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## THE IMPACT OF THE INTEGRATION IN THE EUROPEAN UNION ON THE EVOLUTIONS OF THE MACRO-ECONOMIC VARIABLES WITH INFLUENCE ON THE PENSION FUNDS PROFITABLENESS

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#### Abstract

During the last decade of the  $20^{th}$  century, modelling the macro-economic evolutions and implicitly modelling the evolutions in the social insurance systems, including and especially the pension systems, gained a very strong "anchor", which allowed and allows at present the realization of multiple evolution scenarios, with a pretty big probability of achievement. This anchor, or better said this anchor-variable is the "inflation rate", usually calculated as the consumption price index, respectively as its percentage variation from one period of time to another. The last decades of the  $20^{th}$  century and the first five years of the  $21^{st}$  century were characterised by an extremely accelerated rhythm of innovation, as well as by an acceleration and a multiplication of capital flows, which practically led to the phenomenon known as "economy globalisation" or simply as 'globalisation", as it extended outside the economical sphere towards all the spheres and sectors of the social life. This process has been accelerated by the "transition from plan to market" of the economies from Central and Eastern Europe, as a consequence of the fall of the totalitarian communist system, which dominated this part of Europe half a century, and of the end of the era known as "the Cold War". The economic globalisation movement, together with the transition from plan to marketas well as with China's entering into the international economic circuits, grew enormously the investment possibilities and thus the possibilities of placing the capital accumulated in the western countries during the autarchy period which characterised the Cold War era.

## 1. The theoretical-methodological basis of the model of macro-economic forecast , of labour market and population – MITGEM

During the last decade of the 20<sup>th</sup> century, modelling the macro-economic evolutions and implicitly modelling the evolutions in the social insurance systems, including and especially the pension systems, gained a very strong "anchor", which allowed and allows at present the realization of multiple evolution scenarios, with a pretty big probability of achievement. This anchor, or better said this anchor-variable is the "inflation rate", usually calculated as the consumption price index, respectively as its percentage variation from one period of time to another.

This anchoring in a key macro-economic variable is nothing but the expression of the substantiation of the macro-economic models and of those aiming towards modelling the evolution of the variables connected to the social insurance systems, on what we could call "a function of predictability". The price, given its quality of "fundamental economic information" or information about attributes as it is named in the theory specific to the information economy, plays a fundamental role as market signal, guiding the demand and the offer flows. From this point of view the prices stability, or better said the prices evolution stability or predictability, the non-accelerated character of their evolution,

expressed through the non-accelerated character of the inflation rate, generally give a predictability character to the economic evolutions, thus encouraging the movement of the capital flows, the medium and long term investment and especially the innovation, as the progress engine. Or the last decades of the 20<sup>th</sup> century and the first five years of the 21<sup>st</sup> century were characterised by an extremely accelerated rhythm of innovation, as well as by an acceleration and a multiplication of capital flows, which practically led to the phenomenon known as "economy globalisation" or simply as "globalisation", as it extended outside the economical sphere towards all the spheres and sectors of the social life.

This process has been accelerated by the "transition from plan to market" of the economies from Central and Eastern Europe, as a consequence of the fall of the totalitarian communist system, which dominated this part of Europe half a century, and of the end of the era known as "the Cold War". The economic globalisation movement, together with the transition from plan to marketas well as with China's entering into the international economic circuits, grew enormously the investment possibilities and thus the possibilities of placing the capital accumulated in the western countries during the autarchy period which characterised the Cold War era. The western capital placement in countries with an abundant production factor offer, the labour (work force) created the premises of an unprecedented growth of the goods and services offer, in conditions of high productivity, granted by the modern technologies, but also at very low prices, given the low costs of using the labour factor in countries where the offer for this production factor is, as we said, extremely abundant (both China and the countries in Central and Eastern Europe as well as countries from the former Soviet Union), which resulted in very low wages compared to those in the western countries. This growth of the output volume given the conditions where the global demand rose should lead to a general price growth, and thus to a rise of the inflation rate level, on "classic" conditions, so on conditions of relative "autarchy". But if this very big demand, in continuous expansion of goods and services more and more varied, is fueled by an ultra-abundant offer, due to the technologies allowing the mass production of a very large number of goods and services, at lower and lower prices, given on the one hand the fierce competition between the producers situated now in a market with global opening, and on the other hand the possibilities of producing these goods and services in economies where labour factor costs represent only a fraction of the work force costs in the western countries, all this makes prices of the main goods and services categories practically register a decreasing dynamics. The produce that was considered a few years ago as the attrbute of the elite, became a consumption good accesible to practically a huge mass of consumers. Because of this fact, not even the price rise of basic raw materials (oil, natural gas, iron ore) in the last years could stop the global economic growth or lead to an "overheating" of the main world economies, or in other words, lead to a growth of the inflation pressures, on the contrary, certain economies even confrunted the "deflation" phenomenon.

