

The feelings' invisible hand

„The science plays its own role; it is incapable to legitimate the other language games... First and foremost, it is incapable to legitimate itself.”
Jean-François Lyotard

The economic theory is, after a long time, at a deadlock. It seems to be a crisis of grounds. The clear sign is that the call to generic regularities is done ever infrequently. Practically, the economic theory has been managementized. It treats the random. The functional fragmentation upon macro and micro levels has opened a methodological gap: the conjunctural and detail solutions have made indispensable the assembly vision. The efficiency performance, supported within Ford type organizational contexts, has proposed the way of a second fragmentation: between the nominal and the real. Thus, all the macroeconomic has been made manageable as pieces. The ontological discontinuation has justified the methodological discontinuation.

The instrumentation generated by the efficiency side has succeeded, paradoxically, in the symbolic economy. The mechanical successful outcomes have been rediscovered in the balances projection, the balances technique proving to be infallible. The money economy, focused in an exclusive manner on monetarism, has introduced assumptions promoted at the rank of institutional rule. The autonomy of the central banks has show plainly the triumph of the symbolic economy.

The speculative frenzy has eliminated any doubt about the absolute efficiency function of the monetary economy. The step towards the offshore formula was, naturally, in conformity with the casino economy. The society has exchange values only; the value as such has a sense only if it is treated as exchange value.

In this manner it has been made the most significant disjoining: that between the economy and the society. The former has bestowed itself with the market ideology, the latter being doomed to come back, possibly, to the natural economy. The money economy became rapidly sufficient to itself. It has consolidated the own nature, artificial one. The human society is for the money economy a useless expenditure, an efficiency props. The trend is inexorable: the knowledge becomes exchange value. The information imitates exclusively the money function in society. The high level of the informatics society exhibits irrevocably the temptation of a social control. The relativization of the truth is legitimated by the market's arbitrary.

The derailment is connected with the consistency of the modernism of the enlightenment. The construction of the economic theory on mechanical principles (the obsession

for efficiency), determinist rules (with the market as absolute cause), adversative methods (the competition that eliminates), rational instruments (organizing the use of time) or anthropophagous institutions (the man's transformation into workforce), power structures (the quantification of the human nature) appears to be a model of the ultimate limits and limitations. It becomes a construction that needs to overstep its perfection in order to have a sense. The crisis is one of renovation as far as the ingredients of the theoretical construction must have another consistency.

What could this mean? The efficiency shouldn't be material one, the market would be replaced by an inclusive competition, the time will not be rationalized anymore, the work comes near the man's essence as a thinking and creative creature, the man being valued as an ineffable universe of spirit for the spirit and feelings. Such economy does not have as goal the nature destruction thorough the deprivation of the human nature. The economy wouldn't be anymore a mechanics of the unnatural needs. At its core is placed the man, and the restrictive and constructive sense of the rationalization will be replaced by the progressive and liberating sense of the humanization.

The economy that aimed the achievement of a market society withdraws in the ended history of the enlightenment. The economy of the second modernity, where the world depends exclusively on its thinking, waiving, at the same time, to the invasion of the exchange values, becomes what it must be: a human science.

The transcending of the model of enlightenment is a question of exit from the captivity of many paradigms. Among other, also from the imitative formula of an economy built around the functional relationship between labor and capital with the structural relationship between consumption and scene. The dissolution of the economy matrix values as form of specialization and expressing the all human gestures as money is equivalent with an escape from habits, from the habit with the progressive rationalization paradigm also. Otherwise, the ideology of the market keeps further the man's captivity in the ideatic cage of the materialism.

The conclusion? The economic theory as product of the enlightenment didn't call yet in question its precepts. The delay is serious. The entrance in the post-modernism is schizophrenic one. The exit from this can not be described even as an Utopia.

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Informal Value Transfer System – Hawala

■

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***Abstract.** Hawala plays a key role in facilitating remittances, especially those of migrant workers and is an integral part of the international finance system. There was, however little understanding of the concept, mechanism and its impact on the global financial channels. This research effort aims at providing a historical background to its origin, and discusses why it has lasted over the last several hundred years. The paper also presents the operational features that make the system attractive for both legitimate and illegitimate uses and its advantages over formal sector.*

Key words: hawala; informal value transfer systems; conventional banking sector; migrant workers.

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Hawala is one of several informal funds transfer systems, facilitating the transfer of funds or value outside the regulated financial institutions, without physical or electronic money movement. Scholars place its origin many centuries ago, in China and Indian Subcontinent, when traders looked for a way to travel, without having to carry large sums, thereby making them less vulnerable to robbery on the Silk Road (Buencamino, Gorbunov, 2002, p. 1).

In a traditional hawala transaction, four participants are required: a sender of the funds, a recipient of the funds, and two hawaladars. For instance, an expatriate worker wishes to send money back home. To do this he goes to an intermediary, the hawaladar, to arrange the transfer. He makes payment in dollars or other convertible currency. The hawala dealer contacts a counterpart in the receiving

country, who makes payment in local currency to the beneficiary (Wilson, 2002, p. 3).

Today, hawala services are found in all continents and most countries. Originally established on the Indian Subcontinent in Asia, the hawala networks have achieved international organization and status, especially with the intensification of transnational migration, in SUA and Europe, in the latter part of the twentieth century (Passas, 2002, p. 37).

When compared to a traditional means of remitting money, hawala seems cumbersome and risky, but there are some reasons for preferring the system today, including (Passas, 1999, p. 29):

- high costs of banking or official channels;
- a lack of easily accessible formal financial institutions in remote areas of some countries (Afghanistan, Yemen, Somalia);

- lack of confidence in the conventional banks;
- delays, in official sector, due to holidays, weekends and time differences;
- lack of efficient banking infrastructure so that the local bank has not the means to send the money overseas;
- rigid/strict foreign exchange regulations;
- to avoid currency reporting controls;
- wide divergence between official and black market exchange rates;
- cultural, political, social reasons;
- illiteracy;
- criminal purposes such as money laundering, terrorism financing, tax evasion, accepted by hawala networks.

Even they consider that economic and cultural factors explain the attractiveness of the hawala system (El Qorchi, 2002, p. 31), we think that the quality of its services is more important in this matter, providing more convenient, faster, efficient and reliable transactions than the formal financial sector. In addition, Harjit Sandhu claims that the informal value transfer systems such as hawala are used by ordinary people for socio-economic and political reasons, anonymity, lack of licensed banking channels, illiteracy and avoidance of local taxes (Sandhu, 2004, p. 13).

Harish Pawani observed, in 2002, on the occasion of the International Conference on hawala, that the system is a real alternative to corrupt official financial sector and a quick, cheaper, efficient, trustworthy and confidential way of transferring funds or other values who operates 24 hours a day, advantages that also make it vulnerable to illegal activities, such as money laundering, terrorist financing, organized crime or drug trafficking (Pawani, 2002, p. 14).

The lunchtime seminar on the alternative transfer systems, January 2003, was an opportunity for John Wilson to argue that the technicalities of the hawala system have been widely misunderstood and misrepresented since the events of September 11. He thinks that most of the people use the system because it is cheaper, faster, reach more destinations and it is more reliable than the formal banking system (Wilson, 2003, p. 1). The author also claims that the motivations for preferring informal transactions are due to convenient black or grey market exchange rates and reliability, based on cultural factors such as family

or tribal connections (Wilson, 2005, p. 3). Professor Roger Ballard, University of Manchester, also enumerates similar advantages of hawala services such as lack of forms, trust, speed of transfer and ethnic solidarity. The hawala networks are entirely based on trust and they are highly efficient, reliable and potentially safer than the formal banking institutions (Wilson, 2003, p. 4).

The hawala system is actually quite simple. The hawaladars work in a range of settings, from curbside stalls and modest offices in South Asia to back rooms and secret locations in Europe and North America (Loony, 2002, p. 2). Some dealers operate with even less, using a table in a tea shop as an office and having little more than a cellular phone and notebook as overhead expenses (Jost, Sandhu, 2000, p. 6).

In this regard, the fees charged by hawaladars on the transfer of funds are lower than those charged by banks and other remitting companies, thanks mainly to minimal overhead expenses and the absence of regulatory costs to the hawala agents, who often operate other small businesses. To encourage foreign exchange transfers through their system, dealers sometimes exempt expatriates from paying fees. In contrast, they reportedly charge higher fees to those who use the system to avoid exchange, capital or administrative controls. These higher fees often cover all the expenses of the hawaladars. (El Qorchi, 2002, p. 32).

The hawaladar's profit usually comes, according to Nikos Passas, from currency exchange rates manipulation, the difference between the street (black market) rate and the official rate of the currencies involved. While they give their clients in the West a competitive rate, they can get an even better rate by selling the hard currency in the black market. The author also reports the case when hawala transfers are combined with gold deals and smuggling operations. He thinks that the main profit is made from the sale of the smuggled commodities rather than from the money transfer service. For instance, hawala dealers commonly transfer the local currency to the United Arab Emirates, where they use it to buy gold, which is then smuggled into India and sold for a profit. Part of the proceeds from this sale can be used to pay the recipients of the hawala transaction, but sometimes the clients may wish to be paid in gold rather than rupees. For this reason, the profit margins

for hawaladars depend greatly upon the price of gold in India (Passas, 1999, p. 15).

According to Buencamino and Passas, the income of the hawaladar comes from charging a commission ranging from 0.25% to 1.25% of the amount involved (from 0.25%-0.65%, according to Saltmarsh (Saltmarsh, 1999, p. 96) and from 1%-5%, according to World Bank (World Bank, 2006, p. 4). Samuel Munzele Maimbo argues that the cost of making funds transfers into and around Afghanistan averages 1% to 2% and the final quotation depends on the negotiating skills of both parties and their understanding of how the market operates. Discounts are offered depending on the volume of the transaction, the relationship between the client and the hawala dealer, the currency of exchange, the security environment in Afghanistan, and also on the destination of the funds (Maimbo, 2003, p. 5). The official financial institutions charge higher fees ranging from 15% to 25% of the amount transferred (World Bank, 2006, p. 135). For instance, in Western Union case, the fee depends on the transferred amount and ranges between \$13, for an amount not exceeding \$50. The maximum amount can be transmitted through Western Union service is \$ 10,000 or Euro equivalent (Banca Transilvania).

Hawala transfers remain fast, generally quicker than any official system, so funds can be collected by recipients in as little as two hours (Fugfugosh Ahmed, 2006, p. 4). This can be contrasted with the week or so (from two to seven days to complete) required for international wire transfer involving official sector, as delays due to holidays, weekends or time differences (US Department of the Treasury, 2003, p. 3). For instance, Western Union Money Transfer services depend on the working hours of the agent in the destination country, on any applicable restrictions, as well as on the service type requested (Banca Transilvania).

The system is more efficient than formal financial transfer channels, partly because of the lack of bureaucracy and the simplicity of the operating mechanism. Just using a phone, facsimile or an e-mail and large amounts of money are transferred around the world, without raising questions or identification from either the remitter or receiver and, above all, without leaving any paper trail. The sender is given a code/password, which is passed on to the

recipient and this is all he must know in order to pick up his money from dealer's counterpart (Vaknin, 2005). Funds are often delivered "door to door" within 24 hours by a correspondent who has quick access to villages even in remote areas (El Qorchi, 2002, p. 32).

The official financial institutions require the receiver to complete a "*To Receive Money*" form with the following information: name, address, phone number, amount expected, sender's full name, country from which money transfer was sent. Both sender and receiver also need to provide valid identification documents. The same steps are also followed by the sender who needs to complete a "*To Send Money*" form with the following information: name, address, phone number, receiver's full name, the country he is sending to, the amount transferee, and the expected city of payment (Banca Transilvania). According to Cheran and Aiken, Western Union and MoneyGram charge higher fees, ranging from 15% to 25% of the amount involved, and under these circumstances they can not represent yet a real alternative to the informal transfer services (Cheran, Aiken, 2005, p. 20).

The minimal documentation and accounting requirements help reduce the time needed for transfer operations. This informal way of transfer operates without leaving any paper trail; there are no contracts, bank statements or transaction records, and yet those who use the hawala networks can move thousands of dollars around the world in a matter of hours. In addition, confirmation and payment are instantaneous, and the entire transaction can be concluded in minutes (Maimbo, 2003, p. 28).

Roger Ballard, one of the academic analysts in this field, argues that the hawala operators frequently relied very heavily on memory, as there was no way in which they could hope accurately to remember all aspects of the increasingly complex transactions in which they were engaged. They also developed their own very elaborate and very private forms of record keeping, which non-specialists were wholly unable to decipher, in order to guarantee the security of their private records (Ballard, 2003, p. 19). A hawaladar in Delhi (Ganguli, 2001), who would not give his real name, claims that all he needs is a good network of trustworthy people and the transfer will be done anywhere in the world (Hong Kong, Johannesburg, New York, Paris), in maximum eight hours. He also

thinks that hawala dealers don't care about where the money comes from, if they are from legitimate or illegitimate sources.

One of the most important features of the system is trust. The international wire transfers through official financial institutions which might involve the client's local bank, its correspondent bank, the main office of the recipient's foreign bank, have the potential to be problematic. So, in at least once instance reported to the experts, Patrick Jost and Harjit Sandhu, money for a large commercial transaction (money being sent from the United States to South Asia) was lost "in transit" for several weeks while trying to conduct such a transaction, and when the bank located the money, was returned to the customer (Jost, Sandhu, 2000, p. 6).

The hawala system is based on credibility and trust between the dealers and their clients, in a relationship that develops over the years, so none of those *involved* can afford to make a mistake. Not only do all partners in the system need to trust each other, but they also need to ensure that no-one in the network will get the network into illegal activities, because that would bring the whole fragile edifice, from which they nevertheless manage to extract a reasonable living, down. Those who are betraying the network of absolute trust know that they and all the immediate members of their family have to face social and commercial ostracism (Ballard, 2003, p. 21). In such circumstances, dealers know that any failure to honor contracts will result in immediate blacklisting, and possible expulsion, from the market (Looney, 2002, p. 2). Hawala system is entirely based on ethnic and family solidarity and depends on absolute trust between the participants, so in order to encourage foreign exchange transfers through their system, hawala dealers may instruct their counterparts to deliver funds to beneficiaries before expatriate workers make payments (El Qorchi, 2002, p. 32).

According to Mohammed El Qorchi, there are cultural considerations encouraging expatriate workers to remit funds through the informal transfer systems. Usually, many expatriate communities are exclusively male, because wives and other family members remain in the home country, where family traditions prevail. These traditions may require family members, especially women, to maintain minimal contacts with the outside world. A trusted hawaladar, known in the

village and aware of the social codes, would be an acceptable intermediary, protecting women from having direct dealings with banks and other agent. In his testimony before a US Senate panel, Rahim Bariek, a hawala agent, said that in Afghan culture the hawaladar is an honest person, with a good reputation and credit and without him people would never be able to send money to their families abroad (Sharma, 2006, p. 112).

Because of language issues and lower social status, expatriate workers may experience difficulties with formal institutions. As barriers of using official channels, Rob McCusker mentioned limited education or even illiteracy (McCusker, 2005, p. 2).

In many parts of the world, especially in the rural areas of the developing countries, informal networks are the only possible means of receiving money from within the country or abroad. There are places where conventional banking facilities do not exist, are terribly inefficient, slow or expensive (for instance, the lack of banking linkages between Australia or SUA and several African countries; also several aid groups funded by the European Commission use almost exclusively informal money transfer networks to transfer funds to some African and Asian countries) (Buencamino, Gorbunov, 2002, p. 5).

The extent of the hawala networks is related to the weaknesses in conventional financial systems, foreign exchange restrictions, or even to political instability. For instance, according to Samuel Munzele Maimbo the hawala dealers in Afghanistan have traditionally provided clients with a range financial of and nonfinancial business services, including:

- currency conversions;
- funds transfers;
- micro-finance;
- deposit-taking services;
- communication facilities (telephone, fax, and e-mail).

Strict foreign exchange regulations, high tariffs and taxes, and currency reporting controls, are the main reasons for the current interest in using the informal money transfer channels. In this regard, hawala services are often preferred by migrants with questionable visa status, because it would be difficult, if not impossible for them to open a bank account as they don't have adequate identification (Jost, Sandhu, 2000, p. 6).

US Department of State claims that the qualities of efficiency, anonymity or lack of paper trail explain the attractiveness of the hawala system for its clients, but they have also attracted individuals and groups engaged in criminal activities such as money laundering, drug trafficking, smuggling or the financing of terrorism (US Department of the Treasury).

Despite all this, hawala remains the most popular informal transfer network because of its components

of trust and the extensive use of connections such as family relationships or ethnic solidarity. Although the great bulk of hawala transactions are harmless, the system has proved to be extremely useful for money laundering or other illicit activities. In this regard, the authorities should, work on ways to further develop the hawala system to meet international rules and regulations that safeguard against abuse.

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Implementation of Ecological Policies in Danube Delta Area

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Abstract. *Public authorities and the local community have become lately increasingly aware of the complex relationship between the environment and the economic activity and of the need for integrating environmental requirements into economic activities. Therefore, a strategy that aims at a sustained development which takes into account the environmental aspects is imperative. Environmental policies represent a set of measures and tools with the objective of controlling and limiting the process of deterioration of environment quality. The design of environmental policies for the Danube Delta is not an easy task, due primarily to the major changes that affect the deltaic ecosystem, the patterns of behavior and consumption, poverty and isolation of the local communities, etc. The environmental policies in the Danube Delta have no longer an auxiliary role, rather reactive, but instead they are meant to set objectives at the economic, legal, educational and social levels and to guide the strategy for their achievement. In this paper I have outlined both the objectives of the environmental policies and the types of measures (general, direct and indirect) for their implementation in the area of the Danube Delta.*

Key words: environmental policies; sustainable use; reconstruction of ecosystems; traditional economic activities; legal instruments.

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1. Objectives of the ecological policy implementation in Danube Delta Area

The natural mechanisms that determine the perpetuance in time, functionality of the Danube Delta Biosphere Reservation, maintenance of its capacity of permanently regenerating the life conditions and the necessary resources for its support have overstepped, as against the atrophic activity, the intangible sphere.

The interaction of the two systems, nature and economy, considered independent so far, is now evident.

The fact that this situation was understood is proved by the preoccupation, at political level, for monitoring and limitation of human impact.

Ecological policies represent a set of measures and instruments designed to control and reduce the deterioration

process of the environment, to produce resources and to ensure life conditions. (Bran, Ioan, 2003, p. 100)

Another definition, characterized by a greater concreteness, is that *Environmental (ecological) policy represents a set of measures elaborated at macro and micro economical level in order to reduce the deterioration process of human health and environment, as well as the nature (maintenance of valuables and diversity of life forms) and environmental elements which affect production (soil, vegetation, raw material, etc.)* (Rojanschi et al., 2004, pp. 72-73).

Ecological policies in Danube Delta area has not been auxiliary for long time but they are oriented to formulate

objectives in economical, juridical, educational, social, etc. field and to elaborate their achievement strategy. It is true that ecological policy formulation into the Danube Delta is not quite easy especially due to ample changes to which the deltaic ecosystem is subjected, behavior and consumption models, local traditions, poorness and isolation of the local communities, etc.

As I was born and spent my childhood in the Danube Delta, and later by my job being permanently in contact with the trends of this zone of Tulcea County, I can declare that, at a first stage, ecological policies in the Danube Delta were mainly oriented to deal with the environmental issues perceived as pollution of different types, waste disposal, ecosystem damage, etc.

In this respect, they assured “the cleaning”, “curing” and somehow, by some constraints, could influence the processes that produced negative effects.

Now, when the environmental problem is not a problem itself anymore but an aspect that accompanies every human activity in the Danube Delta, ecological policy becomes the general framework which provides the bench marks and the methods for initiating new activities and adaptation of the existing ones, interfering in all fields.

The last two decades were witnesses of promotion trends of ecological policies oriented to collaboration with economical policies, both at our whole country level as well as in the Danube Delta.

To formulate an environmental policy for an area like Danube Delta declared Biosphere Reservation is not very easy to do even if there is a database regularly updated by the National Research and Development Institute of the Danube Delta (INCDD) and the zone is administrated by an institution having specific tasks: Danube Delta Biosphere Reserve Administration (DDBRA).

Generally speaking, although the scientific substratum of a policy is of high importance, nevertheless its formulation is rather pragmatic than scientific because it implies incertitude and human factor.

Due to uncertainty, the formulation process of a policy should progress continuously to a higher certainty.

For a *complex territory* like Danube Delta, many details are unavoidable uncertain during a policy formulation process but these can be approached in an advanced stage, because the planning process itself generates knowledge and let all detail of the problem to be understood.

If we refer at scientific incertitude, this is related to difficulty in obtaining some data regarding the environment. This kind of incertitude has substantially reduced its effect on environmental policy formulation in Danube Delta area due to a prestigious activity of INCDD Tulcea and tight cooperation relationships between this institution and DDBRA.

Less productive was, in this respect, the relationship between DDBRA and Environmental Protection Agency, especially in the period in which, according to the Urgent Ordinance no 112/July 2000 of Romanian Government, DDBRA had no more the task of dealing with environmental issues on the administrated territory.

Normative and politics incertitude is related to values and options of society and people. In this respect one should see how much the society must and can be influenced by the formulation process of an environmental policy for the Danube Delta.

The base factor of this intervention depends on how different parts appreciate the importance of environmental damages in connection with social and economic interests, with risks and distribution of costs and benefits.

Thus, in one manner the fishermen communities consider the issue of unsilting the channel that allow the fresh water to circulate into the Danube Delta and in another way the same communities of the same Danube Delta treat the protection measures for ichthyophagist birds (pelicans and cormorans).

Social incertitude refers to positions, interests and necessities of involved groups, which are only partial known. It refers also to how the decisions of these group can be influenced, fact that could affect their own decision.

The solution for these uncertainties can be done only by interactive involvement of all target groups.

It is very all known the conflict situation that was created by implementing a measure for sustainable development of piscicultural and reed resources from DDBRA, respectively granting the water mirrors and reed areas.

When preparing this measure, DDBRA did not show transparency and did not discuss the terms of tendering documentation, on which the concession action was based, with the fishermen.

Not even the potential concessionaire enjoyed the high attention from DDBRA, when preparing the concession action of Danube Delta resources.

All these uncertainties represent the reason from which disagreements often happen and the attention to the policy is diverted, determining the decision making process to be difficult.

This disagreements registered in the Danube Delta in recent period of time increase the necessity of some effective negotiations.

Human condition, human interaction process and the context must so taken into consideration separately in environmental policy formulation and implementation process into the Danube Delta.

An important moment in elaboration of environmental policy into the Danube Delta was and has been yet the setting of the objectives of these policies.

From my own point of view the objectives set could be:

A. Biodiversity preservation

A.1 Preservation species and habitats.

A.2 Preserve strictly protected area.

A.3 Delimitation and setting the functional zones.

B. Sustainable turn into good value of renewable natural resources

B.1 Substantiate the sustainable management of natural resources.

B.2 Regulate the use of natural resources.

B.3 Regulate the business activities into the Danube Delta.

C. Ecosystem reconstruction and improvement

C.1 Reconstruction of the damaged ecosystems.

C.2 Improvement of the environmental factors of water and ground ecosystems.

D. Pollution limitation

D.1 Water pollution limitation.

D.2 Soil pollution limitation.

D.3 Air pollution limitation.

E. Support for economical traditional activities of local population and protect the economic interests of the inhabitants

E.1 Making the natural resources accessible especially to local communities.

E.2 Using local labor.

E.3 Providing necessary living aids to local population.

F. Ecological information and education provided to general audience and local population

F.1 Information.

F.2 Education.

2. General measures to implement the environmental policies in Danube Delta area

This kind of measures, named in specialized works as general economical measures, too, express the necessity to harmonize economical policies in the Danube Delta with environmental ones, in the framework of adjusting structural and sectorial programs by means of monetary and budgetary policies, capital and energy market policies as well as by investment policies.

2.1. Monetary policies

By this type of environmental policy, through interest rate and up to date rate, economical development of the Danube Delta can be influenced in consensus with ecological constraints increasing the profitability of some fields of action having a positive impact on environment and in this way changing the direction of capital circulation to preserving the support capacity of natural systems.

