering specific for mountain areas. The houses are floored, in almost equal proportions, with floor board and with parquet and only a negligible proportion has another structure.

The main heating source in the house is the tiled stove in most cases; only 6% of houses have their own heating system and, of course, the fuel that is being used is wood in all situations. The facilities of the household / dwelling show a high degree of comfort. Almost all houses have furniture, stove, refrigerator, colour TV, washing machine. Relatively high rates have also registered the radio, the phone, the radio - cassette, the vacuum cleaner, and other more.

For rural areas, the personal computer and the car display important figures (each of one 37% of households) and satellite antenna meet the needs for information and entertainment in 29% of households.

With regard to other facilities such as the kitchen, the bathroom, the toilet, the drinking water or sewerage network, there is still enough room for the normal demands of the early XXI century. Except the issues related to infrastructure and which have been mentioned above, Sarmizegetusa community displays a developed social and economical level, largely holding conditions for rural tourism, the Dacian vestiges being essential in this respect.

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## **DISTRIBUTED DATABASES MANAGEMENT USING REMOTE ACCESS METHOD**

**MIRCEA PETRINI** \*

**ABSTRACT:** *Because of the formidable obstacles to realizing the ideal distributed database, DBMS vendors have taken a step-by-step approach to databases and networking. They have focused on specific forms of network database access, data distribution, and distributed data management that are appropriate for particular application scenarios. This paper studies the remote access method as a component of the distributed databases management.*

**KEY WORDS:** *Distributed databases, Remote Access, Oracle*

### **1. DISTRIBUTED DATA**

Commercial data processing in a modern corporation has evolved a long way from the centralized environment of the 1970s. Figure 1 shows a portion of a computer network that you might find in a manufacturing company, a financial services firm, or in a distribution company today. Data is stored on a variety of computer systems in the network:

- Mainframes;
- Workstations and UNIX and Linux-based servers;
- LAN server;
- Desktop personal computers;
- Mobile laptop PC's;
- Handheld device;
- Internet connections.

With data spread over many different systems, it's easy to imagine requests that span more than one database, and the possibility for conflicting data among the databases:

- An engineer needs to combine lab test results (on an engineering workstation) with production forecasts (on the mainframe) to choose among three alternative technologies.

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- A financial planner needs to link financial forecasts (in an Informix database) to historical financial data (on the mainframe).
- A product manager needs to know how much inventory of a particular product is in each distribution center (data stored on six Linux servers) to plan product obsolescence.
- Current pricing data needs to be downloaded daily from the mainframe to the distribution center servers, and also to all of the sales force's laptop computers.
- Orders need to be uploaded daily from the laptop systems and parceled out to the distribution centers; aggregate order data from the distribution centers must be uploaded to the mainframe so that the manufacturing plan can be adjusted.
- Salespeople may accept customer orders and make shipment date estimates for popular products based on their local databases, without knowing that other salespeople have made similar commitments. Orders must be reconciled and prioritized, and revised shipment estimates provided to customers.
- Engineering changes made in the workstation databases may affect product costs and pricing. These changes must be propagated through the mainframe systems and out to the web site, the distribution centers, and the sales force laptops.
- Managers throughout the company want to query the various shared databases using the PCs on their desktops.

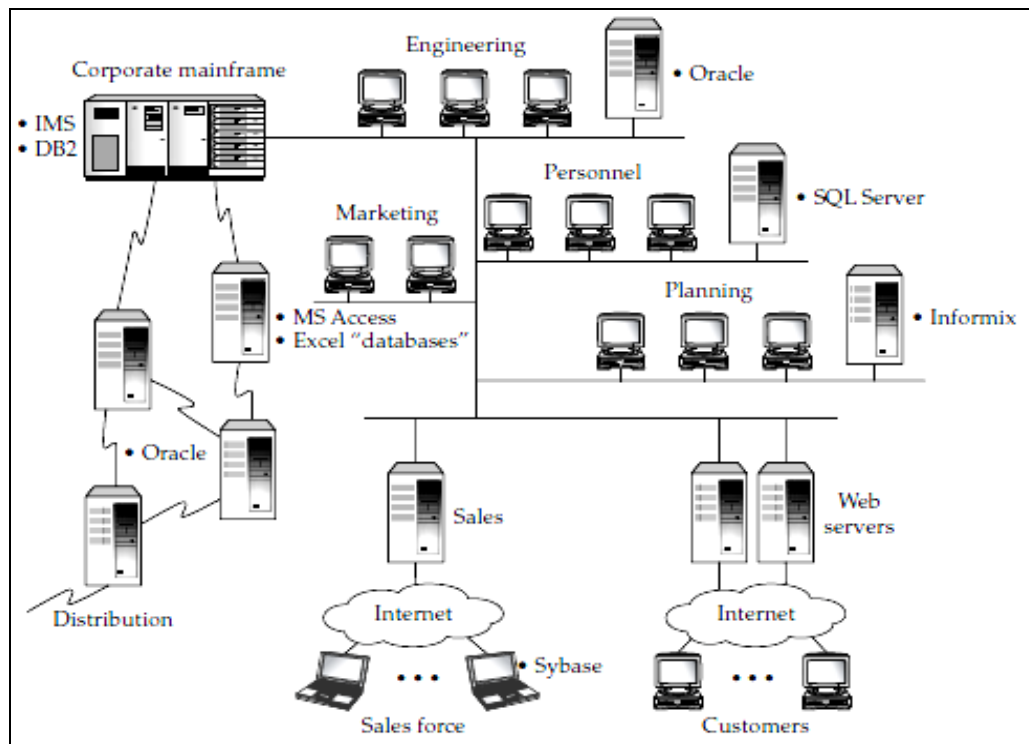


Figure 1. DBMS usage in a typical corporate network

As these examples suggest, effective ways of distributing data, managing distributed data, and providing access to distributed data have become critical as data processing has moved to a distributed computing model. The leading DBMS vendors are committed to delivering distributed database management and currently offer a variety of products that solve some of the distributed data.

## 2. REMOTE DATABASE ACCESS

One of the simplest approaches to managing data stored in multiple locations is remote data access. With this capability, a user of one database is given the ability to reach out across a network and retrieve information from a different database. In its simplest form, this may involve carrying out a single query against the remote database, as shown in figure 2. It may also involve performing an INSERT, UPDATE, or DELETE statement to modify the remote database contents. This type of requirement often arises when the local database is a satellite database (such as a database in a local sales office or distribution center) and the remote database is a central, corporate database.

In addition to the remote data access request, figure 2 also shows a client/server request to the remote database from a (different) PC user. From the standpoint of the remote database, there is very little difference between processing the request from the PC client and processing the remote database access request. In both cases, a SQL request arrives across the network, and the remote database determines that the user making the request has appropriate privileges and then carries out the request. In both cases, the status of the SQL processing is reported back across the network.

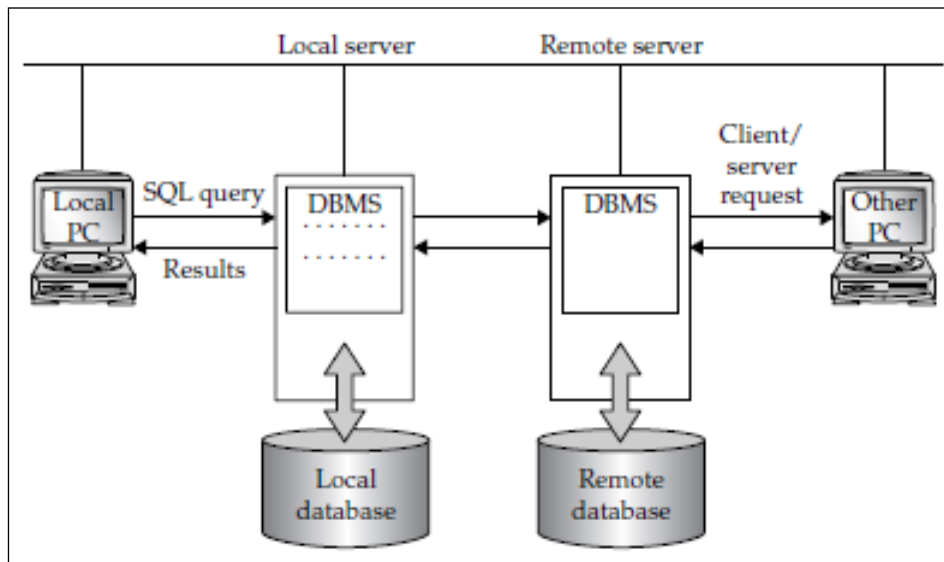


Figure 2. A remote database server access request

The local database in figure 2 must do some very different work than the process it normally uses to process local database requests, however. There are several complications for the local DBMS:

- It must determine which remote database the user wants to access, and how it can be accessed on the network.
- It must establish a connection to the remote database for carrying out remote requests.
- It must determine how the local user authentication and privilege scheme maps to the remote database. That is, does it simply pass the user name/password supplied for local database access to the remote database, or is a different remote user name/ password supplied, or should some kind of automatic mapping be performed?

Several of the leading enterprise DBMS vendors offer the kind of remote database access capability shown in figure 2. They differ in the specific way that remote access is presented to the user and to the database administrator. In some cases, they involve extensions to the SQL language accepted by the DBMS. In others, the extra mechanisms for establishing remote access are mostly external to the SQL language.

Sybase Adaptive Server Enterprise (ASE) offers a simple entry-level remote database access capability. While connected to a local Sybase installation, the user can issue a `CONNECT TO SQL` statement, naming a remote server that is known to the local server. For example, if a remote server named `CENTRALHOST` contains a copy of the sample database, then this statement:

```
CONNECT TO CENTRALHOST
```

makes that remote server the current server for the session. The local server in effect enters a pass-through mode, sending all SQL statements to the remote server. The remote database can now be processed directly over the connection, with standard, unmodified queries and data manipulation statements:

*Get the names and sales numbers of all salespeople who are already over quota.*

```
SELECT NAME, QUOTA, SALES  
FROM SALESREPS  
WHERE SALES > QUOTA;
```

Oracle takes an approach to remote database access similar to the capabilities provided by other DBMS brands. It requires that Oracle's SQL\*Net networking software be installed along with the Oracle DBMS on both the local and the remote system. The database administrator is responsible for establishing one or more named database links from the local database to remote databases. Each database link specifies:

- Network location of the target remote computer system.
- Communications protocol to use.
- Name of the Oracle database on the remote server.
- Remote database user name and password.

To access a remote database over a database link, the local system user uses standard SQL statements. The name of the database link is appended to the remote

table and view names, following an “at” sign (@). For example, assume you are on a local computer system that is connected to a copy of the sample database on a remote system over a database link called CENTRALHOST. This SQL statement retrieves information from the remote SALESREPS table:

*Get the names and sales numbers of all salespeople who are already over quota.*

```
SELECT NAME, QUOTA, SALES
      FROM SALESREPS@CENTRALHOST
WHERE SALES > QUOTA;
```

Oracle supports nearly all of the query capabilities that are available for the local database against remote databases. The only restriction is that every remote database entity (table, view, etc.) must be suffixed with the database link name. Also, Oracle does not support DDL or database updates via a database link. Here is a two-table join, executed on the remote Oracle database:

*Get the names and office cities of all salespeople who are already over quota.*

```
SELECT NAME, CITY, QUOTA, SALES
      FROM SALESREPS@CENTRALHOST, OFFICES@CENTRALHOST
WHERE SALES > QUOTA AND REP_OFFICE = OFFICE;
```

### **3. REMOTE DATA TRANSPARENCY**

With any of the remote database naming conventions that extend the usual SQL table and view names, the additional qualifiers can quickly become annoying or confusing. For example, if two tables in the remote database have columns with the same names, any query involving both tables must use qualified column names - and the table name qualifiers now have the remote database qualification as well.

A single column reference has grown to half a line of SQL text. For this reason, table aliases are frequently used in SQL statements involving remote database access. Synonyms and aliases are also very useful for providing more transparent access to remote databases. Here’s an Informix synonym definition that could be established by a user or a database administrator:

```
CREATE SYNONYM REMOTE_REPS
      FOR SAMPLE@CENTRALHOST.JOE.SALESREPS;
```

The equivalent Oracle synonym definition is

```
CREATE SYNONYM REMOTE_REPS FOR JOE.SALESREPS@CENTRALHOST;
```

With this synonym in place, the preceding qualified column name becomes simply:

```
REMOTE_REPS.NAME
```

Several DBMS brands take the synonym capability for transparent database access one step further and permit views in the local database that are defined in terms of remote database tables. Here is an Oracle view definition that creates a view called EAST\_REPS in the local database. The view is a subset of information from the remote sample database:

*Create a local view defined in terms of two remote tables.*

```
CREATE VIEW EAST_REPS AS
      SELECT EMPL_NUM, NAME, AGE, CITY
```

```
FROM SALESREPS@CENTRALHOST, OFFICES@CENTRALHOST
WHERE REP_OFFICE = OFFICE
AND REP_OFFICE BETWEEN 11 AND 19;
```

After this view has been defined, a user can pose queries in terms of the EAST\_REPS view, without worrying about database links or remote table names. The view not only provides transparent remote access, but also hides from the user the remote join operation between the OFFICES and SALESREPS tables.

Transparent access to remote data, provided by views and synonyms, is usually considered a very desirable characteristic. It does have one drawback, however. Because the remote aspect of the database access is now hidden, the network overhead created by the access is also hidden. Therefore, the possibility of a user or programmer inadvertently creating a great deal of network traffic through very large queries is increased. The database administrator must make this trade-off when deciding whether to permit remote transparent synonyms and views.

#### 4. CONCLUSIONS

Supporting such distributed queries and transactions adds a major new level of complexity (and potentially huge network data transmission overhead) to the remote access. Because of this, although several commercial DBMS systems support distributed queries and transactions, they are not heavily used in practice.

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## **BOUTIQUE HOTELS - NEW APPEARANCES IN HOTEL INDUSTRY IN ROMANIA**

**CECILIA IRINA RĂBONȚU, GEORGE NICULESCU \***

**ABSTRACT:** *The appearance in Romania of new forms of accommodation, with a unique specificity, has determined us to explore the boutique hotels in terms of the concept, the specificity, their typology, employment and the possibility for development in the still early market in our existing country. As recent studies in the field illustrate, the hotel market will meet a strong emerging development on share of small hotels, boutique-type. Increasingly popular in recent years, boutique hotels have emerged as an alternative to "mammoths" with hundreds of rooms and impersonal atmosphere.*

**KEY WORDS:** *tourism, boutique hotel, Small Luxury Hotels, boutique hotel market, trends*

### **1. INTRODUCTION**

We witnessing today to the emergence of new forms of hosting demanding tourists with high attention to the finest/slender details, and we will not hesitate to refer here to Boutique Hotel which excel by design and the special attention to refinement and personalized services, which are translated by retention of demanding customers. As recent studies in the field illustrate, the hotel market will meet a strong emerging development on share of small hotels, boutique-type. Increasingly popular in recent years, boutique hotels have emerged as an alternative to "mammoths" with hundreds of rooms and impersonal atmosphere.

### **2. DEFINING THE CONCEPT OF BOUTIQUE HOTEL**

In order to define the concept of Boutique Hotel we proposed to define these two separate terms. Thus, boutique is the name given to small and luxurious stores that sell goods on small series and the hotel is the building with more furnished rooms that offers the possibility of hiring on short-term, by day, especially to travelers.

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Jointed these two definitions of two different concepts, in an attempt to define the concept be discussed, we can say that Boutique Hotel is a small hotel, offering luxurious rooms furnished to hire on short-term periods to tourists in particular. But it does not stop here, but in trying to clear up this new concept on hotel market in Romania, I continued my search and I found that Boutique Hotel is a word that encompasses a new world of meanings. It means a new way of looking at hospitality: a friendly reception and personalized services.

The word comes from the United States of America, the huge hotels with thousands of rooms which do not differ in appearance to one another, being furnish in the same manner all over the world. In 1984, watching vision Ian Schrager has created a hotel so avant-garde thus beeing uprised the hotel industry. By separation by the traditional and the revolution of inside it enshrined the term of "boutique hotel" and then hotels around the world have approached this concept.

The concept of boutique hotel is strongly opposed to big chains hotel that is supposed to be reduced size, located in a prestigious area, furnished with unusual furniture, intimate, family atmosphere. It is appreciated that boutique hotels have a unique design, but notes with a great personality. Certainly these hotels are smaller in size and can offer customers privacy and discretion. Boutique hotels get to know customers well and offer very personalized service that large hotels can not ensure to its guests. In North America, where came from the concept of "boutique hotel", so these type of hotel offers more then services luxury five-star, winning through the intimacy and design, hence the reduced number of rooms and the ability to serve more closely customers. Boutique hotels are aimed primarily to businessmen representing approximately 80% of customers and tourists.

Thus, it appears from the above said that the ace of boutique hotel lies in the personality of its own, attracting demanding customers or familiar with the unique atmosphere of some places that re-create the aristocratic style of past times or import items from other cultures.

### **3. BOUTIQUE HOTELS TYPOLOGY**

It was carried out a typology of this type of hotel and it arrived at dividing their style in modern and classical, as the establishment of country or metropolitan area, but regardless of category, all ensure safety and quality of service, peerless charm and easily accessible location, a warm, impeccable receiving. These hotels are often unique in terms of design and are designed with great care for the framework and with the central theme, which are visible from the scene until the general environments. We also found in the materials studied that the hotel's type name differs depending on the design, namely whether we are dealing with a contemporary design these hotels are called "design hotels" and those with a classic design / modern bears the name of "boutique hotels".

Most times, some boutique hotels are hidden from the public eye, both physically and in terms of trade. They can be found only in specialized guides or offices of luxury tourism. Not everyone has access to these hotels, in order to know them is the need for sufficient financial means to enable a luxury travel, you have to

find this type of hotel, known and experienced in terms of benefits, but also appreciated as a whole. It notes that it is necessary to promote towards a mass market, because advertising used by the major luxury hotel chains has not its purpose and finality.

In Romania can not talk about a market at this time, however, there are such units reception in Bucharest occurred in the last eight years and as such example can give the Parliament, Carol Park Hotel, Le Boutique Moxa Hotel, Rembrandt, El Greco, Duke, Opera, Central, Palas or Venezia, who borrowed elements of classical style Baroque and Venetian. A possible explanation for the early development of boutique hotels in Romania, particularly in Bucharest city, is the closed circuit itself where is working the niche target. Here, the average occupancy degree is between 75% and 80%. Also in Oradea town there is still a small luxury hotel named Black Eagle.

Certain is the fact that they are part of the luxurious market of this industry and a decisive importance is the direction of decoration, quality of architects and designers, importing materials and luxury furniture in classic style. It says that boutique hotels are par excellence, synonymous with the wealthy design.

For example Carol Parc Hotel is a restored palace on the old walls, spaces are different, have different sizes, are high ceilings and an attic, and every space in the hotel create a personalized design. To better understand what it means these luxury tourist locations must point out that the design belongs to a company in Italy, the bathrooms bears the signature of Laura Biagotti, cosmetics are provided by designers like Bogner or Bvlgari, silk or wood are the best quality, persian carpets, and Murano lamps, all this items however creating a special world in the hotel industry

In another building in old Bucharest, more precisely in a high-block and oval facade next to Cismigiu, opened Hotel Opera, arranged in the style of early 20. From furniture and finishing with room maids skirts, everything has turned us back in time while the George Enescu delighted the Bucharestian salons with the music of Wagner.

Additional services offered by these receiving units consist in the permanent room-service, at the reception which does not form any tails, cleaning services twice a day, books on the shelves of the room and found flowers on future customer taste, luxury cosmetics, all these however justifying the higher price of nights in a hotel boutique. The rooms are notes by the unique design and combining history with elements of modern technology, which gives a note of originality of such a boutique hotel. Boutique hotels in the country are still between admiration and skepticism, maybe because the market is just in training, and tastes of Romanians with money should be educated towards this direction, where less may mean more. In Romanian country, luxury is still associated with size, think most part of field specialists.

#### **4. INCLUDING BOUTIQUE HOTEL IN SMALL LUXURY HOTELS**

In the richmen's world has issued a new fashion in terms of holidays. It seems that times when Las Vegas, Monte Carlo, New Zealand, Dubai or "classic" Honolulu were considered luxury destinations for those with money are to sunset. In 2008 was at great search exclusive destinations, places at the end of the earth, holidays without paparazzi and without neighbors.

NetworkSmall Luxury Hotels (SLH) includes 360 hotels for the persons which category 5 stars means too little and is considered by international media tourism as the most wanted holiday location. This network can be seen by some significant attributes, namely: secret, discreet, luxury dazzling, at the end of the world, issues which have raised the network of villas developed by a group of American investors in the most hidden areas around the world, to the degree of "holiday destination of 2008".

Given these circumstances, it is not difficult to understand why SLH has chosen to integrate a wide range of locations: from buildings in the medieval style in full center of American metropolises, to the podgorene French castles, Austrian huts and bungalow sites in Seychelles. This choice depends in large part by the two major requirements of consumers of luxury: a business trip or relaxing trip. For business travel, there are locations in central city, but very small number of rooms (boutique hotel), or placed at a strategic distance to the city, so customers can enjoy peace and a specific holiday, and could reach quick to meetings of the center. So in this case appear boutique hotel as part of the SLM.

If we talk about vacations situation is quite different in the sense that real castles, equipped with a whole army of cooks, waiters, housekeepers and sommelier, all educated to be "invisible", are widespread in the most unexpected locations. There is, obviously, on the traditional countries from tourism map (France, Italy, Greece, USA, Austria, etc.). But there are more exotic locations (India, Laos, Tanzania, Kenya, Cook Islands or the Channel Islands, Dominican Republic, Czech Republic, Slovakia, Mauritius, Taiwan, West Indies, Vietnam, South Korea, but China and Russia), but also locations in all archipelagoes and heaven islands (Fiji, Indonesia, Maldives, Bahamas, Greece, Sri Lanka or New Zealand).

A hotel can shelter from 20 people (most expensive) to 100-150 guests, the most popular, although they are few places where get groups on the one hand because to the high luxury is not much place from the "discount" and because on the other hand services tend to stop inside the property. It is people who gathered the same complex tailors, fashion houses, jewellers, profesional masseur, professional cosmetic schools, cooks from which fight all the restaurants and sommelier who has taught every wine at his home and that, together, provide a few days away the world. It is known that the emergence of these new standards, hotel stocks were inovate: five stars is the lowest rank of the category, followed by "education", "deluxe", "apartment/flat junior" and senior apartment/flat", the finally degree means even a whole castle to rent for a few days. Beyond the settlement, it is essential that the villas are located in places extremely well guarded, in locations where access is only by special means of transport, as jeep to the helicopters and water planes.

The easier way to gain access to your network is to entry site SLH, which brings to the forefront as a picture as clear about what gives such accommodation units. It requires filling out a questionnaire in which questions range from flat pillows the way in which it enters the room (to descend, ascend at the same level) or distance from the elevator, from what kind of spare time attract the more (golf, kayaking, windsurfing, sailing, etc..) pending the completion of the sections about what it wants to the destination conditions for a particular sport, total silence, lapon kitchen or whatever it may think.

## **5. TRENDS IN THE BOUTIQUE HOTEL EVOLUTION**

It considers by the study conducted by consulting company Jones Lang LASalle, regarding the investments in regional real estate market, that by the end of 2009, at least 2830 new rooms will be put into service, particularly in accommodation units' boutique hotel', which become increasing in demand on the local market. It also specifies that at present the hotel market includes approximately 9.000 rooms, divided between 3 and 5 stars being dominated by four-star hotels, in response the demand of business tourism. It awarded almost 80% of the number of tourists stayed in hotels, Bucharest being the most appropriate example of this kind.

It considers that there is a shortage of accommodation places, and in the future will become interesting hotels with a small number of rooms, but with personality. This will be the trend: small hotels, but not necessarily luxury or boutique, which in fact involves investments high enough. Also in the opinion of specialists in the field is the idea that the number of units "three-star with four stars services" will progress faster, even if there is still room in the market for 4-5 star hotels.

According to the study mentioned above, concluded that the yield in the hotel industry is currently stable, as the decrease in employment is offset by higher prices of accommodation, a situation common in units of 4-5 stars, where the rate of occupation decreased in early 2008, from 80% to an average of 60-65%.

By contrast, hotels of small luxury type or boutique are occupied in the proportion of 75-80% annually, and the percentage exceeding 90% in peak months, given the small number of rooms available in these locations.

It is clear that there is interest in boutique hotels in Romania, this issue being demonstrated by the occupation degree of which enjoy these hotels and the growing number of such locations. For example Opera hotel, located in the historic center of the capital, has 33 rooms and 22 employees, had revenue of 405.000 euros in the first half of 2008 and an employment of 78%. Estimated turnover for 2008 is approximately 820.000 euros, representing an increase of 5% from 2007. However, it was noted that during 2008, business target has changed, boutique hotels getting more and more tourists from many countries such as Holland or America, but very few tourists from Romania.

For smaller hotels or small luxury location remains an important item, also historic center of Bucharest, in renovation, will still remain a target for the small hotel which may be in a more isolated area, very special. For example, Carol Parc Hotel, located in the area of Carol Park in Bucharest, the hotel's architecture reflects the quality, elegance and style of aristocratic life in Romania of the last century, as I stated before. Employment degree of a boutique hotel reaches the peak season, similar to the luxury hotel in the Capital, 70-80%, although it is considered improper a comparison between an exclusive hotel with a small number of rooms and large luxury hotel units in the country with hundreds of apartments. In general, exclusive hotels will always have an occupation rate of similar to industry, accordingly to the active periods.

Demand for accommodation spaces could boost the development of small hotels, especially by foreign investors, who will work mainly in Bucharest, especially

after "during 2006 and 2007 have seen a moderate increase of yield in hotel industry" under study Jones Lang LaSalle regarding real estate investment in Bucharest

## 6. CONCLUSIONS

Given the above said we can conclude that the boutique hotel market in Romania, even if in the beginning, has clear prospects for development, as a segment of the hotel industry in which foreign investors want to get involved considering that not do in vain. And it is sure that Romania offers many possibilities for developing this new segment created, given that tourism business is growing rapidly. Forecasts made by various institutes and authorities concerned in this regard clearly shows that the trend is upwards, which was helped somewhat, after our opinion, by the crisis on the real estate market that allows the purchase of buildings that are suitable for conversion into a hotel at prices much lower than in 2008.

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## **THE MIGRATION OF THE WORK FORCE FROM ROMANIA ABROAD: REASONS, POSSIBILITIES, CHANCES, IMPLICATIONS**

**CECILIA IRINA RABONTU, AMELIA GEORGIANA BONCEA \***

**ABSTRACT:** *Even though in Romania there are a few social categories with incomes comparable to those of the Occidentals: enterprisers, notaries, the wage earners working in banks and communications, peasants that sold their lands for millions of Euros, but also enough budgetary people and, as well, all kinds of dodgers, corrupt civil servants or combinatory people. All of them have monthly incomes of at least 2.000 Euros, their wage being the only thing they have in common. However their number is not negligible.*

**KEY WORDS:** *migration, work force, incomes comparable*

They are the ones that pay enormous amounts of money for an apartment or that buy the most expensive cars. Those are the ones that not even consider the fact of going to work or doing businesses abroad. They have here almost everything the West could offer them.

However, next to them, and in a considerable number, are the ones that have insufficient incomes. The small incomes have multiple justifications: not too much school, negative attitude, shiftlessness, trouble integrating, training in domains that offer small incomes or just bad luck and lack of chance. They are the ones that try to get something out of their chance of being able to work in other countries, looking for salaries of 1,000-1,500 Euros. Their number seems to be somewhere between two and three millions.

These aspects led to the situation in which our country finds itself today, namely the existence of a considerable deficit of work force. Some officials speak of a deficit of over half a million wage earners. The trade union leaders, but also government representatives found a solution rapidly: the Romanian employers should pay those incomes of 1,000-1,500 Euros and that's it, the ones that are away will come back, others won't consider leaving. The problem is just one: the Romanian economy can not offer a medium wage, abruptly, four or five times bigger than it is at the

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present time. This thing is practically impossible, because is also necessary for the productivity of work and the prices to increase correlatively with this medium wage increase. Consequently, the actual work force deficit can not be covered bringing back the Romanians from Italy and Spain that however don't even want to come back.

In Romania, the firms need employees that accept incomes of 300-400 Euros, salaries that for a Romanian are small but, for a Chinese or an Indian are dream salaries. The work force market from Romania is less and less concurrential: with an almost inexistent unemployment, the employer has less and less chances of choosing. The only chance is the opening of this market, aspect taken into consideration by some enterprisers that considered the problem already resolved by bringing hundreds of Chinese. The Asians' concurrence won't be welcomed by the trade unions; the same happened with the countries where the Romanians went to work.

Where it appears a too big gap between the employees' wishes and the employers' offer massive migrations to and from that country happen. Thus in Romania two aspects appear worth taking into account, namely: the first the Romanians' emigration, followed by the foreigners' immigration. Thus, the Romanians' degree of motivation of finding a job abroad is a very important aspect when taking in consideration the emigration. The problem of ensuring a decent existence and a better life is the most triggering argument of emigration.

The expression of the intention of going to work abroad is influenced by the acquaintances abroad, there is a high probability for these ones to use these acquaintances for getting the information they need and for actually getting there.

There are also reasons because of which the Romanians hesitate leaving and those first and foremost refer to the fact that they are afraid their family will fall apart after they leave, but they are also afraid that it won't be easy to find a job abroad either.

The ones that look for a job in one of the countries members of the European Union are based on the informal networks (77.4%) – relatives, friends, acquaintances, etc., in the detriment of the institutions specially designed with the administration of emigration. According to the ANBCC study, the ones that intend to work outwards are preponderantly young, unmarried persons, with incomes slightly over the medium, active on the Romanian work force market.

Coming to face up these realities without an immediate remedy, EQF or The European Qualification Framework will simplify the access on the work market in the European Union. Practically, this one will tie the individual systems of qualification from the states that are members, functioning as a translation apparatus. In this way, the qualifications obtained in a communitary country will become easier to understand for both the employers and the employees.

EQF is a promotion instrument of the permanent education. The European Qualification Framework makes reference to the general education, but also to adult education, to vocational education and superior studies. It is applied from the most elementary preparation to the academic level. The European Qualification Framework will contain all kinds of professions, aptitudes etc. According to [www.euroconkurs.ro](http://www.euroconkurs.ro), the EQF basis is formed of eight reference levels that describe what the person knows, understands and what he or she can do - practically, is a synthesis of the results of education – irrespective of the place where the respective qualification was obtained.



Until 2010, the European Union states must relate their national systems of education to the EQF system. And starting with 2012 all the employment will have this means of understanding as their basis.

The named instrument permits both the employers and the persons who want to find a job in another state of the community space to compare the qualifications obtained in different member countries, but also the education and training systems.

The net medium wage in Romania increased – in nominal terms - in the interval October 2006-October 2007 with 25.2% reaching 1,084 lei (323 Euros), according to the data published at the beginning of December by the National Statistics Institute (INS). In real terms, taking into account the inflation, the increase of the net medium wage was of 17.2% in the mentioned interval.

The productivity of work in industry increased in the first ten months of 2007 with 10.3%, show the data published by The National Statistics Institute (INS). As compared to October 2006, the productivity of work went up in the tenth month of this year to 10.5%.

According to some recent Eurostat statistics, Romania is the second EU country if we take into consideration the increase of the hourly costs with the work force, with an annual advance of 23% in the third trimester of 2007, outbalanced only by Livonia where this one increased with 30%.

The most considerable increases of the hourly costs of the work force in the third trimester of this year were registered in Livonia (with 30%), Romania (23.2%), Estonia (20.6%) and Lithuania (20.1%), and the lowest costs were registered in Germany (0.9%) and Finland (1.9%). At the same time, the increase of the unsalarial costs with the work force oscillated between -1%, in Germany, and 28.9% in Livonia, according to Eurostat.

The statistics office of the European Union (EU) mentions that the total hourly costs with the work force in the euro zone (EU 13) registered an annual increase of 2.5% in the third trimester of this year as compared with 2.4% in the second trimester. In EU27, the annual costs increased with 3.7 % in the third trimester, as compared with the 3.3% increase in the second trimester.

The two major components of the work force costs are the salaries and other incomes that are given to the employees (primes, bonuses) and other costs that don't imply the payment of the salaries.

In the euro zone, the salarial incomes had a rate of annual increase of 2.5 % in the third trimester of this year, as compared to 2.5 % in the anterior trimester, and the non-salarial costs with 2.2%, as compared to 1.8%, in the second trimester of 2007.

In EU 27, the expenses with salaries increased with 3.8%, and the expenses that don't have anything to do with salary payment increased with 3.1%, in the third trimester of this year. For the precedent trimester, the increases were of 3.5%, respectively 2.6% a year.

On economic sectors, the costs with the work force increased in the euro zone with 2.5% in industry, 3% in constructions and 2.4% in services, in the third trimester of this year. In EU 27, the costs with the work force increased with 3.4% in industry, 5.3% in constructions and 3.6% in services, during the same interval.

At the beginning of 2006, on the territory of the states members of EU, of Romania and Bulgaria, there were circa 28 millions immigrants, representing 5.6% of the total population. Two thirds of the immigrant population was constituted of extra-comunitar citizens: 32% of the Europeans whose origin countries were not members of EU (most of them Russians, Turks and Balkans), 22% of Africans, 16% of Asians and 15% of Americans.

In the biggest immigration EU countries top, Italy is situated on the second place next to Spain, being only advanced by Germany. From the point of view of the annual increase rate, the two countries have no equal in Europe, advancing, in proportion, even USA. Thus, even though USA's population is five times more numerous than the one of Italy, it only registers annual entrances of a million new immigrants, as compared to Italy, that registered 700 thousand new immigrants in 2006. The foreigners that work in Italy sent in 2006 4.3 milliards Euros to their origin countries, on the first place being situated Romania, where the immigrant workers sent approximately 777 millions Euros, shows the "2007 Immigration" rapport, that was made public in Italy in October.

The destination work countries preferred by the Romanians are: Italy (23%), Spain (20%) and Great Britain (18%).

If until 1999-2001 the destination countries palette was large enough, in the last period five important destinations in the Romanians' preferences were contoured: Italy, Spain, Great Britain, Germany and France. The positioning of Great Britain among the first three European countries preferred is a new element and probably contours a new type of migrant. It is about the young persons, with education and really high incomes and, pre-eminently, women, that more pregnantly express their desire of going to Great Britain.

The ones that go to Italy and Spain have incomes that are slightly lower than the incomes of the persons that want to immigrate in France and Germany, and also than the ones that want to go to Great Britain.

In what concerns Holland as a destination country, until 2009, the Romanians must first obtain a work permit from the authorities. Initially, the social businesses' minister Piet Hein Donner wanted to start the debate on an opening of the frontiers in May next year, with the occasion of publishing a rapport that evaluates the needs in what concerns the work force and the actual situation of immigration on the work market. Numerous Hollander communes recently complained about the lack of integration of the East-European workers, phenomenon aggravated by a big geographical concentration, frequently in the vicinity of the work place.

Amsterdam even announced plans to encourage the East-European immigrants to move from the neighbourhood in which they live and to find diffused accommodations in the capital. Approximately 100,000 workers coming from EU members East-European countries, the vast majority from Poland, presently work in Holland.

Over 80% of the Romanians who went to work abroad, through the Occupancy Agency, in the first half of the year, preferred Germany, for a maximum wage of 1,200 Euros, and of the other 12,000 Romanians who used private agencies, half went to work in the United States.

According to the data furnished by the National Agency for the Occupancy of Work Force (NAOWF), over 80% of the work contracts obtained by the Romanians through the agency of the state institution, in the first six months of this year, were for Germany. Thus, NAOWF intermediated the departure of over 20.000 workers in Germany, where these ones work in the sanitary or gastronomic domains, in agriculture or they do housekeeping. The biggest wage gained in Germany is of 1,200 Euros, the lowest being of 850 Euros, in agriculture.

The other countries in which NAOWF also intermediated the Romanians' going to work were Spain (3,755 work contracts), France (54) and Switzerland. Spain has the richest offer of work places for the Romanians (agriculture, transports, alimentary industry, gastronomy, commerce or constructions), but also the lowest wages when compared with the other countries, these ones being comprised between 730 Euros, in agriculture and 1,600 Euros, in constructions. The Romanians who left for France work in agriculture, constructions and in the gastronomic domain, for a salary of maximum 1,250 Euros.

Even though Switzerland is a country in which the Romanians gain the biggest salaries, comprised between 2,000 and 3,000 Euros, from the beginning of the year only 27 Romanians obtained work contracts in this country. The domains in which the Romanian labourers work in Switzerland are gastronomic, sanitary and in agriculture.

NAOWF also informs that, through private agents of recruitment and work force placement, approximately 12,000 Romanians went to work abroad, half of them preferring the United States of America. The rest of the countries in which the Romanians obtained contracts through the agency of private firms were Italy (1,461), Cyprus (1,335), Germany (522) and Portugal (344).

According to NAOWF, the Romanians abroad that left through the agency of the state institution sent back in the country, in the first semester of the year, approximately 81 million Euros. At the same time, those 53,000 Romanians that left through the agency of the Migration Office last year gained a total of 157,000,000 Euros, out of which almost a hundred millions being gained by the ones that worked in Germany. Thus some economic implications, seen as positive, and some demographic ones, with negative repercussions on Romania's situation, appear.