The solidity of the inflationary anchor was consolidated also by the fact that the Central Banks gained, starting with the 1980s, independence from the Governments of the respective countries, which allowed them to pursue their own policies, through specific instruments, respectively through controlling the circulating monetary mass, as well as through controlling the reference interest rates. This led to the creation of a general perception of predictability of the global business and economic environment.

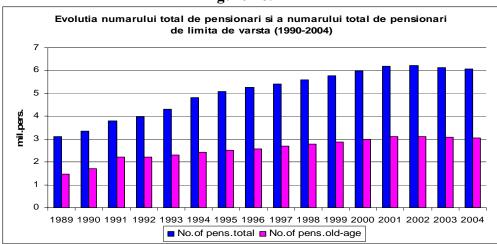
All these reasons linked to the macro-economic evolutions at global level justify the use of the inflation rate as anchor variable of the macro-economic modelling processes.

At the same time, the economic predictability, from the price variation point of view, justifies the use of the inflation rate as anchor variable also in the modelling of the processes and evolutions in the sphere of the social insurance system and especially in the sphere of the pension systems, no matter their philosophy. This is because the predictability gives both the companies, the housekeepings, and the Governments and the Pension Funds the possibility to plan both the economising processes and especially the long term investment processes. The price variation predictability as determinent for the economic predictability, offers the possibility of diversifying the pension insurance, from the PAYGtype classic system to the systems based on individual economising or accumulation. This happens because both the contributions and the benefits can be better predicted on long term, general intervals. Both the beneficiaries, and the collective placement organisms (the pension funds) can project their financial assets portfolioesso as to maximise the benefits and to minimise the risks on much longer time intervals. At the same time, the globalisation gives the collective placement organisms the possibility to compensate their risk "exposure" (leverage) through a "hedging" as broad as possible and even to obtain supplementary profits from trading the "leverage" and the "hedging" portfolioes as independent assets. This abundance of options regarding the possibilities of capital placement, and especially the existence of an abundance of insurance and "risk placement" options contributes to the draw of new capitals in the market circuit, and thus to the increase of the abundance of the capital production factor offer, another element itself contributing to the global maintenance of a non-inflationist climate, which constitutes an important premise for diversifying placements in order to obtain in the end pension insurances.

At the same time though, the abundance of the capital factor also leads to a significant decrease of the earnings obtained through capital placements. So, it is necessary to have a portfolio management as active as possible, and especially, on short term, a leverage as broad as possible, covered by a hedging as diverse as possible and with market depth (hedging to hedging practically) in order to ensure truly positive benefits from capital placement. This mechanism works also with the pension funds, which slowly have to diversify their portfolios as much as possible and to practice an aggressive "leverage", even a risky one, in order to be able to offer their clients, at the maturity of their placements, the pension insurances indeed able to ensure them an old age free of poverty.