In this context I would like to present two of my proposals, made as a county councilor, on the way in which the credit of 30 million USD, that Nordic Investment Bank wants to give to DDBRA within the project “Support for sustainable development of the Danube Delta”, may be used. Thus, besides some objectives such as:

- Improvement of the monitoring system for Danube Delta ecosystems using modern facilities of satellite supervision.
- Improvement the infrastructure regarding public utilities, transport and communication in order to reduce pollution, isolation of communities and to improve living condition.
- Restoration the function of natural ecosystems and natural habitats of endangered species from the Danube Delta.

My proposals aimed at:

- Supporting development of alternative traditional economical activities (tourism, handicrafts) by giving some credits adequate interest and up to date rate in order to reduce the pressure on pisciculture resource.

and

- Giving mini-grants to financially support preservation of local tradition in using natural resources and in home construction tradition (village landscape), promoting renewable energy (windmill, solar cells) and clean energy (navigation with electric propulsion).

2.2. Budgetary policy

Budgetary policy, as general economical measure, can play an important role in diminishing negative effects and increasing the positive ones upon the environment of the Danube Delta. This will be possible if a special attention is paid to budgetary incomes from taxes and charges on use the Danube Delta resources and, on the other hand, the subsidy system is reorganized in order to reduce distortions which this system generates at price level and financial resources granted to support environmental programs increase.

An example could be the initiative of DDBRA to surrender a share of the due from fishing area and reed area concessions for such activities and actions which ensure the sustainable exploitation of fish and reed resources.

Starting from the amount collected as due by DDBRA in a year from piscicultural and reed area concession, which was about 1 million Euros in 2004, we can propose a normative act to be initiated which allow DDBRA to include this amount in its own budget in order to be used for environmental projects.

Also, by an adequate budgetary policy, Tulcea County Council allocates a share of its incomes, coming from tax

on tourism and recreation boat access into the Danube Delta as well as from the due on concessions of the agricultural and fishery land in the Danube Delta, administrated by Tulcea County Council, for supporting some activities and actions such as:

- *Collection*, conveyance and disposal of plastics waste (PETs, etc), abandoned on administrative territory of communes and the town of Sulina in Danube Delta Biosphere Reservation (according to County Council decision no 56/2005);

- *Studies regarding restoration of some agricultural and fishery lands*, which are no more used in compliance with their designed destination.

In a period in which there is a major interest for ecological agricultural products, the Danube Delta offering excellent conditions for this kind of activity, it would be desirable for the taxes and dues to be collected by Tulcea County Council to subsidy the best practices in deltaic agriculture.

2.3. Energy policy

Energy policy has been one of the main fields with greater impact on environmental quality in Danube Delta area, influencing renewable rate of different resources.

The measures within energy policy contributed and still can contribute to reduce pressure both in forestry ecosystems from the Danube Delta and the level and intensity of air pollution and other environmental factors.

From this point of view Danube Delta electrification, process started in 1970s and completed, by connecting Sfântu Gheorghe to the national energy system in 1992, was a great success, mainly in the benefit of local communities and it also represented a reduction of forest cut and reed and mace harvesting in heating purpose.

Another measure within energy policy, which gains more importance in DDBRA preoccupation, is promotion of recreation crafts with electric propulsion instead of those that use combustion with liquid fuel and lubricants.

In recent period the number of fast recreational crafts which circulate on channels and lakes of the delta has increased very much and their engine power increased too up to 255 horse power

Besides air pollution by emissions and water pollution by casual discharging, the fast movement of these crafts has a high negative impact on aquatic flora and fauna.

This is why I consider necessary that Tulcea County Council, DDBRA AND Ministry of Transport, Construction and Tourism to elaborate and to approve Regulations regarding circulation of recreational crafts as well as fluvial crafts of other type on channels and lakes from the Danube Delta. These regulations must forbid circulation of fast boats, with power greater than 25 Horse Power on certain channels and lakes in the delta.

The use of solar energy for hot water and heating of tourism facilities is another component of energy policy implemented in this area.

This kind of equipment is already installed in Egreta Hotel from Dunavătu de Jos, in Tourist Complex "Roșu", placed between Sulina and Sf. Gheorghe, in "Cormoran" Complex as well as in a lot of other guest houses recently built in Danube Delta localities.

Electricity from wind energy is possible in many zones of the Danube Delta Biosphere Reservation, especially in those with strong winds a long period of the year, usually in isolated zones with lack of the electricity network.

Eolian Micro power plants or eolian power plants parks can successfully replace the Diesel power Generators which proved to be not only pollution sources for all environmental factors but also great consumers of fuel and oil which lead to increasing cost.

Giving credits with subsidized interest or even grants to companies and communities, that wants to set up eolian power plants, can represent a measure capable to increase the percentage of electricity produced in unconventional way (renewable energy in this case wind) in Danube Delta in near future.

A guarantee of the success in this field would be the transfer of Know how from western countries such as: Germany, Netherlands, France and Italy.

We must also mention the fact that the use of eolian energy has also a negative impact on the environment of the Danube Delta such as: visual pollution, phonic pollution, interference with broadcasting waves and tearing risk (Dăduianu-Vasilescu, 1994, p. 175).

3. Direct implementation measures of the ecological policies in Danube Delta Area

We may appreciate that the feasibility of every ecological policy for Danube Delta area depends on the possibility of implementing, monitoring and control over it.

The Severity of the ecological policy is an important attribute that may be transformed in a simple speculation if, from objective and/or subjective reasons, the ensemble of the measures and means for environment protection can not be implemented in a sufficient important proportion into the Danube Delta. An important phase is to make the environmental policy operational in Danube Delta in order to ensure efficiency, inclusively from the point of view of the distributive impacts harmonisation, phase supposing certain conditions to be satisfied: (Negrei, 1997, pp. 137-138):

- *Qualified Human Resources* and more developed expertise capacity *providing*;

- *The existence of a legal frame* to reflect the rate between general and particular and which is based on a conscious informational transfer;
- Achievement of a *higher compatibility* between the *proposed instruments* to be used in the implementation of the ecological policy and the *technical and material base*, taking into account the possibility of its extension and modernization;
- *The design of a functional system* in order to assure control and self-control over the implementation of the ecological policy.

The central element in ecological policy implementation into the Danube Delta is represented by the environment protection instruments system.

If we start from the ecological policy objectives, which are dimensioned in the previous chapter, function of the environment issues in the Danube Delta and the social and economical development features of Danube Delta area, we will structure the alternative instruments system in order to achieve the proposed objectives.

In addition with the general economical measures, briefly presented in a previous chapter, it is also intended to use the direct (punctual) measures concretised in:

- *legislative instruments*;
- *economical instruments*;
- *horizontal support instruments*;
- *environment projects promotion*.

3.1. Legislative instruments

As a definition, legislative instruments are those instruments which have to ensure a high level of public health and environment protection, especially in the case of a high level of ecological risks, as well as in respect the obligations comprised in international agreements and conventions regarding environment (Rojanschi et al., 2004, p. 125).

In the legislative action, the accent falls on laws, normative regulations as well as on instructions which became subsidiary.

The regulation, giving directions to the citizens, societies and other organizations, may be generic due to the fact that everybody must obey this law, or may be individually oriented towards a certain situation or groups for which, for instance, an environment license is applied.

Among the characteristics of this type of direct measures, capable of favouring the rate of the technical innovation, generally, and especially the rate of innovations in the field of pollution combat technical, we can enumerate (Bran, Ioan, 2003, p. 125):

- *Imposing of some norms*, concerning the results without precisising the procedures or the used techniques;

- *Regulation of reasonable terms and a calendar* regarding the compliance to the set up norms;
- *Providing economical instruments* with complementary title, which are integrated to the market in order to incite at innovation;
- *Examination of the established obligations* and of the regulation concerning the environment protection.

The main elements and aspects that can be regulated in the structure of environment integral management law are: definitions of concepts and application field; institutional aspects (authorities, attributions); international aspects; planning; norms and standards; ecological zoning; impact evaluation over the environment; firms and administrators activities; products demands; chemical substances; environment demands types; management of different environment factors – water, waste, radiation, special activities; measurement and registrations demands; license giving procedure; financial regulation; responsibilities.

It is important to mention some of advantages and disadvantages of regulations and legislation.

Possible *advantages* of a direct regulation (Rojanschi, Bran, 2002, pp. 41-42) are:

- Establishes from the beginning:
 - The democratic wrights of all citizens;
 - Minimal standards concerning emissions, behaviour, quality, etc.
- Can be applied when the market mechanisms and the possibilities of a convincing communication are:
 - missing or without a chance;
 - in a total disagreement.

The disadvantages and the limitation of the legislative instruments reside in the fact that:

- it is necessary a long period of time in order to create a solid and integrated structure of the legislation;
- it can create a wrong impression that once solved as it should on the paper, the engagement of the regulating process would be automatically done;
- it can not cover all practical situations in a legal and flexible way.

Generally, the practice proved that it is an advantage to have lesser rules but in a better coordinated condition between them and rules less urgent and detailed but clear and better applied. For a better understanding of the way of applying the direct measures, but also for the indirect and general ones, within the implementation of the ecological policies in the Danube Delta, it is important to show how this space is organised and managed.

So, in the last years, Romania is remarked for its accentuated tendency of affirmation of some administrative structures having a specific character, including in the

territorial plan, representing true ecological circumscriptions. The last ones are monitoring the management and the protection of some environment factors, in a unitary manner, and are territorial and structural organised independently from the administrative territorial divisions of our country (Duțu, 2003, p. 298).

Danube Delta is one of the biggest and less affected wetland from Europe, constituting an international important region. In the same time, it is fragile because, in the last years, very serious damages took place as a consequence of the irrational exploiting of the delta resources, of the regulation operations as well as because of different forms of pollution.

In such a situation, in the last years, a series of measures, including legislative ones, measures targeted towards the stopping of the degradation process of delta natural patrimony and towards the ecological reconstruction.

The main result is the creation of the Danube Delta Biosphere Reservation, an institution with a complex juridical statute, having the task to provide the appropriate management and the sustainable development of the natural resources of the zone.

Through Decree no. 103/7 February 1990, the works of integral exploiting and territorial arranging of the Danube Delta were stopped. The Decree no. 92/1983 was abrogated and was forbidden all activity damaging delta zone.

Through Decree no. 187/1990, Romania subscribed at World Cultural and Natural Patrimony Convention, adopted by UNESCO at 16 November 1972, and Danube Delta was inscribed a on the world natural heritage list in December 1991, being declared as a biosphere reserve.

Through Govern Decision no. 983/1990 Danube Delta Biosphere Reserve Administration was created, juridical institution subordinated to Romania Environment Ministry.

Un important step in establishing a new protection and conservation regime for Danube Delta is Romania adhesion, Law no. 5/1991, at International Wetlands Convention, especially as a habitat of aquatic birds Convention RAMSAR) and the registration of Danube Delta, in May 1991, on the list of this Convention.

All these regulations established an ensemble of national and international rules, applicable in Danube Delta.

The legislative characteristics presented above constituted arguments in favour of the setting up of the Law no. 82/1993 regarding the creation of the Danube Delta Biosphere Reservation. This law was adopted by the Romanian Senate and the Deputies Chamber on the 8th of November 1993, published in the Official Gazette no. 283/7 December 1993.

This legislative act comprises three large categories of dispositions:

- a) regarding the general and the special regime of protection;
- b) with institutional and authorization character;
- c) sanctions.

The law provides the creation of Danube Delta Biosphere Reserve Administration, which have as main activity the protection of the environment factors, the flora and the fauna as well as the renewable natural resources.

The activity object of the Reserve Administration is the creation and the application of a special management regime for conservation and protection of the biological diversity of the deltaic natural for the development of human settlements and for the organisation of the economical correlated with ecosystem capacity support.

Also, through this law, the Reserve Administration is nominated as National Public Interest Domain Administrator and Environment Authority, which ensures the control of the way in which al legal provisions are respected concerning environment protection.

These provisions are stipulated in the Law no. 137/1995, environment protection law, which is regulating the acquirement of the environment agreement, environment authorisations issue way, etc.

In order to achieve its attributions, DDBRA uses important laws concerning other activities carried on Reservation territory. It is used the law regarding water protection, the fishing and the aquaculture, hunting and forestry as well as other laws coming in the direction of the protection of DDBR.

By the Government Decision no. 248/1994 regarding the statute of organisation and functioning of DDBR, important completions are made concerning the adoption of some measures facilitating the application of the Law no. 82/1993.

From the publication of the two normative acts (Law no. 82/1993 and G.D. 248/1994) and till now, the legislation regulating the DDBR statute, as a protected area, has suffered a lot of modifications, through the next normative acts:

- *Law no. 69/1996* for modification and completion of the article 10 of Law no. 82/1993, through which was regulated the juridical statute of some Reservation lands, being constituted the county interest public domain, administrated by Tulcea County Council;

- *Urgency Ordinance no. 112 from 29 June 2000*, for modification and completion of Law no.82/1993, through which modifications are made concerning the environment protection attributions of the DDBR. These attributions were forwarded to the Environment Protection Territorial Agencies.

- *The Law no. 454/2001* regarding the modification Urgency Ordinance 112/2000, through which DDBRA won

again its statute of protection organism for Danube Delta environment. A lot of real improvement is done for the good implementation of the activities of the Reserve Administration.

Through GD no. 367 from 18 April 2002, the base of a new statute of organisation and functioning is set for DDBRA, which complete GD no. 248/1994, re-giving to DD BRA the function of environment authority, according to the law on the reservation territory.

All these completions issued by normative acts had as a result the existence of a law package as well as other laws, all improving DDBRA activity. According to the legal dispositions, DDBRA has a double quality of administrator of the national interest public domain and of environment authority within DDBR perimeter, issuing agreements and environment authorisations in conformity with the Law no. 137/1995 for environment protection, republished with all ulterior modifications and completions.

To carry on economical and production activities, such as tourism and divertissement, by the physical and moral persons, you need to have an authorisation issued by Tulcea County Council, function of the environment authorisation issued by the Reserve Administration.

We have to make the specification that through the promulgation of the Law no. 113/2005 regarding the approval of the Government Urgency Ordinance no. 69/2004, for the modification and completion of the Law no. 192/2001 concerning the alive aquatic resources, fishing and aquaculture, the quality of Administrator of the alive aquatic resources (fish, frogs, crawfishes, etc.) from natural fisheries basins found on DDBRA territory, reverts again to the National Agency for Fishing and Aquaculture, public institution of national interest, din subordinated to the Rural Development and Agriculture Ministry and not to the Reserve Administration, as stipulated till now in the Law no. 82/1993. Also, in the same law, it is foreseen that the National Agency for Fishing and Aquaculture delegates the sustainable management of the live aquatic resources to Danube Delta Biosphere Reservation, for the reserve territory waters.

The Law no. 113/2005, is severely criticised by the representatives of the civil society, the initiators being accused that, under the demagogic cover of the European Union demands and in the name of the persecuted fisherman, they wish to impose the law in the interest of some group of persons and to create chaos and the possibility of turning back the national robbery in the Reservation.

In what concerns the sanctions and contrives regime practiced on DDBRA, we have to show that Law no. 82/1993, concerning the setting up of Danube delta Biosphere Reservation, established, among a complex

protection system for the Danube Delta, a series of sanctions in order to contribute at a safe application and observance of it. Thus, without abrogate other laws provisions such as: Law no. 192/2001 concerning fish, the fishing and the aquaculture, Law no. 103/1995, concerning the hunting and the game, Law concerning the forestry fund, Law no. 107/1996 concerning Romanian water. The Law no. 82/1993 stipulated some exceptional dispositions derogating from these normative acts with general character and they are applied only in the Reservation zone. As a consequence, in the situation of not regulating some aspects according to the exceptional dispositions, the general norms from the laws can be applied in this specially protected area.

The protection of Danube Delta Biosphere Reservation constitutes the obligation of all physical and juridical persons, being a major national objective, based on the following principles:

- *DDBR territory ecological risks and damage prevention principle;*
- *DDBR biodiversity and specific ecosystems preservation principle;*
- *Precaution principle* in the decision making process;
- *Elimination principle*, with priority, of the pollution sources damaging the nature integrity and people health.

Through *Law no. 83/1993*, concerning the constitution of the Danube Delta Biosphere Reserve, the *first special law* was adopted for a *protected area*.

In what concerns the penalty character, we may affirm that, because of the accentuated degradation of Danube Delta ecosystems, the law maker considered as necessary to strengthen the sanctions, the normative act keeping the infringement responsibility for the deeds made in such conditions. According to the penal law, these deeds are considered offences.

This specific law has the role to slow down and in the same time to drastically sanction all deed bringing damage to the natural balance.

We have to specify the article 13 letters a to h from the Law no. 82/1993, was modified through GD no. 341/2002, updating the limits of the contravention fees at very high values, to discourage the breaking of Law no. 82/1993 provisions.

3.2. Economical instruments

As, with good reasons, a specialist remarked, it is not possible and not desirable to place an ecologist agent behind every person, tourist or inhabitant of the Delta, to guard the compliance with law. It cannot be neglected that this public supervisor can have a personal interest smaller

or bigger but which can affect the implementation of environmental legislation in the Danube Delta.

This is why, regional legislation – specific to the Danube Delta, as well as national practice and international and European regulations experiment and implement some economical and fiscal instruments such as emission taxes or others such as subsidies, special funds, administrative dues, negotiable emission quota, ecological label, etc. designated to change human and company behavior against the environment.

By their nature itself, financial and economical instruments are considered, in the context of present environmental policies, to be the most efficient in adapting the relationship environment – business in DDBRA in order to get a balance among the three fields: economic, social and environment.

The fact these instruments are more and more used in present is due to the following factors (Bran, Ioan, 2003, p. 127):

- *Limitation of public power*, in general, and of *traditional system* “order – control”, especially;
- *Regulation are not enough* in comparison with environmental problems more and more serious in Danube Delta in spite of substantial economical costs;
- *The necessity to implement the “polluter pays” principle* and to include the environmental costs, such as pollution, in goods and service price;
- Necessity to *integrate environmental policies* in other fields of economical policies such as agriculture, industry, transport, tourism, etc;
- Necessity to *find more efficient and less expensive instruments* in order to improve ecological performances.

The instrument of environmental policy of financial and economical type uses and conducts the transaction mechanisms on the market with the following procedure:

- *Stimulate rational behavior* for environment
- *Finance the implementation of environmental policy* for example funds for preventive or correction measures;
- *Get funds* for other projects that indirectly contribute to achieving environmental purposes.

Economical instruments can be of several types: incentives, penalties and taxes. These are addressed either to environment itself (energy consumption, space, raw material or eco-space) or to market transactions.

Further I present some advantages and disadvantages (Rojanschi, Bran, 2002, pp. 42-43) of the concept.

Possible advantages of the mechanism of financial and economical instruments are:

- The results are often got cheaper and faster than by direct regulation;
- It is often more efficient than the use of authorizations,

standards and (discussions), public debates. This fact is especially available when:

- The effect on the economy is negative, neutral and or tangentially positive;
- Monitoring costs (cost of verification the compliance with regulations and evaluation of environmental quality) are low. This is applied in different situations such as:
 - Substitution of products with high negative environmental impact;
 - Closing some productive chains;
 - When a specific approach is needed;
 - When insurance companies monitor in their own interests.

Possible disadvantages and difficulties of this market mechanism are the following:

- Sometimes it is not available, due to the problem nature or implementation difficulties, such as: terms of international commercial and political agreements;
- It cannot offer certainty (for example it cannot make sure the production and the use of natural resources from the Danube Delta will be reduced at an optimum level);
- It does not lead inherently to “assuming” environmental values.

3.2.1. Taxes

This type of economical instrument is frequently used for product penalization of the activities damaging the environment. In a great part of cases, when a product is not wanted to be forbidden but only limited in its use, this last objective can be achieved by means of supplementary taxes instituting in order to amplify its cost.

The following taxes (Platon, 1997) categories are individualised:

Utilisation Taxes represent direct payments for use of a resource, for a waste treatment service or for pollution reduction by an institution or a public organization. The most usual are the dues for natural resources, used water treatment taxes, domestic waste collection. This kind tax depends on the volume and poured substances characteristics.

The value of the due obtained from the concession activities of pisciculture and reed on DDBR territory must assure the recuperation of the expenditure made from the national budget for conservation and management of the fish and reed from DDBRA, as follows:

- *Investments* made in the last 10 years (1990 - 2001) for the improvement of the ecological conditions in the natural fish and reed culture complexes from Danube Delta Biosphere Reservation;

- *Research annual expenditure* regarding the assessment of the fish and reed cultures from DDBR;
- *Monitoring annual expenses* for fish and reed cultures from DDBR;
- *Annual expenses of DDBRA for the management of the fish and reed cultures from DDBRA.*

The utilisation dues have as effect the introduction of the natural resources of the Danube Delta on market mechanism at prices which reflect their rarity, as well as the opportunity cost of their use.

You can notice that in order to determine the real debt of the concessionaire towards DDBRA, for the natural resource captured or harvested, it necessary to be exactly known the quantities, in our case the fish and the reed token by the concessionaire from the natural goods, in a certain period of time (month, year) The problems start from here, in the sense that DDBR is not capable at this moment to verify exactly what are the quantities of fish and reed token from the natural goods.

A good quantity from the fish (40% from the capture after some voices) goes on the black market, with all economical and ecological consequences which are not very difficult to be determined.

In this chapter of the utilisation dues, we have to show that through all concession contracts of fish and reed resources, DDBRA imposes to the concessionary companies to make investments concerning the resource protection and to provide its regeneration.

The investment works consist of:

- *Annual elaboration of an assessment study of fish and reed resources* in the concession zone and the assessment of some zones destined to wild animals habitat protection;
- *Zones signalization* for natural habitats with different protection degree, included in the valorisation zone of the concession resource;
- *Refection and repopulating actions of fish stocks* of which species is endangered by fishing activities;
- *Hygiene by controlled burning* of the reed areas;
- *Unsilting and cleaning activities* of some small channels from dead vegetation;
- *Guard and surveillance actions* of the concession zones, etc.

Also, the concessionaries are obliged, by the contract, to make adjacent investments of the resource exploitation process, such as:

- Arranging (fish) *collecting or* (reed, wood) storing points authorised by DDBR, in the concession areas;
- *Technical means endowment*, for fishing, transformation process and transportation, specific to this type of activities carried on DDBR.

DDBRA imposes in an indirect way taxes „for the made service”, representing the payment of the costs of the collective or public treatment of effluents, through the demand made to the economical agents or to physical persons, applying for DDBR activity authorisation, to present catering contracts with profiles companies for:

- *Domestic waste takeover*;
- *Fosse or ship tanks empty*;
- *Used oils and hydro-carbon residues takeover*;
- *Sewage use* to take over the domestic waters;
- *Used water treatment*, etc.

The administrative taxes are the taxes applied by environment administration for different administrative services such as for environment agreements or authorisation issue or regulation application.

Most part of the time, the administrative taxes have the role to collect revenues and not to improve the quality of the environment.

In order to issue environment agreements and the authorisations, in its double quality of public domain of national interest administrator as well as of environment authority in the DDBR Reservation, DDBRA collects the taxes established by the Minister Order.

Also administrative taxes are the authorisation taxes for the organisation and the carry on of some economical productive activities, for tourism and entertainment on DDBR territory, established by Tulcea County Council, on the bases of the founded proposal of Danube Delta Biosphere Reservation Administration. These taxes are justified and approves annually.

Authorisation taxes value, for organising and carrying on some economical productive activities for tourism and entertainment on DDBR territory, cashed in 2004, is of 182 millions of ROL. This sum is constituted as a source of own revenues in Tulcea County Council budget and it are used for financing of some activities such as:

- *Subsidizing with 50% the tariffs for potable water use*, in *Danube Delta* localities;
- *Collecting, transporting and storing the plastic waste* (pets, etc.) from the administrative surface of the *localities of DDBR*;
- *Subsidizing the interest rate difference* for the destined credits to *products stocking* strictly necessary for the autumn-winter isolated localities from Danube;
- *Communal roads rehabilitation* from Danube Delta;
- *Ecological education*, etc.

The experience of the last years shows us that the collecting of the administrative taxes by Tulcea County Council is carried on with difficulties because a lot of economical agents and tourists are avoiding paying it.

It is desirable an aggressive strategy for collecting these taxes, conceived and applied by Tulcea County Council.

3.2.2. *Detaxation and subsidies*

Tax cancellation for some products due to their significations for environmental protection proved to be an important possibility to promote some ecological objectives in DDBRA.

Thus, tax cancellation in case of unleaded gasoline let also in our country the price of this to be lower than the common gasoline, encouraging the use of this clean fuel by the inhabitants and the tourists come in the Danube Delta, for fishermen boats and especially for recreational crafts which are in a great number and of high power.