If it hadn't been for this movement of incredible amplexity, Romania would have been confronted with an economic and social crisis, whose proportions are hard to imagine, that would have been recoiled on the entire state of the Romanian society and even on the calendar of Romania's adherence to EU. The Euro-commutators left open work places reduced the rate of unemployment at a very low level for the economic and social situation in Romania. The 4-5 milliard Euros that annually entered in the country, coming from the ones that left to work abroad, were a source capital (in a lot of cases, the only one) for other millions of Romanians whose standard of life they ameliorated, led to the explosion of dwelling constructions and of the sales of equipments and goods meant to appoint them, of the number of cars, created work places, stimulated the consumption. In another benefic measure of migration, it can be noticed that the migrant Romanians, living in countries with a high standard of civilization, see and learn the civic spirit around them, the respect of laws, the order,

the cleanliness, the attitude towards work, all these representing a great benefit for Romania.

If the economic, social and cultural perspective of migration for work is predominantly positive, we can't say the same about the demographic perspective of the phenomenon. The demographic perspective has more negative aspects and is constituted of a price that has to be paid. Statistically speaking, the Euro-commutators, are young persons: approximately 40% leaving in the period 1996-2006 and approximately 50% leaving in the years of massive exodus 2002-2006. The proportion of the ones that are not married is of 82% of the ones between 15-24 years old and of 23% of the ones between 25-39 years old. Leaving abroad, many of them postpone their marriage and, implicitly, bringing forth children. The biggest danger is that once they get abroad, part of the ones that left don't want to come back, making everything possible to regularize their stay there and to obtain unlimited stay permits ( by even appealing to mixed marriages, of convenience).

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## **MAKING THE INVISIBLE VISIBLE: THE INTANGIBLE ASSETS RECOGNITION, THE VALUATION AND REPORTING IN ROMANIA**

**NICOLETA RADNEANTU \***

**ABSTRACT:** *The emergence of knowledge-based companies increased the importance of intangible assets, assets that were considered the most competitive advantages of companies. So, in this paper I tried to answer the following question: Which is the Romanian accounting reality about the intangible assets recognition, evaluation and reporting? What can we do that traditional financial statements do not become mostly useless for their end users?*

**KEY WORDS:** *intangible assets, knowledge based organizations, recognition, valuation, reporting*

### **1. INTRODUCTION**

Throughout time, accountancy in Romania has been oriented moreover on providing financial information to the state and fiscal authorities. The evolution of the Romanian accounting regulations is closely related to the changes of the economic, social and political environment [1]. Currently Romania applies OMF (Order of the Ministry of Finance) No. 1752/2005 regarding the financial statements of commercial companies. This accounting regulation implements the 4<sup>th</sup> Directive as well as the 7<sup>th</sup> Directive of the European Economic Community.

The 4<sup>th</sup> Directive of the European Economic Community establishes the form and contents of annual financial statements, accounting principles and evaluation rules, as well as regulations regarding the preparation, approval, auditing and publication of financial statements; meanwhile the 7<sup>th</sup> Directive of the European Economic Community establishes and regulates the form and contents of annual financial consolidated statements, as well as the rules to be respected when creating, approving, auditing and publishing annual consolidated financial statements.

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## 2. THE INTANGIBLE ASSETS RECOGNITION, EVALUATION AND REPORTING IN ROMANIA

Further, on we shall try to identify the accounting treatment for intangible assets based on different types of financial statements commercial companies must prepare - enclosed in table 1.

**Table 1. Regulations regarding the recognition, evaluation and reporting of intangible assets in Romania**

OMF no. 1752/2005	Regulates the treatment for the accounting recognition of intangible assets in individual financial statements of companies in Romania.
IAS 38 – Intangible assets	Regulates the accounting treatment of recognition of intangible assets in financial statements
IFRS 3 – Mergers	Prescribes the accounting treatment for intangible assets that can be segregated and have their origin in contractual rights or other legal rights, as well as intangible assets that meet the segregation character of the definition.
GN 4 – Evaluation of intangible assets	Concentrates on explaining the approaches, principles and different values that should be taken into consideration when evaluating intangible assets.

*Source: The author of the paper*

According to OMF No. 1752/2005, intangible assets are in fact identifiable non-monetary assets that have no material support, utilized in production or supply of goods and services that can be rented to third parties or used in administrative purposes. The present classification [6] used in Romania is based on the conception that the assets of a company consist of tangible and intangible assets. You will find further classification of intangible assets in Romanian legislation enclosed in table 2. The International Accounting Standards Committee (IASC) proposes as solution for the controversial issue of intangible assets evaluation the regulations under the International Standard of Evaluation Practice GN4 - The evaluation of intangible goods. IASC provides accountants with recommendations and counseling regarding evaluation; it seeks to coordinate its standards and programs or disciplines related to accounting as well as cooperate with international organisms to elaborate and promulgate new standards.

In order to have a match between IASC standards - International Evaluation Standards, International Standards of Applying Evaluation, International Standards of Practice in Evaluation; Financial Reporting Standards (IAS/IFRS), IASC cooperates with The International Accounting Standards Board (IASB) as well as with independent standard committees of the International Federation of Accountants (IFAC) - The Committee for Accounting Standards for the Public Sector and the International Committee for Audit and Insurance. International Evaluation Standards are considered the permanent grounds for the other. These are IVSC 1 (market value - Type of value), IVSC 2 (Types of Values other than market value), and IVSC 3 (reporting evaluation). The International Standards for Applying Evaluation describe the means of evaluating assets so as to further use them in financial reports or taking

decisions of granting loans, while International Standards of Practice in Evaluation give instructions on specific problems that appear during the evaluation process and the means of applying standards in different situations or particular domains.

**Table 2. Classification of Intangible Assets regulated by nowadays laws in Romania**

<p><b>OMF no. 1752/2005</b></p> <ul style="list-style-type: none"> <li>- Foundation expenses</li> <li>- Development expenditure</li> <li>- Concessions, patents, licenses, trademarks, rights and similar assets, if they were acquired for consideration</li> <li>- Goodwill, since it was acquired for consideration</li> <li>- Other intangible assets</li> <li>- Advances and intangible assets in progress</li> </ul>	<p><b>IFRS 3</b></p> <ul style="list-style-type: none"> <li>- Intangible assets related to marketing</li> <li>- Customer related intangible assets</li> <li>- Intangible assets from the artistic field</li> <li>- Intangible assets such as contractual</li> <li>- Intangible assets such as technological</li> </ul>
<p><b>GN 4</b></p> <ol style="list-style-type: none"> <li>1. Rights :             <ul style="list-style-type: none"> <li>- Lease contracts</li> <li>- Distribution agreements</li> <li>- Employment contracts</li> <li>- Conventions</li> <li>- Financing agreements</li> <li>- Supply contracts</li> <li>- Licenses / permits /authorizations</li> <li>- Certificates / attestations</li> <li>- Franchise agreements</li> </ul> </li> <li>2. Relations             <ul style="list-style-type: none"> <li>- Trained workforce</li> <li>- Relationships with consumers and dealers</li> </ul> </li> <li>3. Intangible assets grouped (goodwill)</li> <li>4. Intellectual property             <ul style="list-style-type: none"> <li>- Inventions</li> <li>- Copyright</li> <li>- Trademarks</li> <li>- Used Technology (formulas, recipes, specifications, databases, trade secrets, know-how, customer lists, etc.)</li> <li>- Research projects - ongoing development</li> </ul> </li> </ol>	<p><b>IAS 38</b></p> <ul style="list-style-type: none"> <li>- Software</li> <li>- Patents</li> <li>- Copyright</li> <li>- Movies</li> <li>- Client Lists</li> <li>- Rights regarding mortgage</li> <li>- Licenses</li> <li>- Import quotas</li> <li>- Franchise</li> <li>- Relations with customers and suppliers</li> <li>- Market share</li> <li>- Marketing Rights</li> </ul>

Source: The author of the paper

The International Standards of Practice in Evaluation GN4 address the problem of measuring intangible goods using different approaches, principles, methods and evaluation procedures in concordance with the market reality. Intangible goods have no physical substance; they grant rights and privileges to their owner and usually produce income for their owners [5]. GN 4 Standard [7] provides the following approaches regarding the evaluation of intangible assets: the market approach (the comparison of sales), the capitalization of income and the cost approach.

*The market approach* determines the market value of an intangible asset by referring to: either the traded prices of identical or similar intangible assets on an active market, or by the multiple evaluation involved in the transaction prices of some intangible identical or similar assets on an active market. Market multiples represent a way of standardizing the analysis of comparable elements. These are evaluation elements that represent the multiples of some elements which are usually accounting concepts (turnover, current gross profit - EBIT, gross operating profit before deducting depreciation - EBITDA) [2]. When about market approach there must be a reasonable basis for the comparison of similar intangible assets. The latter must function in the same field or in a field that responds to the same economic variables as those of the evaluated element [7].

*The capitalization of income approach* refers to the estimation of the value of an intangible asset or ownership rights over it by calculating the present value of anticipated benefits [2]. The two common methods within this approach are the direct capitalization of income, the discounted cash flow analysis (DCF). Direct Capitalization of income is calculated as a ratio between a representative level of income and a rate of capitalization; or a multiple between of the representative level of income and an income multiple (a capitalization factor). The discounted cash flow analysis presupposes the estimation of future cash receipts. These receipts are converted into value by applying a discount rate. The present value of cash flow for a certain period projected into the future can be found out by using the following formula:  $PV = C_1 / 1+r_1$ , where: PV - Present Value,  $C_1$  - Cash flow during the first period,  $r_1$  - The discount rate during the first period. The most popular methods of determining the discount rate are: the Capital Asset Pricing Model (CAPM), the arbitrage pricing theory - APT, the Fama-Fench Three Factor Evaluation Model.

*The cost wise approach* presupposes the estimation of cost for each element involved in the creation of assets, including profit promoter, using in our evaluation data we hold at the present

### 3. CONCLUSIONS AND SUGGESTIONS

Challenges brought by the new knowledge economy have led to a higher awareness when about the necessity and importance of information in the process of the survival, performance and continuity of knowledge based companies. The difficulty to assess what are the operations generated by the continuous development of companies determined the reconsideration of the financial information systems and further generated the use of terms such as: intensive knowledge-based company, intellectual capital, structural capital, organizational capital [4]. In our vision the most appropriate definition of intangible assets fitted to nowadays social, financial and political environment in Romania would sound like this: intangible assets are economic goods that have no material substance, a lifetime longer than one year, generate both future benefits for the company in its relationship with the stakeholders, as well as resources the company generates for internal use.

We consider the notion of intellectual capital is not synonymous to that of intangible assets, as it can be considered a subcategory of the latter, because elements



such as foundation expenses, licenses, and research and development costs cannot be treated as intellectual capital. This perception is also reflected in the research of economists and such as Bontis, Black, Carns, Richardson, and Epingard. We believe the structure of the balance sheet presented in table 3 is the best response to the demands of this kind of companies.

**Table 3. The balance sheet of a knowledge-based company**

Assets		Equity + Debt
Current assets	<ul style="list-style-type: none"> <li>• Stocks</li> <li>• Claims</li> <li>• Cash</li> <li>• Cash Equivalents</li> </ul>	Financing resources for tangible and intangible assets included in annual financial statements
Immobilized assets	<ul style="list-style-type: none"> <li>• Land and land arrangements</li> <li>• Construction</li> <li>• Plant and machinery</li> <li>• Other plant, machinery and furniture</li> <li>• Advances and tangible assets in progress</li> <li>• Formation expenses</li> </ul>	
Intangible assets	Intangible assets recognized in financial statements and registered in annual financial statements (intangible assets) <ul style="list-style-type: none"> <li>• Formation expenses</li> <li>• Patents, licenses, trademarks and other commercial rights</li> <li>• Concessions</li> <li>• Expenditure on Research Development</li> <li>• Commercial Fund</li> <li>• Other intangible assets</li> </ul>	
	Intangible assets unacknowledged and unregistered in annual financial statements <ul style="list-style-type: none"> <li>• Knowledge and skills of employees</li> <li>• Experience of staff</li> <li>• Skills</li> <li>• Customer Loyalty</li> <li>• Alliances</li> <li>• Company image</li> <li>• Emotional Intelligence</li> <li>• Formal relations</li> <li>• Informal relations</li> <li>• Social networks</li> <li>• Partnerships, etc</li> </ul>	Financing resources for intangible unacknowledged intangible assets not included in annual financial statements

Source: The author of the paper

Given the characteristics of knowledge based companies (innovation, increasing importance of intangible assets inside companies, investment in training and workforce, continuous learning, protection and exploitation of intellectual capital, development of an open culture, internal development of a knowledge data base and continuous growth of network of clients, suppliers and external human resources, externalization of activities that are not essential to the company, strategic

development of the company based on the depth or solidity of the company's knowledge force. etc.) we consider that their financial situations must comprise the following elements that generate added value: knowledge and skills of employees, employee experience, skills, clients' loyalty, alliances, company image, emotional intelligence, formal relationships, informal relationships, social networks, formal processes, informal/ tacit routines, management process, partnerships.

The emergence of knowledge-based companies increased the importance of intangible assets, assets that were considered the most competitive advantages of companies, which lead to situations where the market value of companies became much higher than their accounting value. This tendency will amplify in the near future and there is great danger that traditional financial statements become mostly useless for their end users. The problem of revising accounting regulations regarding the evaluation of intangible assets had been emphasized by the international authority that regulates accounting standards – IASB ever since with 2007. The context of convergence between IFRS and US GAAP, offers the opportunity of substantial improvement regarding the recognition, evaluation and reporting of intangible assets in concordance with the demands of the present economy. Due to a lack of resources, IASB decided that the project should not be included on the active debate agenda [8].

Therefore, this paper is trying to make a first step in recognizing intangible assets generated by the knowledge-based organizations. In order to achieve a considerable improvement of the accounting information, an important volume of work will be necessary for the construction of concepts and methods of intangible assets recognition, evaluation and reporting. We really took a step forward in understanding the place of information in the life of enterprises by making a revision of traditional approaches concerning accounting and by accepting that a change in the principles and accounting practices of intangible assets must be made.

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## **DERIVATIVES ON THE CAPITAL MARKET IN ROMANIA**

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**ABSTRACT:** *The capital market is to supply and demand of medium and long term capital, with the same role as the financial market in general with the feature length greater maturity. Institution typical secondary capital market is the stock market. The secondary market securities can, in principle an auction market or a market negotiation. In Romania there are two regulated markets of securities i.e. BSE and RASDAQ as separate entities. The coverage of financial instruments, according to EU directives in force, is wide, including both tradable capital market instruments and money market instruments. Futures contract is an understanding between two parts to sell or purchase a particular asset at a predetermined price, the performance of the contract at a future date. Options are contracts between a buyer and a seller and giving the latter the right but not the obligation, to sell or buy any particular asset at a future date, as obtained on payment of a premium to the seller. The options may be for sale when the buyer acquires the right to sell the asset, or may be purchasing, when given the right to purchase the asset. In our country options contracts were introduced for the first time SIBEX, which is currently the only market in Romania where he traded options. This gives the buyer the right but not the obligation to buy or sell a futures contract at a predetermined price, the duration of the contract.*

**KEY WORDS:** *capital market, stock exchange, financial instruments, derivatives, futures, options, transactions*

Thus the category of financial instruments included: securities, fund units of collective investment undertakings, money market instruments, including futures contracts involving payment of cash differences, forward contracts, interest rate, interest rate swaps, exchange rates and actions, options on any financial instrument, derivatives on commodities, any other instrument admitted to trading on a regulated market in a Member State or for which it has been made an application for admission to trading on such market.

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The capital market is to supply and demand of medium and long term capital, with the same role as the financial market in general with the feature length greater maturity.

In terms of the agents involved two types of markets that is the primary market, which are negotiated in the presence of primary and secondary securities issuer, that and his participation, and a secondary market investor market, being targeted by financial flows of a investor to another. In terms of the duration for which they are deployed / fixed resources we have: money market for short-term transactions and capital market transactions in the medium and long term.

Institution typical secondary capital market is the stock market. The secondary market securities can, in principle an auction market or a market negotiation. In Romania there are two regulated markets of securities is BSE and RASDAQ as separate entities. Bucharest Stock Exchange (BSE) is a market where goods and securities unwind after a specific procedure. The operation and its organization is made according to legal regulations, including oversight by the state. The objects of the B.V.B. include securities, currencies and precious metal.

Function of the Bucharest Stock Exchange is to concentrate supply and demand of securities, to ensure their trading stock, to record and publish courses for sale / purchase.

The role is to mobilize financial capital, its redistribution, public information on the status and market trends. In our country operates Bucharest Stock Exchange and Stock Exchange Sibiu Monetary Financial and Commodities and Electronic Exchange RASDAQ. BVB features stock indices: BET, which includes the top 10 companies listed in Category I, BET-C All companies in Category I and II, except for financial investment companies, BET-FI index is a sector that includes only investment funds listed to BSE

The purpose is to stock exchange trading securities, which are documents certifying that their owner holds a right to a certain value. They are also called securities. Moreover, financial instruments traded on the capital market can be divided into primary securities and derivatives. Primary products of the capital market are shares, bonds and specific products arising from the rights conferred by shares (rights by appropriate award and warrants). Derivatives are represented by: futures, including similar contracts with final settlement funds, options with the underlying securities, equity, money market instruments.

The coverage of financial instruments, according to EU directives in force, is wide, including both tradable capital market instruments and money market instruments.

Thus the category of financial instruments included: securities, fund units of collective investment undertakings, money market instruments, including futures contracts involving payment of cash differences, forward contracts, interest rate, interest rate swaps, exchange rates and actions, options on any financial instrument, derivatives on commodities, any other instrument admitted to trading on a regulated market in a Member State or for which it has been made an application for admission to trading on such market. Save money market instruments, short-term securities that

are traded in the money market, all other types of financial instruments circumscribes capital market, are issued or traded therein.

Moreover, financial instruments traded on the capital market can be divided into primary securities and derivatives.

The securities are the shares bonds and special products generated from the rights conferred by shares.

Derivatives are represented by futures contracts, including contracts similar to the final settlement funds for contracts with the support options. Equity securities, money market instruments, futures contracts, including contracts similar to the final settlement funds, exchange rates, interest rates and commodities and other instruments qualifying as regulations of the NSC. Instruments such as futures and options contracts are forward contracts whose elements are standardized by the market operator that is traded.

Futures contract is an understanding between two parts to sell or purchase a particular asset at a predetermined price, the performance of the contract at a future date. Options are contracts between a buyer and a seller, giving the seller the right but not the obligation, to sell or buy any particular asset at a future date, as obtained on payment of a premium to the seller. The options may be for sale when the buyer acquires the right to sell the asset, or may be purchasing, when given the right to purchase the asset.

Components of capital market financial instruments by category are: market shares, bonds, government securities, derivatives market, market repo and reverse transaction market synthetic financial instruments. Synthetic financial instruments resulting from combining the characteristics of different types of financial instruments and creating a new investment tool. This category includes financial instruments by type basket ("Basket Securities"), based on a selection of primary securities, combined so that the following standardized items.

The securities are equity or debt that gives the holder certain rights established on some of the company issuing entity. The securities are inscriptions (Document value) negotiable, which can be converted into cash whenever the capital market.

The narrow, shares and bonds are securities issued by a company. Mobile assets are financial instruments include shares issued by companies, and other securities equivalent to them, traded on capital markets, bonds and other debt including securities with maturities greater than 12 months, negotiable on the capital market and also any negotiated other titles, usually giving the right to purchase those securities by subscription or exchange, giving place to a cash settlement, excluding payment instruments.

Specific securities are instruments of a market economy, capitalist, the heart of the capital markets. Legal term securities that were reintroduced recently, in the Romanian legal circuit. Consecration of the concept of securities, occurred by Law no. 52/1994 on securities and stock exchanges, the securities defined as "negotiable instruments issued in physical form or evidenced by entries in the account, which gives their holders property rights, the issuer, the law and under specific conditions, the issue of them.

Law no. 52/1994, were considered the following securities: shares, bonds and derivatives or any other debt securities, classified by the National Securities Commission in this category. Romanian Civil Code in Article 474 (taking the provisions of Article 529 of the French Civil Code), defined as movable property by determining the law, shares or interests in companies to finance, commerce or industry, even when their capital is in real estate.

The Romanian doctrine was shown that only when limited companies and partnership companies stock can be said that shares and bonds are, in principle, and securities.

But not every action can be classified and security. Dematerialized shares, being established by a written with commercial value, which are securities, not essential characteristics of securities and does not incorporate rights claim, the claim can not give autonomy to the fundamental legal relationship and no certainty that he would give it a literalness.

The definition of securities in the current Romanian law starts from the premise that the securities are a species of financial instruments, premise set out in art. 2 (1) section 11 letter. a) of Law No 297/2004 on the capital market, it is also applicable law currently governing the capital market are considered securities under Article 2 of Law No 297/2004 following pct.33: Shares issued by companies and other securities equivalent to them, traded on capital markets, bonds and other debt instruments including government securities with a maturity of more than 12 months, negotiable on the capital market; Any other securities normally giving the right to purchase those securities by subscription or exchange giving place to a cash settlement, excluding instruments of payment. The definitions in art. 2 sections 33-34, Law No. 297/2004, divides securities into equity securities and securities other than those related to equity securities.

Equity securities are shares or other securities equivalent to shares, and any other securities giving the right to acquire as a result of a conversion or exercise of this right, to the extent that the values of the latter type are issued by the same issuer or by an entity belonging to the group he belongs to that issue.

Securities not falling into this first category, the capital securities are part of the second category. One can appreciate that equity securities are securities such as shares, while the securities in the second category are the type of non-convertible bonds into shares. The common feature of all these titles represent, as you can see, negotiability. Equity securities or securities other than equity securities are securities that are traded either for or because they are tradable capital. Mobile assets market securities are traded on regulated markets, stock exchange or OTC, only after, in advance, have been registered as such by the NSC, the Office of Securities records from there.

The securities have a complex legal nature. Originally securities are contracts between an issuer and subscribers. But this gives rise to rights which detaches itself from the contract, getting the consistency of property whose existence is independent of the contract. In some cases, some financial products are underwritten for a single holder but reserves the power to fractionate them, if appropriate, between several

carriers. The product is a commercial in origin but with the vocation to become a security.

The principle of harmonizing the relevant national laws, a principle which is based on the Treaty of Rome, has as its starting point the essential concepts of harmonization of capital market. The concept of security has a broad imposed by Directive. 79/279 concerning the conditions of admission to official listing on a stock exchange and the European code conduct in securities transactions, account appears "any way negotiable or likely to be negotiated on an organized market.

European doctrine considers that the securities are shares or other securities equivalent to shares, certificates representing the shares, bonds issued by public or private entities, other securities to capital markets and "any other negotiable securities which would normally acquisition of such securities by public subscription or by exchange or cash.

Union Council Directive 93/22/EEC of 10 May 1993 on investment services in the securities field (DIS), the Directive entered into French law by Law no. 96-597 of July 2, 1996 on the modernization of financial activities, the directive considers that by the value of securities we understand "categories of securities typically capital markets, for example, government securities, shares, negotiable securities allowing the purchase of shares by subscription or exchange, certificates of shares, shares issued in series, index warrants and allowing the purchase of such debt securities by subscription". Articles 1 of this Directive shall deem securities: shares and other securities equivalent to shares, bonds and other negotiable debt capital markets and any other securities normally dealt in, allowing the purchase of such real property by subscription or exchange or giving entitlement to a cash payment. European courts have decided, however, that the proposed definition does not affect the various definitions of financial instruments held in national legislation for other purposes, especially for tax purposes. As such, the definition has only indicative value.

The securities are incorporated into Community law securities claims or personal-patrimonial rights (sometimes referred to as political rights, whereas it some securities carry a right to vote at general meetings of shareholders and members of the bondholder or issuer, and, under certain conditions control of the issuer). For securities traded on regulated markets must be made in advance subject to initial public offerings and have been registered in advance to share exchange or regulated market.

The first grant approved in Romania to organize and manage the market for trading derivatives is Scholarship Monetary Financial and Commodities Sibiu. Derivatives exchanges, including those with the underlying goods are regulated, approved, monitored and controlled, like all other grants by the National Securities Commission. Financial market derivatives exchange company managed by SC SCE S.A. developed continuously, so that in 2004 the market traded within 16 futures and 16 options contracts by type with the underlying futures contracts.

Futures and options investors are addressed both as a hedging tool for the unfavourable evolution of asset price-support and to obtain profits through speculation in asset prices available for trading. Derivatives are traded in an electronic platform that allows remote trading and offers risk assessment of compensation and position of

the investors in real time. Also have direct access to qualified investors, seeking real-time price developments.

Scholarship Monetary Financial and Commodities Sibiu Romania is the only stock exchange where futures and options contracts traded with shares listed on the underlying spot market. Particular interest to these tools has materialized in a volume of over 3,000,000 contracts registered in the first 10 months of 2006.

This has led to diversification of existing instruments and creating new opportunities through new products of the exchange, which can be used successfully in their trading strategies. SC B.M.F.M. SA SIBIU was established as a private legal person and functions as joint stock company under Law 31/1990 with the object of "administration of financial markets" - CAEN code 6711. SC BMFM SA SIBIU market operator is authorized by the National Securities Commission of Romania in the decision being entered in the register 356/31.01.2006 NSC, Section 11 - Operators of the market with no. PJR11OPPR/320002. Regulations SC BMFM SA Sibiu and the SCE are approved by the NSC by Decision no. 357/31.01.2006 and 358/31.01.2006. Regulatory framework applicable to SC BMFM SA Sibiu and SCE includes Law 31/1990 on commercial companies, Law 297/2004 on capital market regulations and regulations NSC's own SC BMFM SA Sibiu and SCE. Capital of SC BMFM SA SIBIU is distributed 3,254,000 USD 16,270 shares of nominal value EUR 200 per share.

A shareholder may not, directly or through affiliated persons involved or more than 5% of the total voting rights in the General Assembly of Shareholders.

Specific element is the organization of capital to "exchange cards" (or membership card) the same system can be met in the United States to the major derivatives exchanges (Chicago Mercantile Exchange and Chicago Board of Trade). Currently the share capital of SC BMFM SA SIBIU is divided into 373 cards from the stock 81 small cards (package of 20 shares) and 293 large cards (package of 50 shares) that gives the holder of trading as markets developed by SC SCE and free access to electronic trading platform ELTRANS.

The most common derivative securities in our country now are futures contracts. A futures contract is an obligation to sell or buy at a future time (called maturity) a specified quantity of a commodity, a financial asset or currency (called the underlying) at a price and according to standard specifications set when concluding the contract (currently).

At maturity there is a reverse of the initial operation (buy or sell), earned or losing is the difference between the prices of the two operations. Underlying asset may be: a commodity whose characteristics are standardized (oil, grains, cocoa, etc.), a currency, a stock ticker, interest rates, etc.. Goods or currency futures can run either with or without physical delivery of the assets concerned. In our country it is developing all futures contracts without physical delivery of the asset. By trading the stock, futures contracts have a course on the market, resulting from supply and demand.

Specifically, we take the example of the futures contract on the leu / dollar exchange traded Monetary Financial and Commodities Sibiu - Sibex. The aim of the ends (traded) contracts is to obtain a gain in future money. Contracting Parties are any



natural or legal persons who have an account at a brokerage firm trading companies (like companies who trade securities on the Stock Exchange, but different from them).

The market rate of U.S. dollar futures contract today (today) is the estimate made by those who traded him on the value rate of the NBR the day due date (at the end of the month, for example). Thus, the futures rate is influenced by the evolution of official lei / dollar but also the supply and demand for these futures.

Example, an investor's official estimate growth rate (NBR) of the dollar in the coming weeks and appreciate the price of futures trading in U.S. dollars Sibex is reduced compared with its expectations. He buys futures contracts today at market rate if the forecast futures. In were true and the official exchange rate rose, it means that the futures of the market increased. Now he has two choices: 1. market to sell futures contracts purchased, the sale being carried out at a rate higher than the purchase. In this case he wins the difference: (selling rate - the process of buying) x multiplier x number of contracts.

Multiplier is 1000 for this type of contract, 2. to wait until maturity (end), when there is compulsory liquidation contracts through a sale. In this case he wins the difference: (BNR course in late - being bought) x multiplier x number of contracts.

If that forecast does not come true and the falls, then the investor register a loss caused by the negative difference between the futures purchase and sell (or purchase of the futures and the current exchange rate at maturity, if the expected until maturity). If investors expected a decline from the beginning of the course and not an increase, as we detailed in the above example, it could start with a sale, following that later, when the rate fell, to perform the reverse operation Purchase, winning difference.

The purpose of these transactions is either getting some hedge gains or economic agents to cover depreciation of the leu. For the latter case, take the example of an importer: he enters into a contract to import and pay \$ 1000 today at a rate of 3.0000 RON / USD (for example), but loads them arriving over 2 months, when the course is 3, 4000 GBP / USD (for example), and it records a loss (charging the same goods less money, in dollars, than he paid). In this case, to cover, at the contracting import it buy futures contracts, and after 2 months he sells them and register a win in the futures, gain what diminishes the loss of import.

U.S. dollar futures contract price is called margin and is only a fraction of the value of the futures contract. Thus, the price of a futures contract by \$ 1,000 (worth 1000 \$ x approx. 3.0000 USD / \$ = approx. 3000 USD) is only 187.5 USD. Basically it is a price (not lost) but only a deposit where you can fall any losses. If we achieve a win, money is conserved.

The validity of a contract (the Stock Exchange in Sibiu) is 3 months and 6 months. For each transaction is paid a brokerage commission agency. Similarly is running and futures contracts or stock BET. Contracts options. A contract options are a right (but not the obligation) to buy (CALL type option) or sell (PUT-type option) a financial asset (a share, a futures contract, etc.) in a future time and at a predetermined price at present (called the exercise price).

The buyer can decide if their contract options be exercised or not his option to buy or sale the assets, depending on their interests and forecasts. To the right of option

buyer pays the seller on completion of the transaction an amount of money called first. The premium is what is negotiated at exchange and be subject to supply and demand.

Thus, the loss is limited to the first buyer that the seller pays the contract. If his predictions are not confirmed, the buyer is not obliged to exercise the option, losing only the first. If the forecast is confirmed, the buyer will exercise the option. In terms of vendor earnings or premium received from the buyer, the seller has no decision power on option exercise, he waiting for buyer decision in this regard.

In our country options contracts were introduced for the first time SIBEX, which is currently the only market in Romania where he traded options. This gives the buyer the right but not the obligation to buy or sell a futures contract at a predetermined price, the duration of the contract.

In conclusion, the risk of derivative transactions is very high, because working on the margin (do not pay full value of the contract, but only a fraction of it, as I mentioned in previous chapters).

Working on margin is not necessarily a disadvantage for this type of operation, because gains can be obtained also very large: Suppose an operation by purchasing a futures contract on the exchange rate EUR / USD. The value of such a contract is USD 1,000, so  $1,000 \times 3.0000 \text{ GBP / USD}$  (for example) = 3000 USD. Working on margin will not pay full value of the contract, but only an initial margin of EUR 187.5. If predictions come true and bring a transaction gain of EUR 25, then return operation will be  $25/187, 5 = 13.33\%$ , much higher than  $25/3.000 = 0.83\%$ , obtained for that would have paid full value of the contract. This reasoning is valid, but in reverse. If you would have lost 25 USD, then the loss would have been 33% of the amount invested.

For transactions that are intended to obtain some gains speculation, we give below an example on futures contracts maturing in December 2008, with the underlying shares of SIF Moldova (SIF2).

The value of such a contract to market is  $1000 \text{ shares} \times 0.61 \text{ USD} = 610 \text{ USD}$ . Working on margin will not pay full value of the contract, with a margin of only 150 USD. An investor decides to sell (to open "short" positions) in 10 contracts DESIF2-DEC08 price of 0.61 RON / share. At maturity Quote DESIF2-DEC08 contract was 0.55 lei and liquidity positions were automatically, but the investor with the right to close positions held and before maturity. The profit earned by it was 600 lei (60 lei / contract). The yield obtained was  $60/150 = 40\%$ , much higher than  $60/610 = 9.83\%$ , obtained in case that would have paid full value of the contract.

Trading in futures contracts can make spectacular gains, provided that these operations take place following a careful study and rigorous analysis. Note that the degree of risk is very high - you can lose all money invested in only a few days, there are cases in which the loss may exceed the amount invested. Trading in options contracts can limit these risks, however, the liquidity of this type of contract is very small now. Diversification in the future of this operation (by introducing stock options, for example) will increase their attractiveness to them.

Interest in options transactions on SCE increased in recent years. An interesting feature advantages, as it entitles an investor to buy or sell an underlying asset (futures contract, if SCE) at a pre-determined price at the time of the transaction,

but without creating an obligation to do so. Thus, an investor who wants to risk too much, but anticipates an increase in the exchange, will buy CALL options, paying the price not too high a sum called first. In this way the investor is entitled to maturity options, to buy the underlying asset at a price set when the transaction, with the growth of (exercising option, the investor buys the futures contract at a lower price and sells at market prices, higher, recorded profits).

If the market is evolving not in the sense expected, then the investor does not exercise the option and loses only the price paid for first, accounting for a much smaller loss than if they bought directly futures contract and the market would be low. The situation is similar to an investor who anticipates a fall in the exchange. This type will buy PUT options, paying them a first seller.

If the market falls, according to predictions, then the investor has the right to sell futures contract at a price fixed when the deal with the options and buy it, then, to market, a profit, if the market does not decrease, then the investor does not exercise the option and loses only the first.

Therefore, things are clear and quite interesting for buyers of options. They have a limited risk to the premium paid, but a potential big win. How are things for sellers of options? They rely on a market development contrary to those amend a buyers options. Therefore, if a buyer of options CALL (for Purchase) rely on market growth, the seller anticipates a decline same options. If the market drops, the seller remains the options premium received and the buyer does not exercise option and things stop there.

But if the market grows, things get complicated for the seller CALL options. He collected first from the buyer (but, as we have seen, this is not very high). The buyer will exercise the options held and will begin to accumulate profits so long as the market grows.

The seller of the same options will start to accumulate losses as long as the market grows, moreover, the latter has no way to get out of it transaction. The seller of the CALL options at your disposal is their customer, so that its losses are theoretically unlimited. PUT an option seller has the same problem if the market falls. In this case, the buyer exercises the option and the seller accumulates losses as long as the market falls.

It is very sad scenario for sellers of options, provided that the losses which they may accumulate are theoretically unlimited (and may exceed, without problems, the amounts originally invested). The sellers of options have an initial moment of joy at receiving the first, but if their projections do not come true, they lose control over transactions and are unable to get out of it than when buyers decide.

These are things that are not being discussed when promoting the benefits of the options. These benefits exist, but when you do not know all the information related to their function, the options can be dangerous, especially for beginner investors.

Of course, the risks I have mentioned above can be covered: a seller of options should CALL buy futures contracts that represent the underlying assets of options, so if the market grows and seller of options begin to accumulate losses (theoretically unlimited) of options These losses will be covered by earnings futures, similarly, a seller of PUT options would be to sell futures contracts that are underlying of the

options. Unfortunately, these things are little known, especially by investors' beginners.

Therefore, when an investor discovers with great enthusiasm options, it is better that they take into account all the risks involved. Otherwise, a seller of options, the joy of the collection of the first page can turn very quickly into despair when losses accumulate, without the possibility of being terminated.

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## **FREE MOVEMENT WITHIN THE EU - A FUNDAMENTAL RIGHT**

**OANA-CARMEN RĂVAȘ \***

**ABSTRACT:** *Free movement of people is a basic pillar of the single area the European Union (EU) has been building since its creation. It is acknowledged as a fundamental right for EU citizens. A right of free movement across the EU was originally envisaged only for the working population, as a single market could not be achieved while limitations to workforce mobility remained in existence. The Schengen Convention was the first agreement to abolish controls on people at the internal borders of the signatories, to harmonise controls at the external frontiers of the 'Schengen area' and to introduce a common policy on visas and other accompanying measures like police and judicial cooperation. The Schengen signatories agreed that each country could only reintroduce controls on their mutual borders in certain well-specified circumstances. The right of every European citizen to move and reside freely within the territory of the Member States is enshrined in the Charter of Fundamental Rights of the EU, adopted in December 2000. The charter also states that these rights 'may' be granted to third-country nationals.*

**KEY WORDS:** *movement of people, European citizen, European Union, *acquis*, principle of non-discrimination*

Free movement of people is a basic pillar of the single area the European Union (EU) has been building since its creation. It is acknowledged as a fundamental right for EU citizens. Yet, implementing this principle by abolishing border controls at internal borders has been more difficult than for those underpinning the free circulation of capital, goods and services. Further steps are being taken to ensure that free movement is applied in a coherent and simplified way throughout the EU Member States, and that checks and controls at the EU's external frontiers are reinforced to a level that will guarantee the Union's internal peace and security.

The free movement of persons between the Member States of the EU is one of the basic aims of the Union. What has become true for capital, goods and services has to be a reality for people too. A right of free movement across the EU was originally envisaged only for the working population, as a single market could not be achieved

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while limitations to workforce mobility remained in existence. Yet, thanks to the rising social and human dimension of the European area, the right to free movement has since been extended to include all categories of citizens, to dependants, to students and to those who are no longer economically active. Since the integration of the Schengen Acquis into Community law, the notion of "free movement" is used in two senses. First, in the traditional sense of free movement and secondly in the sense of being able to cross the internal borders without undergoing checks.

***What does the traditional right to free movement for EU citizens entail?*** The right to free movement means that every EU citizen is entitled to travel freely around the Member States of the European Union, and settle anywhere within its territory. No special formalities are required to enter an EU country. This fundamental right extends to members of the EU citizen's family, and applies regardless of their situation or the reason for travel or residence.