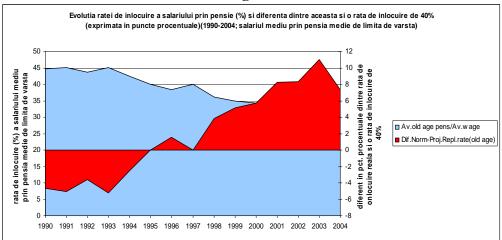
All this means that practically, the price stability creates both risks and opportunities. If stability gives the possibility to make long term investment and economizing decisions, it also means abundance of capitals and placement possibilities, the competition between different actors on the capital markets and the reduction of earnings from capital placements. in other words, the pension funds and the individuals, the housekeepings and the companies will have to enlarge their market exposure degree, by diversifying their placements, at the same time with the sofistication of the hedging or the risk insurance modalities that come with the enlargement, the expansion of the leverage. Practically, the price stability makes the pensions that can be obtained through a single long term capital placement (respectively through the participation to the public pension system or to a single private pension system) lose touch with the wage income, or in other words, to reduce continuously the replacement rate calculated according to the wage income, respectively to the medium wage, as happens with the conventional reporting. This

happens because the wages grow not only by taking into account the general price rise ( the inflation rate) but also according to a fraction of the productivity growth which inherently must reflect also on the labour factor; while usually pensions have almost no connection to the productivity growth, being practically correlated with the inflation rate, thus with the price and the tariff rise. Since the latter have smaller and smaller variations (the effect of predicatbility in the conditions of a globalised economy), pensions grow from one period to another in smaller and smaller proportions, which makes them lose touch with the wage earnings and not being anle to ensure the individual, after retiring from activity, income and implicitly a standard of living comparable to that before retiring. The connection between the inflation rate evolution and the pension indexation mechanism, or the rise of the real and nominal value of these so that it can ensure the pensioner a decent living. makes it appear, in conditions of low inflation, the absolute necessity to diversify the placements in order to obtain pension insurances, or in other words to obtain pensions, in order to keep thus the connection between the wage earning and implicitly the standard of living before retiring and the standard of living after retiring, thus preventing the individuals and the housekeepings from becoming poor after retiring from the active living no matter how late it might take place, mainly because of the increase of the pensioning age as a consequence of the demographic pressure (the aging of the population as a consequence of the rise of the life expectancy at birth and so of the rise in the weight of the persons of age in the total population, enhanced by the natality decrease).









On the other hand, given the capital factor abundency, the benefits that different placements can produce become smaller and smaller. To maximise them, it is necessary to create scale economies and purpose economies, as far as the investment and the economising processes are concerned. So there appears the necessity for each individual and each housekeeping to diversify his own leverage, in the conditions of an adequate hedging of course, in order to be able to thus ensure the continuity of his living standard after retiring. In other words, in conditions of price stability - reduced inflation- enhanced by the abundance of capitals and placement possibilities, so in the conditions of lower and lower interest rates, another effect itself of a non-inflationist economic climate, of some reduced unitary earnings from capital placements, the key to maintain some consistent replacement rates able to maintain the living standard of individuals and housekeepings after retiring, at comparable levels to those before retiring, is both the diversifying (the "purpose" increase) of the capital placements, and especially the growth of the capital placements volume (the "scale" increase). This only points out the neccessity for individuals to economise more and to invest as much as possible from this economising into assets which can be converted into pensions at the anticipated moment of retiring from activity. Hence the neccessity of the alternative pension systems, including those of occupational, sectorial, or branch type or those according to the anglo-saxon model, the enterprise/company/corporation type.

Starting from these reasons, it is obvious, we believe, that the whole modelling exercise we propose and which will have as purpose to explain the neccessity of the occupational pension funds and in general of the pension systems alternative to the PAYG in Romania, it uses as an exogen, explanatory variable the *inflation rate*, as it is expressed, even in an imperfect manner, by the annual percentage variations (current december to last december) of the consumption prices index (IPC/CPI%).

## 2. The impact of the integration in the European Union on the evolutions of the macro-economic variables with influence on the pension funds profitableness

The main macro-economic variables influencing the evolution of the occupational pension funds profitableness, must be forecast in their short term evolution, respectively for the next ten years, and must be designed on long term, respectively until 2030-2040, so that we can include the population evolution and the macro-economic evolutionsthat influence the profitableness of the pension funds placements, placements which usually have a long maturing term (if the occupational pension funds were created for example this year, the first payments wouldn't take place sooner than 15 years from now, in other words, the investments made by these funds must have in view mainly a long term profitableness and speculative earnings as in the case of the ordinary investment funds.