From the same reason, DDBRA will have to act accordingly with the bio-fuel for which the European Countries have total opening.

Regarding subsidies, I mention as example the *financial support* granted by governmental programs (co-finances of pre-accession programs) for waste water treatment (waste water treatment plants from Tulcea and Sulina) or those offered by Romanian Government for environmentally friendly agricultural activities in DDBRA.

The main form of subsidizing is represented by environmental fund, created to directly finance environmental protection.

Also, the 25% co-financing provided by Romanian Government for implementing the Special Programme for Agriculture and Rural Development (SAPARD), that encourages activities which decrease the pressure on natural resources of the Danube Delta (such as rural tourism, agriculture, and aquaculture), can be a good example of subsidizing as economical instrument in implementing environmental policies in Danube Delta area.

Generally, subsidies are not in concordance with the principle “the polluter pays” and present the disadvantage that they can influence the pollution increase or the number of polluters companies which benefit of subsidy.

The polluting tendency is not discouraged because funds come from administrative sources and not from the polluters.

In my opinion, the sector which needs subsidies with priority is waste management all over the DDBRA territory.

3.2.3. *Consignment systems*

It is a market mechanism more and more frequent especially in European countries, and has in view the compulsory consignment of recipients to encourage their return or recycling.

In Danube Delta as well as in the whole country this system has been practiced for long time in what concern glass recipients, by reuse of them and expenses disbursement.

In time, this mechanism was abandoned being considered that it did not influence significantly the number of return recipient and thus a low ecological efficiency.

I consider that the persons responsible for ecological policies that must be implemented in Danube Delta area has enough reasons to introduce consignment systems for packaging which represent an important part of domestic waste met in this territory.

I refer especially to those packages made of plastic, but also to the drink cans, which “invaded” the whole Danube Delta following the high flood from the spring of 2005.

It must be mentioned, that the concern regarding the use of consignment systems for environmental protection should be balanced as against the principle of free competition and free circulation of goods within Danube Delta Biosphere Reservation.

3.2.4. *Insurances*

Besides economical instruments presented above, insurances can play an important role especially when environmental damages produced by business and social activities must be repaired.

This kind of instrument is not used in the Danube Delta in present, but it can constitute a challenge for DDBRA to impose this kind of instrument for companies that do bunker operations of maritime or River ships or for companies that trade gasoline, Diesel and oil for naval engines in the whole Danube Delta.

It must be mentioned that insurances usually cover only damages that comes from a defined event or from an accident.

If damage is gradually, from example by a pollution cumulated upstream from a gasoline and Diesel selling point of the Danube bank, the insurance cannot cover this kind of damage.

3.2.5. *Green label*

Starting with 70s, for the first time in Germany (“blue angel” in 1978), then in other European countries, but in recent years in our country, too, the vision was expressed, according to which it is important to discover and to prevent environmental problem before they produce, instead of reaction after they produce some means that can be very expensive. In this respect *green label* becomes continuously very important.

Green label represents a promotional environmental instrument for environment friendly products calling for public interests and manufacture *prudence* (Duțu, 2003, p. 376).

By this method producers are requested to examine the whole life cycle of product (respectively manufacturing, distribution, use and disposal), in order to prevent environmental damages in every stages and in respect with every factor: air, water, soil.

The main role of ecological label is to inform the consumers about products and services that are considered less destructive for environmental and health than other similar ones.

The criteria must be a global appreciation of the ecological quality of the product.

According to stipulations of the Urgent Ordinance of Romanian Government no. 91/2000 that introduced a methodology for implementing the basic principles and for recognition of products with low impact on the environment, we can presume that the green label can be applied in the Danube Delta for the following products and services:

- *Cereals* cultivated on agricultural lands in the Danube Delta;
- Vegetables and fruit (melons);
- *products and semi-products from aquaculture* (fish, frogs, river shrimps snail, etc);
- *Tourism services*;
- *Medicinal plants*;
- *Honey and honey products*;
- *Eatable mushrooms* etc.

It must be mentioned that ecological label can be used as instrument with especially moral value, of prestige, of identification and underlying some exceptional natural elements or consecrated ecological practices.

In this sense it is desirable to implement into the Danube Delta the initiative launched in 1998 by the World Wide Fund for Nature (WWF), label for ecological exploitation of forest.

DDBR zoning, the specificity and complexity of these zones, makes me recommend that, among the marking means of ecological dimensions of these zones, blue flag and black flag can be used.

By Government Decision no 335/4th of April 2002, some measures were adopted for implementing the “Blue Flag“ Programs, in Romania.

3.3. Horizontal supporting instruments

This kind of instruments aims at the following important actions:

- Update the database of DDBRA;
- Promote scientific research in the Danube Delta;
- Improve sectorial and spatial planning;
- Develop public information systems and professional training.

3.3.1. Update the DDBRA data base

Due to the fact several institutions administrate the public land of DDBRA or are involved in implementing environmental regulations in this territory, generate difficulties in setting and continue updating of

environmental data base strictly necessary when establishing environmental policy objectives and their implementation in the Danube Delta.

Present technical solutions permit a system which can interconnect environmental data bases and other connected fields among the following institutions:

- DDBRA;
- National Institute for Danube Delta Research (INCDD);
- Tulcea County Environmental Protection Agency (EPA);
- Environment Guard;
- Tulcea County Council;
- Local Council of the local communities in DDBR;
- County Department Romsilva Tulcea;
- Tulcea Water management branch of Romanian Waters “Dobrogea, Seaside” from Constantza.

This system which we propose can positively influence the methodology and the quality of annual report regarding the environment status in Danube Delta Biosphere Reservation.

3.3.2. Promotion scientific research

Scientific and technological research, as horizontal support instrument, plays a determinant role in sustainable management of the Danube Delta. An institution well-known in this field at national and international level is National Institute for Danube Delta Research from Tulcea.

A proof in this respect is represented by several actions concerning Danube Delta carried out by this institution in 2005:

- *The study regarding the consequences* of Bistroe canal from Danube biosphere reservation Ukraine, on environment as well in regard with economy and social aspect in Danube Delta biosphere reservation.

The conclusions were presented within the Scientific Council of DDBRA in order to include the ecological reconstruction strategy 2005-2015 in the Management Plan of DDBRA.

- *Monitoring* of hydrological, morphological, sediment and ecological effects on the Danube River, delta and the sea coast determined by the construction of the new navigation way by Ukraine.

- *Studies and research* for:

- implementing Water Framework Directive (DC/2000/60/CE) and European Network of protected areas NATURE 2000;

- Assessing and monitoring the status of environmental factors in order to scientifically substantiate the strategy of sustainable use of renewable natural resources of DDBRA.

- Cadastral works in DDBRA – sit NATURE 2000, for the communities of Sulina, Murighiol and Sfântu Gheorghe;
- Feasibility Studies and technical design for investments included in the management plan of DDBRA.

An important characteristic that must be mentioned in this chapter is the necessity to synchronize in regard with time and space the research and activity with the objectives and instruments of environmental policy in the Danube Delta and its adjacent area.

An example would be the study named “Management plan for sustainable development of protected natural area from Danube Delta Euro-region” financed by CBC TACIS Programs of European Union (tspf 0302/0040). The project partners were Odessa Regional Council and Danube Biosphere Reserve (Ukraine), Cahul County and Scientific Reserve “Lower Prut” (Republic of Moldova) and Tulcea County Council and the lead partner Danube Delta Biosphere Reservation Administration (Romania).

The project, launched in 2002, created the possibilities to authorities of each reserve, authorities of each regional public administration from the three neighboring countries to develop crossborder cooperation in setting and implementing the first management plan of natural protected areas from Danube Delta and Lower Prut River of Lower Danube Euroregion. The Management Plan consists of a selection of objectives that will determine some harmonized actions in the fields of environmental protection and sustainable use of natural resources by a better public consultation and a better involvement of local communities in sustainable development process.

This management plan represented, in the same time, an important step in developing crossborder cooperation relationships, in implementing concrete actions of ecological reconstruction and not the least in rediscovering and turning to good account the traditions and cultural customs of communities that live in this generous and sensible area.

We must mention that there are already some important premises for approaching the set objectives, created by some international cooperation documents signed by the three neighboring countries: The agreement of environment ministers from Romania, Ukraine and Republic of Moldova regarding crossborder cooperation in natural protected areas from Danube Delta and Lower Prut River, signed in Bucharest, on the 5th of June 2000 and the Protocol regarding cooperation in the framework of Green Corridor Program, signed by environmental ministers of Bulgaria, Romania, Republic of Moldova and Ukraine, on the 5th of June 2000, too, in Bucharest.

On the other hand, the “Lower Danube” Euroregion created in 1998 as association of border regions Brăila, Galați and Tulcea from Romania, Cantemir and Cahul from the Republic of Moldova and Odessa from Ukraine represent a new framework for regional cooperation in environmental protection field.

The creation of a trilateral biosphere reservation, as proposed by specialists for the near future, will offer a real chance to governments and specialists of the three countries to develop a European crossborder cooperation model in preserving the largest wetland area of Europe. This action comes to underline the extraordinary ecological importance of this area and, simultaneously, the universal responsibility of decision makers regarding this area where people live, work and rest and where must be created and maintained all necessary conditions for sustainable development.

3.3.3. Develop public information system and professional training. Public awareness strategy in DDBRA

People – inhabitants and visitors cannot be separated from delta nature: their presence and activities have an important impact over delta heritage. Taking into account this fact, Danube Delta Biosphere Reserve Administration had got as main objective the increase of public awareness among local population, visitors and other interested groups in the Danube Delta.

The first public awareness strategy was developed with support and experience of international organizations, by a participative process which involves key target groups from the Danube Delta.

It is the first step in developing real collaboration and communication between DDBRA and the other interested groups, on the one hand, and improving the internal communication within DDBRA, on the other.

The strategic objective is to support preservation and sustainable management of natural resources in the Danube Delta, increasing social and economical benefits of local population as well as financial sustainability of DDBRA by implementing integrated and oriented awareness actions.

The strategy was financed by the World Bank in the framework of the Project GEF Danube Delta Biodiversity, and was facilitated by the organization Fauna & Flora International.

The strategy was elaborated between October 1999 – May 2000.

3.4. Environment projects promotion

The financing of the ecological activities in Danube Delta by means of the environment funds represents only an instrument to reach the ecological policy objectives in this area.

The real improvement of environment quality is depending on the coordinated actions within the political reform, on the institutional consolidation and, not at last, on financing.

We make the specification that the financing can not act as a substitute of the other two elements.

On a long term, only the integration of the ecological policies objectives of Danube Delta area in the regional policy and even in the Romania macro-economical one will allow efficient progresses towards these objectives, the funds destined for deltaic environment having as main goal to sustain policies integration efforts in order to achieve the objectives of Danube Delta ecological policy. The promotion of some environment projects in Danube Delta has, at its base, two financing sources:

- *Internal sources*
 - State budget (including the environment fund, water fund, forests conservation and regeneration fund);
 - Own sources of:
 - DDBRA
 - “Romsilva” Autonomous Administration
 - “Apele Române” Autonomous Administration.
- *External sources*
 - Non-reimbursable credits resulted from pre-accession funds;
 - Global facilities for environment;
 - Funds from multilateral agreements for financing environment protection projects ;
 - Advantageous credits from financial institutions from outside the country, guaranteed by the government, etc.

Among the most important projects promoted on DDBR territory, having intern source of financing, we cite the following projects:

- *Danube Delta Ecological Reconstruction Project* (approved by GD no. 455/09.05.2001), with the following objectives:

a) Improvement of the circulation conditions of the water within DDBR natural aquatic complexes;

The re-profiled length in the seven big aquatic complexes from DDBR is more than 300 km, the complexes representing the main source of fresh water in the case of a low level of Danube waters.

b) Ecological reconstruction works in order to improve environment conditions for fish natural reproduction.

These investment objectives are necessary in order to achieve works for some channels re-profiling for re-establishing the connection between the main water circulation networks within the aquatic complexes and the natural reproduction affected zones. The achievement of these works will contribute to a productivity progress of about 5-7 kg/ha of lakes surfaces level.

- *Potable water supply programme* of Danube Delta localities (approved by GD no. 950/1996).
- *Stone pavement program for communal roads* from Danube Delta (approved by GD no. 577/1997).
- *Programme “Houses for rent for young people”* (62 units in Sulina, 28 units in Murighiol and 18 units in Sarichioi).
- *Programme “gym centre”* (gym centre in Sulina and Crişan).
- *Defence programme against flooding* of Danube Delta localities, through which hydro technical works were achieved in 7 localities.
- *Programme “Tulcea County Development”*, with a total value of 100 billions of ROL (approved by G.D. no. 1116/2001), through which was targeted the creation of tourism structures in Danube Delta, including new places of work.
- *Ecological reconstruction programme* for some Danube Delta localities.

The most important environment projects promoted on DDBR territory, with extern financing source are:

- Project “Danube Delta Biodiversity Conservation”, financed by the World Bank, with a total value of 4.5 mil. USD, through Global Environmental Facilities – GEF), implemented in 1995 – 2000 period of time;
- Project “Biological fight against Lymantria in Romania and Danube Delta forests”, financed with 359.000 USD from the total value by FAO programmes;
- Within LIFE Programme (financial instrument for environment) launched by European Union, in nature and environment domain, we have the projects:
 - “Sun and wind for Energy: a model of sustainable management” (LIFE - Nature);
 - “Save Pelicanus Crispus in Danube Delta” (LIFE - Nature)
 - “Letea and Caraorman Forests – Nature 2000 sites from Danube Delta” (LIFE - Environment);
 - *Wasteless Wetland* (LIFE - Environment) proposed to be financed by the Association “Save Danube Delta”, in quality of leader and beneficiary of the project.
- Within INTERREG III Program – East Zone, projects: Delta MED and Delta PLAN
- *Within CBS-TACIS Programme*, financed by the European Union, “Biological diversity conservation and sustainable Development management objectives in the protected areas in Lower Danube Euro region”;
- Within *SAPARD Program*, the projects focusing tourism development in Danube Delta (*Measure 3.4*) and rural infrastructure (*Measure 2.1*), in the following localities: Crişan, Pardina, Jurilovca, Sarichioi;

- Within *Rural Development Program (RDP)*, implemented in 5 pilot counties, including Tulcea County, we have projects concerning water supply systems, sewage and road rehabilitation in Danube Delta localities (C.A. Rosetti, Sf. Gheorghe, Beștepe, Mahmudia, Murighiol);
- Within *ISPA Program*, the following projects are indicated to be achieved (proposal):
 - Water treatment station and sewage systems in Tulcea Municipality;
 - Water treatment station and water supply system as well as sewage system in Sulina town;
 - Waste management in Danube Delta.
- “*Support for Sustainable Development in DDBR*”, proposal for financing from Investment Northern Bank.

4. Indirect support measures for implementing ecological policies in Danube Delta area

Indirect and support measures sphere comprises:

- Revising the institution of the property regarding the use of the lands;
- The access to the property;
- Possibilities to be valorised by Danube Delta communities in order to research the control over the activities carried on in the perimeter of the property;
- Operational cost optimization of environment policy through the improvement of the informational system, the simplification of juridical procedures and juridical reforms.

4.1. Property institution revising

The failure of the communist regime makes that landed property regime in Danube Delta to return at the existent regulations which were suspended during the former regime.

Till the moment of the adoption of the Constitution in 1992, the following provisions were applicable (art. 476 from the Civil Code):

“The big roads, the small roads and the narrow streets which are in state responsibility, the rivers and the navigable rivers, the shores, added banks, the lands were water had retracted, natural or artificial ports, banks for ship accosting as well as all Romanian land which is not private property are considered to be public domain”.

The adoption of the Landed Fund Law no. 18/1991 clarifies explicitly for the first time the situation of the Danube Delta lands.

According to 5th article of the law: “river beds, vats and lakes of public interest, beds of interior maritime and territorial waters, Black Sea Coast shore, including the beaches, the land for natural reserves (...) constitutes the public domain”.

The Romanian Constitution from 1992, art. 135(3), establishes the subjects of the public property wrights: the state and the territorial administration units. The 5th paragraph offers the possibility of administrating all public natural goods to public institutions or to autonomous administrations.

According to the 10th article of the Law no. 82/1993, regarding the setting up of the Danube Delta Biosphere Reservation, terrestrial and aquatic surfaces, including the lands found permanently under water and which are component parts of the reservation together with its natural resources, excepting the lands forming the object of a private property or that are in public or private domain of local interest, constitute natural patrimony of national interest found under the unique direct administration of the reservation.

Till now, every thing was constructed on a simple logic, the conditions for a unitary exercise of the attributions, given by law, being ensured for DDBRA. There are especially 2 categories of attributions: natural patrimony administration from national public interest of the reservation and, respectively, of refection and protection of its physical and geographical interest.

A parliamentary initiative followed, at the demand and the request of Tulcea County Council, through which the provisions of the 10th article of the Law no. 82/1993 are modified. In its new form, it is established that Tulcea county public domain is constituted by the lands comprising fish ponds and agricultural lands on DDBR territory. Tulcea County Council is the administrator of this sum of lands.

We must make the specification, from the beginning, that the approaches of Tulcea County Council had mainly a economical motivation, in a period in which its own budget was not capable of covering al expenses that had to be done for a favourable resolution of its attributions regarding the responsibility on the county interest public services.

The take over in administration of 79.541 ha of land with fish ponds and agricultural polders from DDBR opens the perspective for own revenues coming from concessions of these lands to the juridical and physical interested persons. Indeed, year after year, the sum of the dues was more and more important, reaching 39.305 billions of ROL in 2004.

By the help of this amount of money, Tulcea County Council has solved some major problems of the county, including problems of Danube Delta communities such as:

- *Communal and county roads rehabilitation;*
- *Interest rate subsidy* for the credits demanded by the economical agents *ensuring the autumn-winter supply for the isolated localities from Danube Delta;*
- *50% of subsidy of the tariff* for using potable water from the centralized networks of Danube Delta localities;

- *Children and persons found in difficulty protection;*
- *Ethnic cultural tradition promotion in Danube Delta;*
- *Plastic waste recovery (pets) in DDBR, etc.*

Another important reason for taking over, by the county council, the above lands in administration was also the fact that 13 commercial agricultural and pisciculture companies, created according to Tulcea Prefecture Decision no. 93/1991, carry on activities on Danube Delta. The companies were created as a consequence of the reorganization of the Economical Company Danube Delta, Law no. 15/1990, being declared economical units of local interest. In that period, the companies were crossing difficult times having a critical economical and financial situation.

I appreciate that, in a wrong way, it was considered that Tulcea County Council could give some oxygen for the activity of these companies, by entrusting directly the concession of the land and taking a minimal due.

The situation complicated a lot in the moment when the most part of these companies started to fail and lost their main active shares. The County Public Finances Direction levies the distraint upon them in order to retrieve the debts of these companies in favour of the state budget.

The crumble of the social capital of the 13 commercial pisciculture and agricultural companies, organized on the public domain of county interest, process that kept the “secrets” of the Romanian economical transition, led to an alarming growth of the concessionaires (physical and juridical persons) of the above lands.

Thus, when implementing the Law no. 219/1998 regarding concession status, and also the Law no. 99/1999 regarding the privatization, Tulcea County Council granted the lands to 113 persons, either natural or legal (64 fishery land and 49 agricultural), in 2005.

It stands to reason that the majority of the concessionaires were animated by business interests and less by those regarding environmental protection in granted area.

Even the stipulations regarding environmental protection, formulated in tendering documentation for granting the lands, were small in number and are somehow general (article 5.2 and article 5.3 of the tendering documentation approved by Tulcea County Decision no. 43/31st of August 2004).

It must be shown that the Law no. 82/1993, modified by the Law no. 454/2001, provides that “the lands included in the public domain of county or local interest, used as agricultural and fishery lands but which can no more be exploited in this respect due to degradation or other causes,

will be restored at their natural regime by doing all the necessary works of ecological reconstruction, established by DDBRA AND Tulcea County Council.”

Presently, Tulcea County Council and the local community’s councils from the Danube Delta are in the position of not completely complying with this stipulation of the law because the majority of the fish breeding ponds, as well as some of agricultural lands are not used according to their designed purpose, being exploited either in a semi-intensive or natural regime, without irrigation or drainage systems. Most of the fish ponds and fish reproduction basins of the fish breeding ponds are drained and used for agricultural purposes.

Up to now, Tulcea County Council has not presented any proposal to DDBRA for ecological reconstruction of some parts of the fish breeding ponds.

Taking into account the situation presented above, and having in view the big investments made by Romanian Government for renaturation of large areas of the Danube Delta, an integrated coordination is necessary for implementing environmental policies and a sustainable management of DDBRA.

It is evident that deterioration or loss of some assets of natural heritage represents damages which are sometimes irrecoverable. Protection, preservation and improvement of environmental quality, including preservation of natural habitats, of wild flora and fauna are of major public interest, taking into account that biological diversity that forms natural heritage provides the most part of products, goods and services necessary to society being the base of sustainable development.

From this reasons there are more and more authorized voices, to whom I join, too getting rid of the “tog” of county administration person, that require the amending of article 10 from the Law no. 82/1993 with subsequent modifications and supplements made by the Law no. 69/1996, Urgent Ordinance no. 112/2000 approved by the Law no. 454/2001 particularly passing the lands of fish breeding ponds and agricultural lands from county and local public domain administrated by Tulcea County Council and local councils, into national public domain, administrated by DDBRA.

In this way, the ground and water surfaces, including lands permanently under water, which are in DDBR, excepting the lands which, according to the law, are private property of natural persons and the lands that are public or private property of local communities, together with natural resources they generate, form natural heritage of national interest as stipulated by the Law no. 213/1998 regarding public property and its juridical regime.

Also, the Law no. 462/2001 for approving the Urgent Ordinance no. 236/2000 regarding natural protected areas

regime, preservation of natural habitats, wild flora and fauna, provides at the article 22(1) that fishery and agricultural lands inside natural protected areas, legal constituted, achieved by public investments on lands belonging to public domain, will be mainly dedicated to administrative and scientific activities run by those that manage the protected areas.

The return of the lands occupied by fishery and agriculture to the previously juridical regime, I presume that can guarantee the use of these exploitation lands in their initial purposes, as well renaturation of some lands that were affected by human actions.

The ecological reconstruction of lands of the fisheries and agriculture, which cannot be anymore operated in their initial purpose, must be done with direct implication of DDBRA based on studies made by research institutes and

with endorsement of Romanian Academy – Natural Monument Protection Committee.

Conclusions

In this presentation I tried to demonstrate, without pretending to succeed, the modality in which the revision of property institution regarding land use can become a indirect measure that support the implementation of environmental policies in Danube Delta area.

It remains as a special problem for politicians and the managers of Tulcea County administration to convince the Romanian Government and Parliament to issue an normative document according to which an amount of about 50 billions ROL to be provided to local communities in the Danube Delta to ensure all necessary public services at a proper level.

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The Crisis on the Labor Market in Romania



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***Abstract.** In the last 17 years the labor market in Romania has suffered deep changes. We can find two distinct stages regarding the evolutions on the labor market in Romania after 1989. The first stage, which includes the period 1990 – 2003, is defined as a period of deep restructurations of the Romanian economy. It is characterized as a period of relatively high unemployment and the undertaken actions were directed mainly at limiting the unemployment and its harmful effects on the society. We consider that after 2005 the employment evolution heads towards a new crisis on the labor market, but its cause is not a high unemployment, but rather an offer dropping on the labor market. The causes and the possible solutions are delivered in this script.*

Key words: the employment of the labor force; the crisis on the labor market; the objectives of the employment policy; the strategy of employment the labor force; the demographic strategy.



The economic and social context

In the first years of transition, Romania has faced an unemployment boom, on the basis of the structural changes in the national economy. By the process of restructuration, privatization, closeout of the companies having mainly a state capital, the structure of the employment force has changed, i.e. employment in the state sector was reduced as a result of the processes of restructuration, privatization and closeout, while employment in the private sector has increased.

As a result of the imbalances caused by passing to market economy, the massive personal dismissals induced by the process of restructuration or closeout of the economical unit led to the decreasing of the number of employees and to increase of number of unemployed. It is necessary that the social policy should start from the need for a radical change in approaching this subject. To create minimum conditions for citizens to be able to actually

take part in the social life it is necessary that the legislative guarantees should be ensured urgently in parallel with continuous increase of the individual responsibility level.