***Free movement stemming from the abolition of internal border controls.*** Although free movement was already enshrined in the EEC Treaty, not all the Member States went as far as abolishing internal border checks. The effective application of free movement was given a boost in 1985 when Germany, France and the Benelux countries (Belgium, the Netherlands and Luxembourg) signed an inter-governmental agreement on this issue of gradually abolishing internal border checks, in the small Luxembourg border town of Schengen. The Schengen Agreement was followed in 1990 by the Schengen Convention, which finally came into force in 1995.

The Schengen Convention was the first agreement to abolish controls on people at the internal borders of the signatories, to harmonise controls at the external frontiers of the 'Schengen area' and to introduce a common policy on visas and other accompanying measures like police and judicial cooperation. The Schengen signatories agreed that each country could only reintroduce controls on their mutual borders in certain well-specified circumstances. The Schengen Convention, however, did not aim at regulating the right to long-term residence and work, neither for EU citizens nor for third-country nationals. Today, the Schengen Convention has been incorporated into the EU's Treaties. As of March 2001, 13 EU Member States have signed up to Schengen. They are Belgium, Denmark, Germany, Greece, Spain, France, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland and Sweden. Ireland and the United Kingdom - which never signed up to the Schengen Convention - will take part, in the future, in those aspects of the Schengen acquis that deal with cooperation between police forces and judicial cooperation, but they will not end border controls with other Schengen States. Two other non-EU Member States, Norway and Iceland, apply the Schengen provisions completely on the basis of a specific agreement.

The right of every European citizen to move and reside freely within the territory of the Member States is enshrined in the Charter of Fundamental Rights of the EU, adopted in December 2000. The charter also states that these rights 'may' be granted to third-country nationals.

***How does the EU maintain its internal security?*** The Schengen Convention, now integrated in the EU framework, includes a detailed series of measures designed to compensate for a lack of internal border controls by reinforcing security at the Union's external frontiers. Key among these measures is the requirement that Member States

with an external EU frontier have a responsibility to ensure that proper checks and effective surveillance are carried out at the EU's external frontiers. Once a person is inside the Schengen area, he or she is free to move around wherever he or she wants for a short time period. It is therefore vital that checks and controls at the EU's external frontiers be rigorous enough to stop illegal immigration, drug smuggling and other unlawful activities. Schengen also provides for better cooperation and coordination between police services and judicial authorities as an aid to Member States' internal security, and in particular to fight effectively against organised crime. This is the context for the creation of the Schengen information system (SIS). The SIS is a complex database that enables the law-enforcement, judicial and consular authorities of EU Member States to exchange data on certain categories of persons and on lost or stolen goods.

The European Commission shares the right to initiate proposals with Member States in this area. This means that the Commission is partly responsible for proposing policies and actions, as well as implementing and executing them.

***What accompanying measures have been taken?*** Beyond recognising freedom of movement as a fundamental right, the EU has taken several accompanying measures in order to facilitate its implementation, including: simplified formalities for EU nationals; harmonised entry conditions for non EU nationals; harmonised visa policy; improved documents security.

On the security perspective, a new image archiving system called FADO is to be set up, allowing EU Member States to exchange information on EU official documents and help detect any papers that may be counterfeit.

***European Union citizenship, a wide set of rights and obligations.*** Every person holding the nationality of a Member State of the European Union is, as a result, a citizen of the Union. Citizenship of the Union supplements national citizenship without replacing it. It is made up of a set of fundamental rights and obligations enshrined in the EC Treaty among which it is worth underlining the right not to be discriminated on the basis of the nationality.

***An evolving concept.*** Since the treaty of Maastricht, the concept of *European citizenship* is enshrined in the Treaty establishing the European Community (Articles 17- 22 and 255). It has evolved as the European integration moved on as creating an ever closer Union among the peoples of Europe became the first aim of the European Union to be mentioned in the EU Treaties completed with the objective of strengthening the protection of the rights and interests of the nationals of its Member States through the introduction of a citizenship of the Union.

The Maastricht Treaty, signed in 1992, aimed to strengthen the protection of the rights and interests of the nationals of its Member States through the introduction of a citizenship of the Union. The European citizenship confers, notably, on every European citizen a fundamental and personal right to move and reside freely without reference to an economic activity. With this Treaty also came additional voting active and passive rights in European and local elections. It enhanced as well diplomatic and consular protection by giving the right to EU citizens to ask for the help of any Member State represented in a third Country if his/her own Member State is not represented there.

The Treaty of Amsterdam, which entered into force on 1st May 1999, extended citizens rights/obligations by introducing a clause allowing EU institutions to take measures against discrimination on the grounds of sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation to the Treaty. Amsterdam also reinforced the *free movement of people* by integrating the Schengen Convention into the Treaty. Furthermore, it affirmed the commitment of each Member State to raise the quality and free access to education at national level to the highest level of knowledge possible with, in particular, the view to tackling unemployment.

The Treaty of Nice, signed in 2001 facilitated legislating relating to free movement and residence by introducing qualified majority for the decision-making in Council.

A definition opening the access to specific rights:

- The legal definition for the European citizenship can be found in Article 17 of the *Treaty establishing the European Community*: “Citizenship of the Union is hereby established. Every person holding the nationality of a Member State shall be a citizen of the Union . Citizenship of the Union shall complement and not replace national citizenship.”
- In practice, it means that any person who holds the nationality of an EU Member State is automatically a European citizen. The question of whether an individual possesses the nationality of a Member State is settled solely by reference to the national law of the Member State concerned. Thus it is for each Member State to lay down the conditions for the acquisition and loss of nationality.
- As for any legal system dealing with rights and liberties, it must be of course well understood that the EC treaty construction also encompasses all the obligations related to the rights mentioned.
- A specific set of rights is attached in the treaty to the European citizenship, namely: the right *to move and reside freely within the EU* (article 18 of the TEC) – subject to certain limitations introduced by community law; the right *to vote for and stand as a candidate* at municipal and European Parliament elections in whichever Member State an EU citizen resides (article 19 of the TEC); access *to the diplomatic and consular protection* of another Member State outside the EU (article 20 of the TEC) if his/her Member State is not represented there; the right *to petition the European Parliament and to complain to the European Ombudsman* (article 21 of the TEC).

This list should not be considered as exhaustive. Moreover, those rights an expression of the right to considered as a national in any EU Member State and therefore not to be discriminated on the basis of the nationality (Article 12 TEC). *The principle of Non-discrimination* should be considered as a cornerstone of the whole construction. In addition to the rights specifically attached to the citizenship of the European Union that are explicitly mentioned in the Treaties, there is a whole series of fundamental rights and obligations which stem from the EU Treaties, the case-law of the Court of Justice of the European Communities, the Council of Europe’s Convention on Human Rights and the constitutional traditions of the Member States. Other rights such as for instance, the right to contact and receive a response from any EU institution in one of the EU official languages, the right to access European



Parliament, European Commission, and Council documents under certain conditions or the right of equal access to the Community civil service find their place here.

The treaty gives the European Commission the right to put forward proposals to strengthen or to add to the rights specifically attached to the EU Citizenship. On this basis, the Council after consulting the European Parliament may adopt unanimously provisions that it shall recommend to the Member States for adoption in accordance with their respective constitutional system (Article 22 TEC).

***A regularly monitored application of the concept.*** Article 22 of Tec requires the EC Commission to report every three years on the application of the treaty provisions related to EU Citizenship. The fourth Commission report – ( COM (2004) 695 – was issued on 26 April 2004 and covers the period from May 2001 to April 2004 report.

***The Charter of fundamental Rights.*** Fundamental rights as respected by the EU have been assembled into a single, simple text called the Charter of Fundamental Rights of the European Union, which was proclaimed by the European Parliament, the European Commission, and the EU Council of ministers in Nice in December 2000. The Charter was then incorporated in the Treaty establishing a Constitution for Europe signed in October 2004 and under process of ratification.

By now, the Charter commits the European institutions and the Member States when applying the EU legislation. The Court of First instance, in January 2002, referred to the Charter as the expression of the constitutional traditions common to the Member States mentioned in Article 6 §2 of the TUE. New legislation will simplify conditions and administrative formalities for applying EU citizens' right to move and reside freely throughout the European Union. The Directive 2004/38/EC on the right of citizens of the European Union and their family members to move and reside freely within the territory of the EU has been adopted by the European Parliament and the Council on 29 April 2004 (JOL 158 du 30 04 2003). It brings together the complex body of legislation that existed in this area. It introduces more flexibility by eliminating the need for EU citizens to obtain a residence card, introducing a permanent right of residence, defining more broadly the situation of family members and restricting the scope for the authorities to refuse or terminate residence of non national EU citizens.

***Latest developments.*** The Member States are currently transposing the Directive 2004/38/EG on the right of citizens of the European Union and their family members to move and reside freely within the territory of the EU. They have until 30 April 2006, to achieve the complete and correct transposition of the directive. To that end, the EU Commission has been organising meetings with Member States from June 2005 to January 2006. The EU Commission is preparing the third report on the implementation of the three Directives on the right of residence of Union citizens and their family members, of whatever nationality, who are not economically active in the host Member State, covering the period 2003-2006.

Four major judgments were given by the EU Court of Justice on the interpretation of directives 93/96, 90/364 et 90/365. (Cases C-456/02; C-200/02; C-209/03 and C-157/03). On these occasions, the Court recalled that the right to reside in the territory of a EU Member State is conferred directly on every citizen of the Union by article 18(1) EC and that citizenship of the Union is destined to be a fundamental

status of nationals of EU Member States, enabling those who find themselves in the same situation to receive the same treatment in law irrespective of their nationality. The Court also underlined the need to interpret the right of free movement in the light of fundamental rights with particular regard for the right to protection of family life and the principle of proportionality.

***Historical developments:***

- *Free movement of persons* has existed since the foundation of the European Community in 1957. It was introduced from an economic point of view, since the right was linked to a person's status as a salaried worker and it was part of the broader project of realising a common market with free movement of capital, goods and services. The right was then extended to self-employed persons and service providers. Family members were entitled to the same rights. [...] Then, this right has been progressively extended to encompass all categories of citizens.
- In years 90's, three directives were adopted, which guarantee the rights of residence to categories of persons other than workers: retired persons, students, and inactive people.
- In 1992, the Maastricht Treaty introduced the concept of citizenship of the European Union which confers on every European citizen a fundamental and personal right to move and reside freely without reference to an economic activity. The Amsterdam Treaty, which came into force in 1999, further strengthened the rights linked to European Union citizenship by integrating the Schengen Convention into the Treaty.
- The European Court of Justice recognised the direct applicability of Article "18" of the TEC [or 12 ex 6?], giving thus each EU citizen the right to ask for the respect of that article, subject to limitations- *Arrêt 12 Mai 1998, Martinez Sala, affaire C-85/96, rec.I-2691 et Arrêt 24 Novembre 1998, Bickel et Franz, affaire C-274/96, rec.I-7637.*
- *The Treaty of Nice* which entered into force on 15 February 2003 facilitated the legislative process by introducing qualified majority voting in the EU decision making process in the field of free movement and residence.

***Free movement and right of residence.*** The new legal and political environment entailed by EU citizenship has allowed for a fresh look to be taken at arrangements for European citizens to exercise their rights, and fulfil their obligations in this regards through the creation of a single set of rules governing freedom of movement. European citizens can, *mutatis mutandis*, move between Member States on similar terms as *nationals* of a Member State moving around or changing their place of residence inside their own *country*. European citizens have the right to enter, reside and remain in the territory of any other Member State for a period of up to three months simply by presenting a valid passport or national identity card: no other formality is required. If they intend to remain for a period exceeding three months, a residence permit must be obtained. The conditions for granting a residence permit depend on the status of the citizen (employed or self-employed person, student, retired or inactive person).

Any EU citizen can take up an economic activity in another Member State either as an employed or self-employed person. In this case, he/she will be issued a

residence permit by simply presenting an identity document (passport or ID) and proof of employment or self-employment. If a citizen wants to reside in another Member State without exercising any activity or to study, he/she can do so provided he/she can prove (and in the case of students, declare) that he/she has sufficient financial resources not to become a burden for the host Member State's social assistance system and that he/she is covered by a sickness insurance policy. He/she must also prove that he/she has sufficient financial resources and sickness insurance for each member of his/her family who is entitled to reside with him/her.

*Family members, irrespective of their nationality, have the right to accompany and establish themselves with a European citizen who is residing in the territory of another Member State. Family members who can enjoy rights under Community law include the spouse, minor (under 21) or dependent children, and dependent ascendants, though in the case of students only the spouse and dependent children enjoy this right. If the family members are not EU citizens, they may be required to hold an entry visa by the Member State where they intend accompany the EU citizen. They shall be granted this visa free of charge and with all facilities by that Member State. More information about your precise rights when you move to another country can be obtained at: Dialogue with citizens and business site.*

**Flanking measures to strengthen the freedom of movement and right of residence.** Over the years, the Commission has initiated a wide range of measures designed to make the right to free movement a practical reality. For example, laws relating to the recognition of academic and professional qualifications across the EU are now in place. The employment web site, EURES, offers job-seekers and employers EU-wide information and advisory service in order to facilitate labour mobility. Country guides for people wishing to enter and/or live in another Member State are also available.

**The Directive 2004/38/EC on the right of the EU citizens and their family members to move and reside freely within the territory of the Member States.** Despite impressive advances, EU citizens could still face problems when they moved to another Member State. Common difficulties concerned notably the lack of information about the extent of their rights, lengthy administrative procedures in obtaining residence documents and the precise definition of the rights of family members. The Directive adopted by the Parliament and Council on 29 April 2004, on a Commission's proposal (COM (2001) 257 in JOC 270 E of 25 09 2001) was meant to overcome these difficulties.

The main objectives of the Directive are:

- To replace all the previous EC legislation in this field by a single text instead of Regulation (EEC) n° 1612/68 and the Directives 64/221/EEC, 68/360/EEC, 72/194/EEC, 73/148/EEC, 75/34/EEC, 75/35/EEC, 90/364/EEC, 90/365/EEC et 93/96/EEC.
- To give the rights to move and to reside to EU citizens as such and not anymore to categories of people identified as workers, students, self-employed and so on.
- To simplify the conditions and administrative formalities associated with the exercise of the right of free movement and residence in the Member States. For residence of less than three months, the only requirement is the possession of a

valid identity document. For residence of more than three months, the need to hold a residence card for citizens of the Union is abolished and replaced, if provided by national legislation, by registration in the population register of the place of residence, validated by a certificate issued immediately on presentation of proof that the conditions attached to the right of residence are complied with. EU citizens must be either workers or self-employed persons or else dispose of sufficient resources not to become a burden on the social assistance system of the host Member State and a comprehensive sickness insurance. Members of the family must provide proof of identity and of the family link to an EU citizen.

- To introduce the right of permanent residence for EU citizens after five years of continuous residence. They will no longer be subject to any conditions on the exercise of their right of residence, with virtually complete equality of treatment with nationals.
- To facilitate the movement of family members irrespective of whether they are EU nationals or not. The definition of 'family members' covers for the first time registered partners under the legislation of a Member State, if the legislation of the host Member State treats registered partners as equivalent to marriage. Other partners of EU citizens will not have an automatic right to entry and residence in the host Member State. However, the host Member State will have to "facilitate" the entry and residence of the partners with whom the EU citizen has a "durable relationship duly attested", taking into consideration their relationship with the EU citizen. Family members who are nationals of third countries also enjoy greater legal protection, for example in the event of death of the EU citizen on whom they depend, or the dissolution of the marriage under certain circumstances.
- To clarify the limitations to the right of residence on grounds of public policy, public security and public health in order to ensure that citizens of the European Union enjoy better administrative and legal protection in the context of measures restricting their right of residence, and to guarantee strong protection against expulsion for minors and persons who have resided in the host Member State for a long period of time.

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## CONSIDERATIONS REGARDING THE WAYS TO REDUCE THE US TRADE DEFICIT

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**ABSTRACT:** *In a recently published (Business Week, November 2, 2008) article, the distinguished columnist, Michael Mandel, pointed out some interesting issues concerning the US trade gap and the consequences it has on the entire global economy and economic system. In this kind of respect, he finds three possible ways for America to reduce this trade deficit and to relaunch its own economy on (new!) a good track. The three scenarios he finds out as being really possible for US to narrow its trade gap, actually, are: a) the so-called “business as usual” scenario that assumes the actual US trade gap will remain pretty much unchanged or rise slightly; b) the so-called “global restructuring” scenario that assumes the US government will not assure enough stimulus package or the US dollar will drop further or both; c) the so-called “innovative growth scenario that assumes the US will manage to export more innovative and knowledge-based goods and services and the US trade gap will go down smoothly without affecting the global growth. Far from trying to make any kind of polemic with the article’s author we still have to add that – and this is a point of view being a little bit different from the author’s – the US trade deficit is the cause as well as the main symptom of the global economic imbalances.*

**KEY WORDS:** *trade gap, scenarios, new technologies-based products*

### 1. INTRODUCTION

In a recently published (Business Week, November 2, 2008) article, the distinguished columnist, Michael Mandel, pointed out some interesting issues

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concerning the US trade gap and the consequences it has on the entire global economy and economic system. In this kind of respect, he finds three possible ways for America to reduce this trade deficit and to re-launch its own economy on (new!) a good track.

There is no question that the ongoing situation has become a real burden to US itself as well as to the rest of the world economy. As we've just said, Michael Mandel identifies three possible ways for US to cut down its trade gap. He also analyzes and makes some predictions on how and by how much the world economic system could be affected in case of each and everyone of those three scenarios.

The three scenarios he finds out as being really possible for US to narrow its trade gap actually are:

- the so-called “business as usual” scenario that assumes the actual US trade gap will remain pretty much unchanged or rise slightly. In this case US will continue to be the main market for the world consumption-designed products while the world itself will continue to lend US the money they need in order to finance this consumption-based kind of growth.
- the so-called “global restructuring” scenario that assumes the US government will not assure enough stimulus package or the US dollar will drop further or both. All that could mean the living standards in both US and the rest of the world will drop as the cheap stuff made in emerging economies like China will not be sold in US the way and in the amounts it has done until now and the knowledge-based US exports will not be accessed by emerging markets the way they've done until now. The world economic growth will be jeopardized.
- the so-called “innovative growth” scenario that assumes the US will manage to export more innovative and knowledge-based goods and services and the US trade gap will go down smoothly without affecting the global growth.

Far from trying to make any kind of polemic with the article's author, we still have to add that – and this is a point of view being a little bit different from the author's – the US trade deficit is the *cause* as well as the *main symptom* of the global economic imbalances.

Elsewhere, we have to add that the US trade gap will not go down following a single scenario but following some kind of “mix” of those mentioned by the columnist. US is already trying to make a spectacular come-back as world significant creditor (lender) even that this country is, still, the world's main debtor. The last “quantitative easing” actions taken by FED are, in a very discreet way, designed mainly for that. More else, a sudden stop in borrowing money from overseas and in importing goods and services will simply mean to add a further burden on the global access to cash that is already scarce. A global economic restructuring is already coming. We have to notice that US imports too much but a significant majority of goods imported have very small added-value. Maybe US hasn't generated too high added-value in recent years but this country is far from being in a position to be dependent on added-value created overseas. So, the real costs of its big trade gap are not as high as they look like at a first glance.

We have to add also that the US hasn't accumulated this huge existing trade gap only due to its “consumerism” behaviour. Without importing heavily from Japan in early 90es, for example, the still struggling Japanese banking system would have been

a mess. And examples could easily go on. The future of the global economic development is already designed. It's called BIOTECHONOLOGIES and NANOTECHNOLOGIES. And it's all made in US. The real issue here consists in how to finance the production on large scale for these new technologies-based products. This question has nothing but a single answer: outsourcing. But this has to be done wisely, the way that it will put the world back on track in terms of growth without jeopardizing the US international trade position.

How is that supposed to be done? Nobody knows at this time. Analogies are dangerous things in making economic predictions, but we have to analyze the last two big US recessions (1974 and early 90es) in terms of trade deficit, the evolution of the US dollar on currency markets and the impact on the global economy. Any analogy with the Great Depression seems - in our view - to be inappropriate.

## **2. OVERVIEW**

We have to point out that US is a net exporter in terms of services. In times of recession the US dollar usually depreciates but is a proven issue that a weak US Dollar doesn't affect significantly the amount of services exported by US. Those services are high added-value products and – of course – they address to rich countries. A key issue here could be the ability of the US economy to create services “dedicated” to less rich countries and especially to emerging economies. This kind of services should be less expansive and so, affordable for emerging economies and this does not necessarily mean they have to lose in terms of added-value. US has to adapt some of its services production capacities to the purchasing power existing in each country US does make commerce with. And that does not necessarily mean to cut costs. But it could mean to accurately assess the existing and potential needs of each existing or potential trade partner. The emerging economies are usually developing countries that need foreign investments and especially green field investments.

A wise trade strategy could consist in moving the production of goods a partner like this does need in the partner's country and, in order to produce the goods, the partner will start to import production and distribution related services from US. Even more, the US could easily import goods produced at lower costs (due to the cheap labour force) in emerging countries while exporting production and distribution related services as long as US keeps a trade surplus. But this kind of trade surpluses have to be small, the way that they will not become burdens for any emerging economy and that could be done by spreading (diversifying) the green field investments to as many as possible emerging economies. The ideal “targets” for such kind of investments are – for example – the Central and Eastern European countries due to their friendly attitude they have to US. In other words, US could create a development strategy for these countries very much like the so-called “Marshall Plan” that was designed for Western Europe in late 40s. We also may add to the picture that US could as well encourage some of these emerging countries to export further in terms of goods (in fact, some of these countries could start to accumulate trade surpluses) to US while US does continue to spread this kind of trade policies to other “targets” like these.

The scenario described here up is, basically, a kind of “business as usual” scenario with some remarks: there will not be a one or two countries US will import cheap-made goods from (like China today or like Japan in the 80s); US will benefit of fair trade policies from its “new” partners because they really are democratic countries with free-market oriented economies that will not artificially keep their currencies at low levels in order to promote their exports.

What, exactly, this “new” situation does mean? It could mean that US will start, still using the “business as usual” scenario, to *restructure* its *international trade* as well as its *international debt* and the first step in doing this could consist in *diversifying* both of them. It could be a win-win kind of strategy for US on one hand and the emerging economies on the other hand and that because, even the fact that Eastern European Countries have their currencies tied to Euro (in fact, some of them, already adopted the Euro) their central banks do continue to buy US treasuries in order to consolidate their international reserves – in other words *to buy US debt*. This way US could diversify its exposure on its own capital account and could start to make repairs on its current account.

Of course that would (and should!) be only a *short term* strategy and that because this strategy is not consistent with itself in the long run due to the fact that, obviously, for whatever country in this world including these Eastern European Countries, US is not the only investing and trade partner. In the long run, this action will, probably reduce the US dependence of China imports and decrease the exposure on one (and, almost, single!) creditor like China, but the chances to accumulate trade deficits with these “new” partners are really high indeed. So, based on a “business as usual” scenario, this “diversifying strategy” must be applied only on short term in order to become an “investment strategy” and create healthy growth for every partner while reducing the US trade gap. In other words US will do better off if it will extend its internal economic dynamism and flexibility to its international economic behaviour. Maybe the so-called “Asian option” could be it but that’s not all for US in order to restructure its economy both nationally and internationally.

In order to support our arguments we think as being appropriate the example of the recession that started in US in the last quarter of 1973 and brought the US GDP down from US\$4,917.0 in 1973 to US\$4,879.5 in 1975 the US\$/DEM exchange rate was decreasing at some slow pace during 1974 based especially on expectations on FED rate cuts. When FED effectively started to cut interest rates (December 1974) the US\$/DEM exchange rate started to decrease further and that could be considered today as being a fundamental reason for the trade surplus US achieved in 1975 (Tab. 1, source: [www.census.gov](http://www.census.gov)). But we have to add that in this period of time the Japanese yen didn’t make any spectacular move versus US\$ and, in spite of that, the year 1975 was the very beginning of big increases in US/Japan trade deficit. In this kind of respect there is appropriate to mention that, during 1974 – 1975 period of time, the Vietnam war had been already over and (excepting the Cambodia situation), the Eastern Asia small economies were at their start to become modern emerging economies under the US “coverage” and US took a good opportunity by trading with this new and dynamic partners. There was kind of “innovative growth” scenario in terms of trade for US due to the strong demand for modern technologies and capital



goods “made in USA” those Asian emerging countries experienced. US made, at that time some quite significant investments in this region. In fact, this was a smart move mainly because the Japanese yen was too weak at that time (so, Japan wasn’t, at that time, in a position to be a big investor in the area) and the Dollar had been to retreat against all region’s currencies. US was smart enough by not becoming a *too big* investor in this region, but they *did invest* while importing cheap manufactured goods from the region and exporting strong added-value goods and, especially, services to the region. It wasn’t to last because the Dollar has had been to become again too strong versus Asian currencies and US had, at this time, to deal with the arising tensions in Iran and in the entire Mideast – so the US economic attention was refocused (again!) on defence issues rather on creating high added-value in its civil industries.

Table 1.

**U.S. Trade in Goods and Services - Balance of Payments (BOP) Basis**  
 Value in millions of dollars  
 1960 thru 2008

Period	Balance			Exports			Imports		
	Total	Goods BOP	Services	Total	Goods BOP	Services	Total	Goods BOP	Services
1970	2,254	2,603	-349	56,640	42,460	14,171	54,386	39,866	14,520
1971	-1,302	-2,260	958	59,677	43,319	16,358	60,979	45,579	15,400
1972	-5,443	-6,416	973	67,222	49,381	17,841	72,665	55,797	16,868
1973	1,900	911	989	91,242	71,410	19,832	89,342	70,499	18,843
1974	-4,293	-5,505	1,212	120,897	98,306	22,591	125,190	103,811	21,379
1975	12,404	8,903	3,501	132,585	107,088	25,497	120,181	98,185	21,996
1976	-6,082	-9,483	3,401	142,716	114,745	27,971	148,798	124,228	24,570
1977	-27,246	-31,091	3,845	152,301	120,816	31,485	179,547	151,907	27,640

U.S. Census Bureau, Foreign Trade Division.

NOTE: (1) Data presented on a Balance of Payment (BOP) basis. Information on data sources and methodology are available at [www.census.gov/foreign-trade/www/press.html](http://www.census.gov/foreign-trade/www/press.html).

We didn’t make any mention regarding the 1971 (the total drop of the Gold Standard) and the 1973 (the first “oil crisis”) moments. Without making any other comments we have to mention that, in our opinion, US did manage quite well both “events”. In the 70s the world economy was less globalized than it is today, China had been, in fact, no present on the international arena and, as consequence, the international trade was more responsive to the exchange rates than it is today. In this kind of respect we find that the US – Germany trade relationship improved quite well during 1975 due to a stronger Deutsche Mark. But this, also, wasn’t to remain: the continuous deterioration in the global security made investors to view the US Dollar as a safe heaven and it was to come strong, again. Of course, the world we’re living now is very different of the 1975’s world, but we do consider that the policies adopted then by US were wise and did make sense *because they were economically correct*. That’s why we assume that measures like these could be taken any time.

We are not taking into consideration any *forced* “global restructuring” scenario like increases of tariffs or protectionism of any kind. In fact what we are experiencing now is some sort of “business as usual” combined with US unilateral “monetary global restructuring” scenarios. And that’s because of the key role the US Dollar still keeps on the international trade arena. In fact, both Federal Reserve and US Treasury have been

realized that the financial crisis the world is still facing is a *cheap money crisis*. *Cheap money does not create high added-value and does not prize the work. In fact, cheap money prizes only the risk.* The mercantilism that helped US to achieve high rates of growth in the last 20 years did work only because of the special status of the US Dollar and resisted only until the US economy did consume even the last trace of added-value it created in the 80s and early 90s on the civil front (high performance pharmaceuticals, computing and internet related technologies. After September 2001, while US invested almost only in defence related industries and research the remaining surpluses in the capital account had nowhere to go but in assets like houses and real estate and in cheap China-made goods – most of them dedicated to satisfy this strange “buy a house and stay at home – your house does work for yourself” kind of culture. But the economic laws are tough indeed. With poor added-value non-military goods produced on high-scale due to migration of the high-skilled workforce from the industrial research, engineering and high-tech economic branches to the investment banking sector(cheap money is for risk, not for work) US has lost dramatically in terms of competitiveness compared with late 80s and early 90s situations. In this kind of economic environment is no wonder that US have experienced a housing bubble and a ballooning US trade gap (Tab. 2, source: www.census.gov).

Table 2.

U.S. International Trade in Goods and Services, 1992 and 2008									
In millions of dollars. Seasonally adjusted; details may not equal totals due to seasonal adjustment and rounding.									
Period	Balance			Exports			Imports		
	Total	Goods (1)	Services	Total	Goods (1)	Services	Total	Goods (1)	Services
<b>1992</b>									
Jan. - Dec.	-39,212	-96,897	57,685	616,882	439,631	177,251	656,094	536,528	119,566
January	-2,026	-6,952	4,926	50,251	35,498	14,753	52,277	42,450	9,827
February	-831	-5,593	4,762	51,682	36,854	14,828	52,513	42,447	10,066
March	-2,641	-7,355	4,714	50,294	35,711	14,583	52,935	43,066	9,869
April	-3,109	-8,284	5,175	50,302	35,439	14,863	53,411	43,723	9,688
May	-3,919	-8,720	4,801	50,044	35,403	14,641	53,963	44,123	9,840
June	-2,824	-7,538	4,714	51,727	37,099	14,628	54,551	44,637	9,914
July	-2,781	-7,433	4,652	52,533	37,753	14,780	55,313	45,185	10,128
August	-4,455	-9,317	4,862	50,940	36,051	14,889	55,395	45,368	10,027
September	-3,530	-8,451	4,921	51,984	37,043	14,941	55,515	45,495	10,020
October	-3,520	-8,354	4,834	53,035	37,997	15,038	56,556	46,352	10,204
November	-3,968	-8,714	4,746	52,246	37,519	14,727	56,214	46,233	9,981
December	-5,603	-10,185	4,582	51,843	37,264	14,579	57,446	47,449	9,997
<b>2008</b>									
Jan. - Dec.	-695,937	-840,252	144,315	1,826,596	1,276,994	549,602	2,522,532	2,117,245	405,287
January	-61,486	-73,922	12,437	149,272	103,776	45,497	210,758	177,698	33,060
February	-61,749	-73,349	11,600	151,618	106,795	44,822	213,366	180,144	33,222
March	-59,420	-71,574	12,155	150,400	105,066	45,334	209,819	176,640	33,179
April	-62,141	-74,567	12,426	154,832	108,969	45,863	216,973	183,536	33,437
May	-60,528	-73,709	13,182	156,631	109,523	47,108	217,158	183,232	33,926
June	-60,177	-73,220	13,043	161,628	114,384	47,244	221,805	187,603	34,202
July	-64,891	-77,248	12,357	164,427	117,227	47,201	229,318	194,475	34,843
August	-60,913	-72,179	11,267	161,653	114,661	46,992	222,565	186,840	35,725
September	-60,140	-71,662	11,523	151,984	106,025	45,960	212,124	177,687	34,437
October	-59,389	-71,393	12,004	149,708	103,831	45,877	209,097	175,224	33,873
November	-43,247	-54,269	11,021	141,525	97,545	43,980	184,772	151,813	32,959
December	-41,858	-53,159	11,301	132,919	89,193	43,726	174,777	142,352	32,425

(1) Data presented on a Balance of Payments (BOP) Basis.

Source: U.S. Census Bureau, Foreign Trade Division.

But US seems it have learned its lesson. US realized that a weak dollar doesn't necessarily mean reducing the trade deficits. *Cheap money can buy only cheap things.* The only thing we have to add is that – because the US Dollar current international status as world's reserve currency – US Federal Reserve has been afforded to print tremendous amounts of fiat money, and *that's what created both the housing bubble and the huge trade gaps.* In spring this year we've been noticing some smart moves made by US. First, both FED and US Treasury have realized that US simply *could not* (and *should not*) a new China, hence, as first step, it has, somehow-somewhat, to invest overseas while continue to ease tensions on its own credit and capital markets. And it seems it has found some kind of solution to this problem.

FED have started some significant “quantitative easing” actions designed to inject some significant amounts of cash on the markets in order to revive the credit markets and the lending activity. Meanwhile the IMF (in which US is the main shareholder!) decided to lend money, especially to the Eastern Europe emerging economies but not only. Great investors like Warren Buffet and George Soros heavily criticized the FED action but they really meant what they said?! Among other issues they raised they were saying that, far from resuming the lending activity in the business sector, this move will only artificially and temporarily revamp the price of assets and of goods and services – finally conducting to inflation without gains in productivity (stagflation).

We argue that, at least for the time being, inflation is out question in US. We have only to remind that both values of PPI (Producer Price Index) and CPI (Consumer Price Index) were showing in recent months that inflation is well contained. More else, PPI has known its first Y/Y decline since 1955. Also, we have to add to the picture that for the month of April 2009 we've just seen a monthly decline in the CPI number (-0.1%M/M) and only a modest increase in the PPI number (+0.1M/M) while in their Y/Y dynamics both numbers have shown sharp year/year declines (source: [www.money/cnn.com](http://www.money/cnn.com)):

- April PPI Y/Y: - 3.6%
- April CPI Y/Y: - 0.4%
- August PPI Y/Y: - 6.4%
- August CPI Y/Y: - 1.9%

Also, we have to say that the recent monthly job losses in US were huge indeed and that could mean everything (anything!) but inflation. In the last three months we've seen dramatic declines in the non-farm payrolls number as well as well as in the jobless rate number (source: [www.money/cnn.com](http://www.money/cnn.com)):

- August non-farm payrolls M/M: actual: - 247,000; consensus forecast: - 247,000;
- August jobless rate: actual: 9.4%; consensus forecast: - 300,000;
- April non-farm payrolls M/M: actual: - 663,000; consensus forecast: - 650,000 ;
- April jobless rate: actual: 8.5% in line with expectations;
- March non-farm payrolls M/M: actual: - 651,000; consensus forecast: - 648,000;
- March jobless rate: actual: 8.1%; consensus forecast: 7.9%.

So, assuming that all money released by FED is to have the US economy as destination, still we don't see any inflationary pressures to develop at least for the next 6 to 12 months ahead. But, the key issue here is the money resulting from this

quantitative easing action taken by FED has not US economy as main destination! The last G20 meeting (April the 2<sup>nd</sup> 2009) has given free way for 500 billion dollars at the IMF disposal in order to help emerging economies.

We did notice that the main contributor - as a sovereign country – to this kind of “world stimulus package” is, actually, the United States of America (100 billion dollars)! So, US are due to become the main creditor of the world, but in a very strange way – and that because US is also the main debtor of the world. *So, some third of those 300 billion dollars released by FED by purchasing long term T bonds are actually designed to finance emerging economies.*

### 3. CONCLUSIONS

At the last G20 meeting, the status of the US Dollar as world’s reserve currency was subject of serious discussion actually for the first time in the post World War II era. It seems, in the aftermath, that America has learned its lesson in recognizing that the “laissez-fair economic policy” and excessive deregulation in the banking system were mistakes. US wants to put an end to the “consumerism era” and to put its economy back on track by regaining in terms of productivity in order to generate a new kind of growth based more on added-value and less on assets. The ignition of such a process seems to be this main contribution it made to the IMF efforts in assisting emerging economies. These economies will restart to re-think their own kind of growth and are supposed to buy more capital goods “made in USA” and, so, lifting more pressure of its already 6 months sharp narrowing trade deficit.

Growing demand overseas for US made goods and services will stimulate the entire business sector and the US economy will start to generate some new and fresh liquidities. We also have to add to the picture that the average American homeowner will never-ever spend (especially on imported goods) the way he or she has done in the last decade. The US dollar is due to remain weak, at least for a while, and that will also be a “plus” for the American international trade position. As the US international trade will improve, this country will start to pay down its national debt. The US economic growth engine will never be the same it was in the last four decades. The work will be re-priced (and *re-prized!*) as well as capital gains. Last numbers, showing sharp declining US trade gap this year, seem to confirm this trend (Tab. 3, source: [www.money/cnn.com](http://www.money/cnn.com)):

**Table 3. US trade deficit**

<b>Month</b>	<b>US trade deficit (Billions of US Dollars)</b>
June 2009	- 27.00B
May 2009	- 26.00B
April 2009	- 28.50B
March 2009	- 27.50B
February 2009	- 26.00B
January 2009	- 36.00B

Our guess is that “easy money policy” will reach its end sooner rather than later and that because *the US economy has an enormous potential of growth*. In this kind of respect we have to remind that this economy produced reasonable growth at 140 – 150 dollars/oil barrel and the recent sharp decline in oil prices has created a huge “productivity reserve” by diminishing energy costs in the entire US business sector. So, the profit margins will benefit, too.

On the other hand, we have to notice that US is actually the only country being in a position to lend money to the world (and so, being an important *world investor*), directly or via IMF, with no bad effects on its own economy. That could happen because any other big dollars detainer (big exporters like China, for example, that has the US dollar as main currency in its reserves and continues to buy US debt) that eventually has intended or do intend to lend US dollars to the world will reach nothing but undermine its own economy by putting down the value of the dollar and diminishing its own reserves. *As many analysts already noticed, big exporters like China have created economic engines for nothing!*

Also, we have to add that the US capital markets are the most liquid, the largest and the deepest in the world. These capital markets assure large doors for good capital coming to US as well as large doors for insane capital leaving US. In this kind of respect we have to notice that US Treasury made its moves by using market instruments while the FED’s quantitative easing measure is, basically, an open market action. The US economy is an innovation-based, versatile, and very dynamic one. Its workforce is the most flexible and mobile in the world. By re-thinking the capital distribution and re-pricing work, the US government will encourage the development of new products (goods and services) with good outcomes in terms of productivity gains. As we’ve noticed earlier, the average American consumer’s behaviour has changed dramatically in recent months and is due to continue this way. As the Americans will start to leave the consume-on-debt behaviour by dropping down their credit cards and to save more, the behaviour of the banking system will also change by switching from finance consumption to finance investment-based activities.