In consequence, we will proceed in this subchapter to the forecast of 16 macro-economic variables whose later evolutions will influence the evolutions of the occupational pension funds profitableness as well as the population evolutions and, from this point of view, of the basis of insured persons.

The variables whose evolution will be forecast and analysed in correlation with the evolution implications on the occupational pension funds profitableness cover the following problematical areas:

- the general economic development and the development of the commercial exchanges;
- the labour market evolutions (wages, occupancy, unemployment);

• the evolutions in the living standards (poverty, income inequality, RIP/inhabitant)

In consequece, the list of variables included in the forecast exercise is the following:

- the nominal RIP in billion USD;
- the RIP annual percentage variation (RIP%), also known as economic growth;
- the annual percentage variation of the consumption prices index (the inflation rate-CPI%);
- the liberalization index (LibIdx) until reaching the cumulative value of 10;
- the Stability index (StbIdx);
- the wages share in the total of the available income (%);
- the work productivity expressed as RIP/occupied person;
- the occupied population (occupancy), expressed in millions of occupied persons;
- the unemployment rate (BIM);
- the raw medium wage in USD;
- the medium pension in USD;
- the share of the occupied population in agriculture (the agricultural occupancy) in the totality of the occupied population (%);
- the openess to trade (OT, calculated as the percentage retio between the sum of exports and imports in mld USD and the nominal RIP expressed also in billion USD);
- the poverty rate, calculated, as share of the whole country's population, of the people under the 50% threshold of the medium income;
- the income inequality (the Gini Index).

As an anchor explanatory variable for the forecast until 2014 as well as for the ulterior projections until 2029, we took the inflation rate or the annual percentage variation of the consumption prices index. Its values were established in a normative manner, taking into account the parameter's importance, which had been justified in the previous chapter. So the forecasts made taking into account this explanatory variable started from the objective of a annual medium inflation rate that had to be around 2,7-2,9% for the year 2013-14, a year considered by us as the most probable and feasible for Romania's entering the Euro zone and its implicit adhesion to the Stability Pact rules, assuming of course they remain the same, at least in general terms, until the respective time. Then, until 2029, a year when the first business cycle manifests itself, the inflation rate has been kept as anchor variable, taking into account the fact that the stability in prices is a demand of the Stability Pact on the one hand, and on the other hand taking into account the fact that a market economy in the incipient stage (an emergent market) as Romania will be considered until that time, including from the point of view of the capital flows and markets, maintaining the price stability as a guarantee of the evolutions predictability in the business environment and especially as a precondition of a continuous and accelerated economic growth, will be essential for drawing and stimulating investors, both the direct ones and the portfolioes ones. After this date, the anchor explanatory variable changes, the role of the inflation rate being taken over by the economic growth, which is used in this capacity for the projections until the year 2040.

We must also mention that the evolutions of the inflation rate in its capacity of anchor variable for the forecast until 2014 are taken into consideration only after reaching the critical transition mass, so starting with 1999, considering that between 1997-1998 the "critical mass" was reached and overcome, on the liberalisation index scale (moreover the series for this variable stop in 2004, when value 10 is reached – "the end of the

transition"). In this approach we start from the considerations made in the previous chapter, according to which the evolutions before reaching the critical mass, specific almost exclusively to the transition from plan to market, are practically impossible to repeat and in consequence can't be taken into consideration for a forecast and especially for the anchor explanatory variable (it is hard to believe the inflation rate will reach again values of 155%). The evolutions of the inflation rate, in its capacity of anchor explanatory variable, manage to forecast pretty accurately the evolutions of all the macro variables enumerated in the list in this paragraph, thus actually underlining the importance of the stability in prices, as a guarantee of the economic and implicitely the social progress, in the conditions in which, of course, these prices are established through competition mechanisms and in which they are strengthened through a monetary prudentiality of the Central Bank. The only two variables whose evolutions can be forecast based on another explanatory variable, which has actually been achieved, are the occupancy and the unemployment rate, which are sensitive to the economic growth variations and less sensitive to the inflation rate variations. Yet, taking into account that the economic growth itself depends on the inflation rate, it is obvious that the latter keeps its role as anchor variable also for the two essential labour market variables. Moreover, taking into account the rigidity of these two latter variables, their predictable evolutions for the year 2014 are, as it was expected, unspectacular.