The social model for achieving this must rely on the equilibrium between competition, cooperation and solidarity, by differential pay according to efficiency criteria and by balanced and transparent distributions of incomes earned in the society. In order to come out from the economic crisis in which lies, Romania needs more work places on the basis of the social solidarity.

The main objective is to ensure the protection and social welfare measures for certain categories or groups of persons able to work, by actions which will contribute to securing the work place, to attain permanent and rising incomes, as an essential premise for improving the living conditions of the active persons in the labor market.

The labor force employment

After 1990, the market labor formation and functioning has become one of the priorities of transition and economic reform program. As a derivate market, the labor market has received and gathered all shortcomings of the labor market functioning of other Romanian markets.

The macroeconomic context for ensuring conditions to realize the criteria for joining the European Union imposed that the labor market functioning to show itself as a complex maturity process of its legislative and institutional components. These ensure in a relative short period of time the increase of the employment rate of labor force at 70%.

In conditions of speeding up of the restructuration and increase of the insecurity at the work place, a substantial number of social problems raised in the labor market. Labor force employment has become one of the tensest areas of the transition. Romania faced a crisis of labor force employment under conditions of economic decline established in the decade 1990-2000.

Privatization and restructuration the Romanian economy has significantly influenced the labor market, by determing massive dismissals and appearance of the unemployment phenomena. The involutions in the economy limited the employment possibilities of the labor force; the number of the active and employed population, respectively the activity and employment rate, were reduced, while the unemployment became chronic.

The crisis on the labor market in Romania

In the last period of time, the specialists, citizens and mass-media are more often asking themselves whether there is or not a crisis on the labor market in Romania or whether on middle-term we're heading towards a crisis in this field.

If there is a real crisis on the labor market in our country, we logically have to answer also what we have to do on short and middle term to solve this delicate and serious matter.

According to statistics, comparative with 1989, the indicators show us that the number of employees in Romania has constantly dropped from 9 millions to 4.7 millions, which are now.

The persons employed in agriculture are about 2.2 millions and the persons employed as authorized natural person, members of the family businesses, employers, managers, administrators comes up to 1,1 million persons. In these conditions the number of employed persons in Romania is about 8 millions.

As a conclusion, in 16 years the number of persons employed in Romania dropped to 1 million compared to 1989.

The diminishing number of persons employed in Romania was caused especially on the basis of reduced number of employees in Romania.

In the time of strong economic restructuration, the number of employees was significantly reduced in Romania from 9 millions to 4.7 millions. In exchange, the employment has grown in areas typical to market economy, which have developed and continuously consolidated in the last 16 years.

The unemployment in Romania hasn't increased accordingly as a result of the legal and illegal immigration. Following this, at present over 2 millions Romanian citizens are working abroad, in accordance with some unofficial statistics.

The migration phenomenon was accelerated in the last 3-4 years before Romania officially joined the EU.

The migration phenomenon has had a series of positive effects, such as reduction of unemployment, poverty and social problems, especially in the rural environment and at the level of the domains which were strongly affected by the economic restructuration in the last years of transition.

The fact that in the last period of time the migration phenomenon has increased led to a labor deficit in certain domains such as constructions, agriculture, tourism, construction materials, mechanical processing, clothing and leather goods industry.

Should the migration phenomenon continue or accentuate after January 01st 2007 through the increase of the number of those who choose to work in other EU countries, the labor force deficit also accentuates and expands in other fields, in addition to those already mentioned.

This phenomenon shall lead to a real crisis on the Romanian labor market.

The crisis on the labor market shall limit Romania's economical growth by reducing the annual rhythm of economic growth and shall seriously affect the achievement of the objective of Romania's medium and long term lasting development.

Romania's budgetary balances are also endangered, with strong negative effects especially on the budgets of social and health insurance pensions. It is known budgets of social and health insurance pensions function well on a ratio from 3 to 3,5 employees per one beneficiary, and at present this ratio is totally unfavorable, from 0,8 employees per one beneficiary.

The continuation of migration in the previous period over the critical level, estimated by some calculations at still 0.5 millions persons, shall lead to a serious crisis of systems of social and health insurance pensions.

It is jeopardized the capacity to pay the pensions in Romania and to finance the health system at the level of its proper functioning.

In these conditions we consider that the responsible governmental authorities must urgently receive the alarm signal and that they take the necessary measures in order to avoid the crisis on the labor market and the extremely serious negative consequences that may appear in other domains as well.

We will now try to present synthetically from our point of view the main measures to be taken in order to avoid a crisis on the labor market from Romania:

- Urgent measures in order to introduce on the labor market the economic and financial leverages proper to a market economy which would lead to the growth of labor incomes, diminish the phenomenon of labor force migration and contribute to the coming back of some Romanian citizens who are working abroad. The specialists' estimations show us the fact that when the medium wages in Romania surpass the limit of 50% of the medium wages in the EU countries, the migration tendency will decrease, and those working abroad will come back in Romania, after having bought a lodging, long-lasting house equipments and eventually a means of transport with their incomes;
- Measures for stimulating the Romanian capital investments in high efficient branches and domains which insure higher payment standards as well;
- Stimulating the investments in the continuous professional training of employees.

As a conclusion, Romania will urgently have to establish on middle and long term the following, in order to come out from the economic crisis on the labor market:

- Objectives of employment the labor force;
- Strategy of employment the labor force;
- Romania's demographic strategy.

The objectives of the labor force employment policy in Romania

The historic context of Romania's actions with a view to integration in the Community's structures are placed under the sign both of deep changes in Romanian society after 1989, such as: building of a democratic society and instauration of a market economy and of changes on the level of European Union by the need of structural intern reforms, doubled by its unavoidable extending over the European countries, which subscribe to the same democratic values.

The declared purposes of the social policy of the European Community and of the member states are promoting the employment of persons able to work, improving the living and working conditions and harmonization of the frame conditions for more work and development. In order to achieve this objective, the Community together with the member states is applying a

series of measures in all areas of politics, such as adaptation of legal and administrative regulations, the agreement between the social orders and member states, establishing the minimum standard of working conditions, promoting the exchange of information, regulations for the purpose of improving the working environment, promoting the financial or other type of employment and creating new work places and professional training.

The objectives of the employment policy and of the labor market of the European Union and its members are based on the main social rights of the persons capable of working, established by common consent, on the right to be treated with generosity as well as the right to the free commodity and capital movement, on the national regulations which act within the common social regulations, on norms and conventions as well as on the objective of promoting and adapting the education system.

One of the basic principles of the social European policy is the equal treatment of all persons capable of working from the legal and social point of view, the forbidding of any form of discrimination, the guarantee of the access to the training and employing institutions as well as to the specific measures and the guarantee of exercising the trade union rights.

The restructuration of the labor market from Romania, within the coordinates of the European strategy, concerns the development and improvement of new mechanisms which should drive away the reminiscent shortcomings of the past. In the same time, a correct evaluation and adapting of these mechanisms is necessary, in accordance with the specific conditions of Romanian economy. On one hand, they will have to answer to the content of the labor market, in order to ensure the fulfillment of its functions with no syncope, and, on the other hand, they must ensure the flexibility of the labor market, its openness, respectively the passing from one sector to another, within proportions and rhythms which should diminish the economic and social costs of transition.

Employment strategy in Romania in order to come out from the labor market crisis

The evolution of employment in Romania is going to be influenced by several factors. On the one hand, the flow of foreign investments shall generate new working places. Small and medium businesses also expect to have a positive influence on the increase of the employment level, employment which is mainly localized under the aspect of non-remunerated work. On the other hand, continuing the restructuration and privatization process shall induce economic growths on the employment, generating new dismissals. Also, despite the relatively high economic growth, the labor force market is still under pressure, mainly because of the age and profession structure of unemployed people, which is not identical to demands in economy.

For these reasons the only solution by which employment in Romania may be positively influenced is to draw up a coherent employment strategy, with precise objectives and integrated applicability, in which all actions of the state institutions have as convergent point the increase of employment percentage.

The objectives of the employment strategy in Romania must be related to the economic revival based on the economic macrostability and the durable development of basic economy sectors.

We consider that the objectives of the Strategy in the employment field are the following:

1) increasing the employment level:

- adopting UE guidelines regarding employment;
- increasing the level of employment;
- repatriation (return) of the labor force of Romania that is working abroad at present;
- increasing the level of salaries in Romania;
- developing the enterprising spirit of employers and persons looking for a job;
- increasing mobility, flexibility, adaptability of the labor force;
- guaranteeing equal opportunities.

2) measures of supporting the unemployed:

- applying insurance measures for unemployment;
- moving the stress of protection policies of the unemployed from passive to active measures.

3) increasing the budget of insurances for unemployment and efficiently using it by increasing the percentage of expenses for active measures in the total of budgetary expenses.

One may achieve the objectives established in the strategy only by constituting a complete social partnership, in which the social partners are involved in drawing up policies, programs in the field of employment and also involved in implementing them.

Within this context, social partners are systematically integrated in the development and implementation of the actions, according to public/private initiatives.

By social dialogue, partnerships make their presence noticed at European level (transnational cooperation concerning youth, education and training programs), national level (tripartite agreements), local level (at community level), at companies' level (employers/trade union/employees).

Partnerships are developed especially through active involvement of local and regional authorities of civil society organizations, which offer services closer to the citizens and which are better adapted to needs specific to communities.

Because at this stage Romania must adapt as far as all activity sectors are concerned in order to achieve and to maintain competitiveness, the social partnership becomes an efficient method to ensure activity modernization and diversification.

We consider that the main actions needed to achieve the objectives are the following:

- Ensuring continuous economic growth, with a direct impact on the growth of the number of working places, based on the development of the sector of small and medium businesses; a special emphasis shall be put on the development potential of certain activity fields, like services (tourism, information technology, etc.), whose percentage within the economy is still quite small.
- Fighting against working without legal forms and initiating measures that lead to reducing costs of working places, fact which shall stimulate the employers to comply with the legislation within this field.
- Identifying alternatives for employing dismissed persons, fighting against long term unemployment that represents a permanent preoccupation for the following years, in the context of continuation of the privatization process and economic restructuring.
- Drawing up special programs addressed to groups of people confronted with difficulties of integration on the labor market: young people, disabled persons, Roma persons.
- Promoting measures destined to lead to the growth of the participation rate by prolonging the activity period for elder persons, based on the latest demographic evolutions, characterized by an aging process of the population.
- Attenuating discrepancies between supply and demand on the labor force market, especially by adapting the initial and continuous training system to trends on medium and long term of the occupational world, in a society based on knowledge and usage of new computer technologies.

Romania's demographic strategy

We consider that the strategy and objectives of the employment policy in Romania may be achieved with favorable results only if we shall urgently draft and implement the *demographic strategy* of Romania, strategy that shall have as main objective the stopping of the demographic decline of our country.

Demographic strategy shall establish the way in which actions must be carried out in Romania on medium and long term in order to stimulate the demographic growth, which is considered a priority in sustaining the durable development of our country.

We consider that Romania's demographic evolution represents a *maximum priority* for all of us, and the drafting and implementation of the strategy within the field is determining for the economic and social development in our country.

Improving the Financial Control – A Priority of Corporate Management Nowadays

■

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Abstract. *The control serves for dynamic, preventive and real-time delivery of information and increases the quality of decisions. It reaches the essence of the phenomena, notices the negative aspects when they appear as tendency and intervenes operatively for preventing and canceling the causes. The control evaluates the results in comparison with the established norms and objectives, but it also contributes to preventing tendencies and phenomena that need corrective decisions. The control represents a form of improving the manner in which the patrimony is administrated, a form of organizing and conducting the activity of patrimonial units.*

Key words: financial control; the methodology of financial control; the control system; control techniques.

■

1. The methodological system of financial control

a) The elements of the control system

No matter the level at which the set objectives are carried out, the control is composed of three different moments that are connected to each other. These moments are (Figure 1):

- the comparison between the records and the real situation;
- the analysis and the evaluation of the results and the deviations;
- usage the findings.

The inputs in the control system consist in the data and information necessary for the two terms of comparison (the ideal situation and the real situation).

The ideal situation is established based on the regulations and restrictions of the legislative system, on the decisions made at different levels of management, on programs of activity, on income budgets, and on the recorded stocks reflected in the accounting (Oprean, 2002).

Depending on the way the control approaches the ideal situation, the conformity controls are different from the pilot control and the adaptive controls.

The real situation is established based on the observations made at the firm, on the inventories of control, on the documents' check, on laboratory analyses, on examinations and on the explanations given by the controlled ones.

The essential moment of the control process is the comparison. Any operation or economic-financial activity is being investigated in connection with a criterion, with a comparison basis. The comparison criteria determine the nature of the control:

- the comparison in connection to a pre-established criterion (norm, goals, forecasts, tasks, standards, etc.);
- special comparisons (between alternative efficiency levels of organization measures or organization solutions with the purpose of choosing the best);
- space comparisons (for instance between certain public services);
- time comparisons (between the programmed or actual activity in the controlled period and the previous period).

The control comparison has typical aspects, depending on the nature of the economic-financial activities and obligations that are being controlled, depending on the calculation methodology and on the record system. The compared operations or activities must be homogeneous, calculated and expressed by using a uniform methodology.

Based on the results of the comparison, the next steps consist in analyzing and evaluating the results or the deviations, defining the influence factors and the causes, and establishing the consequences and the responsibilities.

Turning to good account the findings represents the final stage of the control process. Depending on the conclusions reached in the previous control stages, within this stage are completed and implemented measures that should lead to influencing the controlled activities.

The outputs of the control system consist in operative measures that were adopted during the control in order to correct the situation, to improve the activity, and to punish the guilty persons; compulsory orders given to the controlled ones; reports to the management organs that ordered the control; proposals for improving the substantiation of the management decisions.

b) The methodological system of financial control

The control establishes if the economic and financial activity is being organized and carried out according to the established norms, principles or rules. In order to know and improve the economic-financial activity a methodological system is needed that contributes to the reflecting of reality, legality and efficiency.

From a methodological point of view, the control is a knowledge process that needs several moments: knowing the established situation, knowing the real situation, knowing the deviations by comparing the real situation with the established one, conclusions, proposals and measures (Crăciun, 2002).

Being a process structured on the basis of the enumerated moments, the control methodology needs (Figure 1):

- formulating the control's objectives;
- defining the objectives depending on the forms of financial control (preventive, operative, subsequent control);
- the organs or the areas that are legally competent to carry out the control upon the established objectives;
- the information sources needed for control (primary documents, technical-operative records, and accounting records);
- using the control proceedings and techniques that contribute to knowing the controlled activity;
- establishing deficiencies, shortcomings and deviations;
- drawing out the control acts where are registered the findings;
- the modalities of finalization and capitalization of the control activity;
- establishing how efficient was the control in preventing and solving the deficiencies and shortcomings and in improving the controlled activity.

As a system, the control methodology is a combination of the proceedings and methods, of the principles and means that enable the activity of control.

One uses in a differentiated manner, depending on the nature of the control activity, on the forms of financial control, on the information sources needed for the control, on the nature of the existent deviations – elements which build a system of methodological instruments.

The control methodology uses its own ways and modalities of research, as well as methodological instruments of other scientific disciplines (mathematics, accounting, law, management, finance, computer science, etc.)

The main component of the control methodology is the totality of research, knowledge and improvement methods applied to the economic-financial activity: the general study carried out beforehand upon the activity to be controlled; the control of the accounting records; the control of the facts; the economic-financial analysis; the total control and the random control; capitalization of the findings.

2. The financial control method

The object of any financial-accounting control is the research of economic operations or processes in order to establish the evolution, the stage or their correctness in connection with the program, the set objectives, and the legal norms that regulates them.

From a theoretical point of view, but especially from a practical point of view, the financial control method represents the way of research and action within a system

of mutual conditioning of all methods, techniques, control instruments, in order to prevent, establish and remove possible shortcomings, deviations or deficiencies found in carrying out the economic-financial and the accounting activities. Therefore, *the method* represents the logical system that needs a scientific way of research and activity, a methodological system that serves for reflecting the reality, the legality and the efficiency of the controlled activities (Munteanu, 2003).

The quality of the control activity and its results depend to a large extent on the methods, techniques and instruments used.

In order to reach the objective of the control, one uses different techniques and methods for verifying the controlled activity, that differ and have a typical content, adapted to the actual circumstances, depending on the nature of the controlled activity, the forms of financial control, the sources of information for the control, the possibilities of improving the controlled activity.

The financial control is a practical activity. The suitable choice of the control criteria, of the control techniques and methods contributes decisively to achieving the set objective. There are several specific control methods (Figure 1) that appeared due to practical requirements of control and that aim at the increase of the control's efficiency.

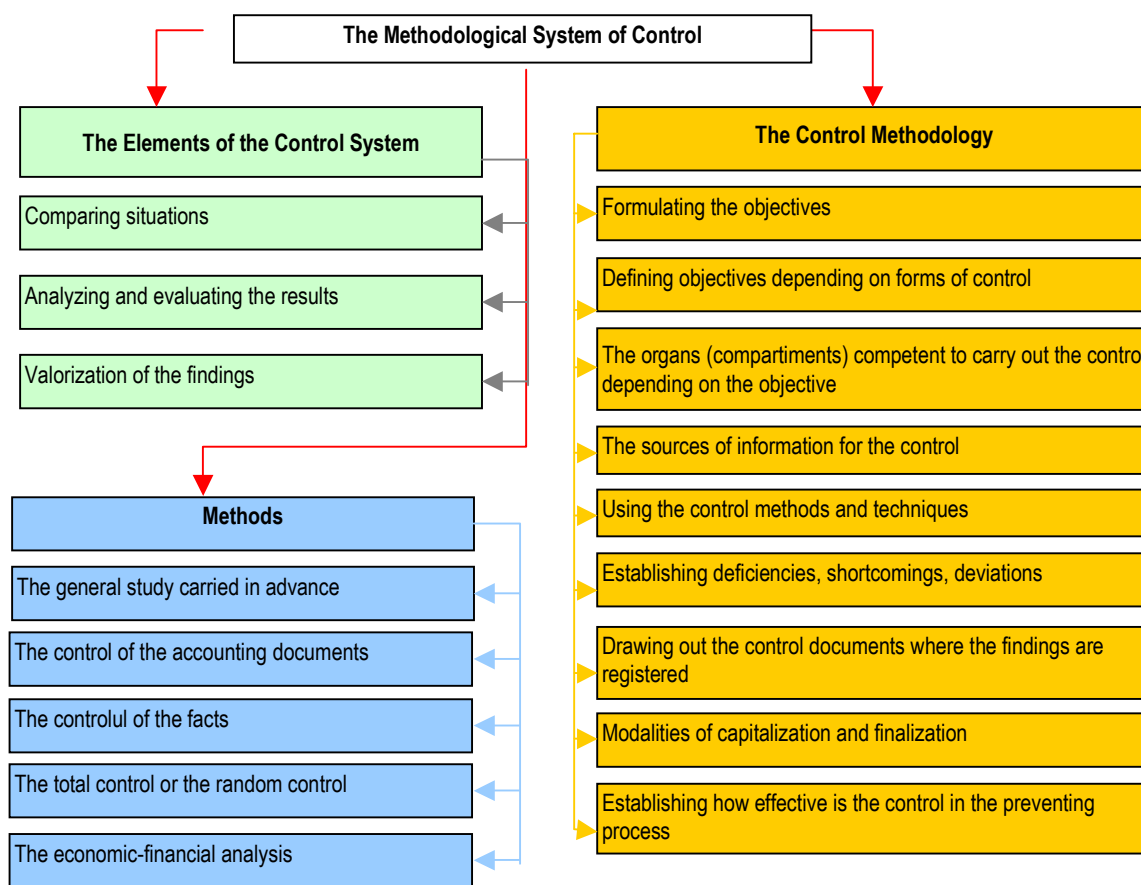


Figure 1. The Methodological System of Control

The control method represents a totality of specific rules, techniques and instruments that are used, in combination with professionalism, in order to concretely solve the problems derived from the functions of control (Munteanu, 2003).

In practice, the use of typical techniques and methods of control (such as the evaluation, the guiding, the judgment, the analysis, the income budget, the annual or quarter financial statements, the explanatory report, mathematic instruments, informational and informatics techniques, etc.) have as purpose to prevent, to find and to remove eventual shortcomings, deviations or deficiencies from the activities of patrimonial units.

Applying with discrimination the typical control techniques and methods allow the control organs to estimate correctly the economic-financial state of the patrimonial unit and establishes the ways of making the unit more efficient.

3. Methods and techniques of financial control

The variety of economic activities, the interaction and their mutual conditioning require the diversification of the control proceedings. These control proceedings can be used simultaneously, successively, in the same process or can be used separately. From the methods used in control, we mention the following ones:

A. The general study carried out in advance

The general study carried out in advance enables the control organs to know the essential and specific elements of the activity to be controlled and based on these elements, the activity of organizing and conducting the control is focused on the objectives that require special attention. This study offers the control organ the possibility of knowing the way the control activities are or were carried out. It can be global or detailed; it refers both at the controlled units and at the content of the control activities.

The objectives and the information sources of the general study carried out in advance

Table 1

The general study carried out in advance	
Objective	Information Sources
- The tasks resulted from the norms in force for the controlled area of activity;	- The legal norms;
- The orientations, the instructions, the competences and the responsibilities in the internal structure of the controlled unit;	- The previous control statements;
- The way in which are organized the accounting and the technical-operative records;	- The accounting reports;
- The real situation concerning the activity to be controlled	- The statements of the collective management organs;
	- The consulting with the management of the controlled compartments.

Being a method in the financial control, the general study carried out in advance has the following objectives (Table 1):

- the requirements deriving from the norms in force for that particular field of activity, that need to be known by the control organs for their orientation towards the aspects that must be considered in the control activity;
- the orientations, the instructions, the competences and the responsibilities in the internal structure of the patrimonial unit where the control is carried out;
- the study concerning the way in which the accounting and technical-operative records are organized, as source of information for control;
- knowing the real situation concerning the activity that will be controlled.

The general study carried out in advance has as source of information (Table 1) the legal norms, the previous control statements, the accounting records, the statements of the collective management organs, the consulting with the management of the controlled compartments.

B. The control of the accounting documents

The control of the accounting documents is the control most frequently used in the economic and financial practice. It can be preventive or ulterior and it is carried out on the basis of the documents it reflects (Figure 2).

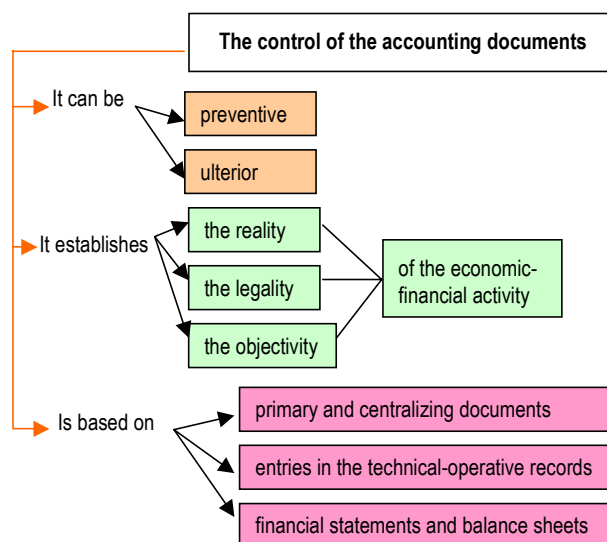


Figure 2. The control of the accounting documents

The control of the accounting documents is the method that establishes the reality, the legality and the efficiency of the economic and financial operations and activities, by examining the primary and centralizing documents in the technical-operative and accounting records of the financial statements.

The main techniques of control are:

a) *The chronological control* is carried out as the documents are drawn out, booked and filed. The documents are examined every day, in a row, in the order in which they are kept, without any previous grouping or systematization.

b) *The chronologic control in reverse order* is carried out from the end towards the beginning of the control period. One begins with the control of the most recent operations and documents and the control is conducted from the present to the past. It is used when it is necessary to establish the moment in which the deviation happened or to follow the development process of the operations that are connected with the deviation.

c) *The systematic control* requires grouping the documents depending on problems (bank, cash register, supply, etc.) and then requires their control in chronological order.

d) *The mutual control* consists in researching and confronting (in the same entity), documents or records with identical content, but different in form, for the same operation or for different, but interconnected operations (Figures 3 and 4).

e) *The crossed control* consists in the reconstruction and comparison of all the copies of a document existent at the controlled unit and at other units from which were received or to which were supplied materials, services or other values (example: the copy of the receipt in the receipt book is compared with the original of the receipt that is at the payer). This control represents an external confirmation of the data put down in the documents or in the records of the controlled units.

f) *The combined or mixed control* requires grouping the acts depending on types, problems or operations and examining each set of documents in the chronological order or in the reverse chronological order of the process of drawing them out or filing them.

g) *The investigation of control* means studying problems that do not result clearly from the documents and records put at disposal. The information is obtained from the persons whose activity is being controlled.