It’s time to remind that US still has the most powerful and prestigious academic system in the world. Its well-known universities (MIT, Harvard) are still the places where the world top researches do work and put out their results. It is to expect that some of those results will soon reach some interests in the economy and will attract investments in order to create those new products we were talking about.

At the last G20 meeting the American voice was a little bit milder than usually, but, while the US dollar is contested indeed but nobody sees a valuable replacement for it, US is to remain the largest and the most powerful economy in the world and, of course, it will use the power of the dollar as the single world reserve currency.

The last FED action will relieve the world economic tensions and will be a support for growth to the developing countries (like Romania!). Those countries will start to consume more than they do now and the IMF will watch closely to their economic policies, avoiding mistakes made in the past. The world has changed dramatically in recent months but the economic laws remain, basically, the same.

The economic war will (call it “global restructuring” scenario!) continue in reaching worldwide dimensions that world has never seen before. The US economy

will face fierce challenges in fighting with its deficits but exporters like China and – why not ?! - Germany will face even tougher tasks. These big exporters have built their economic policies on the assumption that the US consumption market is kind of “black hole” and is to remain this way forever. They were deadly wrong – Germany output has already fallen 6% Y/Y and China’s recent slowdown has never been seen in the last two decades. Oil exporters like Russia and Arabic countries that built their economic plans and budgets assuming the oil price will remain above 100 US dollars/barrel will also be in trouble. The US mood to consume-on-debt has change dramatically. The world economy itself is about to experience dramatic changes. One thing will remain in place, at least for the foreseeable future: the US Dollar will remain the world reserve currency.

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## **ABOUT INCREASING OUR SYSTEM PERFORMANCE IN ECONOMICAL APPLICATION BY SPEEDING UP THE SYSTEM BOOT WITH WINDOWS XP**

**SORIN MIHAIL SAV \***

**ABSTRACT:** *Do we ever wonder how fast our computer actually is? Of course, it says that it is a Pentium at 3.0 Ghz on the box in which the system came but the speed of the CPU is not the only factor in determining how fast our system actually is. The true speed of our computer is determined by the speed of all of our hardware, such as the speed of data written and read from the hard drive, the speed of the RAM, and the speed of the front side bus of the motherboard.*

**KEY WORDS:** *Boot, Bios, Post, Windows, Device, Service*

### **1. INTRODUCTION**

We'll analyze the system to determine exactly how fast it is and how we can make it faster. We need to understand the limitations of our hardware and also to be able to identify possible bottlenecks in our system, before starting to make our computer run faster. Windows XP has a lot of great features and visual enhancements that makes it attractive. However, with all of the new features and attractive effects, the operating system has a higher system overhead, which means our hardware has to work even harder. If we do not always have the fastest hardware, this will help us to get the most out of our current hardware by reducing the heavy workload put on it during the boot up process.

Every personal computer has a system basic input/output system, or BIOS, which is what takes control of our computer the moment we turn it on. The screen that we first see when we turn on our computer is called the *power on self-test screen*, better known as the *POST screen*. If we purchased our computer from one of the major computer manufacturers, this screen is often hidden by the manufacturer's logo. To get rid of this logo from the screen, just press the ESC button on our keyboard; we'll then see what is going on in the background. At this stage in the system boot, the BIOS is probing the hardware to test the system memory and other device connections. Once

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the POST is completed, the BIOS proceeds to look for a device to boot from. Once it finds our hard drive, it will begin to load Windows.

The BIOS also acts as a main system component control panel, where low level settings for all of our hardware devices are made. The device boot order, port addresses, and feature settings such as plug and play are all found in the BIOS setup screens. For example, if we want to change the order of the drives that our computer checks to boot from, then we will want to modify the device boot order. I have to modify this setting almost every time I install Windows because I want my computer to boot off of the CD-ROM to launch the Windows XP setup application instead of booting off of the operating system on my hard drive.

BIOSs on each and every PC may be made by different companies or accessed in different ways. Nevertheless, the most common way to access the setup screen is to press F2 or the Delete key when the POST screen is displayed. If our PC doesn't allow us to access the setup screen in this way, consult our computer documentation or contact our computer manufacturer for instructions. While we are making changes in the BIOS, we have to make sure do not accidentally change any other settings. If we accidentally change a value of a setting and do not know what to change it back to, simply exit the BIOS setup screen as the on-screen directions indicate and select Do NOT Save Changes.

## **2. CHANGING THE BOOT ORDER OF OUR DRIVES <sup>[2]</sup>**

Most computers are set up so that when we first turn on our computer, it will check to see if we want to boot from other drives besides our hard drive. It will automatically check to see if we have a bootable CD in our CD drive. If our computer has a floppy drive, it will check to see if we have a boot disk in the floppy drive. Then, once it has checked all possible locations for a boot disk, the system will default to our hard drive and start booting Windows. What are the benefits of changing the boot order of our system devices? If we modify the order of the boot devices so that the hard disk is placed at the top of the list, the system does not have to waste time checking other devices for boot records. Just by changing the order of the devices, we can save anywhere from one to several seconds off of our boot time, depending on the speed of our hardware. What are the consequences of changing the boot order? Changing the boot order will not hurt our system in any way if we do it correctly. If we remove our hard drive from the list and save the BIOS settings, we will get a pleasant surprise when our computer reboots – a statement that the computer cannot find any operating system. If we happen to get that message, then just reboot by pressing Ctrl+Alt+Delete and go back into the BIOS settings and make sure that we select our hard drive as a boot device. Once we have done that, our system will be back to normal.

Another possible issue that we may encounter is simply a matter of inconvenience. Once we change the boot order of the system devices so that the hard drive is listed first, we will no longer be able to use system restore CDs or floppy boot disks. If something has happened to our computer and we need to boot off of those drives to restore our system or run diagnostics, just go back to the BIOS and lower or remove the hard disk from the first boot device.



### 3. USING THE QUICK BOOT FEATURE OF THE BIOS <sup>[2]</sup>

All systems initialize in more or less the same way. During the power on self-test mentioned earlier, the BIOS checks the hardware devices and counts the system memory. Out of all of the different types of system memory, the random access memory, better known as RAM, takes the longest to be counted. Counting the RAM takes time, and on a machine that has large amounts of RAM, this calculation can take several seconds. For example, a machine that has 2048MB of RAM may take up to 10-11 seconds just to count the memory. On top of the RAM counting, a few other tests need to be done because our computer wants to make sure that all of the hardware in our computer is working properly. All of these system tests are not needed every time we boot, and can be turned off to save time. Most BIOS's offer a feature called quick boot. This feature will allow the user to turn off these tests. Other BIOSs only allow us to turn off the memory check, which will still cut down on a lot of time. Use of the quick boot feature or the disabling of the memory check will not harm our system. In fact, there are even some computer manufacturers that ship their computers with these settings already optimized for performance. The only downside to disabling the tests is the rare situation in which our RAM self-destructs; the BIOS will not catch it and we may receive errors from the operating system or our system could become unstable. If we notice that our system becomes unstable and crashes frequently or will not even boot, try going back into the BIOS and re-enable the tests to find out if our system's memory is causing the problems.

#### 3.1. Modifying the operating system boot

Other hacking methods are still available that will shave a few more seconds off the boot time. For example, we can cut timeout values and slim down the system to get rid of all of the extra features and services that we do not use or need. We have the following ways to do so:

**Lowering OS timeout values.** If we have more than one operating system installed on our computer, we'll have to deal with the OS Selector that the Microsoft installer configures during installation of another operating system. By default, the OS Selector gives us 30 seconds to select an operating system before it reverts to the default operating system. The only way not to wait 30 seconds is to select the operating system we want to use right away. If we use one operating system most of the time, we would definitely save time if we set that operating system as the default and lowered the timeout value to 1 or 2 seconds. That way, we should not have to select an operating system every time we turned on our system or wait 30 seconds before doing so. With Windows XP, both Professional and Home, changing the timeout value is simple if the operating system that we use primarily is already the default.

#### 3.2. Disabling the system boot screen

So, are we enjoying the fun blue bars moving across our screen when our system starts up? Not? Are we finding that we can live without the daily reminder that

we are running Windows XP? If so, then we might want to consider removing the boot screen. One added advantage to doing so: We shall be getting a boost of performance in return. Disabling the boot screen might only save a fraction of a second off our boot time. But keep in mind, every fraction of a second counts. This performance improvement works on a very simple principle. It takes time for the computer to do anything. Taking away some work that it has to do, such as loading the boot screen, will free time that it can spend loading our system files instead. The process for disabling the system boot screen is similar to the process for modifying the default operating system in the boot file. If we do not have any other operating systems installed on our system, then we will have to create our own boot.ini file to place in our drive root (that is, the c:\ drive). I am going to show how to create a file first, and will then show how to modify the boot.ini file if we already have one in our drive root or have multiple operating systems installed.

### 3.2.1. Creating the boot.ini file <sup>[1]</sup>

This section will show us, how to create a boot.ini file for our computer if we have just one operating system installed and we do not already have a boot.ini file in our drive root. To get started, let's go over what the boot.ini file looks like.

The boot.ini file that disables the boot screen looks like the following:

```
[boot loader]
timeout_0
default_multi(0)disk(0)rdisk(0)partition(1)\WINDOWS
[operating systems]multi(0)disk(0)rdisk(0)partition(1)\WINDOWS_
"Microsoft Windows XP Professional" /fastdetect /noguiboot
```

The above boot.ini file is pretty standard except for the addition of the /noguiboot to the last line of the file. That is the parameter that tells Windows to start up without using the graphical user interface boot screen. To get started, open up a copy of Notepad, found in the Accessories menu of the All Programs entry, in the Start Menu and follow these steps:

1. On the first line of the file, type in [boot loader].
2. On line 2 of the file, key in timeout\_0 so Windows does not show the boot selection screen at all. We don't want this anyways because we only have one operating system installed on our computer.
3. On line 3 of the file, type in default\_multi(0)disk(0)rdisk(0)partition(1)\WINDOWS so that Windows knows where to look on our hard drive to start the operating system.
4. On line 4, type in [operating systems].
5. On line 5, type in multi(0)disk(0)rdisk(0)partition(1)\WINDOWS\_"Microsoft Windows XP Professional" /fastdetect /noguiboot to start up Windows with the /noguiboot parameter to disable the boot screen.
6. Click the File menu bar item and select Save As.
7. Type Boot.ini in the File name box and change the Save as type to All Files.
8. Then, change the Save in directory to our drive root, which is usually Local Disk (C:).
9. Click the Save button and we are now finished.

We can now close Notepad. The next time we reboot our computer, we will not see the boot screen.

### **3.2.2. Modifying an existing boot.ini file**

If we have a multi-boot system or already have a boot.ini file, then all we have to do is open up our boot.ini file in Notepad and follow these steps:

1. Locate the Windows XP line in our boot.ini file that will look similar to “multi(0)disk(0)rdisk(0)partition(1)\WINDOWS\_“Microsoft Windows XP Professional” /fastdetect”.
2. Type /noguiboot at the end of the line one space after /fastdetect.
3. Click File and select Save.

These instructions will remove our boot screen. But should we change our mind after we made the change, it is very easy to get the boot screen back. Simply remove the /noguiboot from the boot.ini file. If we are working from the file that we created or copied from the CD-ROM, just delete it.

## **4. DISABLING UNNEEDED HARDWARE DEVICES**

Every time we turn on our computer, it has to load and initialize all of our computer hardware. Keep in mind: Our computer has a lot of devices that we do not always use. These extra devices are loaded and initialized during every boot. When it does so, our computer’s performance is slowed down. Windows XP is now a lot more efficient and smarter during the boot-up cycle. In previous versions of Windows, the system would load one hardware device driver and then load another device driver in a series. The only problem with loading the hardware this way was that it could slow down the boot dramatically if one hardware device was taking a long time to initialize.

One well-known culprit of this is the network card which pauses to wait to get an IP from a DHCP server. Windows XP has a new way of initializing the hardware devices when the system boots up. Instead of loading the hardware device drivers in series, it now loads some of them in parallel. This allows the boot to be much faster. Although the hardware devices are loaded in parallel instead of series, the addition of more devices that the system has to load drivers for will probably still slow down the boot. To disable hardware devices, we will want to use the Device Manager.

### **4.1. What hardware devices should i disable?**

Each user uses (or doesn’t use) devices differently, depending on the system setup. Nonetheless, some classes of devices are more commonly disabled than others. Knowing which ones will help, we make a decision as to what devices we should disable. The following classes of devices are frequently disabled:

- Network Adapters: Especially on Notebook computers, there are often more than one network device. Disabling the network devices that we do not use will definitely save we some booting time.

- Fire wire: If we have 1394 connections, otherwise known as fire wire, we might consider disabling them. Unless we are using our fire wire port to connect our digital video recorder to our computer, or have other external fire wire devices, we have no need to have this device enabled.
- Modems: Do we have a broadband connection? If so, then consider disabling our modem. If we rarely use it, disable it. If we ever need to use it again, just re-enable it. - Multimedia devices: Our computer has lots of multimedia devices. Take a look at the “Sound, video, and game controllers” section in Device Manager. We will find a lot of device drivers that are loaded during our boot. Some are used by all users, but others will find a few that they do not use. For example, I do not use my game port or my MIDI device, so I disabled both of those.
- PCMCIA: If we are a laptop user, consider disabling our PCMCIA card controller, located under “PCMCIA adapters.” The PCMCIA (Personal Computer Memory Card International Association ) slot is a special expansion slot that is rarely used today on laptops except for wireless and wired network cards and card reader attachments for compact flash and other solid state memory cards. Most laptops now have built-in network adapters and some even have built-in wireless adapters. If we do not use our PCMCIA adapter, it is yet another device that can be safely disabled.

## **5. REMOVING EXTRA FONTS FOR SPEED <sup>[4]</sup>**

Windows XP has over 250 different font variations that it loads for use when the system boots up. Of these 250 variations, only a handful are used on a regular basis. Most likely, we really only use the core Windows fonts, such as Tahoma, Times New Roman, Arial, Verdana, Trebuchet, and MS Sans Serif. All of the other fonts can be removed from the fonts folder. As we can imagine, loading over 250 fonts is something that will take the system more time to do. Users who have installed a fonts CD, which usually has hundreds of fonts, on their systems are increasing the amount of work their computer has to do during startup. Simply put, loading a lot of fonts will take more time, because the system has to load and index each font. Thankfully, there is a very simple answer to this: Just remove the fonts that we do not use from our font directory. We can go about removing the unneeded fonts from our font directory in a number of different ways. The best way is to move the unused fonts to a separate folder on our system so that if we ever want to use one of those extra fonts again, we just have to copy it back to the fonts folder.

## **6. DISABLING UNNEEDED SERVICES <sup>[1]</sup>**

A service is a software application that runs continuously in the background while our computer is on. The Windows operating system has numerous services that run in the background that provide basic functions to the system. Network connectivity, visual support, and external device connectivity such as printer services are all examples of the types of services that the Windows services provide. Each of the services running in the background take up system resources, such as memory and

CPU time. Also, during the booting of the operating system, the service has to be loaded. On most computers, there are nearly 20 services that are loaded upon startup. Of these 20 services, only a handful are system-critical services. All of the others can be disabled. In order to disable a service, first we will need to know more about what the most common services do. We have to notice that before we begin changing our service setup, set a System Restore Point to easily restore our system to an earlier configuration. However, be careful when we restore from restore points. Any applications or files that were created after the system restore point will be deleted when reverting to an earlier restore point. To get the maximum amount of performance out of our system, we have the option of disabling all of the services on our computer that are not critical to the system. This would take away a lot of the nice features and conveniences of Windows, but we should have a much faster machine. The following is a list of system-critical services that should not be disabled. Feel free to disable all other services: Com+ Event System, Cryptographic Services, DCOM Server Process Launcher, DHCP Client, DNS Client, Event Log, IPSEC Services, Workstation, Shell Hardware Detection System Event Notification, Protected Storage, Network Connections, Plug \_ Play, Print Spooler, Remote Procedure Call, Secondary Logon, Security Accounts Manager.

***Recommended service setup***<sup>[1]</sup>. The bare-bones system service setup is a good setup for optimal performance. However, don't we want to have some of the conveniences of Windows XP? Check out the recommended services to disable shown in the following list. If we follow these recommendations, we will cut down on our boot time but we will also have the nice features and conveniences of Windows XP. Disable the following services: Background Intelligent Transfer Service, Distributed Link Tracking Client, Error Reporting Service, Fast User Switching Compatibility, Help and Support, Indexing Service, Messenger, Machine Debug Manager, Network Location Awareness (NLA), Portable Media Serial Number Service, Remote Registry (Only included with Windows XP Pro), SSDP Discovery Service, Terminal Services, Windows Image Acquisition (WIA), Wireless Zero Configuration (If we have a wireless network card, do not disable this one), Windows Time, WebClient, Task Scheduler.

## 7. OPTIMIZING THE LOCATION OF THE BOOT FILES<sup>[3]</sup>

The speed at which our files are read depends on where the files are located on our hard drive. Also, when a file is fragmented (which is when one file is scattered all over the disk), it takes more time to access that file than if all of the pieces of the files are side by side. Using tools that are available in Windows and other third-party utilities, we can defragment and place the Windows boot files on the disk where they will be accessed faster. Windows XP has a new feature called the Prefetcher, which determines what files on the hard drive are used during the boot process and where they should be placed on the disk for optimal speed. Although this is not the only benefit that the Prefetcher provides, it makes optimizing the location of the boot files easy.

**Using disk defragmenter**<sup>[4]</sup>. Windows XP includes a boot defragmenter, but it is a little tricky to get it to run. By default, it is run only in the background and cannot be started directly by a user. After our computer has been idle for some time, between 5 and 30 minutes, the system will read the Prefetcher's boot data and start the defrag. The system defrag is run in the background and is invisible to the user. Eventually, if we leave our computer on long enough, it will defragment the boot files. Windows is getting smarter and smarter. However, there is still one problem: There is no possible way to directly initiate a boot defrag. The only way is to leave our computer on for a little while without using it at all. If we are impatient and do not want to wait, then I have a solution for us. As I mentioned earlier, the system will only initiate the boot defrag when the system is idle. Typing in a command that will start the boot is not possible. However, we can tell our computer, even when it is not idle, to process the idle tasks. This will indirectly start the boot defrag. Although because the boot defrag is most likely not the only idle task waiting to be run, there will be other processes run as well, which can cause our computer to appear to be doing a lot of hard work as it completes all tasks. During this time, our computer should not be used for any intensive activities, such as playing games. If we try to use our computer while the idle tasks are being processed, we will notice slow performance until the tasks are completed.

## 8. SUMMARY

Throughout this paper, we discovered many ways to lower the amount of time it takes our computer to boot up. First, we saw how to change some of the BIOS settings that can optimize our computer for maximum boot speed. Then, we discovered how we can remove our boot screen to shave off some more time. After that, we saw how we can disable other parts of Windows, such as hardware, fonts, and services, that we may never use, all of which take up time when our computer starts up. We found out how we can optimize the placement of the files used when our computer boots up, using the Prefetcher and other disk defragment tools.

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## **THE IMPORTANCE OF ABC MODELS IN COST MANAGEMENT**

**MIROSLAV ŠKODA \***

**ABSTRACT:** *The end of the 1980's marked the beginning of new management era. Organizations such as CAM-I (Computer Aided Manufacturing-International, later renamed to Consortium for Advanced Management-International) and the National Association of Accountants had introduced Activity-based costing - a cost accounting technique which charges organization's indirect costs to the activities that cause the costs to be incurred and then distributes costs of activities to the products that cause the activities to be performed. Activity-based costing as a management tool has proved its relevance and found its proponents among academics and managers. Introduction of the time aspect into Activity-based costing proved that it is still attracting attention and undergoing development in order to become more accurate. The paramount goal of the implementation is to prove the increased effectiveness and superiority of cost management when using Activity-based costing. It will be achieved by allocation of overhead costs to products with the intention to determine unit costs. This process of allocation will increase the reliability of cost information and improve the information base for product decisions. Moreover, we expect that this approach will more or less alter the profit margin of individual products. This kind of information is very useful when evaluating price-related or keep/drop decisions.*

**KEY WORDS:** *ABC model, cost management, cost driver, implementation, overhead costs, direct costs, indirect costs*

### **1. IMPORTANCE OF MANAGEMENT COST ACCOUNTING**

Management accounting is defined as a system that is concerned with the provision of information to people within the organization to help them make better decisions and improve the efficiency and the effectiveness of existing operations (Drury, 2005). Management accounting as one of the subsystems of accounting was quite underdeveloped throughout the 20<sup>th</sup> century, but regained its position back in 1980's when professionals and academics started to criticize its lack of innovation and relevance of its methods in rapidly changing environment. One of the most important

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and pioneering title was the Johnson and Kaplan's book called *Relevance Lost: The Rise and Fall of Management accounting* published in 1987.

This underdevelopment can be attributed mainly to the demand for product cost information for external users and simple and inaccurate methods that were used for allocation of costs to products (Johnson and Kaplan, 1987). These product costs designed primarily for financial accounting purposes were then used in day-to-day decision making. Unlike financial and tax accounting, which serve to keep the organization in compliance with laws and regulations, an organization's management accounting system can actually make or break an otherwise sound business (Hicks, 1992). This statement is supported by the following simple ranking of users of management information.

It is apparent that managers use the vast majority of cost information for decision making in day to day business. Shareholders, creditors and tax offices that belong to external users care most of the time about income that is derived from their shareholdings, ability to meet financial obligation, tax liabilities and receivables, respectively.

**Table 1. Users of cost information**

Use	User
Revenues and overall inventory valuation, costs of goods sold used for profit computation	External users
Compliance with GAAP	External users
Strategic planning	Management
Capital budgeting	Management
Operational planning	Management
Operational budgeting	Management
Process cost control	Management
Product pricing and profitability	Management
Product cost control	Management
Financial analysis	Management

Source: Hicks D. (1992): *Activity-Based Costing for Small and Mid-sized Businesses: An Implementation Guide*

Apart from the provision of information to managers, management accounting has also other functions. Namely, provision of relevant information for planning, control and performance measurement and allocation of costs between costs of goods sold and inventories for internal and external profit reporting and inventory valuation. Some authors exempt the allocation function from the definition of management accounting and define so called cost accounting that deals only with this issue.

Cost accounting is defined as a system that measures and reports information that relate to the organization acquiring and/or consuming resources. Furthermore, it provides information for management as well as financial accounting (Horngren, Datar and Foster, 2003). Cost accounting, from a different point of view, is also concerned with cost accumulation for inventory valuation to meet the requirements of external reporting and internal profit measurement, but on the other hand the distinction



between management and cost accounting is extremely vague (Drury C., 2005). For purposes of this thesis, we will prefer the aforementioned definition of management accounting comprising the allocation function.

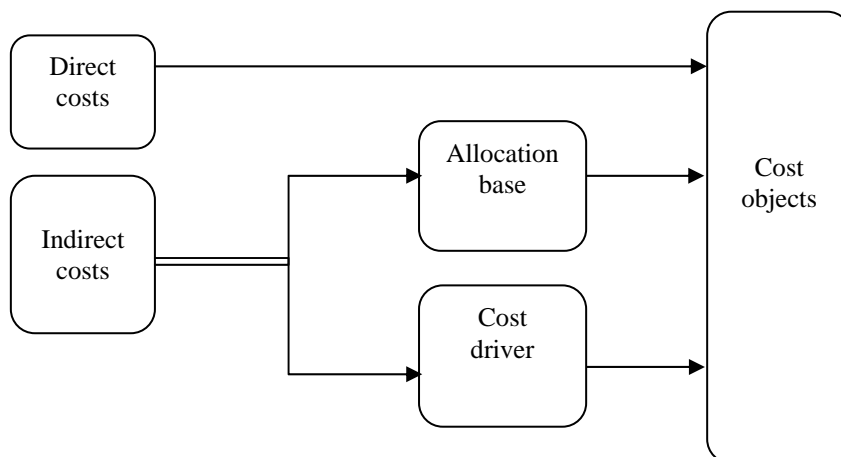
There is a need to mention different types of costing systems and describe the basic terminology. There are 3 main costing systems differing in terms of methodology, accuracy and relevancy for decision making:

1. Direct costing system
2. Traditional absorption costing system
3. Activity-based costing system

*Direct costing system* is the simplest system in terms of cost assignment because it allocates only direct costs to cost object. It is obvious that the biggest disadvantage is that it does not allocate indirect costs (overheads). It is only a partial system useful for business with small or negligible share of overheads on total costs. This system would not work for businesses with high share of overheads because the process of assignment would be arbitrary and lead to faulty and misleading decisions.

*Traditional absorption costing system* and activity based costing system allocate indirect costs to cost object. The purpose of cost allocation technique is to find an indirect measure how to allocate indirect costs to cost object. This can be done using measures such as allocation base and cost driver. These are measures that establish some kind of consumption pattern among indirect cost and cost object.

When the allocation base significantly captures the relationship between the indirect cost and the cost object then the term cause-and-effect allocation is used. In case that the allocation base is rather a weak measure then arbitrary allocation is the appropriate expression. An example of arbitrary allocation is the usage of direct labor costs/hours as an allocation base for allocating indirect costs to cost object. As direct labor costs/hours do not determine the amount of indirect costs incurred, this would likely lead to inaccurate allocation of indirect costs.



Source: Drury C. (2005): *Management accounting for business decisions*

**Figure 1. Process of cost allocation and cost tracing**

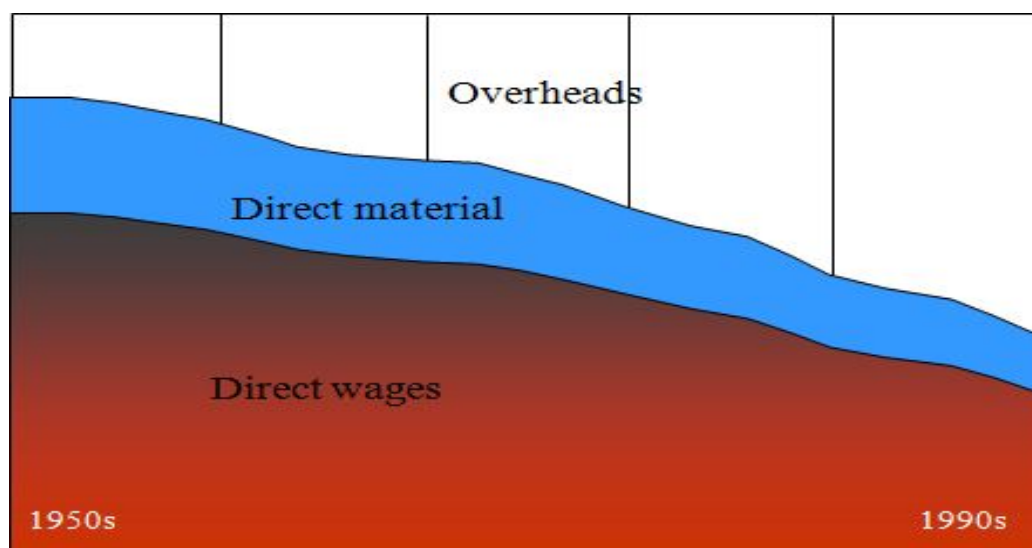
The suitability of traditional absorption costing system may be questionable and managers may start to feel concerned whether it is the right moment to revise this kind of costing system. We picked up eight points set by Hicks D. (1992) that can serve as one out of approaches how to evaluate the costing system and discover the need for change:

1. *Direct labor operations have been replaced with automated equipment since the costing system was lastly revised.* This is a very crucial point because it reveals a considerable deficiency of the traditional costing system. When direct labor remains the allocation base for indirect costs it may distort the process of allocation of indirect costs to cost object because it no longer determines the relationship between consumption of resources and cost objects.
2. *Indirect costs are becoming a much larger percentage of total costs or overhead rates have been increasing during recent years.* Nowadays, manufacturing companies substitute labor with capital, mainly machinery, what in turn increases the importance of indirect costs. This proves that direct labor as a base for allocating indirect costs is irrelevant as it is substantially less than indirect costs and as it was mentioned in the first point there is no direct relationship. That's why there is a need to revise this allocation base by finding a better cause and effect relationship.
3. *All overhead is applied to cost object on the basis of direct labor costs/hours.*
4. *Only a few overhead application rates or only one plant-wide rate is in use.* When the company fails to recognize that processes in the manufacturing process consist of different activities that consume different proportions of indirect costs, it will lead again to distortion of product costs. The main reason is that one plant-wide rate assumes that all processes are equal and can be justified only in case that company's products consume indirect costs in approximately the same proportions. This kind of assumption is rather unrealistic and that's why sufficient number of overhead rates should be used.
5. *The organization appears to be competitive on one end of its product line, but not on the other end.* Let's assume that a company manufactures products A and B. Product A is a high volume product B is a low volume product. If the company applied the aforementioned direct labor allocation base for overhead allocation then product A would be overpriced and costs of product B would be understated.
6. *Operations exist that do not require the same number of operators.* Let's assume that there are two crews staffed by 2 and 1 worker, respectively, and that cost of one working hour is the same. After using direct labor allocation base, product costs would be distorted. This kind of situation could happen in any organization with heavy machinery that is operated by varying number of workers.
7. *Many operations are set up, started and then run with little or no human intervention.* Operations that are automated and run irrespectively of direct labor intervention consume the largest part of indirect costs. If the distribution of indirect costs is based on direct labor allocation base then it will result in distortion of product costs.

8. Accounting personnel spend a great deal of time doing special studies to develop answers to fundamental questions. If special studies have to be conducted to determine the product/product line and customer profitability then the costing system is not able to provide relevant information for day-to-day decision making.

## 2. RISE OF ACTIVITY BASED COSTING

It is important to raise the following question in the beginning: What gave rise to activity based costing? Figure 2 provides a figurative answer.



Source: own processing

**Figure 2. Change in the structure of costs after 1950s**

Recall that during the 2<sup>nd</sup> half of the 20<sup>th</sup> century overheads gained on importance because of their mounting share on the product's total costs. Before this moment direct labor represented a substantial cost item and it was believed that direct labor costs and overhead costs were very strongly correlated. Over the years as a percentage of total costs, direct labor and direct material costs were shrinking due to technological advancements and the strong correlation between direct labor and overhead costs became implausible.

In other words, product's total costs were significantly distorted, if using the outdated assumption of traditional costing system. Furthermore, business conditions changed dramatically as companies were no longer producing few products in massive volumes. Most companies produce and sell large variety of products that consume different amounts of overheads. This indicates that only little space is left to major simplifications concerning the determination of product's total costs.

Moreover, information and communication technology overcame the barriers of data gathering long ago, thus facilitating the rise of a more sophisticated costing

system called activity-based costing. It is very important to accentuate that traditional costing system provides inappropriate data for decision making. Afterwards, when managers and other employees are provided with reports with accounting data in them, they use that data regardless of its validity. On the other hand, existing data are not necessarily bad as much as they are somewhat distorted, incomplete and unprocessed.

**Table 2. General ledger and ABC data**

Chart of account view				Activity based view	
<b>Claim processing department</b>				<b>Claim processing department</b>	
	<b>Actual</b>	<b>Plan</b>	<b>Favorable/ unfavorable</b>		
Salaries	621.400	600.000	-21.400	Receive claims	31,500
Depreciation	161.200	150.000	-11.200	Analyze claims	166,000
Supplies	58.000	60.000	2.000	Handle claims	32,500
Other services	43.900	40.000	-3.900	Prepare documents for legal department	101,500
Rent	30.000	30.000	—	Resolve law suit	119,000
				Make copies	145,500
				Write correspondence	77,100
				Attend training	158,000
<b>Total</b>	<b>914.500</b>	<b>880.000</b>	<b>-34.500</b>	<b>Total</b>	<b>914,500</b>

Source: Gary C. (2002): *Activity based Costing: Optional or Required?* : ACE International transactions

The chart of accounts view provides information that is summarized in a monthly report of single responsibility center (claim processing department). Manager is not able to estimate the amount of controllable costs as well as has no insight into the content of work of employees from this point of view. Biggest disadvantage is that manager sees costs reported as lump sums. Activity-based costing resolves this problem by focusing on activities, that's why general ledger account balances are converted into activity costs. This new, converted ABC cost data can be used in making product, market or customer-oriented decisions.

Another difference is that activity based costing uses verbs and nouns in the so called Bill of Activities to denote individual activities. This wording gives certain flexibility because managers gain new insights into the work of employees and activities can be favorably impacted, changed, improved or eliminated.

To be further critical about chart of accounts, it represents accounting policy of the company and it serves more as a command and control tool. Managers are able to control the overspending of budget target and impose tighter budget restrictions if needed.

Apparently, activity-based costing is superior to traditional costing system, but it does not replace the traditional accounting system. It restates the same data and adds operating relationships to more effectively support decision making. Activity-based costing is not an accounting system, although it uses past information. Some opponents may criticize the relevance of past costs. But the opposite is true. The analysis of past

costs and profits reveal inefficiencies and repeatable causes of defects that cause some activities are unexpectedly costly and why specific products and customers are profitable while others are unprofitable. These conditions, if repeated, are likely to cause the same inefficiencies today or in the future. This means that knowledge of past inefficiencies can be an incentive to corrective actions towards efficiency.

Activity-based costing is an economic model designed to inform management about economics of its past, current and future operations. This is the reason why ABC cannot be referred to as accounting model because its utilization is not limited to past financial information. Budgeted, forecasted or even targeted expenses or quantity data can be the input for this model. This enables to predict the activity expenses and activity driver information to obtain estimated spending for future activities and resources. Used in this way, ABC becomes a powerful tool for budgeting future expenses. Using forecasted activity expenses, presuming efficient operations, ABC can be used as a target costing mechanism. Budgeted information can also be helpful in eliminating inefficient, non-value adding activities from operations. ABC model based on current and forecasted information can reveal whether patterns of past will persist in current or future periods.

Today the margin for error is slimmer. Companies cannot make as many mistakes as in the past and remain competitive at the same time. Price quotations, capital investment decisions, product mix, technology choices, outsourcing and make versus buy decision today all require keeping a closer look at. As more competitors understand better the cause and effect connection that drive costs and are fine tuning their processes and prices, the resulting price squeeze resulting from intense competition is making life for businesses much more difficult relative to the past. Knowing the real product costs, customer related costs and profitability is becoming vital. With ABC, companies can identify where to remove waste, low value adding costs and unused capacity plus understand what drives their costs.

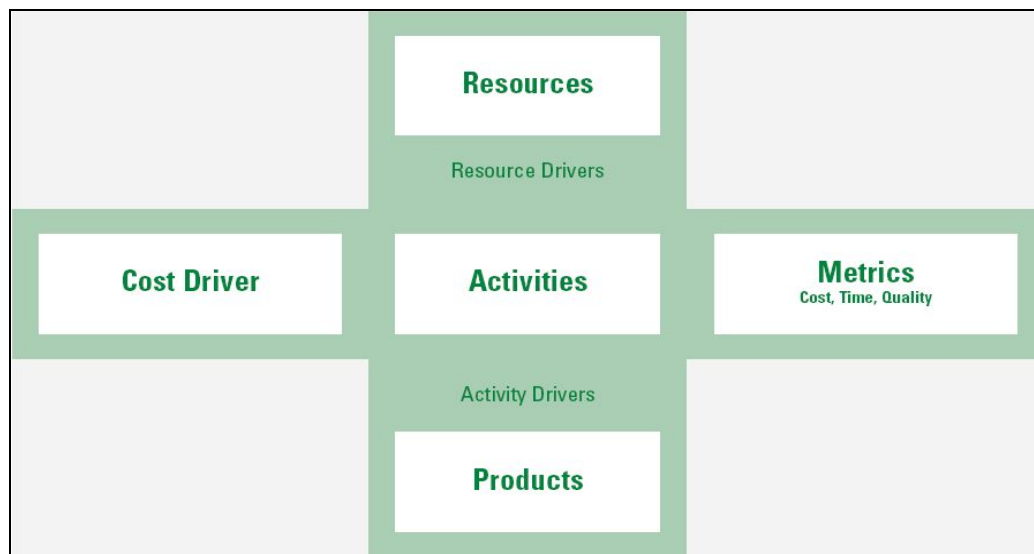
### **3. ABC CROSS**

ABC Cross was originally designed to provide image for ABC by capturing both the process and cost view of the company. This was done as simply as possible but the simplified ABC Cross does not capture the real value of cost accounting that emerged after 1980's (Euske, Vercio, 2007). The classical as well as the enhanced ABC Cross, which displays better the interaction of process and costing is going to be presented.

Original ABC Cross, called also CAM-I Cross (developed by Consortium for Advanced Management – International), was designed for two purposes. The first was to display the relationship among process and cost. The second was to design a graphic so that ABC teams could use it when selling the ABC concept to top management. Owing to the intended simplicity, designers did not include the whole input-transformation-output process and related resource flows. This means that if the original model is not used for the intended purposes, it can be a step backwards for the company. Inappropriate use of the model leads to large variety of cost accounting methods. Too much variability in measurement of customer and product processes

drives cost up, drives quality down and results in frustrated users of data (Euske, Vercio, 2007).

Explanation of the original ABC Cross is that products consume activities and in turn activities consume resources. Horizontal axis shows why costs are generated. Vertical axis depicts the flow of resources to products through activities but it can be misleading. When resources are on the top of this model, it may create an impression of resources driving products. It is useful to put products on the top of the diagram with the idea of products driving the need for activities that consume resources. This provides a more meaningful approach.