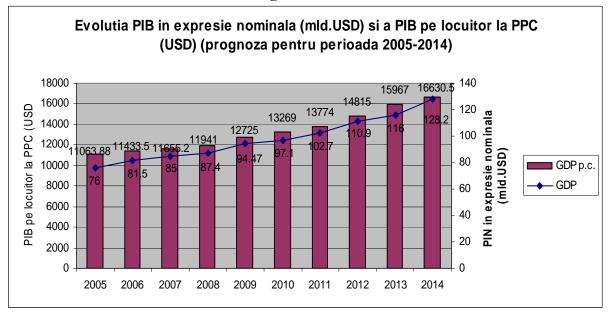
Next, we will present the evolutions forecast for each variable in part, for the year 2014 and projections until 2040 for a part of them, respectively for:

- the annual RIP percentage variation;
- the inflation rate;
- the wages share in the totality of the housekeepings' available income;
- the openess to trade;
- the RIP/inhabitant to PPC in USD.

Romania's nominal RIP will see a relatively marking growthin the next period, as a consequence of both its integration in the economic space of the European Union, which will offer the Romanian economy a broader and more free commodity market, and because of the rise in the stability and predictability degree of the economic environment, manifested first through the rise in the prices stability. So we can forecast that from a current RIP value expressed in 56 billion US dollars at the end of 2007, so in other words at the end of the year Romania becomes an effective member of the European Union, it will represent the equivalent of 85 billion US dollars. Starting from this value and taking into consideration a continuous economic growth trend, similar to the one registered by a part of the 10 states which entered the Union on May 1<sup>st</sup> 2004, but which had annual medium values a little higher, considering the massive productivity reserves Romania has by releasing work force from agriculture, and if the prices stability is maintained (it is anyway a precondition for the integration in the Euro Zone), we can appreciate that Romanian economy's dimension expressed by this indicator will reach in 2014 approximately 130 billion US dollars.

Reaching a value higher than 120 billion US dollars that year or even earlier is absolutely neccessary, in order to avoid the effective "isolation" of Romania's economy in the European economy and to thus become a "really attractive" market both for direct investments and for portfolio investments.

Figure no. 3



*The inflation rate*, anchor variable of this development period, must have over the next period of time continuously smaller values, so that from a forecast rate of approxiantely 9% for the end of 2004, of approximately 7% for the end of 2005, at the end of 2007 it should be of approximately 4%. Next, reducing the inflation rate will have to be done in small steps, so that on the one hand it should reach an annual medium rate situated between 2 and 3, which will allow Romania's integration in the Euro zone towards the years 2013-2014 with its corollary, respectively with respecting the Stability Pact rules, at the same time with maintaining high economic growth rhythms to allow the catching up of the accumulated advances because of the "stop and go"-type transition.