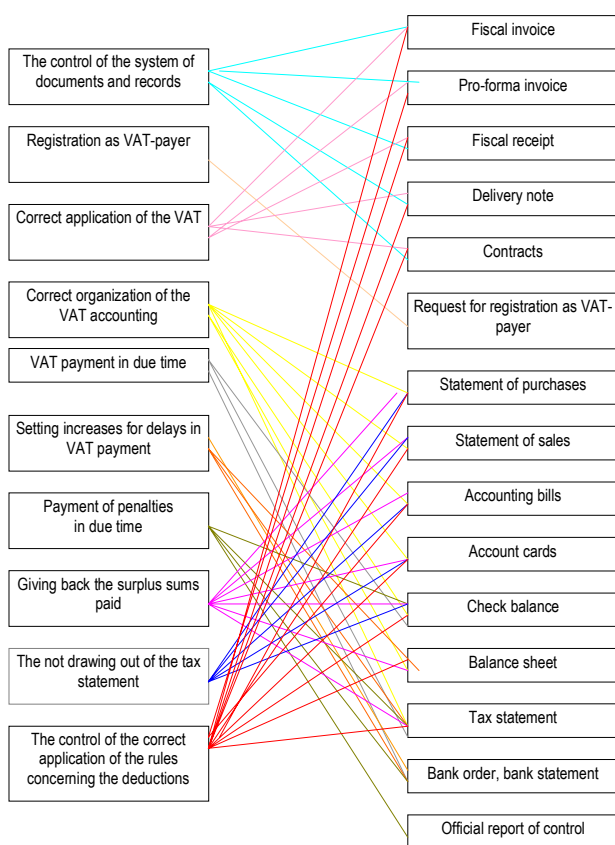


Figure 3. *The correspondence: control objectives – information sources concerning VAT*

i) *The comparison of control* consists in the comparative examination of different balances from the analytical records with the ones from the controlled accounts. The comparison with previous data (example: the expenses of the current year with the ones of the previous year) is frequently used in the case of this technique.

j) *The control calculus* requires re-making the accounting bookings. With this proceeding is obtained evidence about the exactness of the data from the accounting records.

k) *The critical exam* is realized by examining the papers, documents and records, trying to pay attention to the problems that are more important.

l) *The accounting analysis:* with the help of this analysis are established the accounts where the operation will be recorded and the relationship between the accounts. Any

h) *The general analysis and study* are used with the purpose to obtain proofs/evidence of the control (example: examining the debtors and creditors of some accounts, in order to determine the correctness of registering economic and financial operations). This is useful for the control of the accounting that may contain wrong bookings or for controls that need detailed information.

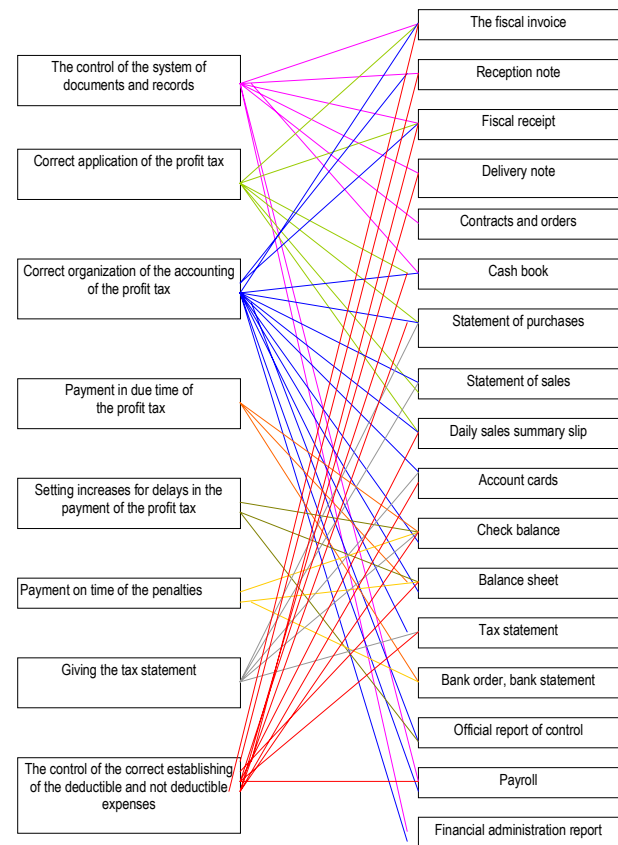


Figure 4. *The profit tax. The correspondence between the objectives of control and information sources*

economic and financial operation is submitted to an analysis before recording in the accounts. The accounting analysis consists in researching each economic operation, on the basis documents, in order to establish the correspondent accounts and their parts (debit or credit) where that operation will be entered (Drăgan, 2004). This analysis precedes the recording of the operations in the accounts.

m) *The analytical balances of accounts* are used for controlling the correspondence between the data of a synthetic account and the ones from their analytical accounts. In the bookkeeping, the active and passive elements are reflected both as a whole and in their component parts, with the help of the synthetic and analytical accounts. The qualitative and quantitative expression creates optimal conditions for conducting the control.

The analytical balances of control are drawn out for each synthetic account split in analytical accounts, based on the data taken from the analytical accounts, before the synthetic control balance is drawn out.

n) The synthetic balance of control requires the control of the entries by comparing each analytical control balance with the respective sums of the synthetic account from the synthetic balance of accounting control.

In the system of accounts, the operations resulted from the movement and the material and financial transformations are reflected on the basis of the principle of the double booking. The functioning way of the accounts reaches a peak in the accounting science through the double booking, which is a methodological proceeding that gives the infallible character of the accounting; this is considered an ideal system for the record of the administrated capital and patrimony seen from a double perspective: economic values and obligations or resources (Drăgan, 2004).

This principle is observed by means of the synthetic balance of accounting control that contributes to guaranteeing the exactness of the bookings made in the accounts and guaranteeing the drawing out of some real and complete financial statements. With the help of this proceeding are determined:

- the recording omissions (the economic operation is booked neither in debit nor in credit);
- the compensation errors (reporting wrongly the sums from the journal or from the documents in „Cartea – Mare”);
- the charge errors (reporting an exact sum from the journal in „Cartea – Mare”, both in debit and in credit, but not under the correct accounts) (Munteanu, 2003);

o) The chess control balance helps to detect the errors that do not influence equalities. These errors may have as cause: wrongly establishing the correspondent account, inverting the accounting formula, registering an operation twice both in debit and in credit, drawing out a correct accounting formula, but with the wrong sums. Through this proceeding one can identify the lack of correlation between the accounts, the compensation and the charge errors.

In practice, in certain cases, in the case of control one can make use of unofficial documents and records, too. The unofficial documents and records are the result of the initiative of the persons that draw them out with the purpose of justifying some values (hand receipt, personal records, etc.). They are considered written proofs that enable examining the official documents and records. The conclusions obtained on the basis of these unofficial documents and records are taken into consideration by the controlling persons only if they are confirmed by official and legal documents and records.

In order to find deviations and shortcomings and in order to argue conclusion about unrecorded facts or facts wrongly recorded in documents and records, one uses specific techniques and modalities for the financial-accounting control, such as:

- *The quantitative reconstitution* of some global-quantitative records, on the basis of inventories and administration papers;
- *The comparison of control* that concerns establishing the possible maximum stocks (reduced goods). The maximum possible stock equals the balance at the initial inventory plus the good input based on documents minus the goods output based on documents.

The control comparison is carried out between the possible maximum determined stock and the stock of the last inventory. Three situations can occur: greater than the stock from the last inventory, smaller than this one or equal with it.

- *The goods input correlated* depending on consume, liberations or sales. One compares the existent possible stock with the input at that date or around that date. This method is used in the following cases:
 - a) the stocks with global-quantitative record, where selling the goods is made on sales slip. It has the role of discovering deviations or lacks covered with documents or evidences, the validity of some inventory documents, etc.;
 - b) the stocks with global-quantitative record with payment directly at sale, without sale slip.

As a rule, the stock's situation is established after making the inventory and comprises the period from the last inventory until the next inventory. The controlled inventory period is situated between two running periods (Munteanu, 2003).

- *The correlation of accounting documents* in order to establish the reality of an economic fact correlated with other facts of mutual influence;
- *The inter-inventories control* shows whether there is a connection between the pluses from an inventory and the minuses from another inventory and if are fulfilled the conditions of legal compensation. If it's made, this compensation represents an exception and, according to this exception, the compensation of goods can operate between pluses and minuses and only for the same inventory period and for the same inventory.

C. The factual control

The factual control has as objective to exactly determine the existent quantities and values, their condition, the processing stage/phase/period and the processing method, the observing of the law in their utilization. The main techniques of factual control are:

a) *The inventory* has as object the finding (at a certain moment) of the qualitative and quantitative elements of assets and liabilities of a patrimonial unit.

The inventory is a typical control technique. As control technique, it is not identical with the periodical inventory of the financial administration or of the entire patrimony. In order to deliver results, the inventory must be carried out suddenly and started simultaneously for the whole unit.

b) *The technical survey and the laboratory analysis* are used when the problems raised during the control are beyond the legal competence, knowledge level or the equipment that is at the disposal of the control organs. The technical surveys are used in order to establish the integrity of the material values, the reality of some operations, knowing some working parameters etc. The laboratory analyses are used with the purpose of establishing the quality of the structure/composition or the content of certain materials, works, and products.

c) *The direct observation* is a technique used in the concomitant control and consists in observing on the spot the way certain activities are carried out.

d) *The physical inspection* consists in examining the assets and other resources. It is a reliable evidence for finding the existence of a certain asset position, of the fix assets, etc.

The documentary/reference control is linked with the factual control and in this manner is established by the way the goods are administrated and the quality of the information concerning the controlled activity.

D. The total control or the random control

The total control comprises all the operations from the established objectives and during the entire controlled period. It is the most comprehensive and reliable control, but it cannot always be applied.

The random control researches the most representative documents and operations and enables the drawing of conclusions on the objective in view. Usually the random control is carried out and if major irregularities are found, the control expands and becomes total.

The total control is carried out through various control modalities:

a) *The simultaneous control* is carried out simultaneously for certain similar or related objectives that can be easily substituted.

b) *The complete control* consists in a group of measures that have as purpose obtaining the certainty that the evidence for the operations is accurate and complete.

c) *The continuous and permanent control* is carried out without interruptions in duration or intensity and comprises all the goods that are subject to control.

d) *The periodical control* is organized at regular intervals and is carried out unexpectedly.

e) *The direct control* is a simultaneous control. It applies to the objectives that are controlled during the carrying

out of that particular activity.

E. The economic-financial analysis

The economic-financial analysis is a research method based on splitting up or separating an object or a phenomenon into component parts. By means of the techniques typical for this method, each element is being separately examined, the cause/effect causes are established, and are determined the trends and fluctuations of various indicators (Oprean, 2002). The analysis completes the control with some aspects that cannot be pointed out by other control methods. It contributes to focusing the control on the essential problematical aspects.

The control cannot confine itself to finding the shortcomings. It is necessary to establish the level and the dynamic of the examined phenomena, the factors that influenced the evolution of the controlled phenomena, the correlation between these factors and the phenomena.

Although the analysis and the verification are two different lines of action, they are mutually conditioned. In order to make a quality analysis, real information is needed and therefore it is necessary to verify in advance the accounting documents in respect to form and content; afterwards will follow an economic-financial analysis (Munteanu, 2003).

On the other hand, the documentary check uses the conclusions of the economic-financial analysis with the purpose of focusing on the sectors, factors and causes that have a negative influence upon the economic-financial situation of the patrimonial unit (Oprean, 2002).

The economic-financial analysis is carried out by means of typical techniques such as:

a) *Techniques for establishing the cause-effect relationships between the phenomena*

Examples: the consistency of the examined object and the circumstances or conditions in which this took place.

b) *The division and the breaking up* insure the depth of the study of the economic financial activity, the time or space localization of the causes and the deviations.

c) *Grouping*, meaning the separation of the controlled operations into homogenous groups, depending on one or several criteria, depending on the purpose in view.

d) *The balance of the elements* and their variations are used when, among the elements of the controlled phenomena, there are sum and differences relations (for instance: the relation between the production volume of sold and cashed merchandise equals the initial stocks and the opening balances plus the volume of the fabricated production minus the final stocks and statement balances).

e) *The operational correlation* is used in adopting decisions when many factors interfere and must be taken into consideration.

The control methods and techniques typical for each method are presented in Table 2.

Methods and techniques of financial control		
Methods	Techniques	
The general study carried in advance	-	
The documentary control	<ul style="list-style-type: none"> - The chronological control; - The chronological control in reverse order; - The systematic control; - The mutual control; - The crossed control; - The combined or mixed control; - The investigation of control; - The comparison of control; - The calculus of control; - The critical exam; - The accounting analysis; - The analytical control balance; - The synthetic control balance; - The chess control balance; - Quantitative reconstruction; - The correlation of goods inputs; - The correlation of the accounting documents; - The control between financial administrations. 	
The factual control	<ul style="list-style-type: none"> - Inventory; - The technical expertise and the laboratory analysis; - The direct observation; - The physical inspection. 	
The total control or the random control	<ul style="list-style-type: none"> - The simultaneous control; - The complete control; - The continuous and permanent control; - The periodical control; - The direct control. 	
The economic-financial analysis	<ul style="list-style-type: none"> - Establishing the cause-effect relations between phenomena; - The division and breaking up; - Grouping; - The balance of elements; - The operational correlation. 	

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Using the Statistical Indicators for the General Insurances Activity

■

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***Abstract.** The statistics of the general insurances activity is largely used in the actuarial calculations. The actuarial analysis are achieved exclusively on the basis of primary and derived indicators, which are drawn up by various statistical methods. The statistical indicators which are used in this respect are obtained on the basis of the factors and conditions allowing the compensation cases to occur.*

The actuarial analysis is performed over the time as well, by using the chronological which allow the decomposition of the phenomenon being studied by its factors of influence.

In this article, after briefly presenting a number of point of view regarding the utilization of the statistical indicators in the actuarial analysis, we have analyzed, successively, a series of issues, such as: the statistical indicators as regards the general insurances fund forming, expressed in physical and value units, or as absolute, relative and average volumes; the statistical indicators of the utilization of the general insurances funds (with the same diversified form of expression) and the statistical indicators of the outcomes of the general insurances activity.

A particular accent went to the underlying of certain methodological aspects regarding the calculation of the above mentioned indicators, emphasizing certain particular characteristics concerning their utilization in the frame of the actuarial analysis.

The article is stressing the clarification of the fact that these indicators are used in the actuarial analysis as a real system. The respective proportions are enumerated, by underlying the concrete possibilities of computation, which secure the possibility of performing the necessary analysis involved by a decisional process.

Key words: actuarial; general insurances; statistical indicators; insurance fund; damages.

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The statistics of the general insurances activity, largely used as far as the actuarial calculations are concerned, is represented mostly by the statistical analysis of the in a body phenomena which are specific to the general insurances.

The analysis of these phenomena is achieved exclusively on the basis of primary and derived indicators, which are drawn up by various statistical methods.

The statistical indicators of the general indicators are obtained by means of the observation of the factors and

conditions of the occurrence of the insured cases during the retrospective period.

The time analysis of the statistical indicators, which is a compulsory element in order to establish the influence of the factors on the risk alteration, provides us useful information for the estimation of the statistical probability of the insurance risk, namely the pre-determination of the future damages (which is the purpose of the actuarial statistics).

1. Statistical indicators of the general insurance fund formation

a) *Absolute statistical indicators*, which are defining the general insurance fund formation, are classified as follows:

Indicators expressed as physical units:

- Number of the insured goods (for the goods insurances) (Nb);
- Number of insured persons (for the health insurances) (Np);
- Number of insurance policies (contracts) concluded (Ni);
- Number of insurance policies in force (Nv);
- Number of policies exposed to risk (N);
- Number of renewed policies (Nr);
- Number of expired policies (Ne).

Indicators expressed as value units. These indicators are classified as *indicators defining the insurance premiums and indicators defining the insured amount.*

Indicators defining the insurance premiums: The premiums are representing the main source of income for the insurer. The basic indicators are the following:

- *Total value of the gross written premiums (PS_b).* The gross written premiums mean the total premiums over one financial year corresponding to the insurance contracts being concluded within the same period, which take into account the reinsurance operations as well.
- *Total value of the net written premiums (PS_n).* This defines the written premiums which do not take into account the reinsurance operations.
- Both the gross written premiums and the net ones include the *amounts actually paid* (the actual written premiums) by the insured to the insurer during the financial year as well as *the amounts to be received* from the insured on the insurance contracts concluded during the financial year even though these amounts will be paid, partially or totally, during the following financial year.
- *Total value of the cashed or earned premiums (PĤ),* which represents the total premiums assigned to the risk exposure during a financial year. They represent that particular part of the premiums written during the respective financial year or during the previous years, which refers to risks being covered within the current period.

For instance, if a policy begins by 01.12.02 for a premium of 120 lei, the premium being cashed by the end of the year 2002 due to that policy counts for 10 lei only (assuming that the risk is uniformly distributed over the year duration). This policy would contribute with 110 lei to the total of the premiums being cashed by the end of 2003, or as an un-cashed premium (PN) by the end of the 2002 year.

This is why the concept of cashed premium will be further used in accordance with the above definition.

The concept of net premium is used also for the administration expenses net premiums; therefore it is necessary to have a contextual approach on the matter.

Indicators characterizing the insured amount

The insured amount is that part of the insurance value for which the insurer undertakes the liability in case of the occurrence of the phenomenon (event) for which the insurance has been concluded.

The insured amount represents, in all the situations, the maximum limit of the insurer liability and constitutes one of the elements at the basis of the insurance premium calculation.

The main statistical indicators regarding the insured amount are the following:

- Total value of the insured amount for the concluded contracts (SA);
- Total value of the insured amount for the renewed contracts (SA_r);
- Total value of the insured amount for the expired contracts (SA_e);
- Total value of the insured amount for the contracts being ceded within reinsurance (SA_{CR});
- Total value of the insured amount for the contracts received within reinsurance (SA_{PR}).

b) *Relative statistical indicators* which are characterizing the general insurances fund formation, having a particular importance as the risk estimation and the analysis of the general insurances activity, are the following:

■ *Rate of the cashed premiums (R_{pi})* calculated as ratio between the cashed and written premiums. The formula of calculation is the following:

$$R_{pi} = \frac{P\hat{I}}{PS}$$

This ratio indicates the tendency shown by the insurance activity, assuming that the insurance classes which are used are basically annual, and indicates the general increase/decrease of the used insurances volume.

■ *Coverage degree in insurances (G_c):*

$$G_c = \frac{N}{M} \times 100, G_c < 100 \%$$

where:

M – number of insurable goods (persons).

This indicator shows, as percentage, how much of the number of goods (persons) is insured. To the extent this indicator is recording values closer to 100, it means that the insurances are more developed.

- Coverage degree by insurance (G_{aa}):

$$G_{aa} = \frac{SA}{V_b} \times 100, G_{aa} \leq 100\%$$

where:

V_b – real value of the goods by the time the insurance is concluded.

The coverage degree is calculated for the goods insurances only and bears the necessary significance if it is computed separately for each goods included by the insurance.

- Renewing degree of the contracts (G_{rc}):

$$G_{rc} = \frac{N_r}{N_i} \times 100; G_{rc} \leq 100\%$$

The average indicators of the insurance fund formation are the following:

- Average written premium on a contract (policy) (\overline{PS}):

$$\overline{PS} = \frac{PS}{N}$$

The result is expressed in lei/contract. This indicator may be calculated both in the case of goods and persons insurances and as well in the case of the civil liability insurances.

- Average insured amount (\overline{S}) is calculated as the ratio between the total insured amounts and the total number of the insurance contracts concluded. The calculation formula is the following:

$$\overline{S} = \frac{SA}{N_i}$$

The result is expressed in lei/contract. This indicator may be calculated also as a ratio between the insured amount and the number of policies exposed to risk during a financial year.

It is calculated for both the whole stock of the existing insurances at a certain moment (policies in force) and separately for the insurances being contracted during a certain period of time.

2. Statistical indicators of the general insurances fund utilization

The statistical indicators which are defining the insurance fund utilization are classified as: indicators characterizing the damages and the insurance expenses and indicators characterizing the insurance reserves (technical reserves).

- a) Absolute statistical indicators, applying to the damages and insurance expenses, are the following:

Indicators expressed as physical units:

- Number of goods destroyed or damaged (in terms of goods insurance) (n_v);
- Number of compensated policies (n_d);
- Number of damages (n) or number of insured cases.

Indicators expressed as value units:

- Value of the paid compensations (DP). The compensations being paid within a financial year represent the totality of payments which the insurer is making on the account of the damages recorded by the insured. DP includes the payments made for the damages which are liquidated during the year as well as the partial payments made on the account of un-liquidated damages;
- Value of the occurred damages (DA) during a financial year represents the total of the damages arising due to events occurring during the financial year, irrespectively the moment the payment of the compensation is made (damages liquidation), and the fact that these events are reported or not by the end of the financial year.
- Total value of the recorded insurance expenses (CA), including wages, payments of commissions, rents for offices, expenses for IT equipments, expenses for consumable materials, advertising expenses. These expenses are know as administration or management expenses.

- b) Absolute statistical indicators, characterizing the technical reserves. The technical reserves, called also non-life insurance reserves, or provisions (commissions), represent the obligations arising as a result of running an insurance activity.

The following absolute statistical indicators covering the reserves from of the general insurances can be identified:

- Total value of the un-cashed premium reserve (RPN), value equivalent to the un-cashed premium (PN) if RPN is calculated as from the gross written premium;
- Total value of the reserve for the reported but yet not liquidated damages (RDRN), representing the un-liquidated obligations for damages which occurred and have been reported;
- Total value of the reserve for the damages which occurred without being reported (RDANr), representing the obligations undertaken by the insurer for the occurred damages which were not yet notified by the insured to the insurer.

Other absolute indicators of the insurance fund utilization are the following:

- *The premiums ceded for reinsurance* (P_{re}), representing the premiums due to the ceded risks in reinsurance or the part of the re-insurer (the insurance company which undertakes the risk in reinsurance) out of the gross written premiums of the party which is ceding (the insurance company which transfers the risk in the reinsurance);
- *Insured amount for the compensated policies (contracts)* (SA_d).

c) *The relative indicators* of the general insurances fund utilization, which are established by statistical methods, are the following:

- *The damage frequency* (q), representing the total number of damages per unit exposed to risk:

$$q = \frac{n}{N}.$$

This indicator can have a sub-unity value ($q < 1$) or an over-unity value ($q > 1$) and serves as estimator of the probable number of the insured events related to the unity of risk exposure.

- *Compensation index* (I):

$$I = \frac{DA}{SA}; I \leq 1$$

The compensation index represents the part of the insured amount out of the insured amount exposed to risk, which is compensated.

- *Risk weight* (G_r) represents the ratio between the average insured amount of the compensated contracts (\bar{S}_d) and the average insured amount of the concluded contracts (\bar{S}):

$$G_r = \frac{\bar{S}_d}{\bar{S}}.$$

This indicator can have sub-unity, equal to one and over-unity values. It is an indicator of efficiency, which shows for which contracts, on an average basis, the compensations have been made with an insured amount which is higher or lower than the average insured amount exposed to risk.

- *Coverage degree of the damage* (G_{ad}) shows, as percentage, which is the ratio between the compensation and the occurred damage. The calculation formula is the following:

$$G_{ad} = \frac{DP}{P} \times 100,$$

where:

P is value of the damaged recorded by the insured goods.

The coverage degree of the damage may be analysed separately, depending of goods included by the insurance. This indicator shows the degree of the coverage for the damage through the compensation being received. In order to avoid that the paid compensations (DP) equals the

damage value, which would favour the occurrence of the risk, the insurer uses as gears “the system of the limited coverage” as well as the *franchise*, consisting of the exoneration of the insurer from covering the damage to the extent of a certain amount or quota.