Source: Euske K.J., Vercio A. (2007): *Enhancing the ABC Cross: Management Accounting Quarterly*

**Figure 3. Original ABC Cross**

Peter Drucker's statement gives the best explanation for the next modification. He states that the organization's purpose is to create and maintain profitable customer. Majority of revenues originate from customers and therefore they are the most legitimate profit centers. If the customer satisfaction fails to produce sufficient amount of revenues, all other goals pertaining to shareholders, employees and wide public will not probably be achieved. Adding supplier as a crucial element in the process of delivering the product or service to customer will create a simplified value chain from customer to supplier.

As was stated previously, customer related decisions are one of the most important decisions. Strategy and planning decisions (regarding customers) work their way through to suppliers. These decisions, flowing to supplier, relate to balancing of capacity and resource demand and supply. Decisions, flowing back to customers, focus on the supply side of balancing capacity and resource demand and supply. Capacity related decisions are mostly undertaken in the process of acquiring and delivering the product or service to the customer. This includes the execution and control of management processes.

Moreover, products and services should not be looked at only as tangible products but also other features important for customer should be taken into consideration e.g. response, channel time. If the paramount goal of the company is to respond to customer's requirements, so called end to end process should be introduced for further explanation. A process can be identified as end to end process if it starts and ends with the customer.

End to end processes are of great importance because they include support and enabling processes (e.g. finance services, human resource services, technology services, supply chain management and business sustaining) that would otherwise pose major barrier for product delivery.

The most important contributions of cost measurement systems are providing relevant cost data to the management and providing that data sorted by driver (unit, batch, product, customer, idle). Providing cost data by driver requires it to be based on data used to manage capacity and resource demand and supply. Capacity measurement includes measurement of resources, activities and end to end processes at idle, nonproductive and productive level.

ABC hierarchy of activity drivers is very important because it minimizes the distortion of product costs. Recognizing the impact of costs driven by units of product, the number and type of batch requirements, the product itself, the customer, and the organization's administration is probably one of the most important contributions Robin Cooper has made to management accounting. Unit level activities are performed each time a product is manufactured. Cost drivers such as labor hours, machine hours and quantity of material processed are also used by traditional cost accounting. Batch level activities such as machine set up, processing a purchase order, production scheduling are performed each time a batch of products is produced. Traditional accounting treats them as fixed costs.

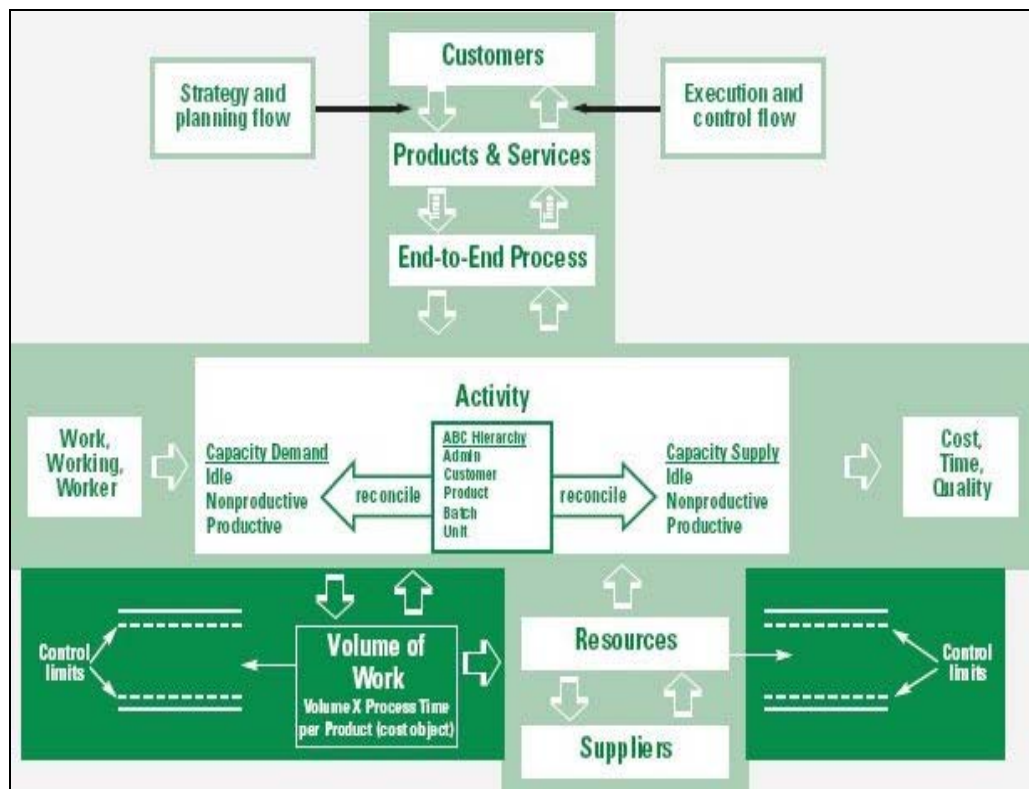
Product/customer sustaining activities such as maintaining and updating product specification and the provided support are enabling the production and sale of individual products.

Facility sustaining activities that support the facility's general manufacturing process and are unlikely to change (general administrative staff, plant management, property costs) are treated by ABC as irrelevant for decision making and unavoidable costs and should not be assigned to products.

If the ABC cross does not present the hierarchy of these activities and their cost drivers, ABC teams will remain focused on the unit level (Euske, Vercio, 2007). Furthermore, such ABC teams will add unit level activities and drivers to cost measurement system and the result will not be materially different from traditional unit based cost measurement system (Euske, Vercio, 2007).

Furthermore, to use the original definition of cost driver as anything that drives costs is very simplistic (Euske, Vercio, 2007). Three requirements for productivity management –work, working and worker are better source of cost drivers and managing them in the appropriate order results in better process improvement (Euske, Vercio, 2007). The process begins with the identification of products and services sold to customers. It further continues with process design determined to deliver that particular product or service at desired quality, cost and time.

If we want to balance the demand for and supply of capacity, we need to establish a common driver. Time fits this requirement because it ensures interconnection of staffing and capacity requirements. Companies that have a very complicated and differentiated manufacturing process, using time is the best way how to reduce cost subsidies of high volume products and customers to low volume products and customers. The time that will be demanded for activities will be included in the work standards. The supply of time to fulfill production requirements will be available in staffing or capacity data and will include time unavailable for work (meetings, trainings, idle time).



Source: Euske K.J., Vercio A. (2007): *Enhancing the ABC Cross: Management Accounting Quarterly*

**Figure 4. ABC Cross after several modifications**

A model without control is not a model. That's why comparing actual to standard figure is very useful. Therefore control systems should be introduced to monitor monthly volumes and related process time and resources compared to values computed by ABC. The ABC version of control systems is the ABC spending and volume variance analysis. Control systems, if constructed correctly, can assist the ABC teams to do the following: avoid chasing normal month to month variation, identify variances that require investigation and provide early warning signs that the ABC cost used in decisions may need an update in the near future (Euske, Vercio, 2007).



#### 4. CONCLUSION

In conclusion, the paramount goal, to prove the increased effectiveness and superiority of cost management when using Activity-based costing, is regarded as accomplished. The application part proved the superiority of activity-based costing system over traditional absorption costing system. The demonstration of distinctions among unit costs calculated by the traditional costing system and activity-based costing system was also accomplished. Moreover, a shift in the profitability of chosen products was pointed out. This shift showed that the information provided by the traditional allocation lacked reliability and led to arbitrary product related decisions.

Customer profitability analysis under ABC model shows that not every customer is a good customer and not all revenue is good revenue. Moreover, it emphasized the necessity of cautious approach to incurrence of customer-specific expenses. It also confirms the validity of the statement that customer specific expenses can have a very negative influence on the sales profitability, if not managed properly.

In addition, the structure of ABC model offered a different vantage point on the costliness of individual positions and proved that gross salary is not the ultimate factor to be considered. IT equipment, telecom expenses, position specific assets and other costs related thereto etc. changed the ranking of the costliness of individual position.

Finally, there is a need to point out that activity-based costing system is not a single shot costing system which requires only regular update of cost drivers and activities when implemented. Changes in the employee's estimations of the percentage of work fund dedicated to activities, acquisition/divestiture of equipment together with changes in incurrence of other overhead costs have to be recorded so that the costing system is not a step backwards for the company.

Further issue that should be tackled in the foreseeable future is the cost of unused capacity that the conventional activity-based costing does not take into consideration. If management of the companies perceives this fact as a barrier hindering the quality of provided information then activity-based costing should be regarded as the option that overcomes this deficiency.

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## **UNDERSTANDING ACCOUNTING PRACTICES ON CARD BASED BANKING OPERATIONS**

**ADELA SOCOL** \*

**ABSTRACT:** *The purpose of this study is to survey the accounting of the on-line banking cards operations, based on Romanian experience. Our paper belongs to the technical studies that analyse the concrete way to reflect the cards operations at the level of the banking societies from Romania. The paper contains a study cases part, which presents the concrete methods of accounting reflection based on banking cards operations. We try to underline the importance of a flexible banking accounting system, which should provide the users with the information needed.*

**KEY WORDS:** *cashless payments instruments, accounting banking settlements, flexible banking accounting system*

### **1. AIM AND RESEARCH METHODOLOGY**

We choose the banking cards as the object of the study based our approach on the importance of the cards in banking field. The cards payments book the attention of the banking customers and of the various authorities, particular central banks. The importance of the cards' utilization in an economy is based on the main characteristic of the cards as a potential substitute for cash. Cards demand central banks to settle monetary policies concerning e-money and to establish the general legal framework of the cards' payment system and their evidence in banks, inclusive the accounting.

In many countries, payments by card represent the vast majority of cross-border retail transactions and are the most common means of effecting payments over the Internet. As for the card market in the euro area, ever since early 2008 card systems in euro were brought into line with SEPA Single Euro Payment Area framework for such payments, whereas the banks that joined SEPA and participate in national card schemes are expected to finalize this process by end-2010. Thus, any cardholder will be able to make payments and withdraw cash in euro across SEPA, in conditions similar to those on national markets.

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Since banking accounting must timely yield the necessary information to make management decisions the preparation of accounting structures should emphasize the economic and financial contents of information rather than keeping a traditional approach where the aim is limited to safeguarding assets and registering liabilities. We underline the need of flexibility in the banking accounting information systems, based on our considerations on the specific features of the banks by comparison with the non-banking entities.

The study is structured on chapters that present the theoretical background in the accounting banking cards operations and new trends in the banking accounting. Also, the paper contains a technical part, which presents the concrete methods of accounting reflection based on on-line banking cards operation. All these mentioned structures allow us to draw the conclusions in the final part of the paper.

In order to support the relevance of our scientific research we will describe the actual stage of knowledge in the area related to the subject proposed, based on concrete references to publications - quoted magazines, international conferences volumes, specialized books etc. - accompanied by the reference bibliography specification.

The direct documentation tasked to assure the information and the knowledge of the related theme were realized at the level of several banks and their accounting experiences in banking cards operations. The paper interprets the accounting of banking cards operations and attempts to identify and analyze the challenges of the banks in bookkeeping of cards operations.

The results based on data for Romanian banks reveal that the accounting of banks in the domain of the cards operations has been improve in the last years, according to the development of the on-line operations with cards. This paper provides specific current information and recommendations regarding the on-line operations with cards and their accounting, that is of interest to a wide audience for a banks, customers and analysts.

## **2. THEORETICAL BACKGROUND**

Studies on accounting of banking cards operations are relatively limited; the specialized papers prefer the descriptive or much too technological approach of banking cards operations or infrastructures. The research papers describe the banking accounting in the context of the e-banking accounting systems (Lin et al., 2005), presented a prototype bank accounting system based on the e-bank framework. The successful implementation of this system will provide banks/customers an increased level of comfort allowing transaction processing to be continued in an accurate, complete and highly controlled environment.

General approaches of the banks' accounting dwell on the harmonization in the banking accounting field (Anagnostopoulos and Buckland, 2007), insisted on the potential behavioural implications of the new economic measurement attributes initiated by the International Accounting Standard Board (IASB) in their efforts to reflect more relevant, "true" underlying economic values as opposed to historical. The study captures perceptions and attitudes as to the future "behavioural" direction of

banks and provides a balanced argument between the rigours of historical cost accounting and fair value accounting.

Another general approach in the domain of the banking accounting refers to relationship between management accounting and organisational strategy, based on the study case of the recent deregulation of the banking industry (Hong Kong example) and the expansion of products that have been offered by banks during the last five years (O'Connor and Cheung, 2007).

Also, without talking in different ways, ignoring the problems of the accounting of the banking cards operations, the specialized literature in the banking cards' domain tends to focus on card frauds and electronic payments. In the '90 years, the cashless society has been described as the place where clumsy and expensive-to handle coins and notes are replaced by efficient an electronic payment initiated by various types of plastic cards is a tantalizing prospect for the twenty-first century (Worthington, 1995).

Others authors focuses on factors influencing satisfaction with Automated Teller Machines (ATMs). Their analysis has shown clear divisions between four different attitudinal types of ATM consumer (disaffected youth, pro-technology, technophobic and cost conscious), only one of which (pro-technology) appears fully satisfied with ATM services. Banks need to use different methods to address the concerns of the other segments (Davies et al., 1996).

The transformation from traditional, "brick and mortar" banking to electronic banking (e-banking) has been momentous (Power, 2000; Weitzman, 2000). Similarly, Chou and Chou (2000) identified five basic services associated with online banking: view account balances and transaction histories; paying bills; transferring funds between accounts; requesting credit card advances and ordering checks.

Prepaid cards (sometimes referred to as stored value cards) are considered as an alternative means of exchange, rapidly supplanting traveller checks, money orders, and even currency (Linn, 2008). The paper recognizes the potential for money launderers to exploit prepaid card products.

The technical solution, networks and security have recently been the dominant themes in the development of payment systems. For example, TARGET is considered the main instrument in serving the monetary policy needs of the Eurosystem and in promoting the integration of the euro money market (Driga and Nita, 2008). Matthews M. analyze the behavior of the banks' customers to view all their online banking accounts. It is examining the progress of account aggregation, the means by which consumers can view all their online banking accounts on the same PC screen (Matthews, 2006).

A study realized by Lassar explore the relationships between banking consumer innovativeness, self-efficacy on the Internet, Internet attitudes and online banking adoption, while controlling for personal characteristics (Lassar et al., 2005). The study examines the adoption of e-banking and how personal innovation attitudes, internet-related self-efficacy, type of web use, and demographic characteristics affect adoption.

Others authors examine reinstated or re-aged credit card accounts are likely to default again. Their findings have some important implications for lenders, consumers,

and investors in credit card securities. Lenders managing post default payment performance of re-aged credit card accounts must anticipate additional defaults and corresponding losses when gauging the potential success and failure of the program. Lenders can use the results of mentioned study to encourage account specific re-aging programs since a large portion of the accounts do cure and in turn, can avoid charge-off, providing significant savings to the lender. Additionally, the lenders should rely on public information in managing re-aged accounts as opposed to private information (Agarwal et al., 2008).

Recent studies used peer group analysis to find anomalous transactions, in the context of plastic card fraud detection. They have demonstrated there are plastic card transaction accounts that evolve sufficiently closely to enable fraudulent behaviour to be detected. Using real world data consisting of high transaction volume accounts, they showed three months of transaction history was adequate to produce peer groups that could usefully track a target for at least one further month. They have also shown that they can screen accounts to determine which are more likely to be amenable to peer groups analysis (Weston et al., 2008).

In a study made by Whitrow card fraud is considered, however, a notoriously fast-changing phenomenon, which responds to market conditions as well as to the measures taken by financial institutions against it. They consider the problem of identifying whether a credit or debit card account has been compromised by fraud. That is, we are interested in whether the account has been subject to fraudulent activity.

There are two main levels on which we may approach this question: transaction level and account level. The most important conclusion to draw from this work is that the aggregation period has a major impact upon the performance of classifiers for fraud detection. The lesson for practitioners is that they should pay at least as much attention and care to selecting appropriate aggregation periods as they do to selecting the best modelling techniques (and fine tuning their parameters) (Whitrow et al., 2009).

At the national level, the majority of the references to the accounting of the banking cards operations belong to some authors, that emphasize the main stroke of the banking accounting – the banking accounting follows and reflects the money flows between entities account holders, through payment documents (Cristea, 2007: 88), (Mureşan et al., 2002: 23), (Zaharciuc, 2000: 128).

The mentioned papers present theoretical descriptions of the accounting of the banking cards operations and a few case studies on cards operations at the ATMs, without analyse the accounting of the cards used at EFTPOS or on-line, based on payment through Internet. In the beginning of the new banking accounting system, in 1998, the fundamental approach in the field (Temeş and Mureşan, 1998) do not make mention about the accounting of the banking cards operations. The reason of this behaviour was very simply - the regulations on accounting in banks from that period do not stipulate any account regarding to the cards operations (Chart of accounts for the banking societies, Order of Ministry of Public Finance and of NBR no. 1418/344, 1997).

The banking field was not enough developed in such a way as to be required a distinct method to reflect the cards operations in the banks' accounting. Subsequent,

the development the banking activities in Romania implied the establishment of the distinct accounts to reflect the current account of a banking card. It was configured an analytical account of the account 2511 "Current accounts" to reflect the operations of the card holder (Chart of accounts for the credit institutions, Order of Ministry of Public Finance and of NBR no. 1282/4, 2002).

### **3. NEW TRENDS IN THE BANKING ACCOUNTING**

Accounting did not appear to play any role in the recent bank failures (example, in the United States during 2008 and the beginning of 2009, which are possible to be the results of growing probable credit losses and concerns about assets quality). There are suspicions that reveal the accounting manipulations employed by banks to engage in speculative activities and hide risks.

Nevertheless accounting remains an artificial construct designed to ensure some measure of uniformity in financial reporting of the banks and in this way, it offers confidence for the investors and for all the users of the financial statements. The accounting of the banks is important and it protects the users of the financial reporting and supports their future decision regarding the bank.

Fortunately, there are specific rules in banks' accounting, derived from the particular statute of the banks in an economy; banks can be recognized as the public interest entities. Once established the situation of banking cards operations, we approach the importance that accounting has at the level of Romanian banking societies.

All the banks and the national banking supervisor - National Bank of Romania - have an interest in the quality of banking accounting, including the accounting of banking cards operations. The interest of National Bank of Romania in the development of an accounting reporting system of quality at the level of the bank societies is resulting also from the obliged settled to the bank to make starting with the financial situations on the year 2006, the financial situations according with the International Financial Reporting Standards IFRS. Those situations were necessary for the information of different categories of users others then the State institutions (Order of Ministry of Public Finance no. 907, 2005). This regulation refers to the credit institutions that are required to apply IFRS, without mentioning about the preparation of the financial statements compliant with EU Directives.

In 2006, a new Order presents the statutory obligation to prepare financial statements compliant with the EU Directives for all the companies in addition to the preparation of the IFRS financial statements (Order of Ministry of Public Finance no. 1121, 2006). In Romania, the banks apply International Financial Reporting Standards IFRS when making the consolidated annual financial situations. In the relation with the State institutions the banks prepare the annual financial situations according with the EU Directives. Banks may prepare the annual financial statements according to IFRS for their own information needs or for the need of the others users, excepting the State institutions.

The actual stage of development in the Romanian banking system reveals a banking system that needs to follow a complex transformation process for the premises

of the Basel II Agreement's and EU Directives' efficient application to be guaranteed. The first element that had to be configured was the specific national legislation.

The National Romanian Bank is given an important part in this standardizing measure. The harmonization of the national legislation in the field with the European one means transposition into the National Bank of Romania regulations of the guidelines issued by European System of Central Banks. The last main issued settlement regarding the accounting in the banking field is Regulation No. 13/2008 of National Bank of Romania regarding the conformity of the accounting regulations with EU Directives for the credit institutions, non-bank financial institutions and Deposit Guarantee Fund in the Banking System – Romania. This is significant settlement in the banking accounting area, compulsory regulation for banks since the beginning of 2009 year.

So, for the moment, in Romania, the banking societies prepare their financial statements according to the EU Directives and the IFRS are used only for the preparation of the consolidated annual financial statements. Also, the banks are free to adopt the IFRS for their own information needs (or for the others users' needs, excepting the financial institution which represent the State). Recent events in the banking filed suggest that reporting under IFRS will be allowed or required for the public entities around the globe within the next few years.

The banks' choose (or compulsory way) to adopt IFRS will generate a predominate effort to conversion the actual national settlements according to EU Directives. The national accounting regulations differ in key ways comparatively with IFRS, including their fundamental premise. The national regulations are more the rules-based settlements, whereas IFRS are more principles-based. IFRS will affect the banks' financial statements and IFRS is expected to have effects at levels of the IT infrastructure system, including accounting. And, not in the last time, the resource needs may be significant.

#### **4. THE ACCOUNTING OF THE VIRTUAL CARD DISCOUNTS FOR PAYING THE SHOPPING ON THE INTERNET**

We present the concrete methods of reflection in the accounting field of the banking cards operations. In this sense, in the bank accounting field, we analyze concrete methods of reflection based on on-line banking cards operations.

The unprecedented development of the Internet in the last years determined the emergence of numerous websites of the companies that offer products and services, organize on-line auctions, provides information pages for money etc. Paying ways for the goods and services contracted on-line by Romanians are connected directly with the virtual cards designed for the Internet payments, whereas for now, Romanians have limited access to other paying systems.

As a rule, in order to effectuate a purchase on the Internet on the basis of a virtual card, at first a natural or legal person must be in the possession of a classic card (generally a debit card), which also has associated a virtual card.

The person who wants to buy a virtual card from a banking unit will ask the bank for a real card, associated to the virtual one. He will pay the bank in cash, on the



basis of a cashing order, a minimum sum for opening the card account and the fee for issuing the classic card. The banking unit will register the cash deposit of a minimum sum in the client's card account and cashing an issuing fee of the classic card. In a few days, the client will be the holder of a classic card and, if the client asks it, the banking unit will also give him the associated virtual card, designed for shopping on the Internet. An important aspect is that each of the two cards has its own account: the account of the physical card and the account of the associated virtual card.

When possessing the real card and the afferent PIN, in order to shop from the Internet, the client will firstly feed the card physical (generally through a transfer from the current account opened at the bank) on the basis of the order given by the account manager. The banking unit will register the transfer of the funds from the current account in the real classic card account. After the real card account is fed, the client will carry on the feeding of the associated virtual card through any ATM of the bank.

The feeding procedure of the virtual card implies: the introduction of the physical card into the ATM, pressing its PIN, choosing option to transfer the virtual card. After these operations are performed in the account of the virtual card, which the bank initially delivered it with zero balance, there will be a balance transferred by the client from its classical card. The banking unit will register the sums transfer from the classic card account into the virtual card account: 2511.C "Current accounts", analytic available in the client's card account = 2511.V "Current accounts", analytic available in the virtual card account of the client.

Once the card was fed, the client will then resort to accessing a virtual shop from a computer connected to the Internet. In order to make an order in the accessed virtual shop there are more steps to be done. First, with a view to make an on-line order, the desired product is selected by pushing a button like buy/add into the basket etc., which is placed in the right side of every product, thus sending the selected product into a virtual shopping basket. With a view to complete the order, the client must be previously authorized.

The authorization consists in introducing the e-mail address and the password. After the authorization, a button will be accessed to complete the order, and then an order page will be opened, from which will be selected an option to continue. Then another page will open from which will be selected the way in which the chosen product should be delivered (courier, post-office etc.), the city where the package will be received and the paying modality.

Second, the chosen paying modality is the one done with the help of the virtual card. Now, the client will be connected to the on-line ISP (Internet Suppliers Payment), to which is connected the web dealer who will ask the necessary information in order to process the payment: the mark of the respective virtual card (MasterCard, VISA etc.), the name of the owner: client, expiration date, the code of the virtual basket.

Once this information is obtained, the ISP e-commerce platform will transmit it to the card agency they are working with, together with the sum to be paid, the transaction fee (% from the shopping value), and the dealer's account number. All the transmitted information are encrypted and sent by the paying processor through a secured communication line to Interchange Network Processor (INP), afferent to the virtual card's mark.

The INP communicates with the dealer's bank on a secured line; in its turn, the dealer's bank makes contact with the bank of the buying client, with a view to check if the necessary funds are available. If the answer is affirmative the transaction is completed and the dealer's bank sends a resulted code, like a verification number, to ISP. ISP forwards this code to the soft that intercedes the shopping (shopping card software), who process the data and then announces the client that the transaction is successfully completed. After the payment is done, the buyer presses the "place the order" button. After this final command, the Internet buying procedure is over, and the client waits to receive the package containing the product he ordered.

The counter value of the goods and services bought on-line, either in RON Romanian currency or foreign currency, is discounted from the RON account attached to the virtual card. For the foreign currency payments, based on the international discounting day, the bank of the paying client will participate in buying foreign currency by auction, discounting the operation at the bank's auction rate of exchange, from the holder's card account.

If the payment is effectuated in RON, the banking unit of the buying client will register the transfer of the sum owed to a banking unit of another bank / to another banking company in the country. If the owed sum is ought to the dealer who has an account opened at another banking unit of the same bank: 2511.V "Current accounts", analytic available in the virtual card account of the client = 314 "Inter-banking discounts", analytic another banking unit of the same bank.

If the owed sum is ought to the dealer who has an account opened at a banking unit of another bank, the owed sum will be inter-banking registered: 2511.V "Current accounts", analytic available in the virtual card account of the client = 1621 "Other owed sums", analytic to the on-line dealer's bank. The banking unit of the payer will reflect the transfer of the sum owed to the dealer's bank: 1621 "Other owed sums", analytic to the on-line dealer's bank = 111 "BNR Current account".

If the payment is done in foreign currency, the banking unit of the paying client will register the conversion of the foreign currency sum to be paid, after the auction of the sum from the virtual card account of the client: 2511.V "Current accounts", analytic available in the virtual card account of the client = 3722 "The counter value of the exchange position" (The sum owed to the on-line dealer RON). In the same time, is registered the obligation towards the bank from abroad: 3721 "Exchanging position" = 1621 "Other owed sums", analytic to the on-line dealer (The sum owed to the on-line dealer in foreign currency).

The payment of the obligation towards the foreign bank is registered through correspondent accounts: 1621 "Other owed sums", analytic to the on-line dealer = 121 "Account correspondent to banks – nostro" (The sum owed to the on-line dealer in foreign currency). The banking unit of the payer will hold from the current account or from the reserve account into classic or virtual card account of the payer client the commission afferent to the payment effectuated by the on-line dealer: 2511/C/V "Current accounts", analytic available in the current account of classic / virtual card of the client = 7085 "Incomes regarding the payment modalities".

## **5. DISCUSSION AND CONCLUSIONS**

Our detailed study identifies the specific rules in banks' Romanian accounting, including in the book-keeping of the banking cards transactions. For the information to be reliable, the banking accounting has to base on generally implemented principles, norms and technical procedures. The role of the National Bank of Romania in this building is major. Its rules include specifications regarding to accounting practice. The banking cards operations do not make exception from this approach. We identify the disparities between the banks in the accounting of the banking cards operations, but only in the analytical ways to reflect the transactions. The concrete methods of reflection in the accounting field of the banking cards operations at the ATMs, EFTPOS and on-line allow us to say that the Romanian banks apply the compulsory accounting standards, established by National Bank of Romania.

Nowadays, the development of the cashless payment system is obvious and the cards play a prominent part in the future viability of the cashless society. We presented the major reference points of the actual status of the national card payment market. We underlined the challenges regarding the frauds with cards and the means to eliminate or reduce them (example 3-D Secure Standards). Also, we described the implications for Romania of the SEPA Card Framework (Single Euro Payments Area). SEPA meant to ensure an adequate level of efficiency and competition on the national card markets, capable of fostering important economies of scale and secure high competitiveness to the European economy.

Considering that the cards are an issue of great interest for banks and customers alike, we recognize the importance of a flexible banking accounting system, which should provide the users with the information needed. The real study of the accounting registrations of the banking cards operations gives us the possibility to sustain the importance of the analytical banking accounts. To reflect the cards transactions, banks have to open an analytical accounts on the basis of synthetic account (as in accordance with the Chart of Accounts for the credit institutions, issued by the National Bank of Romania).

Every bank shall decide the structure and parameters of analytical accounts individually, depending on general criteria and own needs. Regarding banks transparency and disclosure of accounting information banks abide by the national banking legislation and their settlements regarding the accounting of the banking cards operations. We remark the current trend and the compulsory requirements for Romanian banks to comply with the national legislation in the banking field.

The banks may use an analytical account to reflect the banking transactions by cards - an analytical account for the current account of the banking client, called 2511 "Current accounts". At the first examination, there is not anything uncommon in this approach, but if we analyse the substance of the "Current account", we will discover that it reflect all clients' transactions realized by the opened current account - payments, cashing, receipts, funds transfers between the accounts etc. So, in the banking accounting is very difficult to identify the real matter of this account, without an adequate way to symbolize and evidence the current account of the banking customer.

Banks have to settle the proper automatically accounting methods to establish the analytical account of a current account, their symbols and meanings. Banking accounting system is almost fully automatized and technology allows identification of all the transaction and their substance. There is essential just to make an algorithm to fix the details of a current account in order to reflect the operations with banking cards.

We point out the limits of our research of the accounting of the banking cards operations (at ATMs, EFTPOS and on-line), studied only conformable to the national regulations according to the European Union Directives. Also, we suggest future directions of studying, based on the accounting approach of this theme according to IFRS International Financial Reporting Standards.

The questions that remain are if IFRS offers an opportunity to use principle-based accounting and what are the differences in comparison with the actual voluminous accounting banking rules.

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## **WILL EASTERN EUROPEAN COUNTRIES JOIN THE SINGLE EUROPEAN CURRENCY RAPIDLY?**

**CRISTIAN STANCIU, SABIN RIZESCU,  
CRISTI SPULBĂR, NARCIS MITU \***

**ABSTRACT:** *Just before the last G20 meeting in London and following the quantitative easing measures taken by FED it has broken into the news that, during an internal discussion, IMF raised a really provocative issue: should the non-Euro EU members join the Euro very rapidly?! Considering the developing international economic situation we plead that adopting the Euro at a fast pace will be benefic for both sides of Europe: the Western developed countries and the Eastern emerging economies.*

**KEY WORDS:** *European currency, convergence, budget deficit, current account deficit*

### **1. INTRODUCTION**

Just before the last G20 meeting in London and following the quantitative easing measures taken by FED it has broken into the news that, during an internal discussion, IMF raised a really provocative issue: should the non-Euro EU members join the Euro very rapidly?!

At a first glance, the selected G20 members dismissed or at least played down such kind of action. But the question still remains: will be such an action a bad one or a good one?!

Considering the developing international economic situation we plead that adopting the Euro at a fast pace will be benefic for both sides of Europe: the Western developed countries and the Eastern emerging economies.

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## 2. OVERVIEW

We have to mention first that no one of those emerging economies is in a position to join the Euro according on the existing criteria. That means that the rules for joining the Euro should be relaxed. No need to say that the ECB (that was built on Bundesbank old tradition) and a good part of the developed Western countries, especially Germany, strongly rejected such kind of action saying that growing budget deficits in some of those countries have already damaged the Euro credibility and adding new struggling economies to the Euro zone will further put pressure on the European single currency.

In favour of faster introducing the Euro in the Eastern developing countries we have to remind the great exposure banking systems like those of Sweden or Austria or Greece have on the Eastern Europe. For example loans made to Baltic states by Swedish banks left them exposed to almost 30% percent of the Sweden GDP. A sharp decline in these countries' currencies would cause huge trouble for the Swedish economy. The same kind of situation are experiencing banks in Austria that have lend large amounts of money to Romania as well as banks in Greece have done. A currency crisis in Romania could lead to a disastrous economic situation in Austria and in Greece, too. In this kind of respect, we have to add that, as authors rightfully do remark in when a lender (a bank, for example) is exposed to a certain group of emerging countries, when a country of this group might encounter financial problems, those problems could easily spread to the entire group despite the fact that all the other members of the group are economically healthy and stabile. Such kind of situations could far easier be managed if those countries already have been using Euro.

In order to avoid such kind of situations adopting the Euro in Romania as well as in Baltic states seems to be a good solution. And such kind of solution is not impossible to reach. Emerging economies could very well introduce the Euro without being "de facto" members of the Eurozone meaning that they will not have sits - yet - at the ECB board.

More else, countries like Bulgaria or even Romania that are running significant current account deficits could benefit nicely by introducing the Euro. In this kind of respect, on one hand, any currency collapse will be avoided and, on the other hand, those current account deficits will not worsen by adopting the Euro because their economies are contracting, jobs are lost and wages are diminishing. In case of Romania, for example, the latest economic developments put this country on the verge of a rapidly contracting of its current account deficit as GDP ratio. It could mean a lot in terms of the competitiveness of this country as well as in terms of enforcing its financial discipline. More else, this ongoing situation could as well encourage foreign investments flowing into to Romania both as green field investments and investments on capital markets.

The legislation in emerging economies is still far from what it has to be. Adopting Euro sooner rather than later will push these countries to fulfil the so-called "EU community acquis" and to promote more social justice in their legislation (and we are talking here especially about Romania and Bulgaria). That will ease the wage



pressures with good outcome in terms of productivity, competitiveness and will also ease pressure on their budget deficits

We have to add to the picture that Europe of our days is a Europe of regional random financial interconnections. And these interconnections do concern especially the Eastern European Countries and that mainly due to the huge increase in foreign ownership of the banking systems of these countries we've seen in the last ten year or so. In this kind of respect we have to notice that the financial and real economic connections between Western and Eastern Europe are now stronger and more diversified than ever. And there is no secret that even the IMF has been encouraged and is still encouraging this ongoing situation. The banking systems of Eastern European countries are now far from what they were used to be in late 90s. And what makes them so different from they were, is that foreign ownership are among the highest in the world (almost 100% in Estonia, almost 90% in Romania and examples could easily go on). In fact, due to this situation, *the banking sectors of those countries are quite unique*. We don't have to forget that those emerging economies had practically no financial intermediation when they started their roads as market-orientated economies in early 90s.

With no internal capital resources, the main engine of growth in their GDPs was, of course, *the consumption* that led to current account deficits in almost all these countries. The most advanced of them in terms of democracy and economic transparency (Poland, Hungary, Czech Republic, etc.) received, during the 90s, quite nice amounts of western investments, so, they enjoyed smooth and sustainable growth. This situation led to a smooth and gradual credit growth in this group of "advanced" countries. No wonder that, when the credit bubble had exploded in late 90s, these countries were less exposed to economic excesses than their poorer colleagues coming "from behind" (Bulgaria, Romania, etc.).

These countries were, actually, attracted, in the credit bubble in a very irresistible way. Europe, as an economic entity has to face a very provocative and, somehow, dangerous situation: *its poorest members that joined the EU in the last wave have the highest levels of average growth in private sector credit as ratio of GDP* (Estonia 46%, Bulgaria 32.5%, Romania 39.4% versus some of their "advanced" colleagues like Poland 16.1% or Hungary 12.1%) during the 2004 - 2007 period of time. We have to consider that almost all this credit was driven to *consumption*. And we also have to consider that almost all this credit was financed by Western European banks directly or thru their fresh-acquired local branches. So, no need to add that the largest current account deficits are to be found in these countries having the highest private credit growth/GDP ratios. Most of credit, in these countries, is *Euro-denominated*. So, the Western European banking system - or at least a significant part of it - is directly or via its local branches exposed to *those current account deficits*. We consider that, introducing Euro sooner rather than later, this exposure could suffer smooth and well controlled decrease without "currency accidents" and without affecting too much the investing activities.

More else, the private credit growth in these emerging economies is still high and has to remain high in order to reach some kind of natural saturation in consumption as well as to reach a new quality in their investment-related activities:

diminishing the role of governments in the investment expenditures as part of their GDPs. In this kind of respect, we have to mention that the dependence of non-deposit funding has increased significantly almost in all countries of emerging Europe the way that loan-to-deposit ratios have also increased as well ratio between bank credit-to-GDP ratio and bank deposits-to-GDP ratio. And, as we mentioned, before, most of those credits are Euro-denominated.

This situation requires a truly reliable foreign financing. *And this financing must be a market-related one.* In order to reach such an important but sensible goal the emerging economies branches of Western European banking system *must to develop their own independence* and must be helped to develop *their own relationships with the ECB*. The fact that *not all* the Western Europe countries have really big exposures to the eastern emerging countries could be helpful in order re-think and re-built Europe financially. In fact, only Austria, Belgium, Sweden and, maybe, Greece are heavily exposed but their banking sectors are nicely integrated in the Western Europe banking sector as well in the world banking sector, while countries like Germany, France, Italy or even Netherlands have exposures that can be actually neglected.

We strongly believe that for each an every western bank heavy exposed to the Eastern European region the first step could consist in *diversifying its portfolio as well as its assets*, in other words *restructuring* its activity. And this step has to be made by *remaining in the region and not by leaving the region*. And a quick adoption of the Euro in these emerging countries could be helpful in dealing with these challenges.

Of course, skeptics might argue: “... okay, but how about the budget deficits target established at the Maastricht Treaty?!”. In this kind of respect we have to remind to those skeptics that even Germany and France brought this target. The Maastricht treaty was held in 1993 in a reviving world economic environment and we are now in 2007 and (still) experiencing the worst financial and economic crisis after the Great Depression of the 30s.

Last but not least we have to add that the faster Eastern emerging economies will introduce the Euro, the greater are the chances for a rapid EU budget convergence.

### 3. CONCLUSIONS

Maybe some kind of “road map” approved by both ECB and European Commission for the Eastern European countries having as target quickly joining the Euro by these counties could be nothing but helpful.