So the inflation rate will have to descend one percentage point in approximately 5 years, respectively starting with 2008 until 2012, when the value of 3% must be reached so that the broad money supply is sufficient to maintain an economic growth rhythm of around 8-9% each year. In other words, maintaining the decressing trend of the inflation rate so that the price stability and the predictability of the national economic evolutions are strengthened, as a precondition for the development of the domestic investment / economising tendancy and the draw of exterior investments, the broad money supply will have to be maintained at a level sufficient enough to allow the accelerated economic development. In other words, a "certain warmth in the economy's canals" must be kept which will have to be gradually reduced so that the economic growth isn't affected. In this context both the reference interest rate and the prudential regulations concerning the credits will play an extremely important role in maintaining the slightly decreasing trend of the inflation rate after 2007-2008, at the same time with maintaining a broad money supply at a sufficient level to sustain an economic growth, whose average value will have to be 4-5 percentage points higher than the medium value of the 2000-2004 period. This conditioning is imposed first by the economy's structure, where there will continue to prevail branches with low and medium added value, that don't achieve a sufficiently high productivity, so that they can give up the inflationist expectancy, respectively the constant growth expectancy, even if gradual and predictable, of the prices on the market, as a stimulant of the production development. In other words, there will have to be maintained a certain inflationist pressure in the economy, so that the branches ensuring the economic growth engine aren't discouraged and in order to maintain the economic growth rhythm. A classical type economy as Romania's reacts well at such stimuli, a too sudden reduction of the inflation rate, respectively from 4% to 2%, could hace the effect of strangling the broad money supply and, in consequence, of strangling the economic growth, just restarted, or of continuing it at a rhythm where it wouldn't be possible for the Romanian economy to reach a dimension allowing it to get out of the "European secondary economy" status and thus attract investments. Moreover, a too sudden reduction of the inflationist pressure, respectively the much too rapid reach of the 2% threshold, without a transition period of a few years, although it would allow it to enter the Euro zone a little faster, would involve a reduction of the economic growth rhythm, on the background of entering the national currency and of adopting too fast the European currency, if the economic structure as a whole weren't very much different from the one existing today. In the labour market plan, it would give way to an effective occupancy standstill and to an unemployment rise especially, as a consequence of a too accelerated release of work force from agriculture.

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## INTERNATIONAL EXPERIENCE IN CREATING THE INFRASTRUCTURE FOR INFORMATION TECHNOLOGIES DEVELOPMENT IN THE REPUBLIC OF MOLDOVA

### **Grigori ALHAZOV** ASEM Chișinău, Republic of Moldavia

#### Abstract

The article covers the edification of the information-based society, relevant problems in the Republic of Moldova and positive international experience in this sphere. The importance of the information technologies sector increases daily, software and hardware entering every sphere of human activity. This paper provides readers with a brief knowledge of the technical aspect and gives an overview of the global state of the information technologies industry, concentrating on the information technologies sector of the Moldovan economy. The author comes with specific suggestions that would be helpful for the development of this important branch of national economy and industry.

**Keywords:** *information technologies, international experience, information-based society, software, hardware.* 

The development and wide application of the information technologies in socio-economic sphere and in public administration is a general trend of the global development. The analysis of the worldwide experience leads us to the conclusion that using the information technologies for increasing the population well-being, securing the competitiveness of the national economy, developing the human capital and modernizing the main institutions of the state authority is vital. Thus, wide application of the information technologies in every branch of the economy permits to increase the growth rate by improving the labor productivity and optimizing the management and production processes. The share of the IT sector in the GDP of the developed countries manifests a permanent growth, and the creation of the IT sphere products occupies one of the leading places in the world economy structure.

The information technologies market consists of the following segments:

- producing and commercializing the computing machinery, complementary parts and peripheral devices;
- creating and commercializing software products;
- rendering services related to IT implementation and maintenance, including support and maintenance of the information systems and of the IT infrastructure provided by supplier, as well as custom-made software.

Speaking about the IT market of the Republic of Moldova, we should mention that its growth rate surpasses the growth rate of the national economy. At the same time, the level of the IT development and employment is much lower than the one of the occidental countries and than the one of the Eastern Europe and Asia.

International practice demonstrates that the transformation of the IT sector in one of the driving forces of the economic growth and of the modernization of the country in the

earliest possible terms is possible only if the government grants its support to the IT industry.

*World Economic Forum* published its *Global Information Technology Report 2006-2007* containing the rating of the IT development in different countries of the world. This rating contains data for 122 countries including the former USSR states.