- *Damage rate* (RD), which is calculated as a ratio between the occurring damages (DA) and the cashed premiums (\hat{P}):

$$RD = \frac{DA}{\hat{P}} \times 100.$$

The damage rate is expressed in percentages and may be lower, equal or higher than hundred percent. To the extent the level of the RD is lower, the financial situation of the insurance company is more favourable. Usually RD is calculated as against the reinsurance net value but the gross value is used as well in order to establish the performance of the writing activity of the insurer. A high value may indicate either an inadequate tariffs for the premiums or an insufficient control on the damages. Since the occurring damages comprise an estimation of the un-liquidated damages, RD depends on the solidity of the constituted reserves.

The damage rate may be calculated also as a ratio between *the paid damages* and *the written premiums*, but this ratio may mislead and should be used with a maximum of care.

- *Rate of the administration expenses* (RC) is calculated as a ratio between the administration expenses (CA) and the cashed premiums:

$$RC = \frac{CA}{\hat{P}}.$$

Usually this indicator is calculated against the net reinsurance value. In this case, the reinsurance commission is deducted from the expenses, while the reinsurance premiums are deducted from PS.

- *Rate of reinsurances* (R_{re}):

$$R_{re} = \left(1 - \frac{PS_n}{PS_b} \right) \times 100.$$

This ratio shows, as percentages, the quota of the premiums being ceded in reinsurance, namely the level of dependence of the insurer as regards the re-insurer.

- Rate of the net damages (R_{dn}):

$$R_{dn} = \left(\frac{DA_n}{DA_b} \right) \times 100,$$

where:

DA_n – occurring net damages of reinsurance (without damages being liquidated by the re-insurer);

DA_b – occurring gross damages (including damages being liquidated by the re-insurer).

This ratio shows, as percentages, the quota of the damages compensated by the insurer.

c) Out of the *average indicators* of the fund utilization, the most frequently used in the general insurances practice are the following:

- *Average occurring damage* (\overline{DA}):

$$\overline{DA} = \frac{DA}{n}$$

The calculation is also called *the strictness of damages*. The strictness of damages estimates the average value of an individual damage and is expressed as *lei/damage*.

The strictness of damages is an important element for the calculation of the premium tariff of an insurance contract. In case there is no information available concerning the occurred damage, the paid compensation (DP) may be used for the calculation modifying thus the value n depending on the number of the paid compensations.

- *Average duration for the damages liquidation* (\overline{D}_1):

$$\overline{D}_1 = \frac{t_1 + t_2 + \dots + t_n}{n}$$

where:

t – number of days considered from the moment the damages are reported till the moment they are sorted out (liquidated);

n – number of the damages being sorted out.

Diminishing the damages liquidation duration is a goal which should permanently focus the attention of the insurance company, as a continuous process.

d) *The equilibrium relationship* between the absolute indicators of the insurance fund forming and utilization, which may occur within a financial year, t are the following:

- *Between the cashed premiums* ($P\hat{I}$) and the *written premiums* (PS). For a financial year t , the cashed premiums are computed according to the following formula:

$$P\hat{I}(t) = PS(t) + PN(t-1) - PN(t) = PS(t) - \Delta PN,$$

where:

$PN(t-1)$, (t) – un-cashed premiums by the beginning and by the end of the year t ;

$\Delta PN = PN(t) - PN(t-1)$ – absolute alteration of the un-cashed premiums, calculated as a difference between the un-cashed premiums by the end of the financial period and the un-cashed premiums by the beginning of the same period.

In case that the reserve is calculated as from the gross value of the written premiums, we can substitute PN by RPN in the above formula.

- *Between the written premiums and the cashed premiums*:

$$PS(t) = P\hat{I}(t) + \Delta PN;$$

- *Between the net written premiums* (PS_n) and the *gross written premiums* (PS_b):

$$PS_n(t) = PS_b(t) - P_{re}(t);$$

- *Between the paid compensations* (DP) and *occurred damages*:

$$DP(t) = DA(t) + DN(t-1) - DN(t) = DA(t) - \Delta DN,$$

where:

$DN(t-1), (t)$ – non-liquidated damages by the beginning and the end of the year t .

In case that a damage occurs during the financial year t and is liquidated within the same year, it is inserted in the term $DP(t)$ only. If the payment is made after the end of the year, the estimated volume of the damage is inserted in $DN(t)$. In case the expenses involved by the settlement of the damages are taken into account as well then the estimated volume of the damages is inserted in $RDN(t)$. If a damage which occurred prior to the year t has not been yet liquidated, the estimated volume of the damage is inserted in $DN(t-1)$.

- *Between the occurred damages and the paid damages*:

$$DA(t) = DP(t) + \Delta DN;$$

- *Between the net compensations paid by reinsurances* (DP_n) and the *gross paid compensations* (DP_b):

$$DP_n(t) = DP_b(t) - S_{re}(t),$$

where:

$S_{re}(t)$ – amounts paid by reinsurances within the period (t) ;

$DP_b(t)$ – gross compensations paid within the period t (they are known also as *paid damages*).

3. The statistical indicators of the outcome of the general insurances activity

a) *Absolute indicators* which underline the *outcome of the general insurances activity* are the following:

- *The writing outcome* (RS), which indicates by how much higher the premiums cashed within a financial year t are in comparison with the compensations and the expenses recorded within the same financial year (CA):

$$RS(t) = P\hat{I}(t) - DA(t) - CA(t);$$

- *The insurance outcome* (RA), which measures the financial performance of the general insurances activity being run over the period to close:

$$RA(t) = P\hat{I}(t) - DA(t) - CA(t) + I(t) = RS + I(t),$$

where:

$I(t)$ – income obtained out of investment of the technical reserves.

The equation concerning the insurance outcome may be written as several equivalent forms:

$$RA(t) = RS + I(t) + S_{re}(t) - P_{re}(t).$$

b) *Relative indicators*, which underline the *outcome of the general insurances activity* are the following:

- *Combined rate* (R_{cb}):

$$R_{cb} = RD + RC = \frac{DA}{P\hat{I}} + \frac{CA}{P\hat{I}}$$

The combined rate is a measure of the insurer profitability. A high rate (>1) means that the insurer set up premium tariffs at a level which is not enough to cover the writing activity (compensations + expenses).

- *Rate of the writing outcome* (R_{rs}):

$$R_{rs} = \frac{RS}{PS};$$

- *Rate of the insurance outcome* (R_{ra}):

$$R_{ra} = \frac{RA}{PS};$$

- *Rate of the profit* (R_p):

$$R_p = \frac{P_r}{PS},$$

where:

P_r – total profit of the insurance activity.

The statistical indicators of the general insurances activity fulfil to a number of requirements of great importance for the knowledge and the analysis of the level, the structure and the evolution of the insurances activity, as well as for the substantiation of the steps of pricing and writing policies and the evaluation of the outcomes being achieved both at a macroeconomic level and at the level of structural elements of the general insurances market.

For a proper establishment of these indicators, playing a particularly important part in the process of building up an adequate picture on the situation of the general insurances activity and on the evaluation of the economic performances, it is compulsory that an adequate accounting system be available.

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Arguments for the Growth Sale-Purchase Actions on the Land Market



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***Abstract.** The selling of farm lands is the opposite of the agrarian reforms for livery or reconstitution and constitution of the land ownership right. The sale-purchase has the role to facilitate the concentration of the areas into bigger size farms, which creates real chances for performance and efficiency in the farm activity. Upon the dispute between the agrarian reform and the sale of the farm lands, as major fields of action of the agrarian policy, the ideas are not at all new, they emerged right after the first reform in 1864 and certainly they will continue until a new re-configuration of the agrarian structures in Romania, a result of the lands' free circulation. The time interval between Law no 18/1991 and Law no 54/1998 could be considered as a restrictive factor in the direction of the agricultural performant farm's formation. The price of the agricultural land area, on the country's territory is very different, its variation being influenced in an essential manner, by the ratio supply and demand, the consolidation degree, the presence of the irrigation systems and, in a very reduced share, by its quality (fertility). In conclusion, Romania's integration into EU will give impulse, certainly to the growth of the demand for lands, in general and of those agricultural especially, fact which will impose an increasing trend of the selling prices and thus the increase of the interest of those eager to estrange their land properties.*

Key words: land market; land sell; land price; economical evaluation; farm size.



The selling of farm lands is the opposite of the agrarian reforms for livery or reconstitution and constitution of the land ownership right. All the agrarian reform in Romania, happened in the years 1864, 1921, 1945, 1991 and 2000, have constantly had as effect the diminishing up to the elimination of the big agricultural farms in favour of the peasant households, appreciated scientifically as being family small-sized farms.

The sale-purchase has the role to facilitate the concentration of the areas into bigger size farms, which creates real chances for performance and efficiency in the farm activity.

Upon the dispute between the agrarian reform and the sale of the farm lands, as major fields of action of the agrarian policy, the ideas are not at all new, they emerged right after the first reform in 1864 and certainly they will continue until a new re-configuration of the agrarian structures in Romania, a result of the lands' free circulation.

At the beginning of the XXth Century, A.D. Xenopol, the creator of the opinion current regarding the need for

making of some new agrarian reforms, was proposing "not to divide land to the peasants anymore, they should be made able to multiply their wealth and he helped by the state into purchasing land" (Xenopol, 1907).

Also in the year 1907 and in the same spirit, C. Garoflid was writing in the Romanian Encyclopedia that: "The agrarian laws did not create free peasants. Obstacles which law have imposed to the peasant land circulation have stopped the peasants' differentiation. This is the reason why we do not find in the country middle owners, rich peasants" (Frunzarescu, 1939).

Much more convincing upon the need to support the lands sale to peasants against their livery (granting ownership to them), Kogalniceanu M.V. was warning, in the exposition of reasons to the agrarian reform law in 1921, that:

"The turning of the land ownership into a simple property does not ipso-facto produce intensive agriculture. The way the livery was made, more by moral criteria rather

than economic, has had as effect that the land has entered in many parts into weak hands. What the law man could not do, the natural selection may accomplish. For this, the free land circulation is necessary" (Kogalniceanu, 1921).

More recently, in the year 2000, Otiman P.I. was commenting an unanimously recognized fact by the specialists: "The delay of the legislation for the land market regulation has impeded much on the farms' land circulation and has blocked the process of formation and growth of private family commercial agricultural farms" (Otiman, 2002).

The blocking of the lands free circulation for 7 years, from the emergence of Law no. 18/1991, which was announcing the need for sale-purchase of land and until 1998, when Law no. 54 was proclaiming this fact, does not represent a singular fact in the domain. For instance, in the laws for livery (putting into ownership), in 1864, 1921 and even 1945, there were clear provisions, which forbade to the peasants beneficiaries of the reform to estrange the land acquired, earlier than 15 years.

Obviously, the legislation had taken into account the minimum nature period for the new ratios of land ownership and of consolidation the farming capacity of lands, as well as the avoidance of speculation on the land market. But all these motivations grow pale in face of the minuses which the beneficiaries of the Law no. 18/1991 have met, because of the constraints they were submitted to: the precarious of the production factors, the old age, the hostile economic environment, the weakly organized agrifood market.

That is why, the time interval between Law no. 18/1991 and Law no. 54/1998 could be considered as a restrictive factor in the direction of the agricultural performant farm's formation.

From the analysis of the evolution and sale-purchasing market size for farm lands, during the interval 1998-2005 (table 1 and figure 1), the following conclusions were drawn:

- after a modest start, the intensity of sale acts has registered, starting with the year 2002, relatively high quotas, but with very big oscillations from one year to the other. This situation demonstrates: the sensitivity of the land market towards the state of the economy as a whole, which gave evident signals of growth after the year 2000; the relatively low degree consolidation of the ratios on the land market, fact proved by the sinuous apparently disordered of the sale-purchase acts;

- the total sold farm area, in the first 8 years of 513,283 ha, which represented only 6,7% of the farm area under the ownership of individual agricultural farms, reveals the very big land potential immobilized into the subsistence farms;

- except the year 2005, the price of one ha of land was approximately equal to the value of the annual agricultural production, which generated two phenomena with contradictory implications, because:

- the process sellers' pauperization lands' estrangement had a minimum effect in their economic state;
- it grew the interest in acquisition of farm lands at very low prices, in speculative purposes.

The area sold and the average annual price, 1998-2005

Table 1

Specification	Area estranged (ha)	The average sale price (mill. lei/ha)
1998	12,119	4.3
1999	31,878	7.3
2000	21,746	7.9
2001	12,928	11.8
2002	17,563	9.1
2003	83,613	9.7
2004	11,137	19.3
2005	63,999	32.0
Total 1998-2005	513,283	13.6

Source: situation regarding the juridical circulation of extramural lands per cumulated, starting with 1998, up to the year 2005, at 31.12.2005, operational data MAFRD, www.maap.ro, accessed 05.06.2006.

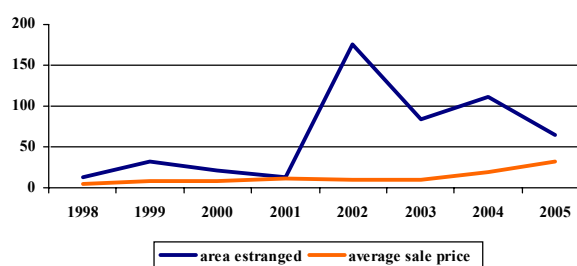


Figure 1. The dynamics of the areas sold and of average price, 1998-2005

The price of the agricultural land area on the country's territory is very different, its variation being influenced in an essential manner by the ratio supply and demand (Otiman, 2004), the consolidation degree, the presence of the irrigation systems (Giurca, 2004) and in a very reduced share by its quality (fertility) (ICEADR, Bucharest, 2004).

Thus, the biggest prices (10-18 mill. lei/ha) were practiced in counties: Prahova, Brasov, Caras-Severin, Suceava, Arges, Salaj and the lowest, in the counties most favourable from agricultural point of view, respectively: Giurgiu, Teleorman, Ialomita, Braila, Calarasi, Timisoara, Arad.

The market value of the farm land in different European countries, 2001-2004

Table 2

Country	Land	EURO/ha ¹⁾			
		2001	2002	2003	2004
Belgium	arable	15,895	16,681	15,653	17,038
Denmark	farmland	12,882	13,727	15,516	16,000
France	arable	3,710	3,860
Italy	farmland	14,266
Netherlands	arable	37,500	35,500	31,750	29,300
England	farmland	11,824	11,017	10,247	11,424
Hungary	farmland	...	11,050	13,439	...
Poland	arable	1,415	1,307	1,308	1,463
Slovakia	farmland	878	888	912	945
Bulgaria	arable	721	721	731	685
Romania	arable	307	278	237	284

¹⁾ converted into the current exchange value

Source: Agriculture in the European Union. Statistical and Economical Information 2005, European Union, Directorate-General for Agriculture and Rural Development, February 2006.

Comparing the land price in Romania to that in the developed European countries, but also to countries in the Centre and East of Europe, it can be seen that the differences are huge, of 5 up to 10 times' smaller, than countries as Netherlands, France, Belgium, Denmark, etc. In fact, in Romania, it was registered the smallest land price, being surpassed by Bulgaria also, when the land price is 2-3 times higher (table 2).

Among the Central and East-European countries, Hungary can be remarked, where we find the existence of a functional land market, and the land price, after the year 2000, surpasses 10000 euro/ha. But, in Hungary, the land reform was in a great extent finalized until 1994, after which, in the same year, a normative act was adopted which regulated both sale-purchase of farmland (agricultural) and the leasing of land, and also the voluntary lands exchange for the land ownership integration (Law LV from 1994 regarding the arable land)(table 2).

The development of the market for agricultural lands' sale and purchase in Romania is restricted, mainly, by the following factors:

a. in the supply domain:

- the decisive role of the land ownership in ensuring the food security of the farmers' family, fact for which they are selling farmland only in case of "a major force";
- the big number of agricultural farms for which land is the main existence means;
- the high opportunity cost, the owners prefer to lease the land, instead of selling it, under the condition in which the annual payment (the lease) represents 1/4 - 1/5 of the gross production;
- the high administrative costs imposed for making official the farmland sale-purchase transactions, fact more visible when the property presents a higher fragmentation degree. It is estimated that the expenses afferent to the land purchase-sale activity (notary taxes, cadastre, intabulation and of judiciary stamp) are amounting to 7-10% of the transactions' value (Ramniceanu, 2004).

b. in the demands domain:

- the lower efficiency in the agricultural production in comparison to the non-farm sectors, which discourages the potential investors in purchasing farmland';
- minimum availabilities in own financial resources and the lack on behalf of the public power, for lands' purchase;
- the lack of a modern system regarding the evidence and bordering of the lands, as well as the relativity in identifying in the field of the parcels inscribed in the ownership titles;
- the transport infrastructure (roads, railroads, navy and airspace), non-according by developed and of a weak quality;
- the fragmented agricultural inputs-outputs market, not informatized and in fact non-productive from economic point of view, dominated by "groups of interests".

c. in the price domain:

- the lack of some information with official character of which it should result the farmlands' economic value, as support for the price negotiation between sellers and buyers. The economic assessment's making lawful of farmlands should represent a priority in the agrarian policy actions for the normal functioning of the land market, especially under the conditions of demands' intensification, after Romania's integration into the EU.

By application of the method for capitalisation of the land rent, the Romania agricultural research (ASAS, 1999) has determined the farmlands value, by 5 classes of favourability, as it follows:

The value of agricultural lands by agro-pedoclimatic zones

Table 3

Favourability zones	Estimated values (mii lei/ha)
Zone I (Romanian Plain)	14000 – 15000
Zone II (The West Plain)	12000 – 13000
Zone III (Plateaus)	10000 – 11000
Zone IV (Hills and hillocks)	8000 – 9000
Zone V (Pre-mountainous and mountainous)	5000 – 6000

Source: The Study: Objectives and solutions for the Romanian agrifood sector relaunching, elaborated by the Academy of Agricultural and Forestry Sciences, Bucharest, 1999.

These values, even if they have an informal character, need some completions:

- the values resulted are very low, in comparison with the land prices in the member countries, even at the level of 1999 year, when they were calculated. This fact is due to the elimination of the time parameter from the classical formula of land's assessment elaborated by W.Petty in the year 1634. This parameter is determined in function of the period of overlapping of three male farmers' generation (grandfather, father and son), period which could oscillate between 22-28 years, corresponding to the life expectancy of them. So, the results in the table 3 should be multiplied by 22 up to 28 times, which could approach the land values in Romania to those in the EU countries;
- the periodical correction of these results with the index for the national currency depreciation.

In conclusion, Romania's integration into EU will give impulse, certainly, to the growth of the demand for lands, in general, and of those agricultural, especially, fact which will impose an increasing trend of the selling prices and thus the increase of the interest of those eager to estrange their land properties. The increasing demand will be sustained by a complex of favourable factors: the national economy's stability and dynamism, the increases in the plan of production performances, but especially of the high fertility degree of farm (agricultural) lands. For instance, 64.2% of the arable areas are in zones I and II of fertility, appreciated as being most favourable for the agricultural production.

At the same time, the supply to sell the farmlands has a very high potential, if we take into account the big share of areas owned by the persons constrained by objective factors to sell their land.

In order to make possible the manifestation of these phenomena, which on their background are beneficial for the development actions on the land market, in the goal of increasing the farm sizes, an active agrarian policy should be promoted at the same time – positive, in the sense of formulating the adoption of a legislation and institutional system, complete and coherent, which by specific levers should encourage the farmlands' free circulation.

In the spirit of the things shown previously and regarding to the land market, which ensures the large framework for the sale-purchase actions' manifestation, we are formulating as it follows a set of proposals for agrarian policy, the adoption of which we consider as necessary:

- The proclaiming of the economic assessment of the agricultural (farm) and forestry land in the goal of fundamenting the economic categories which are being negotiated on the land market (price, lease, dividend).
- The elaboration of a legislative frame which should norm in a coherent and unitary formula the actions of a land market (sale-purchase, cooperation, association, leasing, rent) in the goal of increasing the size of farms.
- The proclaiming of the actions of land parcels' amalgamation (consolidation) by including this action in the category of land melioration works, the foundation of a local stock exchange regarding the exchange of parcels and the realization of the exchange through value equivalence.
- The realization of a modern and standard system for delimitation (bordering) of the land parcels.
- The formation of a body of experts assessors, specialized in cadastre and land book, which should register all operations inscribed to the land market, free for the beneficiaries.
- The proclaiming of farm land's purchase by the state in view of model agricultural farms' constitution, as entities of practical promotion of the technical progress for the farmers in the area and their selling towards the young persons with preference for the specialists higher educated in the domain, within some financial programmes with national support.

The organization of some courses for farmers, in the cold period of the year, for the development of the entrepreneurship spirit, for the qualification, especially in the traditional crafts and the support for the foundation of new farm or non farm businesses.

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Credit Risk Evaluation

■

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Abstract. *In the environment in which a bank functions there are many risk sources that determine the reduction of the profitability. These risk sources must be attentively identified, measured and taken into consideration for the elaboration of a bank's general strategy of monitoring and disproof of the risks. The risk is generally defined as: the adverse effect that certain distinct uncertainty sources exert over the profitability. The measurement of the risk requires that both the uncertainty and the potential adverse effect over the profitability be surprised and evaluated.*

Key words: credit risk; the structure of the portfolio; modeling of risk factor; transformation function; distribution of the credit loss.

■

In the 90's the credit risk became the major preoccupation of the risk managers in the financial and regulation institutions. This was due to several factors:

- Although the market risk is much better evaluated, *the largest part of the capital of the commercial banks is used for the credit risk.* The complexity of the standards measuring models, the analysis and the management of the credit risk might, therefore, not be in accordance with their importance.
- Propelled by the liberalization and integration of the European market, the new distribution channels through e-banking, the financial un-intermediation and the entrance on the market of the insurance companies and investment funds, *the pressure of the competition between the financial institutions grew and determined the diminution of the credit limits.*
- Meanwhile, *the number of companies' bankruptcies stood still or grew in the majority of European countries.* A great number of insolvencies and reorganizations of the banks' activities have been influenced by a previous bankruptcy of the creditors.
- *The regulation methods imposed by Basel Committee to prevent the risk that the financial institutions to go bankrupt because of the credit losses. These regulations include, for example, certain limits of the display according to the capital reserve. The Basel Committee of Banking Supervision promotes a system of minimal capital calculus necessary for the credit risk (the Internal Ratings-Based), based on new models of credit risk determination.*

The essence of credit risk management is the measurement and attenuation of unexpected losses for *the credit display* in a portfolio. A simple example of a situation that involves the credit display is the granting of a loan; the creditor of the loan cannot be entirely sure that the *debtor* will honor the agreement and will return the loan – that is why it suffers a display until the loan reaches maturity. This is where the risk concept appears; the display always introduces a risk.

The typical examples of the products that represent the credit display are: the loans, the bonds and the currencies,

but there is a variety of other financial instruments that involve the display. In the quantitative terms the display is defined as the maximum loss by the non-payment of a counter-party; the granting of 1 leu loan means an initial display of 1 leu – this is how much it is expected to be lost in the beginning by the one that grants the loan, if the debtor does not have the possibility to pay any money (the non-payment status).

The management of the credit risk nowadays is a result of the effort of the banking industry for the avoidance of non-payment experience from the end of 80's and the beginning of the 90's. A result of this effort is also the relatively new and powerful market of *credit derivatives* – instruments that can be used by institutions to protect themselves against non-payment situations.

1. Requirements regarding the modeling of the risk of credit portfolios

Until the present day the development of the models of the risk of the crediting portfolios has been possible because of the theoretical approaches. The modeling begins by understanding the nature of the credit risk and its components which determine the model's algorithms. Such an approach tends to create models that are rather interesting than useful, as their results determine incompletely the objectives of credit risk measurement of the risk managers, but also the regulators.

Thus, a basic model, for the regulation and management of the portfolio, must be determined by pragmatic objectives. First of all, it must include all the important types of risk from a credit portfolio. Secondly, it must be applicable to any kind of significant credit to which the bank exposes itself. Thirdly, the model must be fast, stable and correct. Finally, it must determine the necessary results to support the vital applications of the risk management.

An important ingredient in evaluating the credit risk is the determination of *the distribution of the non-payment rate*. The non-payment risk of the credit is the risk that the debtor cannot pay the financial obligations. The risk of the credit limit appears in the portfolios in which for the credit limit the market value of a product is treated and used. The quality of a debtor's credit is determined by the number of investors towards which he believes he may have financial obligations – on short, medium or long term. This trust may be modified in time (*the migration of the credit's rating*), thus the distribution of the non-payment rate is described naturally by a continuous stochastic variable.