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## **ADJUSTING ECONOMIC OF THE ROMANIA'S GDP USING ECONOMETRIC MODEL OF THE SYSTEM: BUDGET EXPENDITURE-GDP**

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OLIMPIU STOICUȚA \***

**ABSTRACT:** *The paper presents a model of economic adjustment Romania's GDP using econometric model which has the budgetary input and output as Romania's GDP. Adjustment shall be based on a square linear regulator by type discrete.*

**KEY WORDS:** *Gross domestic product (GDP), method of least squares (MCMMP)*

### **1. INTRODUCTION**

The paper addresses a difficult problem that is the optimal management of the economic system: budgetary expenditure- GDP. Under this system of regulating the size of command is represented by the budget expenditure to be chosen so that the gross domestic product to reach a desired level. Block scheme of this adjustment system is shown in the figure below. To achieve the synthesis of the automat regulator by the adjusting system presented outlined above, as we need to know mathematical model of economic system (IS) to be conducted. In this respect, to determine the mathematical model we use to identify parametric offline using the data entry budget expenditure (CB) and Romania's GDP.

### **2. THE PARAMETRICAL IDENTIFICATION OF ECONOMIC SYSTEMS**

In these models, the main issues that arise in the identification process based on experimental results are: the choice of the variables and the structure of model; designing experiments to ensure the optimal level of the variables excitation and to highlight all the regimes operating in an exogenous context given.

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In these models, the main issues that arise in the identification process based on experimental results are:

- the choice of the variables and the structure of model;
- designing experiments to ensure the optimal level of the variables excitation and to highlight all the regimes operating in an exogenous context given;
- the elimination of no stationary disturbances and the errors reducing for the variables input;
- the choice of the optimum period to acquire information and of the duration of the experiment;
- choosing of the optimum method to processing the data, taking into account the characteristics of the model;
- the model validation, aiming at ensuring an adequate maximum of the reality.

In this paper we will use the stochastic models by THETA form, namely that form which contains general information by the models with multiple inputs and the single output, models that look like this:

$$A(q^{-1})y(t) = \frac{B(q^{-1})}{F(q^{-1})}u(t - nk) + \frac{C(q^{-1})}{D(q^{-1})}e(t) \quad (1)$$

where A, B, C, D, F, D are the polynomial by the variable q and by order na, nb, nc, nd and nf, and q are the delay operator.

The vectors nb, nf and nk have the dimension equal to the number of the entries.

To achieve mathematical model of economic system chosen, we use a parametric identification method based on the method of least squares.

In the method of least squares (MCMMP), the system is considered described by the next equation with differences

$$A(q^{-1})y(t) = B(q^{-1})u(t) + e(t) \quad (2)$$

where:  $u(t)$  – input size;  $y(t)$  – output size;  $e(t)$  - white noise of zero average and dispersion  $\lambda^2$ ;  $q^{-1}$  - the delay operator.

In this cases, the model of the economic system is considered described by an equation of differences with the same structure with the equation above.

$$A(q^{-1})y(t) = B(q^{-1})u(t) + e(t) \quad (3)$$

The polynomial A and B have the following form:

$$\begin{aligned} A_T(q^{-1}) &= 1 + a_{1T}q^{-1} + \dots + a_{naT}q^{-na} \\ B_T(q^{-1}) &= b_{1T}q^{-1} + \dots + b_{nbT}q^{-nb} \end{aligned} \quad (4)$$

where  $a_i; i = \overline{1, na}$  and  $b_j; j = \overline{1, nb}$  are the parameters of the ARX model are to be determined.

Are doing the following notations:

$$\begin{aligned} \bar{\theta} &= [a_1 \dots a_{na} \quad b_1 \dots b_{nb}]^T \\ \varphi(t) &= [-y(t-1) \dots -y(t-na) \quad u(t-1) \dots u(t-nb)]^T \end{aligned} \quad (5)$$

With these notations, the output size given by the model is:

$$y(t) = \varphi^{-T}(t) \bar{\theta} + e(t) \quad (6)$$

Given the model structure, should be imposed the condition as the squared average of the error of the prediction should be minimum. The estimation of the parameters of ARX model based on an input n data and output, is as follows:

$$\hat{\theta} = \arg \min_{\bar{\theta}} V(\bar{\theta}) \quad (7)$$

where

$$V(\bar{\theta}) = \sum_{t=1}^n [y(t) - \varphi^{-T}(t) \bar{\theta}]^2 \quad (8)$$

From the above condition results:

$$\hat{\theta} = \left( \sum_{t=1}^N \bar{\varphi}(t) \bar{\varphi}^T(t) \right)^{-1} \sum_{t=1}^N \bar{\varphi}(t) y(t) \quad (9)$$

If introduce the following notation:

- $\theta = [a_{1T} \dots a_{naT}, b_{1T} \dots b_{nbT}]^T$  -the model parameter
- $\rho(t) = [-y(t-1) \dots -y(t-na) \quad u(t-1) \dots u(t-nb)]^T$  the vector which contain the history of the process (past inputs and outputs), the above equation becomes

$$y(t) = \varphi^T(t) \theta + e(t) \quad (10)$$

The model will be described by an equation of the form

$$y_m(t) = \varphi^T(t) \theta + e(t) \quad (11)$$

Estimating model parameters ( $\theta$ ) involves first determining the degrees  $n_a$  and  $n_b$ , and the vector  $\theta$  on the basis of experimental data entry.

In fact, the essence of the method is that the model is deterministic

$$y_m(t) = \bar{\varphi}^T(t)\bar{\theta} \quad (12)$$

situation that  $\hat{\theta}$  is calculated imposing following condition:

$$\hat{\theta} = \arg \min_{\bar{\theta}} \frac{1}{N} \sum_{t=1}^N (y(t) - y_m(t))^2 = \arg \min_{\bar{\theta}} \frac{1}{N} \sum_{t=1}^N (y(t) - \bar{\varphi}^T(t)\bar{\theta})^2 \quad (13)$$

The explicit expression of the  $\hat{\theta}$  is obtained from the condition for cancellation of gradient criterion function:

$$V_{\bar{\theta}}(\hat{\theta}) = 0, \quad \frac{\partial V}{\partial \bar{\theta}} \Big|_{\bar{\theta}=\hat{\theta}} = -2 \frac{1}{N} \sum_{t=1}^N \bar{\varphi}(t) (y(t) - \bar{\varphi}^T(t)\hat{\theta})^2 = 0 \quad (14)$$

written or otherwise

$$\sum_{t=1}^N \bar{\varphi}(t)y(t) = \hat{\theta} \sum_{t=1}^N \bar{\varphi}(t)\bar{\varphi}^T(t) \quad (15)$$

Within this system can achieve very simple solution:

$$\hat{\theta} = \left[ \sum_{t=1}^N \bar{\varphi}(t)\bar{\varphi}^T(t) \right]^{-1} \sum_{t=1}^N \bar{\varphi}(t)y(t). \quad (16)$$

Noting

$$Y = [y(1) \text{K} y(N)]^T, \quad \Phi^T = [\bar{\varphi}(1) \text{K} \bar{\varphi}(N)], \quad (17)$$

the are obtained

$$\Phi^T \Phi = \sum_{t=1}^N \bar{\varphi}(t)\bar{\varphi}^T(t) \quad (18)$$

and

$$\Phi^T Y = [\bar{\varphi}(1) \text{K} \bar{\varphi}(N)] \begin{bmatrix} y(1) \\ \text{M} \\ y(N) \end{bmatrix} = \sum_{t=1}^N \bar{\varphi}(t)y(t) \quad (19)$$

Of the above:

$$Y = \Phi \theta + e. \quad (20)$$

With these notation estimator can be written as:

$$\hat{\theta} = [\Phi^T \Phi]^{-1} \Phi^T Y \tag{21}$$

The estimator given by the relation above represents the least squares estimator, which has been obtained based on the entry data  $u(1), \dots, u(N)$  and of the output data  $y(1), \dots, y(N)$ .

**2. ECONOMETRIC MODELING OF THE SYSTEM: BUDGET EXPENDITURE – GDP**

To achieve this model, we use data on budgetary and Romania's GDP, data taken from National Statistics Institute for a period of 15 years, between 1991-2005.

These data are presented in the table below:

**Table 1. Romania's budget expenditures and GDP**

<b>Years</b>	<b>Budget expenditures [bil. lei]</b>	<b>GDP [bil. lei]</b>
<b>1991</b>	0,05379	0,22
<b>1992</b>	0,1627	0,6
<b>1993</b>	0,41288	2
<b>1994</b>	1,09303	4,97
<b>1995</b>	1,5858	7,21
<b>1996</b>	2,3732	10,9
<b>1997</b>	5,28966	25,2
<b>1998</b>	7,76166	33,8
<b>1999</b>	10,68867	54,5
<b>2000</b>	14,9168	80,3
<b>2001</b>	18,4012	116,7
<b>2002</b>	22,6824	151,4
<b>2003</b>	28,1451	189,1
<b>2004</b>	34,0735	238,7
<b>2005</b>	38,7824	287,2

For a better understanding of the above, we represent the variation in time of budget expenditure and the variation in time of Romania's GDP.

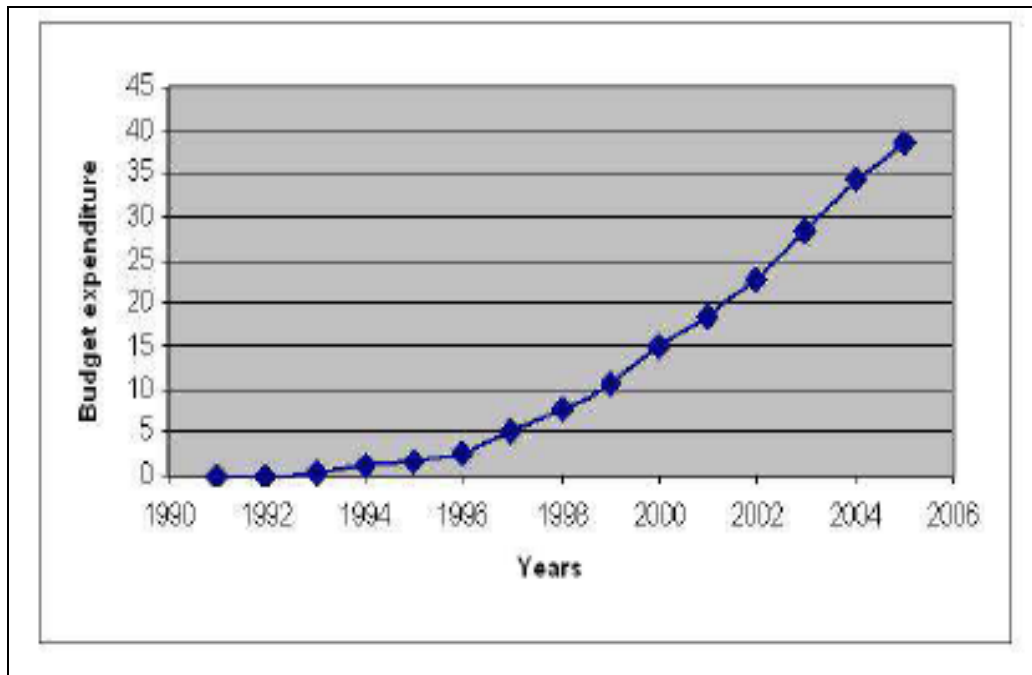


Figure 1. Variation in time of budget expenditure

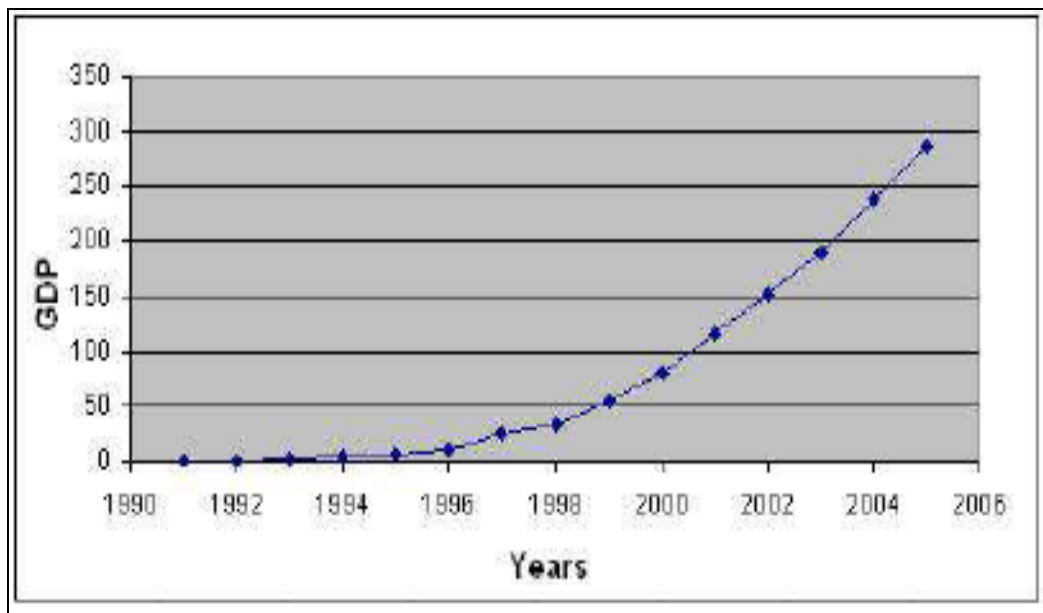


Figure 2. Variation in time of Romania's GDP

These data, presented above will be processed on the following Matlab program:



```

t=data1(:,1);
u=data1(:,2);
y=data1(:,3);
na=2;
nb=2;
nk=1;
ORDERS=[na nb nk];
z=[y,u];
m =arx(z,ORDERS);
present(m);
e1=0.01*rand(length(y),1);
sys=ss(m);
Ad=sys.a;
Bd=sys.b;
Cd=sys.c;
Dd=sys.d;
y1=idsim([u,e1],m);
plot(t,y,'r',t,y1,'k');grid
    
```

In the program outlined above was noted with data1 the table imported from Microsoft Office Excel in Workspace in Matlab.

After running this program can be obtain two types of models:

**A. The ARX model**

$$A_T(q^{-1})y(t) = B_T(q^{-1})u(t) + e(t) \tag{22}$$

where

$$\begin{aligned}
 A_T(q^{-1}) &= 1 - 0,103(\pm 0,3512)q^{-1} - 0,1549(\pm 0,2772)q^{-2} \\
 B_T(q^{-1}) &= 4,504(\pm 1,352)q^{-1} + 2,917(\pm 2,351)q^{-2}
 \end{aligned}$$

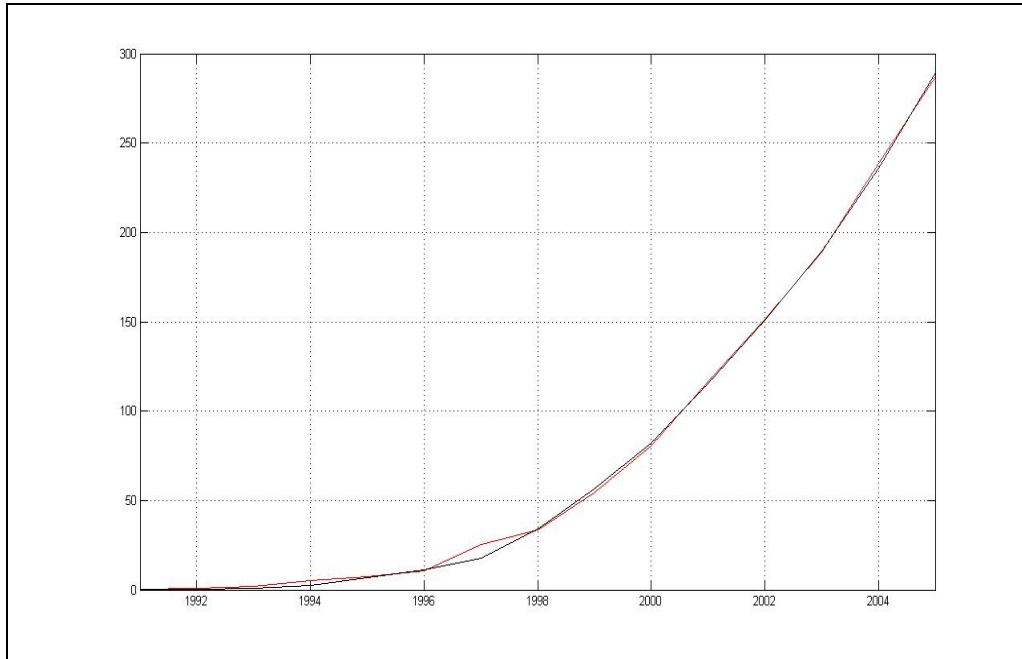
**B. The canonical equations of state model**

$$\begin{cases}
 x(k+1) = F \cdot x(k) + H \cdot u(k) \\
 y(k) = C \cdot x(k) + D \cdot u(k)
 \end{cases} \tag{23}$$

where

$$F = \begin{bmatrix} 0,103 & 1 \\ 0,1549 & 0 \end{bmatrix}; H = \begin{bmatrix} 4,504 & 0,3367 \\ 2,917 & 0,5061 \end{bmatrix}; C = [1 \quad 0]; D = [0 \quad 3,268].$$

New models were created using as input simulated variation in time of budget expenditure. Result of the simulation was superimposed over the real result, so what follows we present graphs obtained from the simulation model ARX.



**Figure 3. Variation in time of Romania's GDP real / simulated**

### 3. LINEAR QUADRATIC REGULATOR (LQR) DESIGN USING THE KALMAN-LETOV METHOD

Mathematical model of the economic system used in the LQR regulator design is the model based on the canonical equations of state (1.22). Question is therefore to determine a driving circuit closed after the state vector of the form  $u(k) = f[x(k), k]$  which to minimize the performance index

$$J = S(x(N), N) + \sum_{k=0}^{N-1} M(x(k), u(k), k) \quad (1.24)$$

on lot command accepted.

In (24), the relation of the S and M are:

$$S(x(N), N) = 2 \cdot x^T(N) \cdot S \cdot x(N) \quad (1.25)$$

$$M(x(k), u(k), k) = x^T(k) \cdot Q \cdot x(k) + u^T(k) \cdot R \cdot u(k) \quad (1.26)$$

where S is a constant; Q and R are symmetric positive semi defined matrices, respectively positive defined.

From the above notes that the regulator LQR design we solved a problem of variational type optimization Boltza with semi-infinite range, with performance index

(24), subject to restrictions (23). The initial condition are  $x(0) = x_0$ , and the final condition is free, with restriction by type Mayer.

In this condition, the hamiltonian of the problem are:

$$Ha(k) = x^T(k) \cdot Q(k) \cdot x(k) + u^T(k) \cdot R \cdot u(k) + \lambda^T(k+1) \cdot (F \cdot x(k) + H \cdot u(k)) \quad (27)$$

Following the application of extreme conditions, the optimum is:

$$u(k) = -K_c(k) \cdot x(k)$$

where:  $K_c(k) = (R + H^T \cdot P_c(k+1) \cdot H)^{-1} \cdot H^T \cdot P_c(k+1) \cdot F$

$$P_c(k) = F^T \cdot P_c(k+1) \cdot (I + H \cdot R^{-1} \cdot H^T \cdot P_c(k+1))^{-1} \cdot F + Q; P(N) = S; P(N) = S.$$

The matrix command for example considered is very easy to obtain by using the following Matlab program:

```
t=data1(:,1);u=data1(:,2);y=data1(:,3);
na=3;nb=3;nk=1;
ORDERS=[na nb nk];
z=[y,u];
m =arx(z,ORDERS);
present(m);
e1=0.01*rand(length(y),1);
sys=ss(m);
A=sys.a;
B=sys.b;
C=sys.c;
D=sys.d;
y1=idsim([u,e1],m);
Q=eye(na);
R=eye(2);
[K,S,E]=dlqr(A,B,Q,R)
x0=zeros(na,1);
[yal,t,x]=lsim(sys,[u,e1],t,x0);
uc=-K*x';
plot(t,y,'r',t,yal,'k');grid
```

After running this program to obtain the following matrix command:

$$K = \begin{bmatrix} -0,0074 & 0,0847 & 0,0482 \\ 0,0807 & -0,2587 & 0,4262 \end{bmatrix}$$

In these circumstances, the command optimum expenditure is completely defined.

#### 4. CONCLUSIONS

Control system of the economical model presented in this paper can be used successfully in practice, based on his could take optimal decisions on budget expenditure, so that Romania's GDP to reach an imposed value.

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## THE ELECTRONIC COMMERCE IN THE GLOBALISATION ERA

DRAGOȘ STUPARU, TOMIȚĂ VASILE \*

**ABSTRACT:** *Globalisation, the unavoidable process which the world entered, is affecting everyone of us in different ways. Globalization means growing permeability of all the boundaries such as time and space, national and state borders, borders of economy, branches and organizations and less tangible boundaries such as cultural standards and their assumptions. The advent of Internet has also a large effect on the acceleration of globalisation and the commerce in special. Electronic commerce (e-commerce) refers to forms of transactions which are based on electronic data processing, among other things text, sound and picture, with the participation of organizations and individuals, on the Internet. Goods sold through the internet are: travel, clothes, groceries, consumer electronics and the pay of the invoices This paper present some aspects of the e-commerce process in Europe and Romania in 2006-2011 periods.*

**KEY WORDS:** *globalisation, computer network, Internet, e-business, e-commerce*

### 1. THE E-COMMERCE AND THE GLOBAL ECONOMIC INTEGRATION

Globalisation describes an ongoing process by which regional economies, societies and cultures have become integrated through globe-spanning network of exchange. The term is sometimes used to refer specifically to economic globalization: the integration of national economies into the international economy through trade, foreign direct investment, capital flows, migration, and the spread of technology. However, globalization is usually recognized as being driven by a combination of economic, technological, socio-cultural, political and biological factors. The term can also refer to the transnational dissemination of ideas, languages, or popular culture. Globalisation has spread in a huge way since the end of the Second World War and will continue to do so as technology and communication improve between nations.

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The emergence of a global marketplace is a fairly recent phenomenon that is having huge effects on both developed and developing nations. There are many people and organizations that are all for this economic integration and also those who stand defiantly against it. Technology is playing a big part in this global dialogue by altering the scope of these economic transactions.

Global economic integration generally speeds up when trade restrictions have been lifted between nations, allowing a freedom of trading opportunity that may not have been previously there. Those on the pro side of the globalisation divide argue that this can increase economic prosperity in all countries and leads to more opportunity among developing nations.

Because opportunity costs can be assessed in any terms, technology differences between countries must be considered when analyzing these transactions. For example, a person who is doing a calculation on a pen and paper can only perform one at a time. Whereas a person using a computer can perform multiple calculations in the same time frame and therefore will have more opportunity to do other things when they are finished, the person with the pen and paper is at a disadvantage as they will be busy for some time and thus foregoing the opportunity to do other potentially profitable things.

The true cost of any action involves not just the economic cost but also involves the opportunity that is lost in performing the transaction. Technology differentials are the biggest factor involved in the manipulation of global economic transactions. These differences must be taken into consideration when analyzing the potential advantage that one nation may have over another.

Electronic commerce (e-commerce) usually refers to forms of transactions which are based on electronic data processing, among other things text, sound and picture, with the participation of organizations and individuals. It is a process of mutual sharing of information with the use of different, available information technologies - among organizations and individuals which exchange goods and services. Electronic commerce means also the influence exerted by electronic information exchange on companies and processes connected with business. The idea is widely understood and covers definitions of e-business and electronic commerce. Some writers assume that e-business is a wider term and is defined as "safe, integrated and flexible approach to delivering different business values through the combination of systems and processes leading to appropriate business operations (transactions) with the use of Internet technology" [1].

E-commerce can be described as an area of electronic commercial activity covering all possible forms of economic activity which, partially or wholly, takes place by electronic, interactive network data exchange. Such exchange substitutes 'physical' exchange of information or products and personal human contacts. It covers electronic trading which is usually associated with Internet area in business, exchange of correspondence and documents, tele-working or tele-conferences. Electronic trading is described as an activity in which the supplier shows and sells their products and services through electronic media. If the final recipient and not a company (e.g. trading company) is the consumer, then the supplier does electronic retailing. The most characteristic feature of presented here electronic trading is its global (supranational) character, which originates from the features of computer networks. This feature is

very important for both suppliers and potential consumers. Possible advantages of electronic commerce can be, for example, increase of competitiveness, lower costs, individualization of products and servicing, etc.

## 2. SPECIFIC CHARACTER OF GOODS SOLD THROUGH THE INTERNET

After business was introduced in the Internet on a large scale in March 1996, the turnover and profits generally began to grow. At present, on the Internet (also, using other multimedia) nearly everything is sold. But, there is a group of goods which is especially preferred at on-line shopping - it also depends on a consumers group, country or region. Generally, the best sold goods on the Internet throughout the world are books, CDs, computers, electronic goods, VHS equipment, women's clothes, investments, plane tickets, hotel reservations, etc. In Romania people most often buy that way books and CDs. It all depends on consumers' preferences and those preferences depend also on the country. Thus, 53% of Belgian Internet users and 52% of German Internet users buy books on-line, the Dutch have the largest share in CD buyers (40%), the French are next in turn (39%). Hong Kong consumers have the largest share in buying food products (32%) and furniture (21%). France has the largest share in buying holidays (44%). The Japanese are the largest group of consumers buying cosmetics and toilet accessories (12%) [4].

It can be stated that nearly everything, even more than in supermarkets can be bought on-line. There is only one condition: the product must exist. More hopes for the increase of turnover and profits from on-line shopping are connected with the trade between the companies (*business-to-business*) rather than with standard retail consumer trading (*business-to-customer*). Net business platforms contact companies exchanging products. Consumers of products and services have the possibility of a quick glance at offers from all over the world and making the best possible choice without the necessity of several phone call, faxes or letters.

It is foreseen that in future the largest net turnover will be generated by energy distributors, chemical industry and producers and distributors of food products, computer and electronic goods. Costs in firms using e-business solutions are, on an average, lower by several percent than those of firms operating in a traditional way. However, for the mass service of consumers and companies, on countries and world scale, it is necessary to develop computer networks, improve them and protect them better. It is necessary to build the so-called information highways which will be fast and reliable.

It has been generally assumed that there are three kinds of products in *on-line* commerce: the so-called *search goods*, *experience goods* and *credence goods*.

*Search goods* are products which can be tested with senses: touch, taste and smell (e.g. food, perfumes, etc.). The next group is the so-called *experience goods*. These are the products the quality of which can be tested after the first buy (e.g. books, CDs, etc.). On the other hand, *credence goods* are these products the quality of which is difficult to be tested even after many buys (or uses).

Another division of on-line products covers; indirect electronic commerce, i.e. ordering material goods on the Internet and then delivering them to the client using

traditional channels (mail, delivery services) and direct electronic commerce which covers ordering non-material goods and services on the Internet and where payment and delivery are also made on-line, (i.e. instructions, advice, elaborations, works of art, software, etc.).

Another, very important function of computer networks and other multimedia is advertising and public relations which works in such a way that the product exists not only physically and medially but also in the psychology of potential consumers which can induce specific activities in future, namely the wish to buy the advertised product. The conditions created by new technologies have made it necessary to use new economy not only in a given country but also around the world, within the framework of globalization processes and free exchange of goods, services and information

### 3. PROSPECTS FOR E-BUSINESS IN EUROPE AND ROMANIA

In the coming years, the number of Europeans shopping online will grow from 100 million to 174 million. Their average yearly Net retail spending will grow from around €1,000 to €1,500, as UK Net consumers outspend even their US counterparts online. Overall, this will cause European eCommerce to surge to €263 billion in 2011, with travel, clothes, groceries, and consumer electronics all above the €10 billion per year mark. [5]

European business-to-consumer (B2C) e-commerce sales totalled 106 billion Euros (\$133 billion) in 2006 and will grow at an annual growth rate of 25 percent over the next 5 years, tripling in amount to reach nearly 323 billion Euros (\$407 billion) (table 1).

**Table 1. E-commerce in Europe\* in 2006-2011**

Year	E-commerce sales in Europe (billions \$)	% increase vs. prior year
2006	132.9	-
2007	196.9	37.2
2008	255.7	28.0
2009	307.1	25.6
2010	357.4	20.0
2011	406.8	15.6

Note: \* includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the UK

Source: eMarketer, July, 2007

At present, leading roles in Europe are played by e-businesses of England, Germany and France (Table 2). The three countries together now account for 72 percent of Europe's online sales:

- The UK is by far the largest of the three major markets, with 2007 sales of 42 billion pounds (\$84 billion).
- Germany, however, has the most online buyers, with 27.2 million, but produces less than half the online sales volume of the UK.



- France, in turn, produces less than half Germany's e-commerce sales volume and has 14.5 million online buyers.

**Table 2. B2C E-commerce Metrics for the Top Three Markets in Europe in 2006**

Country	Sales* (billions \$)	CAGR** 2006-2011 (%)	Online buyers (millions)
UK	55.6	22.7	24.8
Germany	27.1	24.1	27.2
France	12.5	27.4	14.5

Note: \* includes online travel, event ticket and digital download sales

\*\* CAGR – Compound Annual Growth Rate

Source: eMarketer, July, 2007

On average, German and French buyers are spending considerably less online per person than their UK counterparts.

Table 3 shows the percentage of e-commerce in total retail sales in selected countries of Europe.

**Table 3. E-commerce in total retail sales in 2008**

	Country	E-commerce as % of total retail sales
1	Sweden	0.68
2	UKs	0.37
3	Netherlands	0.34
4	Germany	0.30
5	Belgium	0.16
6	France	0.14
7	Italy	0.09
8	Spain	0.06
9	Portugal	0.06

Source: eMarketer, 2009

The first European e-commerce wave began with the UK, Germany and France, and the next wave, over the next years, will begin in smaller markets - Italy, the Netherlands and Spain - eMarketer forecasts. The third wave will follow early in the next decade, as Eastern European states - Russia, Poland, and the Czech Republic - begin to embrace e-commerce, it said.

In Romania, the first online shop was CyberShop.ro in 1997 who sale music CD's but hardly in 2004 is implemented the standard of security 3D Secure - moment from which the owners of cards can pay online. Thus, in 2004 they accomplished a total of 19,410 transactions in the online shops with sales of approximate 3, 5 millions USD.

The year 2008 finished with approximate 100,000 online transactions and 60 of millions Euro results from the online pay with the card [6]. The areas which generate most big volumes on sale in Romanian electronic commerce are in order: touring

services and reservations of air-travel tickets, the pay of the invoices of mobile telephony and IT&C and electronic products, consumer electronics.

#### 4. CONCLUSION

The use of e-business, of course, brings many new possibilities or changes in economy and management, but requires modern, technological infrastructure - this requirement is connected with large, financial investments. As it can be seen from the data presented, e-business develops fastest in rich areas, such as the USA and EU, where 2/3 of the world's GDP (Gross Domestic Product) is produced, causing and additional large economic growth using multimedia (like the loop of positive feedback) in spite of the fact that in rich, developed countries the growth dynamics of GDP is very small (0.1-3%) per year. However, non-material values, like in a typical information society, begin to dominate. Although American and EU goals are similar (information society) the way to their achievement is different. The Americans believe more in market self-regulation and business profits, the EU also stresses state regulations and social values - hence the program e-Europe. Probably, a certain compromise to achieve mutual goals (within the frames of globalization) and fulfil the rowing needs of the population can be made.

The basic rule of on-line services 24/7/365 means constant access of the client to the Internet, 24 hours, 7 days a week and 365 days a year. It ensures constant access to information, possibility of choice, comfort of use, individuality of use, relative savings, social integration, entertainment, possible confidence guarantee, etc.

It is worth noticing that Romania is trying to catch up with the developed countries in e-business, therefore the strategy e-Romania, based on e-Europe program, was made. Still, the Romanian share is still small and requires large investments. From this point of view, Romania is at the beginning of its way to information society and e-business on a large scale, which however gives some advantages because old mistakes should not be repeated.

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## **THE IMPORTANCE OF THE WEB TECHNOLOGIES DURING THE COMMUNICATION PROCESS BETWEEN A COMPANY AND ITS CLIENTS**

**NAIANA ȚARCĂ, TEODORA VĂTUIU,  
ADELA POPA \***

**ABSTRACT:** *In order to face the new market environment which is in constant change, the company must place the customer in the centre of its attention. As a result, the company will not follow, first of all, the benefit brought by a certain successful business, but to develop long-term business relationships with the same customers. The integration of Web technologies has an important place into the process of accomplishing companies' objectives to increase the competitiveness degree on the market by generating customers' loyalty. Developing a web-site makes it possible a very good communication with the clients, and this leads, finally, to a constant adaptation of the company's offer to the continuously changing customers' requests.*

**KEY WORDS:** *client-oriented marketing, website, customer relationship management, performance through quality, centralized databases*

### **1. ORIENTATION OF COMPANIES' ACTIVITY TO PERFORMANCE THROUGH QUALITY**

In the terms of globalized ways of satisfying people's needs, there is a trend of gradual replacement of the companies' market-orientation with the customer-orientation.

In order to face the new market environment which is in constant change, the company must place the customer in the centre of its attention. As a result, the company will not follow, first of all, the benefit brought by a certain successful business, but to develop long-term business relationships with the same customers.

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Companies' customer-orientation implies a continuous and detailed process of analysis regarding the potential clients' expectations, in this way, a strong connection between customers' needs and the quality of offered products and services being assured.

In order to generate performance through quality, a company has to:

- develop interacting long-time relations with the customers;
- generate customers' loyalty regarding company's products by creating those kind of relationships which are based on knowing each-other and mutual trust;
- involve customers in the process of developing products, by taking into account their suggestions;
- involve customers into the process of solving complaints;
- create databases about actual and potential customers, based on a systematic activity that implies the processes of gathering, organizing, classifying, storing, analyzing, and interpreting the data referring to customers' needs and expectations.

## **2. USING WEB TECHNOLOGIES INTO THE COMPANY-CUSTOMERS RELATIONSHIPS**

The importance and the complexity of the relations created by a company with its clients imply a good management of them.

By managing the relations with the clients, a company keep in mind the following issues:

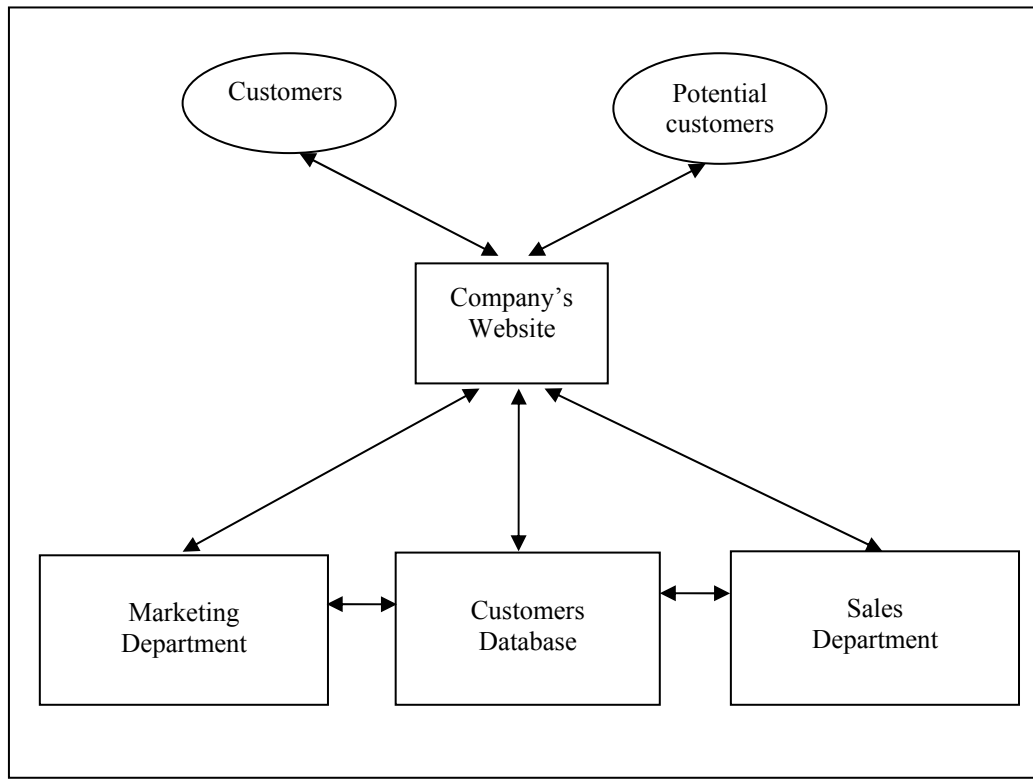
- to identify new customers and then to generate their loyalty;
- to understand customers' buying behaviour;
- to determine and to improve the customers' degree of satisfaction;
- to identify customers' dissatisfaction and to find the appropriate solutions for resolving them.

An efficient customer relationship management implies the process of developing an e-business. By using the information technology, the activity of each department of a company can be continuously improved and the company's behaviour can be permanently adapted to market changes.

Nowadays, there are few companies which, if having a traditional business, did not develop an online version of it. The Internet environment is not only a simple tool to promote a business, but it also offers opportunities to supply information; it is an efficient platform to communicate with the clients.

The integration of Web technologies has an important place into the process of accomplishing companies' objectives to increase the competitiveness degree on the market by generating customers' loyalty.

Developing a web-site makes it possible a very good communication with the clients (Figure 1), and this leads, finally, to a constant adaptation of the company's offer to the continuously changing customers' requests. The most efficient web-site is the one that is integrated into company's informatics system.



**Figure 1. Using a web site in the process of communication between a company and its clients**

The information acquired by the company in the online environment, about the customers, about their needs and expectations, about their buying behaviour, are centralized in customers' databases. The data stored in databases about customers can also be used to adapt company's offer to customers' needs.