The purpose of modeling

The fundamental object in evaluating the credit risk is the purchase of *the distribution of the credit loss*. Once

this distribution is known, we can both answer the main question regarding the losses expected in a given portfolio and determine how great the capital reserve must be.

One of the most important aspects for the building an adequate model for the credit risk and the questions that appear after the purchase of the distribution of the credit loss are:

1) *Which are the non-payment rates and the recuperation rates for the possible non-payments?*

In many cases the non-payment takes place because of the debtor's bankruptcy. Usually, the debtor presents a number of goods that can be sold so that a part of the debts to be paid.

The degree from which the debtor (statistically) can recover the entire debt or a part of it as a result of the closing, liquidation, reorganization or sale is called *the recovery rate*.

2) *For what period the credit is evaluated?*

The choice of a horizon large enough is of course very important if we want the possibility of fixing *the attenuation actions*, in case of any drastic situation. Usually, a year is considered to be the adequate horizon, but the portfolio's maturity is also an adequate horizon.

3) *Which are the variable factors of the modeling process?*

This includes *the risk process, the variable parameters and the error's model*. The risk process appears because of the random nature of the current observations and it is evaluated by the model's results for a high enough level of trust. The variable parameters and the error's model, on the other side, appear because of the difficulties in using the entry data kit, previously observed, to propose a unique model and to estimate its parameters.

4) *What fundamental factors affect the non-payment rates?*

Various economic factors, such as the rate of economic growth and the level of the interest rates, affect the non-payment rates. An increasing economy may determine a small number of non-payments. These fundamental factors are usually treated in the model by incorporating the volatility of the *non-payment rate of the debtor*. This approach gives birth to the distribution functions of the loss with fat tails.

5) *Which is the size of the loss for a given level of trust?*

The answer to this question may be given if the loss's distribution function is obtained, at least for all the events with probabilities of reasonable appearance.

6) *Which are the possible extreme incomes?*

The answer is hard to be given as the data of the possible events in this case are rare. The usual model to solve the extreme events is the settlement of the limits regarding the size of the parties of the same economic sector from a portfolio. All these to prevent the correlations that are too big between the portfolio's components. Such restrictions are called *the limits of concentration*. Another possibility is the simulation of an adequate model a large number of times for various situations to observe *the frequency of the extreme events*.

Although it is obvious, any truly useful model for the credit risk must be capable to represent the entire credit

portfolio. Even if the model covers all the types of credit risk, its results will mistake the correct representation of the risk if it is not wide-range regarding the covering of the types of lessees and the credit's instruments.

The majority of the models are projected from the perspective of commercial loans and bonds' portfolios. When these models are applied to the displays for retail or for the small business they will have unsatisfactory results. The modeling of the concentration or diversification of effects over different segments is critical, and the spread practice to use separate models for different sub-portfolios fails in this case. For example, a portfolio that includes loans in the auto sector, accounts for credit cards in Michigan, auto indirect loans and residual auto rentals create concentrations that are ignored if they are not treated in the same model.

On the other side, the request for the covering as wide as possible must be tempered by practice considerations and especially by the volume of entries for the parameterization of a wide-range model. The bias of the commercial loan and of the bonds portfolio determines a transactional level of the structure of entries for the majority of the models. Unfortunately, the extension on the entire typical portfolio of the bank is not feasible. Given the size of the banking portfolios and the diversity of the offered products, the specific detail on the level of the transaction extensive systems will be necessary achieved for the entry processing, and the performances of the model will a real problem.

The challenge, therefore, is the finding of a structure of the input which has enough flexibility to recognize the individual transactions where the word risk is significant, but keeps only the important information for the remained displays.

An additional complication comes from the variety of the rating systems used by different banks and from the probability that multiple rating systems are used in different parts of the portfolio of the same bank. To be usable for the entire portfolio, the structure of the entries must be sufficiently flexible to accept any combination of the internal ratings, their action and the results of the scoring model, with different types of different portfolios of a bank or similar portfolios of different banks.

Further, a model of the credit portfolio's risk must, also, be capable to adapt to any instruments included in a portfolio which a manager might want to evaluate.

The components of the credit risk

A wide-range model of the credits portfolio risk includes the approach of four types of distinct risk:

1. Specific non-payment. A loans portfolio with the probability for fixed non-payment presents the risk that more loans to enter in non-payment than it is expected. The non-paid loans are relatively rare, especially in the commercial loans portfolios, but the impact of each non-paid loan may

be significant. This risk may be diminished by diversification – insuring the existence of a large number of diverse lessees in the portfolio – but a bank usually attracts a too great display to be removed from the rest of the portfolio.

2. Systematic non-payment. In a portfolio, the non-paid loans tend to group in certain moments. Intuitively, many lessees enter in non-payment when the economy is poor and fewer in case the economy is increasing. The models must take into consideration the effects of these fluctuations by the systematic non-payment. Effectively, the non-payment probability is not fixed, but it is a risky variable of itself.

3. The economic loss without non-payment. The value of a loan may decrease without the lessee to enter into non-payment. A deterioration of the value of the credit perceived, either because of the formal diminution of the rating, either to the systematic changes in the expectations of future non-payments of the loan. For some types of portfolios this fact presents as “market value” adjusted to reflect changes of the expectations as well as of the price on the credit risk market.

4. The loss given by the non-payment. The importance of the losses suffered for non-payment may vary because of the factors specific to the efficiency of each individual loan, but especially because of the systematic variations of the non-paid loans. The loss given by the non-payment may be correlated to the systematic non-payment rates and may result from each or from their combination the volatility of the recovery rate or the volatility of the display.

The regulation tends to include all these four types of risk, since it develops the approach of a basical model. The IRB provided in the new Agreement from Basel already makes appeal to three of the four types, with a certain imprecision. The so-called formula “Benchmark Risk Weight” is concentrated on the fluctuations of the systematic non-payment rate. The IRB also makes appeal to the economic losses without non-payment by “adjusting the maturity” (with the maturity settled at three years for the “IRB Founding”) and the individual risk of a non-paid loan by “adjusting the granularity”.

The majority of the models of the credit portfolio risk integrates the risks: systematic non-payment and specific non-payment. There is a theoretic general consensus, not algorithmic, regarding the approach of the non-payment risk – the non-payments take place randomly and specifically around the fluctuations of the systematic non-payment rates – thus the various models produce, as the equivalent entry parameters, disagreements almost identical and shapes for the distribution of the losses almost similar.

The risk of the economic losses without non-payment is extremely non-consistent. Some of the models fully omit this risk, with the suggestion that the general model is supplemented with a separate model regarding the value of the risk for the limits of the credits. Those models that directly include this risk tend to consider the perspective of “the

rating's migration", in which there is a number of states of the credit's efficiency (opposite to the models with a single state, in which there are only payment or non-payment).

The entries for the models with several states include a matrix of the transition of the ratings (gives back the probability that a credit passes from a rating to another) and a reevaluation program of each credit on each rating, including the non-payment. The degree from which the reevaluation of the systematic risk is appealed to depends on the mechanisms that form the basis of pursuit of the systematic non-payment rates and the transition probabilities. If the ratings are "doubtful" or somehow "clinically-neutral" (that is the changes of the rating do not keep up with the changes of the expected losses) this method will minimize the risk of systematic changes in future expected losses.

Finally, the losses given by non-payment have been until now less accentuated in the development of the methods of the credit portfolios risks, which concentrated more on the incidence of the non-payment. This seems reasonable – in the end, that the non-payment represents the primary source of the risk. More methods assume the loss given by the ascertained non-payment, some of them include the variability of the recovery rates based on the "loan by loan", but none includes the systematic variation of the displays or of the recovery rates, less the possibility of the correlation with the variation of the systematic non-payment rate.

If the inclusion of the specific and systematic recovery rate's volatility is not successful in the model of the risk of the credit portfolio this is equivalent to the attribution of the zero value to the volatility of the recovery and/or its correlation with the systematic risk of non-payment. Some results point out the fact that it is usually a bad enough attribution. It is even more unsuitable for certain sub-portfolios where the correlation represents a main characteristic regarding the crediting decision – the real commercial value, the rental of price goods and their return, the registries of the returned loans – as the value of the guarantees would suffer from the same factors that cause the increase of the systematic non-payment rate. This is a risk that cannot be neglected in the pragmatic modeling of a real portfolio for credits.

The performance of the model

The objectives of the performance assume speed, stability and accuracy. The calculus time is of major importance for the dynamic and applications in real time such as the price of the loan, the evaluation of guarantees, the testing of sensitivity, "what if scenario" and others. The lack of stability or accuracy gives back untrustworthy results of the model.

Unfortunately, many models of the risk of the credit portfolio use the Monte Carlo simulation, which is slow and instable for the wanted results. Some of the models abuse of simplifying presumptions for the increase of the speed and stability, but with the cost of the diminution of

the accuracy if the presumptions do not reflect adequately the conditions of the real world.

The model's functionality

Finally, a model of the risk of the credit portfolio must be of course projected to produce useable results. The first objective for the analysis of the risk and the capital is to create a distribution of the probabilities for the credit's losses. This is useful itself for the control of the risk as well as for the applications of capital adequacy based on the risk.

Some of the most important decisions-support of the applications of a model of the risk of the credits portfolio – the price of the loan based on the risk, the settlement of the dynamic limits and the analysis of the concentration for the identification of the constraints or the optimization of the opportunities – require rather the contributions of the risk than the distribution of the aggregated losses. For these applications it is not important only to be capable of associating the contributions to the risk of the loans existent in the portfolio, but to foresee the solutions to determine the contributions to the risk of the hypothetical loans that are not part yet of the portfolio.

Several models of the risk of the credits portfolio do not offer support for the modeling of the impact of the economic scenarios over the expected losses of the credit and surely neither for the distribution of the credit losses in a particular scenario. This type of analysis of scenario is critical for the support of the intuition of the management and the planning of the unanticipated events, as well as the communication of the risks to the regulators, the rating agencies and the equity annalists.

2. The non-payment model

The model implies a systematic factor, which can be considered as representing the general economic conditions. This factor leads to variations through the non-payment rates in the portfolio.

The distribution of the probabilities of the non-payment rate of the portfolio may be built integrating the distributions of the conditioned non-payment rate with the distribution of the systematic non-payment rate for all the systematic non-payment rate values.

The model of non-payment details the behavior of the conditional factor of the non-payment rates only, leaving other variables of the loss (the recovery rate, the display, etc.) fixed. In the next paragraph the structure of the model's entries is described.

The portfolio representation

To keep the performances in a portfolio of thousands of loans, the model takes into consideration the advantage offered by the following sentence: *The loans that are part of the same portfolio are not significantly different, if they have similar non-payment probabilities and are of similar size.*

Such loan groups can be represented rather through an aggregated display than through an individual registration. The entries of the model consisted of, therefore, portfolios of the “homogenous cells”.

A *sub-portfolio* contains similar loans from industry, geography etc., but which may have different non-payment probabilities or different measures of the display. A *homogenous cell* groups further the loans of a sub-portfolio which have approximately the same non-payment probability and size of the display. The matrix of a sub-portfolio of loans groups therefore the loans by rating and displays.

This structure is capable of summing up more loans in a compact manner, but it can be as detailed as it is wanted, with numerous loans individually admitted for the elimination of the proposed rounding. The entire portfolio can be segmented in this manner, and the structure permits the easy adaptation to different types of sub-portfolios (for example corporations vs. retail). The fact that this approach treats the displays smaller than the average in the interval of the small sizes of the displays, as a small number of large displays must be noted. This will not have an important effect over the results of the model as long as the size of the displays of this interval is small enough contributing very little to the specific non-payment risk of the portfolio.

The factor's structure

The model requires a function that makes the connection between the probability of non-payment for an individual loan and the systematic factor. In the “Merton model” a loan enters into non-payment when the value of the latent factor (most of the times analog with the value of the goods of the corporations) declines under a critical value (also, analog to the value of the corporation's liabilities). Assuming that the standard modifications of the latent factor are normally distributed, the modification of the latent factor for the loan i can be expressed thus:

$$\Delta A_i = \rho \times m + \sqrt{1 - \rho^2} \times \varepsilon_i \quad (1)$$

where:

m represents the systematic factor of the sub-portfolio ($m \sim N[0,1]$), ρ is the correlation between the systematic factor of the sub-portfolio and the latent factor of the lessee, and ε_i is the specific component ($\varepsilon_i \sim N[0,1]$).

For a given cell of the matrix of the loans of the sub-portfolio with the rating r and the corresponding non-payment probability \bar{p}_r (the unconditioned average non-payment rate), the conditioned non-payment rate may be expressed as:

$$p_{r|m} = \Phi \left(\frac{\Phi^{-1}(\bar{p}_r) - \rho \times m}{\sqrt{1 - \rho^2}} \right) \quad (2)$$

where:

Φ is the cumulated standard density function. This expression of the conditioned non-payment rate respects

the known restrictions and the empirical information being delimited between zero and one and convex.

A conditioned non-payment rate $\bar{p}_{r|m}$ being given, the exact distance of the non-payments of a homogenous cell of the sub-portfolio is given by the binominal distribution. As the number of loans becomes bigger and bigger, the nominal distribution becomes refractory. Anyway, the package of described entries allows the user to specify the size of the intervals which will maintain reasonable the effective number of loans.

As the non-payment rate of each cell of the sub-portfolio is independent, having the dependency conditioned by the systematic factor, the aggregation of the binominal distributions of these to the conditioned distribution of the sub-portfolios is common. The distribution of the unconditioned loss is evaluated by the integration of the conditioned distribution of the sub-portfolio with the distribution of the systematic factor over the entire interval of values of the systematic factor.

The algorithm for the evaluation of the distributions of the loss

The non-payment rate d for one homogenous cell having the fixed average non-payment rate p (the same for all the lessees of the cell, by definition) with the total display e and the average of the size of the display s the binominal distribution will follow:

$$\Pr(d) = \frac{k}{n} = B[k, n, p] = \frac{n!}{k!(n-k)!} p^k (1-p)^{n-k} \quad (3)$$

where:

k is the number of non-payments and n is the number of the debtors in the cell (determined by the rounding at integral of $\frac{e}{s}$).

The distribution of the losses of this cell, with the average fixed recovery rate r for the non-payment loans, then the simple distribution of the non-payment rate re-associated with the amounts of the calculated losses as a product of the number of non-payments, the size of the display and one minus the recovery rate:

$$\Pr[l_p = ks(1-r)] = B[k, n, p] \quad (4)$$

The distribution of the losses for the entire portfolio, with each cell having the size of its display and its non-payments rate (its recovery rate, if this detail is required), is obtained by combining the distributions for each cell, assumed independent (necessary consequence for the fixed conditioned non-payment rates). This can be obtained iteratively combining the right-pairs of cells, with the probability of each total loss c resulted from a pair of cells A and B equal to the amount of the probabilities for all the combinations of the common losses that produce a total loss c :

$$\Pr[l_{A+B} = C] = \sum_{i=0}^c \Pr[l_A = c-i] \Pr[l_B = i] \quad (5)$$

Summarizing up to this point, a set of fixed non-payment probabilities being given, this algorithm will present the distribution of the losses for the $f[l|p]$ portfolio, where p is the non-payment probability settled for each cell (corresponding to different values of p , for different risk ratings). Using Merton's transformation function, which connects the systematic factor of the sub-portfolio to the non-payment rate of each cell ($p_{r|m}$) as the function of the non-payment probability and of the factor of correlation of the lessee – to – the sub-portfolio, the expression of the rate of the sub-portfolio losses may be expressed as $f[l|m]$.

This distribution may be called “the distributions’ – factor of the conditioned losses” of the sub-portfolio. The distribution of the unconditioned losses of the sub-portfolio is then evaluated for any amount of the losses given by the average of the distributions’ – factor of the conditioned losses calculated for all the possible values of the factor, determined according to the distribution of the probability of the factor's values:

$$f(l) = \int_{-\infty}^{\infty} f(l|m)\varphi(m)dm \quad (6)$$

where:

$\varphi(m)$ is the density function of the normal standard probability.

More practical, the distribution of the unconditioned loss of the sub-portfolio may be evaluated considering the distribution of the factor's values as discrete and forming a “matrix of the distribution – factor of the conditioned losses”, which will contain the distributions’ – factor of the conditioned

losses for each of a number of samples of the factor's values (with the probability associated to each). The algorithm may be accelerated by introducing the loss unit u for the amounts of the determined losses in equation 5. The conceptual flow of the algorithm is illustrated in Figure 1.

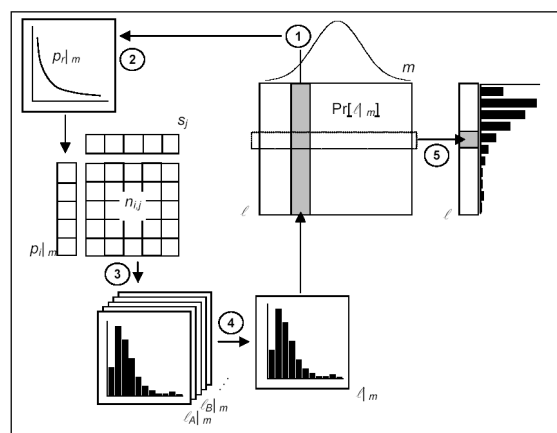


Figure 1. The conceptual algorithm for the evaluation of the loss distribution of the sub-portfolio

- ① For the value of the systematic factor of the sub-portfolio, m .
- ② The conditioned systematic non-payment rates are calculated for different ratings.
- ③ The distribution of the conditioned losses is determined for all the cells of the matrix of the loans sub-portfolio.
- ④ These distributions of the losses are iteratively combined (the distributions of two cells are combined, a third distribution is added to the resulted distribution, then a fourth distribution and so on) to produce the distribution of the conditioned loss of the sub-portfolio for the given value of the systematic factor m .
- ⑤ The distribution of the unconditioned losses is evaluated to each value of the loss by integrating in the entire row of values of the systematic factor.

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The Factors and Transversal Reorganizations Principles of Romanian Textile Industry Enterprises using Activity-Based Costing Method

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***Abstract.** This article describes the factors and the principles of transversal reorganization of the enterprises from the Romanian textile industry by adapting the Activity-Based Costing method (ABC) to its specific. There are presented and analyzed the real possibilities of reorganization of the enterprises in Romania by elaboration of methodological phases that will be covered until the implementation of their transversal organization. Are we ready to adapt the Activity-Based Costing method to the specific of the Romanian textile industry and not only? Here is the question whose response we will find in this article.*

Key words: ABC method; transversal organization; principles; organization factors; textile industry.

Organization factors of Activity-Based Costing management accounting

In the specialty literature, most of the specialists maintain that only few organization factors are playing a serious role in the adoption of Activity-Based Costing calculation system. We have identified and examined five meaningful organization factors, as follows: the enterprise size, technology application, number of products, significant overhead costs and competition.

Some of the specialty studies done by Innes, Mitchell and Bjørnenak revealed the fact that from a statistical point of view, the size represents a differentiation factor between the enterprises that adopt the Activity-Based Costing method and those that do not. The mentioned authors didn't succeed in explaining and grounding this fact, but Bjørnenak suggests that many big enterprises have a much larger communication and infrastructure network necessary for the adoption of ABC method. In the same study, it has been shown that enterprises using ABC method manifest an expansion tendency as compared to the enterprises which do not adopt this method.

Through the years, all the changes made in industry have been directed towards automation and mechanization growth. Traditional cost accounting systems using

overhead costs assessment methods based on manual labor allocation are not able to allocate the overhead costs correctly in an environment in which labor registers a low level (for example: custom method, which is practiced on a large scale in the textile industry). The current tendency of enterprises which are largely based on technology is pointed towards transition to the Activity-Based Costing method implementation. The specialty studies revealed the fact that enterprises using the ABC method indeed rely a lot on technology. Technology can't be considered a significant differentiation factor, because the specialists in the field discovered that most of the enterprises which have not implemented the ABC method enjoy nevertheless a substantial technological support.

In the case of enterprises that produce heterogeneous products, the traditional costing methods tend to establish distorted costs, as long as products use different quantities of overhead resources which are not necessarily related to production volume. The specialty literature indicated however that the number of products could be a distinguishing factor between users and non-users of ABC method. The specialty studies undertaken by specialists from France and United

States of America considered, however, that the number of products manufactured by an enterprise didn't affect the decision of implementing the ABC method.

Traditional systems based on production volume can accurately allocate the direct (prime) costs to manufactured products, executed work or provided services, but not overhead costs, because their corresponding consumption are not related to the physical production volume. Consequently, we may suggest to big, small and midsize enterprises an implementation of the activity-based costing system, because it registers very high overhead costs. The specialty studies done in the world show that there is no significant difference between users and non-users of ABC method with respect to cost structure. Manual labor and materials taken together form the highest proportion in the total costs for both groups of users. That leads to the conclusion that ABC method is used for other purposes than overhead costs allocation.

Competition increases the necessity of knowing and practicing precise costs and it might lead to the adoption of the activity-based costing system. However, it was found that enterprises which implemented the ABC method were not necessarily faced with a bigger competition than other enterprises which did not implement this method yet. That might indicate that ABC method is used for other purposes than for providing more precise costs.

The principles of enterprise reorganization in the textile industry

Any reorganization project will always start from an enterprise or an existing organization. By its nature, the enterprise represents a complex system which is centered on systemic principles. In the enterprise reorganization approach, according to systemic principles we will emphasize more aspects and at many levels. To catch the reality in an industrial context, reorganization approach will evolve as a process and, in consequence, it must be piloted. In another words, reorganization is defined as a process.

For making enterprise reorganization, specialty literature has identified six principles, which form the base of this process:

- the principle of interactivity and indefeasibility of the reorganization process;
- the principle of cyclicity of the reorganization process;
- the principle of hierarchical organization;
- the principle of modelling;
- the principle of successful managing;
- the principle of participative administration.

The principle of interactivity and indefeasibility of the organization process

According to this principle, reorganization is a process which is triggered by a behavior. The proposed reorganization approach isn't an independent ensemble of proceedings; on the contrary, it evolves in time, according to the context.

On the one hand, in the reorganization approach, it becomes interactive and interacts, becoming dynamical and following a specific pattern. On the other hand, the reorganization process is not prescriptive (it doesn't undergo an exact number of stages common to all of them). This principle acts on the selection and organization of the objective part, which is to be reached in the chosen context, in the sense that a certain process is divided into many sub-processes or stages.

The principle of cyclicity of the reorganization process

According to this principle, reorganization process is based on a spiral life cycle. This approach responds to a global cycle (finding-analysis-decision-reorganization-application) which repeats itself which underlies the Deming rule. It follows a cyclic (helical) nature of the approach, in opposition with the precedent linear organization methods. The analysis stage refers to the shaping of the existing one and reorganization stage, just like the conceptual elaboration of a new organization.

The principle of hierarchical organization

According to this principle, the reorganization process is made on levels. In order to master a complex system reorganization, we recommend the implementation of most stages in a hierarchical approach. Following the complexity of the organization system, the analysis and enterprise reorganization is achieved on detail levels. According to the expected reorganization objective, the studies can be defined as preliminary studies, detail studies, etc. But what does this *level of detail* represent?

The level of detail is a permanent abstraction level, which is focused at an angle provided by the complexity of the problem in question. For example, for an IT system, one can interfere:

- At the object level (data, documents, register card, etc.) the changes between treating modules of the data system, if we are interested in the object flow;
- At the entities and relations level, which describe the object structure, if we are interested in the diagram specification, the database concept of an IT system;
- At data structure level and relational table (derived from the conceptual diagram of the precedent level), if it is placed at the application level of database concept.

A system level is characterized according to detail angle or description system finesse and in consequence by the number of information considered for this system.

The principle of modelling

According to this principle, the reorganization process responds to four essential aspects of the enterprise. In the field literature, the following essential aspects are mentioned: organizational structure (organizational entities-decision centers and levels, competence centers, coordinating mechanisms); operational processes (control and objects flows); data and informational system processing; resources (human and technical), in particular

of competence and actors role. Defining the essential aspects considered in an enterprise study domain, starting from enterprise reorganization, represents the primordial stage of the reorganization process. These aspects identify the essential performance levers, which underlie our decisions.

Considering the four essential aspects of the enterprise, reorganization is no longer part of the analysis phase. It refers to all reorganization processes. It plays a part in: identifying all aspects for treating them, then studying the interactions and effects of changes of one or the other, during the whole reorganization process.

The principle of successful managing

According to this principle, the reorganization process represents the center of performance. Performance indicators play an essential role in “judging” the status of the reorganization system and pilotating the process and of the other organization systems all the more.

The reorganizations process is centered on performance, in the sense that the whole reorganization process must be oriented towards performance improvement, a significant aspect in defining objectives. Clearly, these are the indicators which express the relative performance of satisfying reorganization objectives. Moreover they help in studying

the interactions between the considered aspects and the development of cause-effect relations between the drivers of those aspects. In the reorganization process, the performance notion is integrated at all levels. This integration is achieved in two ways: starting from applying the indicators and dashboard at diverse decision levels pursued by the enterprise, or by using joint indicators, which arise for controlling the evolution of the process and processes, for pilotating the reorganization process in a reactive manner.

The principle of participative administration

According to this principle, the reorganization process is managed in a participative manner. In the reorganization case, the whole process must be seen as a project to be followed, defining and representative. Its conduct must answer a project administration logic. The whole reorganization has to be thought and achieved in a participative manner, involving most employees as participants. The enterprise reorganization success is attributed to all employees, participants in this project. In this sense one should set up a synthesis group, which comanditates and pilotates the project, and an analysis group which achieved the reorganization. The group also includes users who participate in the reorganization as enterprise consultants.

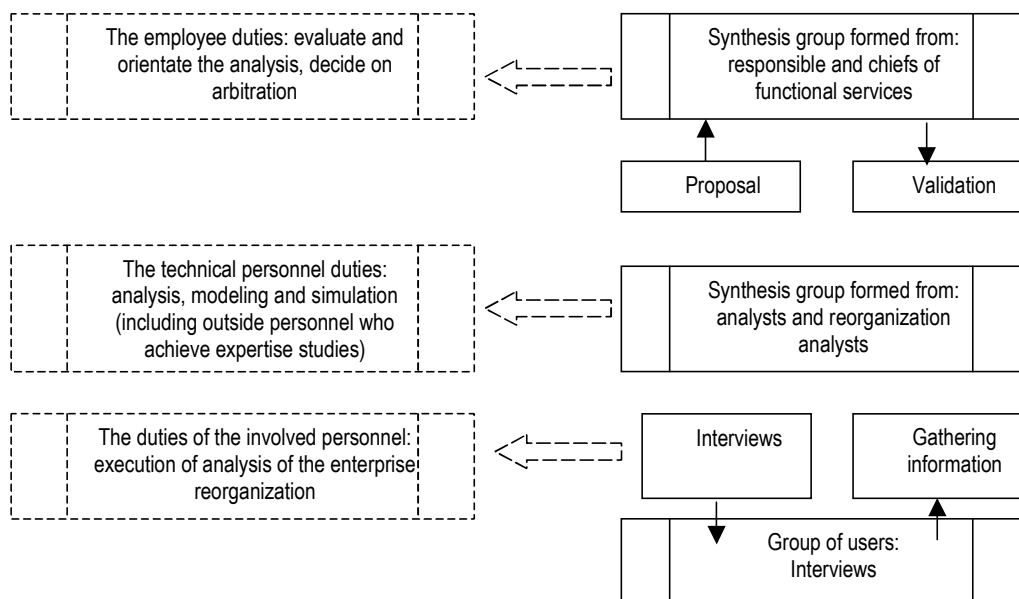


Figure 1. Type of recommended organizational structure

Traditionally and particularly, in the case of grand projects, it is recommended that the reorganization process should take place in three major phases, as follows (figure 2, bottom):

- The analysis phase which allows recreating a very precise connecting situation which is based on the existing situation. The purpose is formulating the problem, examining the disfunctionality causes and identifying the improvement opportunities;

- The conception – restructuring phase follows the extent of the improvements to be made. We propose a conceptual model of the reorganization system, in which we present a performance level better than the existing system;
- The new system implementation phase, the reorganization proper, according to any adjustment, if the examined performance levels are no longer expected from the first action.

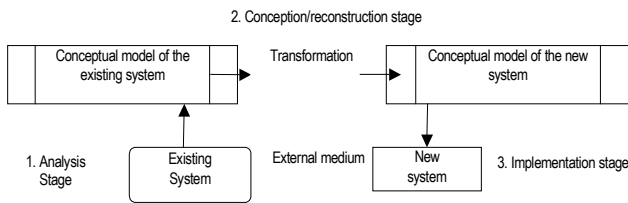


Figure 2. The diagram of reorganization process according to phase division

Transversal reorganization of the enterprise. Notion and organization facilities

For performance achievement, the enterprise management must consider two essential aspects, namely: *life cycle reduction* of the products, public work(s) or performed services and *widening the range offered to customers*. This leads to a flexible and evolving organization and on the other hand it increases the constraints for obtaining superior results. In other words, the most important stake in reaching superior performance is represented by the redefining of the enterprise organization way. To this purpose, it can be rightly said that the ABC method provides the background for adaptation to a type of flexible organization as the transversal one. The ABC method also inserts the notions of *transversal, processes and responsibilities* within the framework of the enterprise. These notions allow the visualization of all actions which contribute to reaching global performance of the enterprise.

The ABC method stimulates the enterprise in becoming competitive and reactive to customers needs, strategic segments obtained by the enterprise or existing tendency and desire of future orientation also anticipating any decisions to be taken in this way. From this point on, the textile enterprises are interested in proceeding a reorganization of their organizational structures, action which can become manifest in two ways: in one way, preparing and forming a new transversal, flexible organization mode, so called "target", which responds to market and environment needs of the customers; on the other hand, application of an improvement project, which facilitates the transition from the existing system to the transversal organization system.

The adoption of a new transversal organization mode can be regarded reluctantly, in its initial phase by the other departments or even the managerial team. After a coherent and very detailed analysis of advantages and disadvantages offered by the new transversal organization mode, one can move on to the next phase, to establish the activities to be performed and the principle application environment. The ABC approach will lead then to an established activities mapping, not only regarding their contents, but also their interactions with each other. We will thus obtain the target-organization applied to the enterprise level.

The enterprise is forced to know the contemplated changes and to interfere for reaching the transversal

organization. Consequently, it will have to compare its real situation with the proposed one, an opportunity occasion to define and engage the corrected actions, which are then hierarchically ordered according to priorities. The ABC approach resorts to a permanent progress and a collective hypnopedia. The economic environment evolution is the one which determines its permanent organization and adoption. Otherwise, the performances obtained at department level belong to the employees involved in their sustaining. This permanent search for progress brings into question a transversal organization, which finds its place at a more vertical traditional personal responsibilities level of the whole enterprise organization.

The transversal carving of the enterprise follows finality and cooperation logic for describing the actions objective which is determined at internal organization level such as visions allows the achievement of a connection between the strategic objectives and their actions objectification, for responding to the next two questions:

What do we propose to achieve? Actually, at this question we must think of the *proposed objectives* and *the activities price which will be achieved*. Why do we achieve it? The enterprise produces and sells, applying the *strategic objectives* and *satisfaction of customers demands* within daily actions. These double interrogations correspond to a tendency of reduction the known activities which must be considered in ABC/ABM analyses in accordance with the whole coherence.

To achieve the enterprise transversal carving into activities, it is necessary to rally a big number of actions and operations, more or less important. What would be the identifiable levels of an enterprise? To answer this question, we must consider certain criteria used by specific enterprises. The levels are in general the following: process families, processes, activities and operations.

The methodology of the transversal organization of enterprises in the textile industry

Most of specialists in the domain are orienting towards a transversal organization of the enterprise carried out in 4 or 5 steps, naturally considering their specific. To achieve a transversal organization of an enterprise in the textile industry from our country, we have identified the following steps:

1. *The conception of the transversal organization of the enterprise;*
2. *Making an analogy between the existing and the transversal organization;*
3. *The proposal of improvement measures of the structural organization of the enterprise;*
4. *The proposal and communication of the objectives;*
5. *Setting up activities and operations;*
6. *Assignment of responsibilities.*

To cover each of these steps, one must elaborate different documents meant to facilitate a clear understanding of the transversal organization process. These documents are the following: the necessary resources list evaluated in hours

allocated to every activity, the deviation analysis evaluated in hours for every process, the transition from current organization to the transversal organization, the particularization through numerical symbolization of activities and operations, the assignment of responsibilities for activities and operations, the assignment of responsibilities for activities and operations with explanation of their level of competence.

1. The conception of the transversal organization of the enterprise

The objective of this phase is the presentation of forming a transversal organization that includes four main directions, centered the following manner:

1. The actions to be achieved refer to those operations evaluated in terms of time and levels of competence;
2. The necessary environments for the application of transversal organization, with particularization about target compartments;
3. The optimal concatenation possibilities of the processes and activities that arise from the achievement of transversal organization of the enterprise. Ideally one should try the determination of those organizations in which the processes and activities allow the proper adaptation to the specifics of every strategic segment. The following questions arise and their answers demonstrate its benefits:

a) Which activities and operations can be faced by the architecture of the transversal organizational of the enterprise?

The architecture of the transversal organization of the enterprise describes the most important strategic actions for the establishment of processes and operations. Here is the description of the actions in an operational and detailed manner, while the activities and processes reshape the operations according customer result logic. Another question arises from this:

b) Can the transversal organization of the enterprise identify the result for each customer?

The transversal organization identifies the result of every activity and operation, and so, it can also evaluate the interest which every activity presents for a customer. The objective of every activity is to produce a result necessary from a strategic point of view. Every operation belongs to an activity, a process and a family of processes. This concatenation facilitates the practical application of a transversal pilotation system and replacement of local actions into customer result logic. This thing describes the façade of an activity achievement.

c) But for what volume and in what cost conditions?

The transversal organization defines the application environments and considers two constraints: the quantities to be achieved and their costs.

d) What actors will be involved in the transversal organization of the enterprise and what will their competences be?

The transversal organization of the enterprise defines the quantitative staff needs for every activity and operation. They also provide a situation in qualitative terms thanks to the introduction of the notion of competence. The actor is described by means of the established actions and its

vertical (hierarchical organization) and transversal responsibilities (processes organization).

e) Where is the action of transversal organization of the enterprise put into practice?

The transversal organization of the enterprise points out the necessary connections for the achievement of activities and due operations. They describe the connections where the responsibilities are practiced.

f) When will the actions of transversal organization of the enterprise become achievable?

The transversal organization of the enterprise defines (through the notions of frequency and capacity) the moment when actions can become workable. It makes sure that the enterprise is able to produce what was determined on strategic plan, considering the resources that are available (human, machines, information environment, etc.).

4. The elaboration of necessary resources for a process, according to the transversal organization of the enterprise.

This list permits the allocation of resources equivalent in hour volume, considering the budget situation. So, according to the example from table 1, the allocation of resources upon standard times is achieved according to the volume of order lines, references on articles or customers and scheduled delivery lines, which are the main factors of resources consumption of activities. This presentation shows the technical and managerial competence level necessary for practicing these operations.

The list of necessary resources evaluated in hours pertaining to “orders treatment” activity

Orders treatment Activities and corresponding operations	Competence level		Necessary time (hours)
	Technical	Managerial	
<i>Instrumentation of customers orders</i>			40
- applying the negotiated conditions for the invoiced orders	2	1	15
- registering the orders into database of the enterprise	2	1	15
- editing, controlling and delivering of the complains pertaining to the orders	3	1	10
<i>Pursuing the application of commercial conditions</i>			60
- pursuing the permanent problems of customers/products	3	2	35
- considering the daily particular conditions	3	2	15
- pursuing the financial situation of the customers and defining future ones	3	3	10
<i>Pursuing the orders at internal level</i>			30
- treating the relative calls pertaining to the customer order	3	2	15
- treating the subsequent events from/and their registering	3	2	15
<i>Invoice and recuperation</i>			30
- verifying the delivery checks	2	2	20
- invoice starting	3	2	10
<i>Total</i>			160

Here is an example of (technical and managerial) competences on levels used or usable in a textile enterprise:

- a) technical competences:
 - Level 1 – accomplishment of a unique action;
 - Level 2 – accomplishment of an ensemble of actions;
 - Level 3 – accomplishment and coordination of ensemble of actions;
 - Level 4 – coordination of an ensemble of long term actions;
 - Level 5 – coordination of an ensemble of short term actions;

- b) managerial competences on levels:
 - Level 1 – putting actions into practice;
 - Level 2 – supervision of the jobs;
 - Level 3 – the team leadership;
 - Level 4 – the leadership of a profit or responsibility centre;
 - Level 5 – the management of a centre (units/investment centers).

From this presentation, we can conclude the following:

- The technical competences indicate a progressive growth with the level changing;
- The same growth tendency is manifesting within managerial competences.

The data registration in table 1 permits the comparison of necessary competences with the ones affected in reality, on activities and operations (table 6). The objective consists in identifying the optimal necessary resources and its allocation in a more precise manner. These situations can be correlated from the point of view of the hour volume and from the responsibility assignment point of view.

2. Making an analogy between the existing and the transversal organization

The objective of this first phase can be achieved through actions that are based on two directions namely:

- The analysis of possible deviation between the real situation ascertained in practice and the transversal organization situation of the enterprise;
- The identification of the main axes of disfunctionality or non-performance that clarifies the decision making of an organization in the following directions: the very nature of the accomplished action, the application environments, concatenation of actions.

So, starting from the data presented in tables 1 and 6, we can determine the list of surplus or insufficient for every resources operation and activity hour equivalent, as shown in the following situation:

The deviations analysis evaluated in hours pertaining the “orders treatment” process

Table 2

Orders treatment Activities and corresponding operations	Necessary time hours (1)	Allocated time hours (2)	Deviations (3)=(1)-(2)
<i>Instrumentation of customers orders</i>	40	45	- 5
- applying the negotiated conditions for the invoiced orders	15	20	- 5
- registering the orders into database of the enterprise	15	20	- 5
- editing, controlling and delivering of the complains pertaining to the orders	10	5	+ 5
<i>Pursuing the application of commercial conditions</i>	60	65	- 5
- pursuing the permanent problems of customers/products	35	40	- 5
- considering the daily particular conditions	15	20	- 5
- pursuing the financial situation of the customers and defining future ones	10	5	+ 5
<i>Pursuing the orders at internal level</i>	30	30	0
- treating the relative calls pertaining to the customer order	15	15	0
- treating the subsequent events from/and their registering	15	15	0
<i>Invoice and recuperation</i>	30	35	- 5
- verifying the delivery checks	20	25	- 5
- invoice starting	10	10	0
Total	160	175	- 15

Under these circumstances, considering the retained objectives, it is obvious that the allocated resources on the two activities are insufficient (according to the negative deviations). Also, we can establish the list of operations and activities practiced by the responsible personnel, having levels of technical and managerial competences inferior or superior to the necessary competence level.

The next table proposes a model of document elaborated by us for this phase, including all the necessary questions for concluding on aspects meant to facilitate the understanding of the transition process from the current organization of the enterprise (hierarchical, horizontal) to the transversal organization.

The transition from current to the transversal organization

Table 3

Explanations	Current organization	Transversal organization	Improvement actions
Activity: what?
Actors: who?
Geographical location: where?
Frequency: when?
Value for the customers or result: why?
Activity-included operations: how? why?
Consumed resources (costs): what quantity? How much?

3. The proposal of improvement measures of the structural organization of the enterprise

The purpose of this phase is to analyze the enterprise activity under two aspects: the normal and the non-normal activity. For showing the normal activity and for dividing the enterprise into processes and activities, we must find the answer to the following question: *For what expected value must we organize our enterprise?*

From organizational angle, all improvements must correspond to visible results from the customer’s point of view, level at which the enterprise could communicate with the customer. Considering the expected customer’s value, we propose the classification of the enterprise activities in two big categories:

1. Activities (and operations) at normal value for the customer. For example, within activity called “new product validation” (according to table 5) the operation called “product testing” it is important, because the enterprise can use data for a better attending on the customers. These activities can also be defined as “visible” activities.

2. Activities (and operations) without normal value, which are hidden from the eyes of the customers. For example, within the activity called “the prototype accomplishment” (according to table 5), the operation called “the accomplishment programming” is purely internal, action that isn’t performed as a consequence of direct consistency, for the customer. These activities can also be defined as “hidden” activities.

The enterprise activities grouped according to the two characteristics allow the orientation of the actions as follows:

- Activities and operations at normal value that can be accomplished better than the competition. The enterprise must invest in these domains and communicate for obtaining a maximal value.
- Activities and operations that support normal value that must be kept and optimized in cost and efficiency, but the manner in which are exerted, presents no interest for the customer.
- Reduced activities and operations without normal value and the desire to be eliminated.

The resources allocate to these activities can be reassigned to activities with normal value.

The second aspect, non-normal aspect is so delicate, considering the fact that a part of normal activities must be eliminated. After considering the value created activities for the customer, the analysis of activities allow the identification of activities without a value that can be eliminated. The activity elimination cost it is calculated with ABC approach (Activity-Based Costing). It can be compared with the global cost of an external performer. The cost presupposes adding to this value of coordination activity the cost of the performer. The entire action circuit that is to be performed by the enterprise, considering the activities structure modality, can be represented as follows:

Type of activity	Activity level	
	Normal	Non-normal
	Undertaking actions	Undertaking actions
1. Activity with normal value	Investment achievement Cost and efficacy optimization	The analysis of activities that can be eliminated Activities elimination cost calculation
2. Activity without normal value	Activity elimination	Activity elimination

4. The proposal and communication of the objectives

The aim of this phase is the placement of the transversal organization mode of the enterprise according to the performances, under three aspects:

1. *The evolution of economic environment.* Here we are, considering the following:

- studying the consequences of the evolution of the economic and enterprise environment on its organization;
- detailing enterprise reorganization objectives and proving the way in which these objectives become a determinative stake of performance.

2. *Defining the possible organization ways.* Here we are, considering the following:

- detailing different aspects of defining the enterprise organization modes (hierarchical, matrix, transversal, etc.).
- bringing forth the dynamic aspect and appraisal of the organization mode of the enterprise according to responsibilities.

3. *Setting up the functional office, called "performance".* Among these objectives, we can mention:

- defining the basic elements that are making up performance;
- detailing the connections that exist between the organization mode of the enterprise and performance;

- demonstrating the necessity of a transversal vision of the enterprise for responding to customer's demands;
- demonstrating the transversal organization mode as an important stake of the performance;
- determination of performances through calculated indicators.

5. Setting up activities and operations

If an enterprise interferes on more strategic segments, in the elaboration of the process list, it should consider the specific activities of a strategic segment and on the other hand, the activities common to all strategic segments. Here interfere the key success factors, whose role is very important.

The key success factors for a strategic segment allow determination of requested competences for their application, facilitating the defining of processes list and specific activities for a strategic segment. Here is an example:

The list of specific processes and activities of a strategic segment

Table 4

Processes		Activities		
Commercialization by wholesale	Defining and application of commercial policies	Prospecting	Pursuing wholesale customers	Offers reception
Commercialization by specialized distribution	Defining and application of commercial policies	Treatment of references	Customer pursuing by specialized distribution	
Orders treatment	Elaboration and registering of orders	Pursuing internal orders	Invoice and recuperation	Allowances reception at the end of the year

This list can be detailed by presenting the operations specific to activities, each activity and operation getting new specific digital symbolization. For example, the process of "new product conception" is detailed into activities and operations as follows:

Detailing by digital symbolization of activities and operations

Table 5

Process no. 12 „New products conception"					
Activities	121 outgo's note book conceiving	122 prototype making	123 technical documentation guarantee	124 defining industrial process	125 new product validation
Operations	1211 product defining according to needs	1221 achievement programming	1231 defining operation modes	1241 studying investments	1251 product testing
	1212 ensuring technological needs	1222 prototype fabrication	1232 achievement of technical file	1242 profitability pre-studying	1252 technical and commercial validation
	1213 ensuring the market needs	1223 design studying	1233 establishment of outgo's note book		

The ABM model (Activity-Based Management) requires a higher activity level than the ABC model (Activity-Based Costing). Indeed, an ABC production cost approach is attached to activities costs without the need for constructing a complex model. In exchange, the improvement of transversal organization of the enterprise with the ABM model leads to action analysis and its concatenation, since they require a much more elaborated description of the activities.

6. Assignment of responsibilities

After the carving of the transversal organization of the enterprise, we must place the personnel within this new organization type, because it represents “the resources” that underlies every action. Of course, all employees will be positioned in the usual vertical plan (depending on hierarchical lines!), but before that, one should consider their role within each activity. Before the assignment of responsibilities (on personnel), we should know *what the actors (employees) represent and what are the elements that underlie their qualification.*

The employees are the persons or the group of homogeneous persons according to their role and technical, managerial competence. The main elements for identifying and qualifying the employees are the following:

- Quantity – indicates the number of employees involved in each activity;
- Name – the employee is identified through his name;
- Position – the qualification aim of each employee according to his domain of competence and responsibility;
- Performance level – a technical competence and managerial competence is attributed to the employee.

It is very important to identify the allocated resources, the employees on operations and activities, which allows us to know the resources consumed by the activities within the processes. Starting from the elaborated situation in table 1, we can construct a new situation hereupon to add the persons involved in the operations and activities. Here is an example of the resources allocated on hour-person for the “orders treatment” activity:

Assignment of responsibilities according to activities and operations

Table 6

Orders treatment	Mr.			Total
	Georgescu Vasile	Irimia Gheorghe	Mrs. Ileana Dumitrescu	
Instrumentation of customers orders	20	15	5	40
Applying the negotiated conditions pertaining to the invoiced orders	7	8	0	15
Registering the orders into the database of the enterprise	6	7	2	15
Editing, controlling and delivering of the complains pertaining to the orders	7	0	3	10
Pursuing the application of commercial conditions	15	20	25	60
Pursuing the permanent problems of customers/products	12	18	5	35
Measuring the daily particular conditions	3	0	12	15
Pursuing the financial situation of the customers and risk definition	0	2	8	10
Pursuing the orders at internal level	8	12	10	30
Treating the relative calls pertaining to the customer order	7	6	2	15
Treating the subsequent events from/and it registering	1	6	8	15
Invoice and recuperation	12	15	3	30
Verifying the delivery checks	9	10	1	20
Invoice starting	3	5	2	10
Total	55	62	43	160

This type of document allows the measurement of allocated resources level according to the volume activities and operations to accomplish. For example, the allocated resource from “orders treatment” can be compared with the volume measured by the number of order lines. In truth-like mode, these affected resources vary according to the registered order line numbers. A much more complex

situation can be conceived through annexing data from table 2, table no 1 and table 6, taking the next shape:

Determination of deviation activities and corresponding operations according to people in charge

Table 7

Responsible: Orders treatment Activities and corresponding operations	Mr. Georgescu Vasile		Necessary times hours (1)	Allocated times hours (2)	Deviations (3)=(1)-(2)
	Competence level				
	Technical	Managerial			
Instrumentation of customer orders	7	3	18	20	-2
- Applying the negotiated conditions pertaining to the invoiced orders	2	1	6	7	-1
- Registering the orders into the database of the enterprise	2	1	6	6	0
- Editing, controlling and delivering of the complains pertaining to the orders	3	1	6	7	-1
Pursuing the application of commercial conditions	9	7	16	15	+1
- Pursuing the permanent problems of customers/products	3	2	10	12	-2
- Measuring the daily particular conditions	3	2	4	3	+1
- Pursuing the financial situation of the customers and defining the future ones	3	3	2	0	+2
Pursuing the orders at internal level	6	4	6	8	-2
- Treating the relative calls pertaining to the customer order	3	2	4	7	-3
- Treating the subsequent events from/and it registering	3	2	2	1	+1
Invoice and recuperation	5	4	11	12	-1
- Verifying the delivery checks	2	2	8	9	-1
- Invoice starting	3	2	3	3	0
Total	-	-	51	55	-4

In conclusion, the proposed approach allows a fine analysis regarding the major stakes of the enterprise. It is perfectly possible to achieve these phases on ensemble or just in a certain part of the activities and processes within small and mid-sized enterprises. Everything depends on priorities and application environments, which they are meant.

This approach can also be progressive, including the ensemble of the enterprise in successive phases. The basic idea remains however present during the entire organizational process: *we must obtain the necessary changes for the achievement modes, for a better allocation of available resources.* Then we can talk about an optimal process of the guided resources according to strategic options.

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