A database referring to the clients, in order to be efficient, has to include current and detailed information about them and about their buying behaviour. For this purpose, the website makes possible a very good communication with the customers by using electronic forms, chat channels, voice applications, etc.

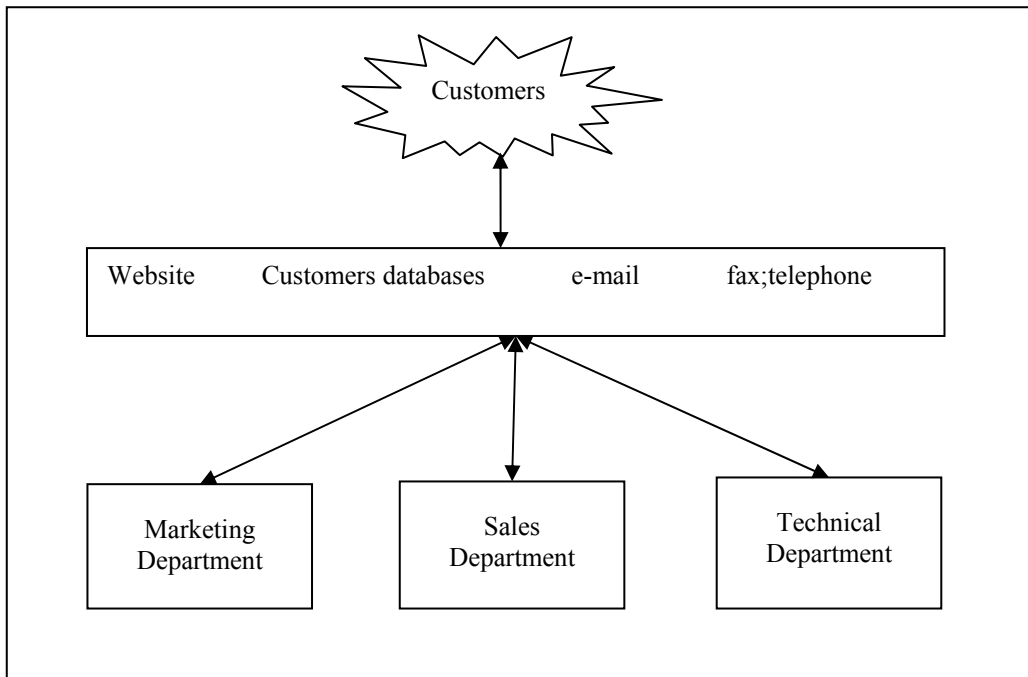
A centralized database containing customers' data, offers the possibility to create working groups, in order to make efficient decisions. Company's employees can work together even if they are not in the same place and at the same time.

By analyzing and interpreting the data stored in databases, important information can result and this information will lead to decisions that will adapt the company's offer to the customers' requests, needs and expectations.

By measuring and analyzing the information regarding customers' complains, the company can find the most appropriate solutions to resolve the situation. An efficient solving of customers' complains will lead to regaining customers' trust in the company and its potential to react.

The information technology offers to companies the possibility to use specialized software applications that have the role to merge sinergically the marketing activity, the sales and the technical assistance, in order to determine new customers and to generate their loyalty.

Software applications specially developed to manage customers relationships allow the marketing department, sales department and technical department to cooperate so that to not lose any sale opportunity and each client to be satisfied about the way its complaint was solved (Figure 2).



**Figure 2. Using a specialized software application in the process of communication between a company and its clients**

Marketing department focuses its attention on attracting new clients and generating loyalty for the existing ones.

In order to attract and develop long term relationships with the customers, the Marketing Department of a company may use individualized information items, specially tailored to the needs of each buyer. These items can be simple promotional texts or they may involve interactivity from clients. PDF file format brochures can be used, containing suggestive images are meant to attract attention. At the same time, these items can take the form of demos of product functionality, useful because they allow the customer to see the product "in action".

Advertisings containing graphics and animation are individualized based on age, occupation, geographic area, and they lead customers to a particular page of the site which is addressed to them.

Based on the customers information stored in databases, e-mails containing advertisements are regularly sent to a very well defined targeted audience. Thus, it is taken into consideration that each client has its own needs, preferences and expectations. The received responses, containing customers' opinions are very useful in adjusting the company's offer to the demands of the buyers. The informational content of the received responses is stored in the clients' databases, updating and enriching it.

Further, comprehensive and correct analysis of the stored data, creates the necessary conditions for the development of those products and services that will meet the expectations of every individual. At the same time, knowing the needs and areas of interest of the customers, the promotion of products and services will be more efficient.

The Sales Department can take orders and sell products in the online environment, using an automated tool for sales.

Also, the Technical Department has the possibility to provide real-time technical assistance for clients.

### 3. CONCLUSIONS

By creating its own website, a company gets the possibility to influence in a positive way, the evolution of its activity. This way, the company becomes more efficient, with a more flexible internal functionality, more careful with the customers' needs and expectations.

Web technologies allow companies to design a certain image and to attract and generate customers' loyalty.

Software applications specialized in customer relationship management assure an improved relationship with the customers. This way, the customers will feel to be treated with more consideration, and that they are granted with more attention, they become more content about the company's products and services and also about the employees' professionalism.

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## COMPUTER-ASSISTED ACCOUNTING

SORIN-CIPRIAN TEIUȘAN \*

**ABSTRACT:** *What is computer-assisted accounting? Where is the place and what is the role of the computer in the financial-accounting activity? What is the position and importance of the computer in the accountant's activity? All these are questions that require scientific research in order to find the answers. The paper approaches the issue of the support granted to the accountant to organize and manage the accounting activity by the computer. Starting from the notions of accounting and computer, the concept of computer-assisted accounting is introduced, it has a general character and it refers to the accounting performed with the help of the computer or using the computer to automate the procedures performed by the person who is doing the accounting activity; this is a concept used to define the computer applications of the accounting activity. The arguments regarding the use of the computer to assist accounting targets the accounting informatization, the automating of the financial-accounting activities and the endowment with modern technology of the contemporary accounting.*

**KEY WORDS:** *accounting, accountant, informatization, computing, automation, computer applications*

### 1. INTRODUCTION

The computer is currently used in many areas and every day it gains ground by breaking in other fields or subfields in order to prove its helping ability and the offered advantages. Computers are more efficient than people in the areas where there is a large volume of calculus because of the speed and the precision this calculus is done. In accounting computer is very useful, because with its help can be achieved much faster different calculations and results may be obtained in an acceptable format. Dulu (2006) says the following: computer-based accounting can be done to a company in a few days, while a man does the same accounting in a few weeks. Thus, the computer was transformed in an indispensable instrument for the daily activity of the contemporary individual. Popovici and Scheau (2005) tell us that today only Nobody

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can doubt the computer's usefulness, its capacity to speed the solving of problems, to ease the work of man and to facilitate the human relationships.

The invention of the computer has determined a powerful change in all the social life, with society stepping on a new path: the path of informatization, entering the age of informatization. At first, in most units the computers were used for three types of works: general accounting, collecting-disbursing bills and personnel remuneration, three areas with specific features, fostering the automation through: an important volume of procedures of the same type, with a repetitive character and a feature to lay-out the specific tasks. The informatization of the enterprises started in the 1960's with billing and payments, continuing with accounting.

The strong economic rise of the western economies involved a large work volume in the big enterprises. Because the growing number of employees and the purchasing of mechanical-graphical equipments (machines that preceded computers and that allowed billing and keeping the books through calculus of the data, but they weren't programmable or parametric) didn't prove efficient, Bocksbaum (2002) said that the only solution to solve the problem was the computer, regardless of its cost.

Going from manual labour to automatic labour by using the computer was fundamental. In a French food company, the accounting department reduced its personnel from 150 people to 5 people between 1965 and 1980; the management of the organization became aware of the computer's importance and placed the informatics department above the administrative departments.

For a long period of time the improvement of the payment, billing and accounting information instruments was the priority, the computer entered the territory of other functions only later and in a progressive manner (text processing started only in the beginning of the 1980's). The transition was made from the accounting done completely by hand to an informatized accounting. The computerization of accounting occurred. In the dictionary (DEX, 1998) to computerize means to process with the help of the computer; to introduce the computer in various areas of activity.

## **2. PRESENTING THE CONCEPT. DISCUSSIONS**

Before approaching the concept of computer-assisted accounting, we will discuss about the terms of computer and accounting.

According to the dictionary, the term of calculator (electronic) is synonym with digital computer, namely computer, the digital computer being defined as follows: universal digital computer, consisting of a variable number of units specialized and commanded by the same recorded program, which allows the performance of arithmetical and logical operations without the human intervention, and solves problems of scientific calculus and of management for the commercial or industrial enterprises.

For Oprean et al. (2007), an electronic calculator is a set of integrated circuits that can ensure the satisfaction of the informing demands at superior technical and qualitative parameters by connecting it to power energy and by programming it.

The computer dictionary (Microsoft Press, 1997) sees the computer as any type of machine capable to achieve three things: to accept structured entries, to process according to the pre-established rules and to supply the results as exists.

Another dictionary (for computers, 1994) defines it as equipment for the systematic processing of the signs and series of signs based on algorithms. The authors of this paper assess that the name of “calculator” is not adequate, because it only renders one of its use possibilities, meaning the calculus of complicated operations with big numbers in a short period of time (with an high processing speed). Looking from an abstract angle, the computer represents a universal machine that stimulates all the specialized machines. In practice, the specialized machines are represented with the help of the programs and the computer represents the machine at the time of the execution.

According to the dictionary, accounting is explained as the set of recording operations based on special norms and rules, of the movements of funds and materials in an institution, reflecting its practical side. On the other hand, accounting is the science that manages the theory of these operations, emphasizing the conceptual side.

Accounting is defined by Meigs et. al (1996) in a simple manner as being the mean through which we measure and describe the results of the economic activities.

Another congregate of authors (Economy dictionary, 1999) considers accounting a field and a knowledge instrument of the economic reality, regarding the economic resources separated in a patrimonial manner.

As a specialized activity in measuring, assessing, knowing, managing and controlling the assets, debts, and equity capitals, as well as the obtained results, according to the Accounting Law no. 82/1991 (2008), accounting must ensure the chronological and systematic recording, processing, publishing and keeping of the information regarding the financial position, the financial performance and the treasury flows for their internal demands and for the relationships with the current and potential investors, financial and commercial creditors, clients, public institutions and other users.

According to article 1 in the Accounting Law no. 82/1991, republished, the business enterprises, the national enterprises/companies, the autonomous administration, the national research-development institutes, the cooperative businesses and other corporate bodies have the obligation to organize and manage their own accounting, namely the financial accounting, according to the mentioned normative document, as well as the management accounting adapted to the specific of the activity.

Public institutions, associations and other corporate bodies with or without patrimonial purpose, as well as the corporate bodies that run activities resulting in incomes, have the obligation to organize and manage their own accounting, namely the financial accounting and, if needed, the management accounting. The subunits without legal personality, with business offices abroad, which belong to the mentioned entities that have headquarters in Romania, as well as the subunits without legal personality that are in Romania and belong to units abroad have the obligation to organize and manage their own accounting.

From the point of view of the used instruments, the management of the accounting in any patrimonial entity is done through two methods: either manually, using a paper and a pen, or with the help of the computer, where filling the documents and processing the accounting data is done with the help of the informational equipments, therefore the accounting is automatic. Currently, accounting is done in a manual or an automatic manner, but the tendency is to give up the pen used to fill the documents because of the substantial contribution of the computer in the financial-accounting field, through the indisputable advantages it brings.

We have seen what accounting does and what a computer is. But what is computer-assisted accounting?

The definition in the dictionary (DEX, 1998) writes that to assist means to be at the site, to take a part (in...), to stand by somebody in order to help him, to defend him, etc. In our case, it is about accounting and the computer, namely the practical activity run by the person responsible about it: the accountant; and an ingenious machine that automates this activity and gives support for an easier achievement of the objectives and tasks of this science.

In our opinion, computer-assisted accounting is a term with a general character; it refers to the accounting kept with the help of the computer or to the use of the computer to automate the operations in the activity of the person in charge of accounting, the accountant; it is a concept used to define the computer applications in the accounting activity. It's about a calculus system (electronic calculator) which is used for the partial or full management of accounting. The computer-assisted accounting systems are interactive and serve to keep the financial books and are represented by general programs (office packages), but also by special programs (packages with economic programs, with an accounting application) and the information application can be simple, such as the cash order application, but it can also be complex.

In general (Ban et. al, 1994), the application is a program or a set of programs that uses the operating system and manipulates files of data, allowing the user to solve a certain problem. It can be a program for text processing, for tabular calculus or graphical presentations, and the software applications designates the general term regarding all the programs that are not part of the operating system. With the help of these programs, the user can solve his problems. According to Ursăcescu (2002), the information application represents a correlated set of software programs, which works to automate the processing operations of the information in a certain area.

At its base are two essential features:

- an applicability area, which is defined structurally (a service, a department) and functionally (the management of the materials, of the clients, the costs' calculus, etc.);
- a certain number of functionalities (general, specific), meaning a set of tasks to be executed (manually, automatically, mixed) within an area.

The informatization of the financial-accounting activities in an organization needs to revise the organization method of the system, so that the necessary environment for the transition from the manual approach to the automatic approach of the data, by benefiting from the opportunities of the calculus systems. Through

informatization, accounting is on a road with no return. Today nobody conceives managing the accounting of any unit without using the financial-accounting information applications and other programs meant to provide a modern technical support to this science.

### 3. CONCLUSIONS

Accounting, as an applied science, implies its organization and management for all the corporate bodies, who, according to the law, must run it. At the present time, the accounting management of the patrimonial units has become dependent on the computer, the electronic calculator is assisting the practical accounting and the accountants step by step, from entering the data about the economic-financial operations, which determine changes in the patrimony of that unit, to the drawing-up of the synthesis documents, from the opening to the closing of the accounting cycle, from the start till the end of the financial exercise, from the founding of the unit to the ceasing of its activity.

The informatization of accounting doesn't mean that the financial books are monopolized by the computer. We must understand that organizing and managing the accounting activity requires a series of tasks, and they can be accomplished in different ways, among which is the use of the computer. Currently, the computer has become a component of running the entire accounting cycle, used by economists-accountants as a result of its superior outcomes in comparison to the classic method.

Pântea (1998) thinks that in the present conditions, with all the progress made in the area of computers, the economy of a country can't spare accounting; it remains the most exact form of keeping the financial books. Pântea says the following: until now, nor is foreseen in the close future, another mean to replace accounting at the level of the economic agents was not found. Only accounting can provide precise information for the decisions of the manager. He must have this "control panel" with multiple dials that represents modern accounting.

We agree and we don't challenge the place and the role held by accounting in the economic life, regardless of the level we refer to: government, patrimonial units, etc. But just as indisputable are the place and the role held by the computer in the modern society, in accounting and in the work of the accountant. The computer makes the life of the accountant easier. We believe that a modern accounting is the only one that fulfils its tasks by using modern instruments, information equipments, among which the central position is held by the electronic calculator.

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## OVERVIEW BY FORMAL AND INFORMAL LEARNING IN THE COMPUTER WORLD

MIOARA UDRICĂ, TEODORA VĂTUIU \*

**ABSTRACT:** *The advancement of information and communication technologies, offers the training sector the promise that the latest generation of network applications will induce qualitative changes in education and training. In the present European context, Romania plans the strategically goals assumed in the process of integration to become reality an established strategic goals for the transition to a competitive and dynamic economy, to a high quality educational system, based on need to assuring the independence and autonomy context and ensure that higher education and research systems.*

**KEY WORDS:** *learning process, formal learning, informal learning*

### 1. GENERAL CONSIDERATION

In the present European context, Romania, as a recently accepted country into The European Community, plans the strategically goals assumed in the process of adhering to become reality and has established strategic goals for the transition to a competitive and dynamic economy, to a high quality educational system, based on:

- *Lisbon European Council 23 and 24 March 2000*, stating that “Europe's education and training systems need to adapt both to the demands of the knowledge society and to the need for an improved level and quality of employment”;
- *The Bologna Declaration of 19 June 1999*, affirming that “Universities' independence and autonomy ensure that higher education and research systems continuously adapt to changing needs, society's demands and advances in scientific knowledge”.

Romanian *Post adhering strategy 2007-2013* stipulates, through specific objectives, the requirement, that the education should be concentrated on development of a set of key competences, which have to ensure a performances achieved at the individual level, both on personal and socio-professional field. These *key competences*,

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endorsed at the European level, are: *communication in the mother tongue, communication in foreign languages, custom of mathematical calculation and basic competences in science and technology, TIC abilities, to learn for learning, civically and inter-personal components, enterprising and cultural conscience.*

Development of key competences assumes an optimal correlation between the two forms of learning: formal learning and informal learning. Both formal and informal learning offer different strengths to the learning process, serve learners, may be useful to educators, to parents at home with their kids or to adult learners who are looking to expand their knowledge, either for their own enrichment or to increase their career options.

With regard to the connection among the participants of process and the way in which the transfer is made, (1) *formal learning* is defined as knowledge that can be captured in any format (written, video, audio) and can be accessed anytime and anywhere, independent of the person who originally had it; (2) *informal learning* is defined as what happens when knowledge has not been externalized or captured and exists only inside someone's head. To get the knowledge, you must locate and talk to the person. (1) *The formal knowledge transfer includes* live virtual-classroom courses with prepared slides, books, video and audio tapes, digital libraries and repositories, a real-time seminar on the Web, electronic performance-support tools, programs accessed during a job or task, instructor-led courses that follow an outline, a recorded Web-based meeting. (2) *The informal knowledge transfer includes* instant messaging, a spontaneous meeting on the Internet, a phone call to someone who has information you need, a live one-time-only sales meeting introducing a new product, a chat-room in real time, a scheduled Web-based meeting with a real-time agenda, or a meeting with your assigned mentor or manager.

These different learning environments are significantly connected to the individual performances in the personal and professional field, are more and more influenced by the computer technology. The use of Internet, on-line resources, virtual libraries, on-line communication, have implications in the society we live in, stimulating and developing multiple cognitive potential of those involved in the educational process. More, the *digital world* becomes a "real" component in a society based on information and knowledge where individual find unlimited resources, favorable to develop his own personality, the *digital world* becomes a present partner for the challenged person involved in the business environment.

The major change brought by computer technology is networking, realized by Internet global network. Most organizations, which were before of a hierarchical type, are now moving to networks and change information using Internet. Internet links people with people, people with information, and information with other information.

Internet is mainly a network of information. But education needs a network of knowledge, which is coherent information, linked to issues or questions, linked to possible uses. Knowledge, which is more elaborate, changes the role of educator, who has to create such networks, and to give the students the way to access knowledge.

Below are the conclusions of an analysis of the performances obtained in business environment by those who gained particular competences in the context of formal and informal environment.



## 2. FORMAL LEARNING

In the new context, school has to change similarly to society. The teachers have to try to eliminate some weaknesses of educational system: technological support is still limited; curriculum does not integrate the use of technology computer; there are not enough credit hours of instruction with CT; old-fashioned methods are still in use; teachers (others than those who teach informatics) have low-level training in informatics; evaluation systems test only acquired information; students want to have short-term benefits; there is a lack of motivation in acquiring long-term competences.

The school needs to understand the evolution of the external world and to change its curriculum areas, ways of learning, school structure and resources, in order to match its aims to social evolution. Because the computer technology profoundly transforms society, education and the way the teacher interacts with students have to take into account that: (1) students can search, evaluate and communicate their own results in the classroom settings or in informal settings, out of the classroom; (2) the teacher has the instruments to develop the ability of each student to intelligently process. For students with different background and competences, the teacher becomes the facilitator of learning, offering strategies to guide learners; (3) universities and other public institutions take part in the development of international projects.

Until now, the Romanian university system has been characterized by strong inertia and focused on teaching. From now on, we think that: the curriculum has to be based on the following assumptions: (1) students live in a global, knowledge-based age and learn in an online world; (2) the teacher should have the knowledge, skills, understanding and positive attitude, to make effective use of the computer technology in their teaching practice; the curriculum has to aims at developing individual competencies which lead individuals to success, institutional competencies which lead society to success and application of individual competencies to contribute to collective goals.

In today's Romania, in private universities, there is a large opportunity for applying strategies to define the curriculum areas, to use new methods. We consider that in the economic field, the curriculum has to include the following courses:

1). *Information and Communication Technology (ICT)* - a course that: develops the basic concepts in ICT and familiarizes students with the standards and protocols in ICT; gives the students skills in communication on Internet and Intranet; helps students to share their knowledge and experience, developing the ability to access new information regarding their fields; includes the students in projects initiated by other future teachers, in order to extrapolate the experience to other situations.

2). *Relational Databases Management Systems* - a course that: familiarizes students with design models and use simulation process in systemic methodology for Information Systems; helps students in designing relational data bases and defining interface with the users; teaches students to use information resulting from a data base in order to understand the real system environment.

3). *Multidimensional Analysis in Data Warehouses Collection* - a course that: helps students to work in client-server architecture, give them initial knowledge in Standard Query Language; guides the students to reach the basic level in designing

data warehouses collections; familiarizes students with multidimensional analysis of the data storage in data warehouses; familiarizes students with the different business functions that lead to effective decision-making.

4). *Object Oriented Modeling in Information Systems* - a course that: shifts attention from symptoms to causes, from assertions to justifications and from the specific to the general; familiarizes students with the analysis, design and implementation phases used in object oriented methodology; prepares students to apply conclusion from the analysis process, in order to develop an existing model, by adding new components; helps students to develop network between objects, to define and reuse components in different environment programming. By similarity, students can understand educational models based on “learning objects”.

Regarding the new methods, in order to develop competencies in computer technology, teachers have to:

- guide the students to reach the basic level in information and communication technology, using the digital library which provides documentation;
- create new and challenging situations so that students can understand data security, ethical issues and how important co-operation is;
- guide the students in understanding the network of knowledge and in designing data bases of knowledge and
- use multiple-choice questionnaires in order to evaluate the students’ progress and for self-assessment.

To develop key competencies of business or management graduates, it necessary to develop an environment where the students can apply knowledge on business or management issues, with a view to improving their decision-making ability at work. Teachers also have to: direct students towards the acquisition of learning skills that will help them operate in a continuously evolving business environment and prepare them to undertake progressively the professional duties required in the real world; help students to understand how organizations use information to create knowledge and make decisions and to analyze the effect of computer technology on business and integrate CT to strategic business plans.

### 3. INFORMAL LEARNING

If until now the interest of researchers was concentrated on the analysis of formal learning, it is now detected a change of emphasis towards a reconsideration of the importance and weight of informal learning, together with the other forms of learning. In addition, the success in an informal setting can lead to greater confidence in the formal classroom. Coffield F., in “*The Necessity of Informal Learning*” said: “Informal learning should no longer be regarded as an inferior form of learning whose main purpose is to act as the precursor of formal learning; it needs to be seen as fundamental, necessary and valuable in its own right”.

The informal learning is an outstanding factor in the development of human personality, meant to ensure the necessary training of the individual for assuming different specific social roles in the context of globalization. By its multidisciplinary and spontaneous character, as well as its accessibility, ensures a vast development of

individual personality best correlated with his needs, increases the odds of the individual to best and efficiently adapt to the demands of the environment.

**Table 1. Michael Eraut’s typology of non-formal learning (2000, p.129)**

	Thought/ action		Mode of Cognition		
	Time of stimulus		Instant/ Reflex	Reactive/ Intuitive	Deliberative/ Analytic
<b>Individual/Social Activity</b>	Past episode(s)	Deliberative	Implicit linkage of past memories with current experience	Brief near-spontaneous reflection on past episodes, communications, events, experiences.	Review of past actions, communications, events’ experiences. Systematic reflection.
			Pattern Recognition		
	Current experience	Reactive	A selection from experience enters the memory.	Incidental noting of facts, opinions, impressions, ideas. Recognition of learning opportunities.	Engagement in decision making, problem solving, planned informal learning.
	Future behaviour	Metacognitive	Unconscious effect of previous experiences.	Being prepared for emergent learning opportunities.	Planned learning goals. Planned learning opportunities.

Informal learning is natural: no curriculum, no classrooms, no grades or certificates, and no schedule in advance. Experience indicates that:

- People learn to do their jobs largely by observing others, asking colleagues, and trial-and-error;
- at least 80 percent of how people learn their jobs are informal and the 75 percent of learning happens as the learner creatively adopts and adapts to ever changing circumstances (A study of time-to-performance done by Sally Anne Moore at Digital Equipment Corporation in the early 1990s, Moore, Sally-Ann, "Time-to-Learning", Digital Equipment Corporation, 1998);
- Almost all real learning for performance is informal, and the people from whom we learn informally are usually present in real time. (The Institute for Research on Learning, 2000, Menlo Park).

In terms of learning in the workplace, everything is focused on performance and performance is everything. Into viewing them as creators and constructors of learning, the informal learning approach people as both learners and educators, moving away from seeing learners as consumers of different packages and opportunities. This means needs skills for learners and educators, offers the conceptual framework for the development of key competences:

- *for learners* the skills include: forming, expressing, justifying, defending an opinion; supporting opinions of others; challenging others’ opinions; questioning

others; seeking clarification; representing others' opinions; building on others' opinions;

- *for educators* the skills include: facilitator skills; active listening skills; feedback skills; intervention skills; evaluation skills.

Taking into account all these reasons, we consider that those who learn in the informal learning environment can easier develop key competences, which are needed to achieve professional performances. Consequently, formal classroom and companies have to accept informal moments of knowledge transfer, should add these accidental, informal intersections of learning and performance into their management.

#### 4. CONCLUDING COMMENTS AND INVITATION TO FURTHER RESEARCH

Formal learning, along with informal learning, provides powerful learning opportunities which can strengthen and support one another. Responsibility for learning is shared among educators and learners. The differences are more a matter of degree in each of these types of education. We hope that the generous issue of formal and informal learning will raise a major interest among the specialists and will bring together valuable individual efforts and experiences. At the same time, we would like to be joined by specialists from different fields and geographical areas of the world, in order to build up a unitary vision, coherently connected to the learning environment, as a relevant factor in the development of human personality.

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## **LIFE INSURANCES AND THEIR INFLUENCES ON REINSURANCES**

**MARIA VĂDUVA \***

**ABSTRACT:** *Life insurance is an insurance concluded for a long period of time and reinsurance shall have to be a long-term reinsurance, otherwise the direct insurer may lose its hedge through reinsurance before the insurance agreement expires or pay an inadequate sum for the reinsurance with the insurance premiums it receives. In the case of life insurances, reinsurance agreements include provisions answering to the direct insurer's need to benefit from long-term protection. In life insurances, almost all reinsurance agreements are proportional agreements, the greatest weight being held by surplus agreements.*

**KEY WORDS:** *life insurance, reinsurance, portfolio, protection*

Life insurances have characteristics that influence reinsurances. These characteristics are:

- Long period of insurance;
- The insurance shall be concluded for a fixed amount;
- Accumulation of capital.

### **1. LONG PERIOD OF INSURANCE**

Assignor's portfolio adjustment depending on these alterations of the reinsurance agreement demanded by the reinsurer can only be made through the termination of insurance agreements.

Therefore, in the case of life insurances, reinsurance agreements include provisions answering to the direct insurer's need to benefit from long-term protection.

Not all types of insurances are adequate for a long-term protection. Excessive damages disproportional agreements for protection against risk accumulations cannot be concluded for long periods because their provisions depend on the structure of portfolio, which shall be altered in time.

Proportional reinsurance is not usual for life insurances and occurs only in filling-in standard reinsurance forms.

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## **2. INSURANCE FOR A FIXED AMOUNT**

Life insurances are concluded for a fixed amount without partial damages.

Life insurance covering the risk of invalidity and paying the pension includes reinsurance agreement that may be similar to an excessive damage protection.

## **3. ACCUMULATION OF CAPITAL**

The sum that has to be initially reinsured does not depend on the insured sum but on the risk sum.

If this difference is not significant in the case of risk insurance with premiums periodical payment when the insured amount equal to the risk sum at the beginning of the insurance, the situation changes when it equals the payment of a sole premium. The risk amount is smaller than the insured sum requiring a bigger initial reserve.

## **4. PROPORTIONAL REINSURANCE**

In life insurances, almost all reinsurance agreements are proportional agreements, the greatest weight being held by Surplus agreements.

Proportional agreements guarantee the covering period, the insurance agreement and the division of luck between insurer and reinsurer because risk division, established at the beginning of the agreement between insurer and reinsurer remains unaltered until the insurance agreement expires, making it easier to equitably establish the reinsurance premium.

In the case of proportional reinsurance, reinsurer takes part in the alterations and amendments made to initial insurance. This applies also to the increases of insured sum due to the application of dynamic adjustment cause with a great importance in the circumstances of a high inflation rate.

Proportional agreement stipulates a minimum amount below which reinsurance does not work anymore. Such solutions serve to the simplification of management with limited effect on the reinsurance relation.

## **5. WITHHOLD FOR EVERY RISK SEPARATELY**

In life insurances, in establish withholding the size of the risk amount is important that the insurer may withhold in case of an insured event. In order to be able to calculate exactly the withholding, actuarial patterns have been used with various degrees of complexity.

Mathematic theory has to operate with simplified patterns that would follow simple objectives and multifunctional influence factors have to be analyzed only to the extent it is necessary.

All actuarial patterns have the same objective: establishing the results of the portfolio retained by the direct insurer. Simple patterns generally suppose that damages be independent excluding accumulation of occurred risks - for instance, an accident.

Therefore, in establishing the withholding, one shall consider several commercial reasons and its own experience rather than actuarial calculations.

When reinsurance seeks other purposes beside the homogenization of portfolio, other criteria are considered in order to establish the withholding.

If reinsurance is seen as a financing source, the following requirements have to be considered:

- The reinsurer has to be able along with the reinsurance to solve the current financing problems
- The amount of premiums withheld by the insurer has to give it the possibility to cover its current and anticipated expenses.

In this case, an adequate solution is establishing an initial withholding at a low level and fast increasing it in order to reach an adequate level for the financial possibilities of the insurer.

In case of major standard risks from the medical field, compound risks, the ones due to age and insured person at the conclusion of the insurance, the insurer shall want to withhold as less as possible because these are the bad risks leading to big fluctuations of results.

In case of insurances giving the insured person the opportunity to increase the insured amount, the insurer shall establish the initial withholding to such a level that after the increase of the insured amount, the maximum limit of the sum it may withhold is not exceeded.

One may consider the supposes decrease of the risk sum for the main insurance and the increase of its own withholding value in time.

Additional services leading to the increase of the risk sum in case of death like for example - accidents additional insurance, have to be considered when establishing the withholding.

If both the death risk and the invalidity risk appear in an insurance agreement, separate withholdings have to be established for the two risks. In practice both risks are insured to the same extent, the assigned sum being established depending on the risk that requires a higher degree of reinsurance.

In case of insured person's death, all the policies concluded for it become outstanding. In order to establish withholding in such cases, the insurer has to consider all the insurance agreements concluded for the same insured person with their related death insurances.

This shall be made with the help of the database, such risk accumulations being able to be determined under the name of risk accumulation control.

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## GLOBALISATION AND e-EUROPE PROGRAMS

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**ABSTRACT:** *Globalisation is a fairly broad term that describes the phenomena of the 'local' turning into the 'global', or the coming together of different aspects of the world into a single and identifiable state. While the term globalisation may have at first been strictly applied to the international financial marketplace and its deregulation, what it means for many today has as much to do with cultural and political realities as economic ones. Globalisation involves economies, cultures and political movements in all of the different parts of the world. There is nothing new about different countries and cultures becoming integrated and working together, what is new though is the speed that it is now taking place. The Internet has also had a large effect on the acceleration of globalisation and can potentially act as a common cultural denominator. Broadcasting and the Internet are still economically and culturally dependent on other issues however and are not ubiquitous everywhere. From this point of view the e-Europe idea are the European vision of an information society these are the ways of implementing the same goal - with the use of computer networks and other multimedia.*

**KEY WORDS:** *globalisation, computer network, Internet, communication, e-Europe program*

### 1. THE INTERNET AND THE GLOBALISATION

Globalisation, the unavoidable process which the world entered, is affecting every one of us in different ways, sometimes right, other times not so right.

There are many different definitions of globalisation, but most acknowledge the greater movement of people, goods, capital and ideas due to increased economic integration which in turn is propelled by increased trade and investment. It is like moving towards living in a borderless world.

Globalization means growing permeability of all the boundaries such as time and space, national and state borders, borders of economy, branches and organizations and less tangible boundaries such as cultural standards and their assumptions [1].

Globalization is an octopus whose international tentacles touch practically all aspects of the state's activity. This expansion is seen mostly in political, economical,

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military and financial areas. The activity of a global company exceeds the state borders and is not attached to the country of origin.

There has always been a sharing of goods, services, knowledge and cultures between people and countries, but in recent years improved technologies and a reduction of barriers means the speed of exchange is much faster.

Global economy conditions and they concern: acceleration of technological changes, shorter life cycle of products, availability of production factors of similar quality and price in the world, progressive globalization of new industrial branches, etc.

On the other hand, global ideas cover globalization of: finances and own capitals; markets and strategies; technology, research and development, lifestyles and consumption models; governments and legal regulations; globalization as political unification of the world and globalization of awareness.

Conditions of the present globalization process create, of course, many old and new problems concerning, among others, social, economical, technical, technological, legal, organization, cultural, awareness and ecological areas. Polarization and differentiation of the world, e.g. into richer and poorer is growing, migrations, capital and culture flows are becoming more intensive. The control of the state over multinationals is usually limited. Supranational computerization and communication standards structure is being built. It creates both opportunities and threats from the point of view of states, nations, business groups and ordinary people. The question arises: how will the globalization process be conducted and who will benefit from it?

It is probably necessary to change business philosophy for the so-called sustainable development, put stress not only on economical values but also social and ecological in the whole world. A company should generate also social values (e.g. for the creation of new workplaces, demand and fulfilling people's needs) and ecological values for the protection of environment where the company also operates. It is really in its long-term need, not just egoistic maximizing its financial value [2].

The reality of globalisation is such that its implications are both impossible to ignore and equally impossible to comprehend. Governments are unable to forecast and deal with the realities of globalisation because in reality and by definition its force lies beyond the scope of any local government body. International corporations have the ability to expand more than the government of any one country and so are forcing the entire global political landscape to re-evaluate and redefine itself.

The Internet is a worldwide network of computers that communicate using a particular protocol. This is known as the Internet protocol and refers to the way that information is grouped together into packets and how these packets are addressed. The origins of Internet date back to 1960's but he has a powerful development beyond 1991 when The World Wide Web became public.

The Internet is so big and all encompassing that it does require this fairly abstract and vague definition. In 2008 the Internet is accessed by almost 22% of the world population; however this number is highly skewed towards particular countries and particular socio-economic groups.

Countries like those in Western Europe, North America and Oceania have a much bigger percentage of their populations who are able to go online. In North

America 73.6% of the total population have access to the Internet, and this is by far the highest amount worldwide. The next biggest numbers are fairly far off with 59.5% for Oceania and 48.1% for Europe. With the Internet meaning so much in terms of networking and connectivity between industries, the lack of its relative availability in certain regions of the Earth could lead to problems with future global economic equality.

There are way more people in Asia than anywhere else on Earth, and so their total Internet presence is still the biggest at 39.5% of world usage. However this pales in relation to less populated areas when looked at in terms of relative population, as here the Asian usage only accounts for 15.3% of the total. The difference in these two figures gives us a worrying statistical insight into the global inequality of information access. It really is a staggering difference when the top 20 countries in terms of Internet availability account for over three quarters of total world usage, while the rest of the world lies at a little less than one quarter, or only 23.8%. [2]

Exactly what these differences in Internet availability across the world mean is a very interesting topic but not a very clear cut one. The Internet means different things to different people and is used in unique ways depending on a number of circumstances. The Internet has made new forms of social interaction possible while also having a large impact on the existing economic and political spheres. Especially in democratic nations the Internet has been used as a political tool that has a huge degree of influence and an enormous scope. Other governments like those of China, North Korea and Iran have restricted the free access to some parts of the Internet and have thus restricted its scope and therefore its influence.

The Internet is growing at a rapid rate all across the world, and will continue to do so for the foreseeable future. The rate that it spreads into particular countries will have a big impact on the future of those nations both socially and economically. While it seems doubtful at times, hopefully the global digital divide does not get bigger but rather decreases and brings nations closer together in terms of both information availability and economic prosperity.

## **2. e-EUROPE - AN INFORMATION SOCIETY FOR ALL**

For the development of the globalization and world information processes, new technologies and their constant implementation are needed. From this point of view in the new reality - e-Europe idea are worth considering. Although in general, European vision of an information society (more legal, state regulations, stressing also social values, cultural differences, etc.) differs from American vision (more commercial, technological information highways, market self-regulation), these are the ways of implementing the same goal - with the use of computer networks and other multimedia.

In connection with globalization processes, a possibility of creating new workplaces, for the economic development and being competitive with American economy, in December 1999 EU presented the program "*e-Europe - information society for everybody*". Its aim is to create the most competitive and dynamic market in Europe before 2001.

e-Europe was launched to ensure the EU fully benefits from the changes the Information Society is bringing. e-Europe's key objectives are to bringing every citizen, home and school, every business and administration, into the digital age and online. It plans to create a digitally literate Europe, supported by an entrepreneurial culture ready to finance and develop new ideas. e-Europe also wants to ensure the whole process is socially inclusive, builds consumer trust and contributes to social cohesion.

The first plan, *e-Europe 2002*, foreseen for 2 years was accepted at the meeting of the European Council in Lisbon, in March 2000, the second one, *e-Europe 2005* was accepted by the European Council in Seville in June 2002. Activities of *e-Europe* program are based on initiatives of EU member countries which generally aim at broadening access to the Internet, creating better and faster WWW sites, on-line services and software and developing Internet structure, remembering about net safety. These aims are to be achieved by mainly legal regulations (and not by self-controlled market - as it is assumed in the USA). These regulations should strengthen activities towards the development of the Internet in Europe, make EU firms more competitive and lower the costs - through direct UE financial support, coming from special funds [3].

The final shape of *e-Europe* initiatives was expressed in three thematic groups, developed into 11 detailed points: cheaper, quicker and safe Internet (cheaper and quicker access to the Internet, quick Internet for research and students, safe nets and smart cards), investing in people and abilities (European young people in the digital era, work in knowledge-based economy, general use of knowledge-based economy), stimulating use of the Internet (acceleration of electronic economy, government and authorities on-line, electronic access to public services, health service on-line, smart transport system).

To achieve the above objectives the e-Europe action plan has set out a set of key action lines:

*Broadband*: providing fast access to the internet at cheap prices, mainly through telephone lines (DSL) or cable but also using wireless technologies (3G mobile phones, WI-FI) and even satellite. Cheaper prices are to be guaranteed by a proper implementation of last batch of EU legislation;

*Security*: making sure electronic networks are free from hackers and viruses and safe enough to build consumer confidence in electronic payments. However, these security concerns have to be balanced with potential intrusion in to citizen's right to privacy;

*e-Inclusion*: making sure the information society is accessible to the largest number of citizens, overcoming geographical and social differences;

*e-Government*: bringing public administrations closer to citizens and businesses by providing modern online public services by 2005 - mainly through high-speed internet connections (broadband). *e-Government* plan was largely implemented till the end of 2002. Until 2005, the whole country administration system should be accessible on-line and the citizen will be able to contact the authorities on the Internet;

*e-Learning*: adapting the EU's education and training systems to the knowledge economy and digital culture. The plan assumes that until the end of 2005 all

UE schools, universities, museums, libraries and archives will be directly connected to the Internet. The plan also ensures on-line studies;

*e-Health*: providing user-friendly electronic health services and information for both patients and health professionals across Europe. The main issue under this action line is the implementation of an infrastructure to provide for medical care, disease prevention, and health education on-line. The plan assumes that until 2005 electronic health cards will be introduced. They will enable the transmission of all necessary data about the patient on the Internet. Until this time, all UE medical centers will have to be directly connected to the Internet. Creating on-line medical services on a large scale is also planned;

*e-Business*: stimulating the growth of e-commerce (buying and selling online) and the inherent re-organisation of business processes to digital technologies. e-Europe proposes to adopt e-commerce legislation and promote self-regulation, establish electronic marketplaces for public procurement and encourage SME's to "Go Digital". For the development of *e-business*, EU wants to create legal facilities for the companies using the Internet by removing those regulations which prevent *e-business* from developing. These solutions will make the Internet a safer and easier place for economic activity. Within the frames of *e-Europe* there is a tendency to lower the prices for telecommunication services.

The first two years of implementing *e-Europe* programme were quite successful. The number of households having the connection to the Internet increased from 18% in March 2000 to 38% in December 2001, the number of school to 80%. As a result of legal regulations and free competition process for telecommunication and Internet services dropped. More and more companies sells and buys through the Internet and works at home using a computer. The largest number of population (28%) use tele-working in Denmark.

European funds helped to create the largest European educational network GEANT which connects 27 national research and educational centres. At present, it is the fastest net in the world, because it enables to send up to 10 gigabytes per second. Further tasks implementing the assumptions of *e-Europe* are planned until 2005, especially as far as on-line portals are concerned, e.g. government, educational, health, economic and e-business with fast connection at low prices. Beyond the end of 2003 EU have their own cyber-police (Cyber Security Task Force) which take care of the safety of information flow in computer networks, protection against hackers and terrorists' attacks on the net.

In June 2005 The European Commission presented the program "*i2010 - A European information society for growth and employment*" - the new initiative for the years up to 2010. The *i2010* strategy is the EU policy framework for the information society and media. It promotes the positive contribution that information and communication technologies (ICT) can make to the economy, society and personal quality of life.

The *i2010* strategy has three aims:

- to create a Single European Information Space, which promotes an open and competitive internal market for information society and media services;

- to strengthen investment and innovation in ICT research;
- to support inclusion, better public services and quality of life through the use of ICT.

To achieve those aims there are various actions such as regulation, funding for research and pilot projects, promotion activities and partnerships with stakeholders.

The strategy and actions, presented in the *i2010 Communication* of 2005, are reviewed and updated through *i2010 Annual Reports*. The annual report also analyses developments in the ICT sector and assesses the Member States' progress in implementing their ICT objectives.

Moreover, *i2010* has undergone a mid-term review to make sure that it remains up to date with the rapidly changing ICT environment. The updated strategy was presented in September 2009.

### 3. CONCLUSIONS

Globalization refers to increasing global connectivity, integration and interdependence in the economic, social, technological, cultural, political, and ecological spheres. Globalization is an umbrella term and is perhaps best understood as a unitary process inclusive of many sub-processes (such as enhanced economic interdependence, increased cultural influence, rapid advances of information technology, and novel governance and geopolitical challenges) that are increasingly binding people and the biosphere more tightly into one global system.

The Internet increase information flows between geographically remote locations with the advent of fiber optic communications and satellites. The *Web* is the most used component of the Internet.

In December 1999 the European Commission launched the *e-Europe* initiative to bring the benefits of the Information Society to all Europeans. This was followed in June 2000 by the *e-Europe 2002 Action Plan*, setting out a roadmap to achieve *e-Europe's* targets, in June 2002, by the *Action Plan for e-Europe 2005* as an important contribution to the EU's efforts towards a competitive, knowledge-based economy, and in June 2005 by "*i2010 - A European information society for growth and employment*" a new strategy for the information society and media.

From 2005, Europe has:

- a modern *online public services* (e-government, e-learning and e-health services);
- a dynamic *e-business* environment relying on widespread availability of *broadband* internet access at competitive *prices*;
- a *secure* information infrastructure.

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## **ENVIRONMENTAL INDICATORS FOR RURAL AREAS - SUSTAINABLE POTENTIAL IN THE NEW AND OLD EU MEMBER STATES**

**JADWIGA ZIOLKOWSKA \***

**ABSTRACT:** *Environmental indicators are new instruments in the European Union to assess the impact of agriculture on the environment in rural areas. Using these indicators in the EU member states, changes in rural areas can be analysed and compared. Thus, strong and weak points in rural areas in terms of environmental protection can be investigated. The aim of the paper is to discuss environmental indicators, recommended by the European Commission in 2006, for chosen new and old EU member countries. This indicator analysis can help to state about potentials in rural areas to protect natural resources. Thereby, fields and countries can be specified requiring higher potential of environmental protection.*

**KEY WORDS:** *Agri-environmental indicators, rural development, sustainability, environmental protection, European Union*

### **1. INTRODUCTION**

Agri-environmental indicators and environmental indicators for rural areas are new evaluation instruments for the policy for rural areas in the European Union since the last few years.

Best known indicator sets for analysing changes of natural resources in rural areas were developed by the European Environment Agency (EEA, 2005), the European Union (EUROPÄISCHE KOMMISSION, 2001) and the OECD (OECD, 1997).

The very first indicators for rural areas and agri-environmental indicators were developed within the Agenda 21 during the United Nations Conference on Environment and Development in Rio de Janeiro in 1992. These indicators were based on sustainability indicators initiated with the Brundtland report "Our common future" in which the aim of sustainable development was defined as follows: "to meet the needs of the present generation without compromising the ability of future generations to meet their own needs".

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The new indicators for integration of environmental issues in the Common Agricultural Policy were defined by the European Commission in the strategic document „Wegweiser zur nachhaltigen Landwirtschaft“ (KEG, 1999: 31). According to this document and other recommendations of the European Commission, the indicators for rural areas and agri-environmental indicators should cover ecological, economical and social aspects.

In September 2000 a new project IRENA (“Indicator Reporting on the Integration of Environmental Concerns into Agricultural Policy”) was established by the General Direction for Agriculture and Environment, Eurostat, the Common Research Unit and the European Environment Agency. The basis for these indicators was DPSIR-Modell<sup>1</sup> developed by the European Environment Agency (EEA, 2006; EUROPÄISCHE KOMMISSION, n.d.).

In March 2001 the European Commission presented new indicators in the report „Statistical Information Needed for Indicators to Monitor the Integration of Environmental Concerns into the Common Agricultural Policy“ (CEC, 2001).

Despite the intensive development of indicator methodology for rural areas, any coherent definition of environmental indicators is known. Both EEA and EU and OECD set different criteria and definitions for successful indicators. Irrespective of this fact, the objectives of environmental indicators for rural areas are the same: to evaluate the impact of agriculture on the environment and to reflect sustainable potential in rural areas. By means of indicators successfully proved in the most EU-15 countries the use of environmental resources can be planned and possible environmental threats for rural areas in the respective EU-member states can be predicted.

## 2. RESEARCH OBJECTIVE

The main objective of the paper is to discuss the question of sustainable environmental potentials in rural areas in the old (EU-15) and new EU member states (EU-10). Special attention should be paid to the new EU member states which are characterised by valuable and well maintained natural resources.

In this paper chosen environmental indicators recommended by the EUROPEAN COMMISSION (2006) in the report “Rural Development in the European Union” were analysed. The goal of the analysis is to compare available natural potentials in rural areas in the new and old EU member states, as expressed with discussed indicators. In the paper following environmental indicators for rural areas were considered: land cover, areas under organic farming, utilised agricultural area (UAA) under less favoured areas, areas of extensive agriculture, Natura 2000 areas, biodiversity, development of forest areas, areas at risk of soil erosion, and climate changes.

Basing on the comparison analysis between the respective EU countries conclusions on the existing environmental needs with regard to environmental protection in rural areas can be drawn. Additionally, development possibilities and directions in the respective countries in this term can be stated. Therefore, the fields and countries can be indicated in which environmental protection requires more

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<sup>1</sup> DPSIR (Driving force – Pressure – State – Impact – Response)



support. Thereby, higher competitiveness with regard to environmental resources and sustainability in agriculture can be projected in the respective EU member states.

### **3. METHODOLOGY AND RESULTS**

With this study environmental indicators for rural areas, recommended by the EUROPEAN COMMISSION (2006), were analysed for chosen EU member states. For the research purpose following indicators from the group of 'indicators improving the environment and the countryside through land management' were chosen:

1. Land cover
2. Less Favoured Areas
3. Areas of extensive agriculture
4. Natura 2000 area
5. Development of forest area
6. Biodiversity
7. Areas at risk of soil erosion
8. Organic farming
9. Climate change

In the following, the listed indicators for chosen EU member states will be analysed and compared. For the current research, countries with a highest or lowest index of the analysed indicators, both in the group of the new and in the group of the old EU member states were selected. Additionally, the average for the EU-10 and EU-15 was analysed and discussed. Thus, potentials in natural environment and consequently sustainability of natural resources in the respective EU member states were investigated.

Due to the missing statistical data the analysis does not include Romania and Bulgaria which assessed the European Union in January 2007.

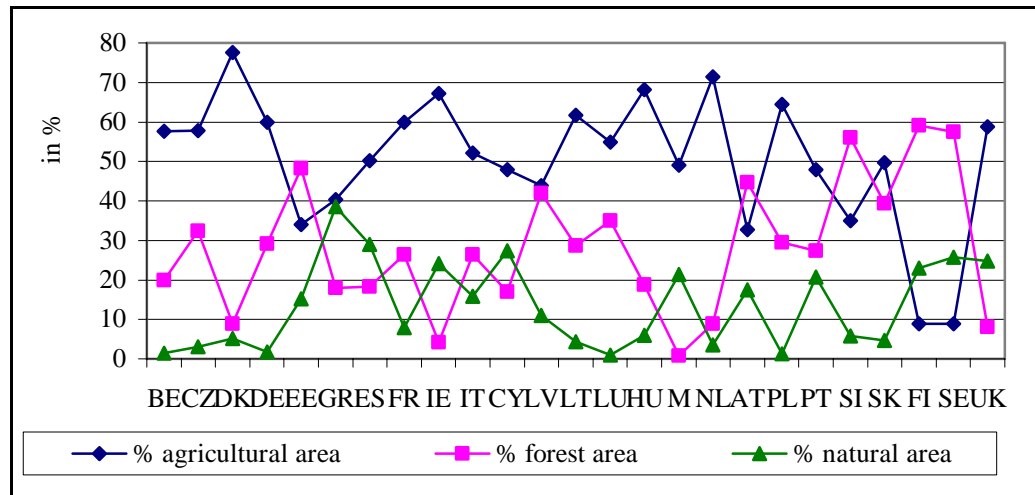
**Land cover.** The indicator 'land cover' is defined as the percentage of area in agricultural/ forest and natural classes. According to the EUROPEAN COMMISSION (2006) land cover is defined as distribution of forests, water, desert, grassland and other physical features of the land, including those created by human activities. For estimation of land cover in the European Union the CORINE Land Cover (CLC) database, relating on the computer assisted interpretation of satellite images acquired in 1990 and 2000 was used. The CLC is a uniform methodology and nomenclature across Europe, highly consistent and the only complete dataset for EU-27.

The indicator index for the named classes in all EU member states is displayed in figure 1.

According to the CORINE Land Cover database the highest percentage of agricultural area in the whole country area is to find in Denmark (almost 80 %) and the Netherlands (more than 70 %) followed by Hungary, Ireland, Poland and Latvia (between 60 and 70 %). The lowest percentage of agricultural areas is to find in Finland and Sweden (less than 10 %).

The CORINE Land Cover data show that the agricultural areas cover the largest area of almost all of the EU member countries. As an exception Estonia, Austria, Slovenia, Finland and Sweden can be named. In these countries the largest

area is covered by forest. Furthermore, the natural area covers the lowest percentage of the whole area of all EU member states. The highest percentage between all member states indicates Greece (38.5 %) and Spain (29 %) followed by Cyprus, Ireland, Sweden, United Kingdom and Finland (between 20 and 30 %); the lowest percentage indicate again Luxembourg, Belgium, Denmark, Poland and the Netherlands.



Source: Own performance according to EUROPEAN COMMISSION (2006)

**Figure 1. Area in different categories of land cover in the EU-15 in 2000**

The presented indicators of different categories of land cover confirm differentiated natural conditions in each EU member state. These conditions influence and determine further the potentials in rural areas in terms of the sustainable use of natural resources. The presented categories of land cover in the EU member countries give a background of possibilities and potentials which will be discussed in the following.

**Less Favoured Areas (LFA).** Less favoured areas are defined in the European Union as areas under particular difficult conditions which, in the most cases, depend on natural conditions. To improve the competitiveness of farmers in these areas, less favoured areas are supported from the European Agricultural Guidance and Guarantee Fund (EAGGF).

According to the Council regulation (EC) No 1698/2005 (COUNCIL OF THE EUROPEAN UNION, 2005) following areas are eligible for financial support:

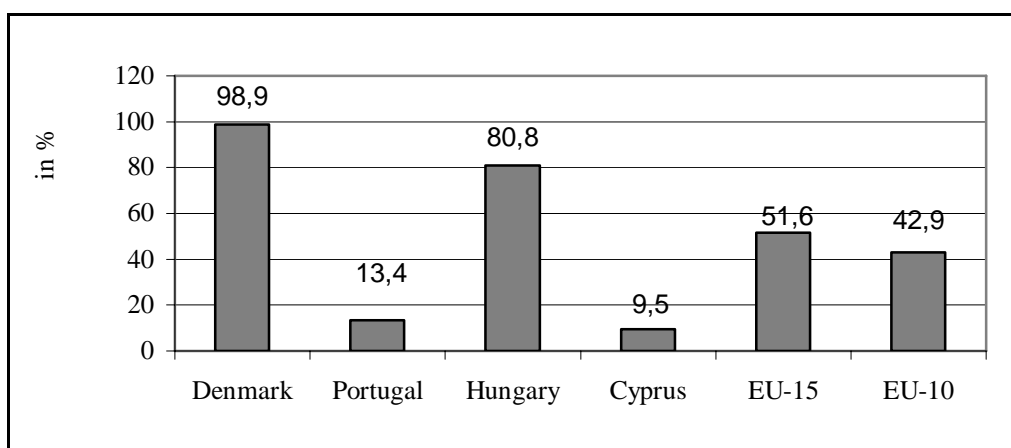
- Mountain areas or regarded as areas north of the 62nd parallel and certain adjacent areas,
- Areas affected by significant natural handicaps and
- Areas affected by specific handicaps.

Problematic is the collection of the information, particularly at regional level and for the areas affected by specific handicaps. Furthermore, the information is not systematically reported in Rural Development programmes and the only survey collecting this information at community level is the Farm Structure Survey. Moreover,

a part of the utilised agricultural areas (UAA) may not be covered by this survey (very small farms and common land) and there is no distinction between areas with significant or with specific handicaps (EUROPEAN COMMISSION, 2006: 192).

The cover of LFA in the UAA can be analysed according to following categories: Non Less Favoured Areas; Less Favoured Areas Mountain; other Less Favoured Areas/ Less Favoured Areas with significant handicaps; Areas with specific handicaps.

In the following the first category was discussed. Analysing the land cover in non less favoured areas, regions with very good and good farming and environmental conditions can be found. According to the EU survey (EUROPEAN COMMISSION, 2006) the whole country area of Luxembourg, Malta and Finland can be classified as less favoured. Other countries are characterised by different percentage of less or non less favoured areas. The results for this indicator are displayed in figure 2.



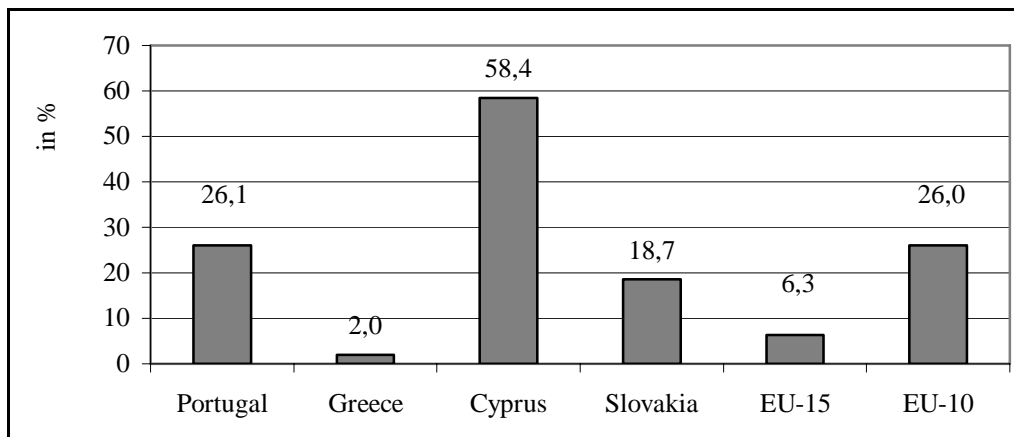
Source: Own performance according to EUROPEAN COMMISSION (2006: 94)

**Figure 2. Percentage of UUA in non less favoured areas**

The figure shows that in the EU-15 most favourable environmental conditions are in Denmark (99 % non less favoured areas) and in the EU-10 – in Hungary (80.8 %). Similarly, the lowest percentage of non less favoured areas is in Portugal (for the EU-15) and in Cyprus (for the EU-10). Comparing the indicators in the EU-15 (51.6 %) and EU-10 (42.9 %) marginal differences can be stated. However, the conditions in the EU-15 are visible more favourable. Rural areas in the EU-10 are more disadvantaged and have, therefore, less natural resources with high environmental potentials.

**Areas of extensive agriculture.** The extensive agriculture is defined as: area under arable crops production (except forage crops), when the regional yield for cereals (excluding rice) is less than 60 % of the EU-27 average; area for grazing livestock production (cattle, sheep & goats), when the stocking density does not exceed 1 Livestock Unit per hectare of forage area (forage crops, permanent pastures and meadows). The evaluation of the extensive character of agriculture should be made at the most detailed geographical level possible.

In this paper the percentage of UAA for extensive arable crops is discussed as a characteristic for the areas of extensive agriculture. According to the EU data, visible differences between the respective EU member countries in terms of this indicator can be stated (figure 3).



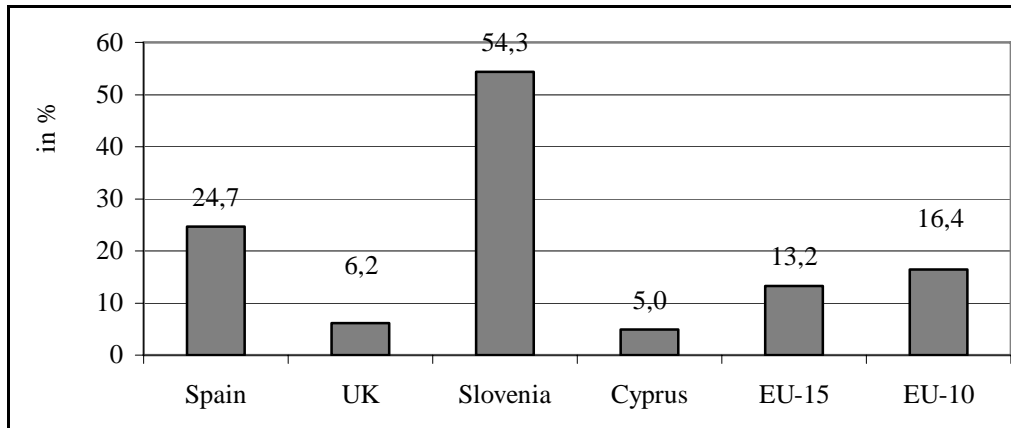
Source: Own performance according to EUROPEAN COMMISSION (2006: 94)

**Figure 3. % UAA for extensive arable crops**

The analysis shows that agricultural production is more extensive in the new EU member states. The highest percentage of UAA for extensive arable crops in the EU-10 is in Cyprus (58.4 %) and the lowest in Slovakia (18.7 %). The latter value is, however, higher than the lowest level for the EU-15 and similarly high compared to the highest level in the EU-15. Moreover, for the countries Belgium, Czech Republic, Denmark, Germany, France, Ireland, Luxembourg, Hungary, the Netherlands, Austria, Finland and United Kingdom the indicator takes the value of zero. This denotes intensive crop production in these countries. Thus, countries with more favourable conditions for environmental protection can be selected (see figure 3).

**Natura 2000 area.** This indicator provides information on the preservation of natural environment and landscape and the protection and improvement of natural resources. Natura 2000 is a network of areas with the aim to conserve natural habitats and species of wildlife which are rare, endangered or vulnerable in the European Community.

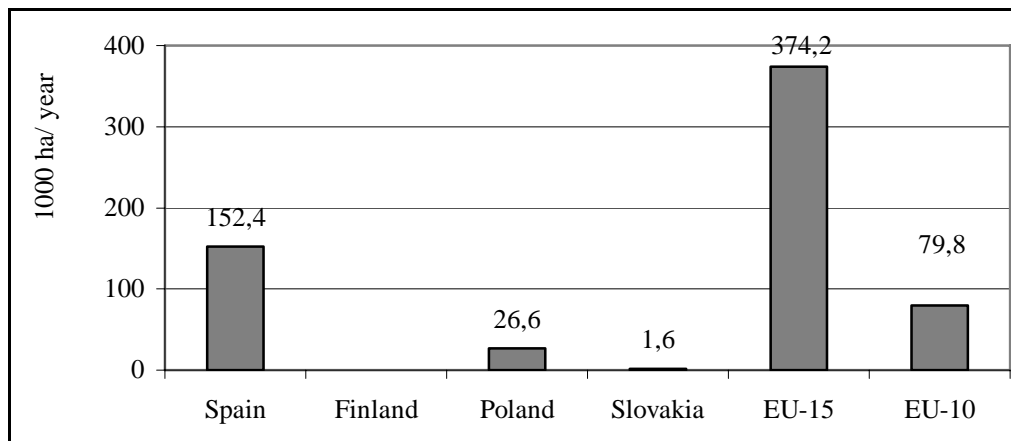
Analysing the territory under Natura 2000 great differences between the old and new EU member states can be found. In the EU-15 the largest territory under Natura 2000 is to find in Spain (24.7 %) which is only less than a half of the territory in Slovenia - the country with the largest protected area under Natura 2000 in the EU-10 (Figure 4). The United Kingdom and Cyprus are the countries with the lowest percentage of area under Natura 2000 (6.2 % and 5 % respectively). The comparison of the average in the EU-15 and EU-10 shows that in the new EU member states more valuable natural resources exist. This denotes that the new EU member states have more sustainable potentials in terms of environmental benefit than the old EU member states.



Source: Own performance according to EUROPEAN COMMISSION (2006: 98)

**Figure 4. % Territory under Natura 2000**

**Development of forest area.** The development of forest area is measured as an average annual increase of forest and other wooded land areas over a certain number of years. As applied for the Global Forest Resources Assessment Update in 2005, the forest is defined as land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds *in situ*. It does not include land that is predominantly under agricultural or urban land use. Figure 5 shows that countries of the EU-15 indicate almost five times higher average annual increase of forest area than the new EU member states. The leading country in the EU-15 is Spain with 152.4 thous. ha average annual increase of forest area and in the EU-10 Poland (26.6 thous. ha/ year). In these countries more chances for sustainable development of natural resources are given.



Source: Own performance according to EUROPEAN COMMISSION (2006: 110)

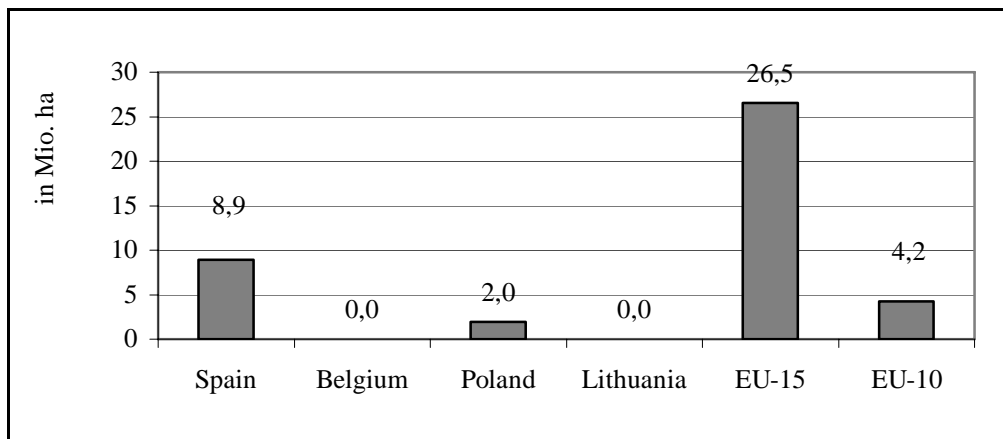
**Figure 5. Development of forest area**

**Biodiversity: High Nature Value farmland and forestry.** According to the European Commission the High Nature Value farmland (HNV) and forestry are associated with high grade of biodiversity. The HNV farmland indicator distinguishes following types of high nature value farmland:

- Farmland with a high proportion of semi-natural vegetation,
- Farmland dominated by low intensity agriculture or a mosaic of semi-natural and cultivated land and small-scale features,
- Farmland supporting rare species or a high proportion of European or World population.

The indicators can be estimated on the basis of land cover data (CORINE database) and agronomic farm level data (in particular FADN) and are expressed as a percentage of UAA of High Nature Value farmland.

The indicators for the new and old EU member states are displayed in figure 6.



Source: Own performance according to EUROPEAN COMMISSION (2006: 104)

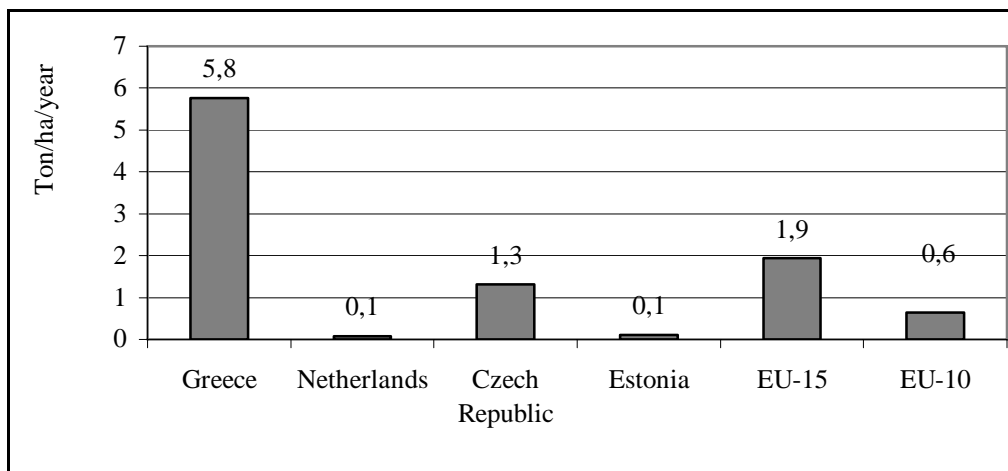
**Figure 6. High Nature Value Farmland**

The analysis shows that the largest areas of High Nature Value farmland and forestry in the EU-15 is to find in Spain (almost 9 Mio. ha) while in the EU-10 – in Poland (2 Mio. ha). The lowest coefficient indicate Belgium (0.01 Mio. ha) and Lithuania (0.02 Mio. ha). Comparing the old and new EU member countries great differences can be stated. In the EU-15 almost 26.5 Mio. ha of High Nature Value farmland are registered while in the EU-10 only 4.2 Mio. ha. The analysis confirms that with respect to the biodiversity great differences between the member states exist.

However, in the new EU member states the most valuable natural areas are maintained as protected areas and are not used for farming. On the other hand, the farming areas are rather used for production purposes without any attention to natural resources. To get to the average of the EU-15 member states with regard to the areas of High Nature Value farmland a lot of afford has to be made in the new member states. This, however, is possible in a long term period also by means of agri-environmental programmes as obligatory political measures for policy of rural areas in all EU member states.

**Areas at risk of soil erosion.** The indicator can be used to measure the level of sustainability in agricultural production. On the one hand soil erosion is determined by natural conditions, on the other, however, farming practices influence the risk of soil erosion. Sustainable management contributes to less soil erosion. The higher coefficients of this indicator reflect, therefore, that farming in the analysed region (country) can not be called sustainable. The effects of the sustainable management can be measured by means of the Pan-European Soil Erosion Risk Assessment model in Tons/ha/year.

According to statistical data for Europe (Figure 7) Greece is the country with the highest soil erosion risk in the EU-15 (5.8 Tons/ha/year) which can be explained with natural conditions in this country. In the EU-10 the highest coefficient of soil erosion was found for Czech Republic while the lowest for Estonia. Comparing the EU-15 and EU-10 one can state that in the EU-15 higher risk at soil erosion exists. This indicates less favourable natural conditions, more intensive farming practices, and consequently lower potentials for sustainable development of rural areas in the EU-15 member states.

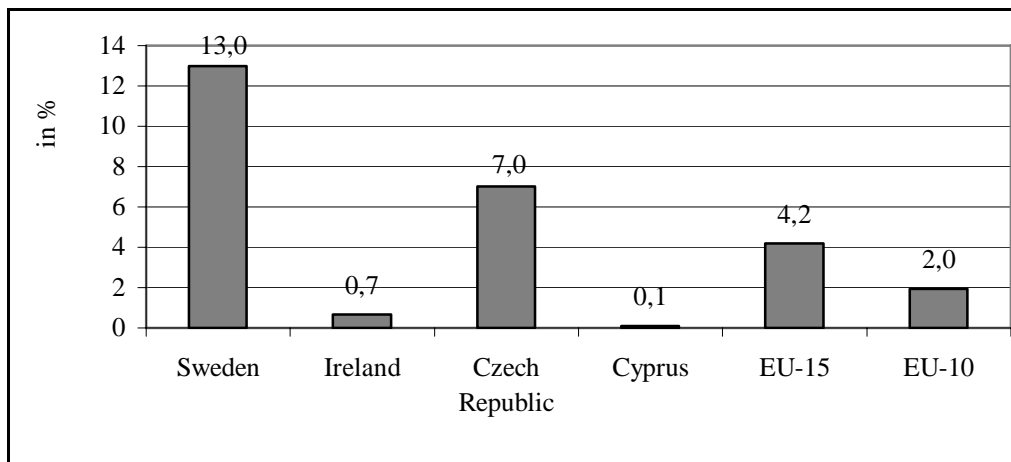


Source: Own performance according to EUROPEAN COMMISSION (2006: 118)

**Figure 7. Areas at risk of soil erosion**

**UAA under organic farming.** The indicator of UAA under organic farming is based on statistical data for national and regional levels. According to statistical data from Eurostat, Sweden is the country with the highest share of Utilised Agricultural Area under organic farming (13 %). The lowest indicator in the EU-15 was found for Ireland (0.7 %). In the EU-10 the largest area under organic farming is in Czech Republic while the lowest in Cyprus.

In general, the EU-15 member states are characterised by more UAA under organic farming (4.2 %) than the EU-10 (2 %) (Figure 8). This indicates that currently the EU-15 member states contribute to a greater extent to environmental protection than the new EU member states.



Source: Own performance according to EUROPEAN COMMISSION (2006: 118)

**Figure 8. Share of Utilised Agricultural Area under organic farming**

**Climate change: Production of renewable energy from agriculture and forestry.** The climate change can be measured with several indicators such as: ‘Production of renewable energy from agriculture and forestry’, ‘UAA devoted to renewable energy’ and ‘greenhouse gas emissions from agriculture’. As renewable energy is one of the most important questions in the European Commission the first indicator will be analysed in this paper. For this indicator, data regarding biodiesel from oilseeds crops and ethanol from starch/ sugar crops are considered. Any other energy sources like energy from short rotation forestry, energy from agricultural biogas (livestock manure) or energy from cereal straw are included.

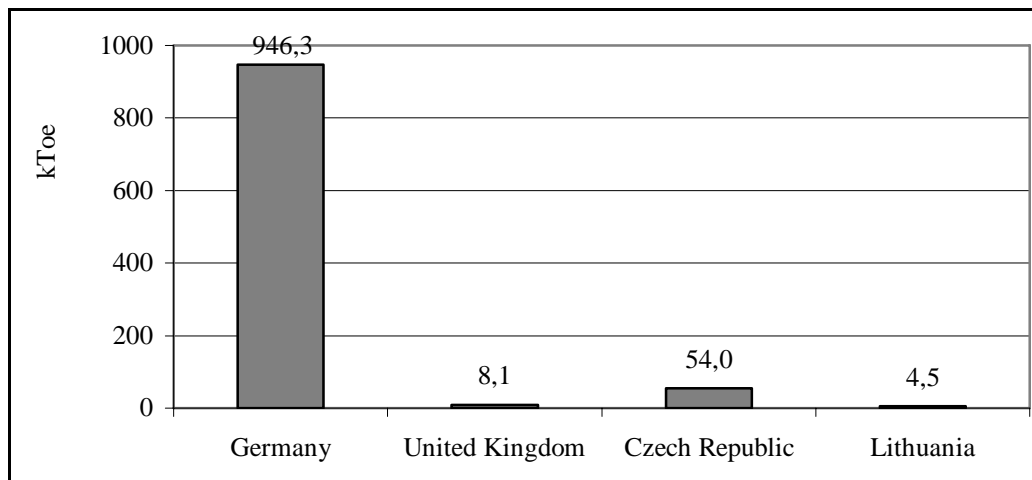
According to the EUROPEAN COMMISSION (2006: 181) production of renewable energy from forestry covers:

- Purpose-grown energy crops (poplar, willow, etc.),
- Woody material generated by an industrial process (wood/ paper industry) or provided directly by forestry and agriculture (firewood, wood chips, bark, sawdust, shavings, chips, black liquor etc.),
- Wastes such as straw, rice husks, nut shells, poultry litter, crushed grape dregs etc.

While the indicator for agriculture is based on indicators-set IRENA 27 (EEA, 2003), the analysis for the renewable energy from forestry is based on Eurostat – Energy Statistics.

Figure 9 shows that the production of renewable energy from agriculture is high differentiated in the EU. According to the available data the highest production of renewable energy from agriculture is to find in Germany (946.3 KToe 1000 tons of oil equivalent) while the lowest in the EU-15 in the United Kingdom (8.1 KToe). In the new EU member states the highest coefficient can be found for Czech Republic (54 KToe) and the lowest for Lithuania (4.5 KToe). Due to the lack of data for all EU member states a comparison between the EU-15 and EU-10 is not possible at the current time.





Source: Own performance according to EUROPEAN COMMISSION (2006: 122)

**Figure 9. Production of renewable energy from agriculture**

#### 4. CONCLUSIONS

In this paper, environmental indicators for rural areas in the old and new EU member states were analysed and discussed. The indicators were investigated for chosen member states which are characterised by the highest or lowest indicator indexes.

The analysis of the land cover shows that agricultural areas make the highest percentage of the total area in all EU member states. This indicates that environmental issues have a great importance while analysing sustainable changes in economies of the EU member countries.

In terms of the chosen indicators the analysis confirms great differences in environmental conditions which influence sustainable potential in the respective EU member states. However, no clear tendency between the respective EU member states can be found.

Undoubtedly, the EU-15 member states have more sustainable potential with respect to the following indicators: 'Less favoured areas', 'Development of forest area', 'Biodiversity: High Nature Value farmland and forestry', and 'UAA under organic farming'.

With respect to other indicators such as: 'Areas of extensive agriculture', 'Natura 2000 area', and 'Areas at risk of soil erosion' the new EU member countries indicate more advantages. This means that information exchange and cooperation between countries in terms of experience in implementation environmental measures, is highly necessary to improve and accelerate the process of making rural areas more sustainable for the future.

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