When this rating was elaborated, its authors took into consideration not only the development of the IT market in one state or another, but also the degree of the influence and penetration of this market into other spheres (for example, education), as well as the successfulness of the governmental policy directed onto intensification of the IT application. The top-10 countries with the highest level of the IT development are: Denmark, Sweden, Singapore, Finland, Switzerland, the Netherlands, USA, Iceland, Great Britain and Norway. In the previous year the situation was opposite: USA took the 1<sup>st</sup> place, while Sweden was only 8<sup>th</sup>.

From the post-Soviet countries, the best results were registered in Estonia that occupied the  $20^{th}$  place. The other countries took the following positions: Lithuania –  $39^{th}$ , Latvia –  $42^{nd}$ , Russia –  $70^{th}$ , Azerbaijan –  $71^{st}$ , Kazakhstan –  $73^{rd}$ , Ukraine –  $75^{th}$ , Moldova –  $92^{nd}$ , Armenia –  $96^{th}$ , Kyrgyzstan –  $105^{th}$ . [4]

According to the most pessimistic estimations, today the volume of the software market is 120 billion USD. More than 30 billion from this sum of money is paid by developed countries to developing ones in order to reduce their corporate costs. These 30 billion are mainly distributed between circa 15 countries. India takes the 1<sup>st</sup> place among them, China is the 2<sup>nd</sup>, then go Malaysia, Philippines and Ireland. Moldova's share is very small; it does not enter the top-15. For comparison – the worldwide armament market is evaluated at 30 billion USD. [3]

The IT market shows one of the most pronounced development trends in the global economy. In the last 5 years, the growth rate of this market made up 10%, while the growth of the global economy was of 3-4%. That's why this branch's share in the GDP of the developed and developing countries manifests a considerable growth. Analytic agencies forecast that these high growth rates of the international IT market shall remain stable in the following 5 years, making up 9% every year. [4]

We'll continue with a short review of the trends that exist in the IT sphere of the Republic of Moldova. Since, on July, 15, 2004, the Parliament adopted the Decree "on the edification of the information-based society in the Republic of Moldova" #1743-III of March, 19, 2004, a new era of the Moldovan IT development began. [1] This Decree gave a serious incentive to the development of the IT infrastructure. Shortly after its adoption one more act was adopted – "Electronic Moldova", National Strategy for the Information-Based Society, a voluminous document containing strategic priorities, general objectives and government intervention spheres in the IT sector. [2]

The graphics seen below state that the IT sector dramatically livened up in 2004, together with the beginning of stimulating measures application:

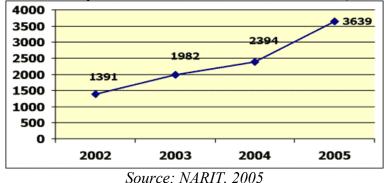


Figure no. 1. The Republic of Moldova IT market volume (million MDL)

From Figure 1 results that the IT market manifests a permanent growth, its volume increasing 3 times in 2005 compared to 2002. The essential growth was registered in 2005 compared to 2004.

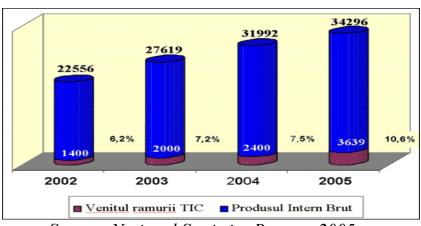


Figure 2. Share of the IT sector in GDP

Source: National Statistics Bureau, 2005

After the adoption of this incentive from the part of the state we can observe that the sector became more active – this branch shows an income making up 11% of the GDP. For realizing the task that was put before the branch, the annual growth of the IT sector share in GDP must be from 1.5 to 2%. The task is to reach the 20% share till 2015. [5]

The presence of IT sphere products creating potential in the Republic of Moldova is evident. At the same time, an integral approach to the IT industry development is being established on the governmental level. Thus, we can formulate the following recommendations for the edification of a information-based society in Moldova that derive from the other countries' experience:

- Creation of the software technology parks and of special economic zones. This
  provision can be found in the legislation of many countries China, India, Ireland,
  Romania, Russia, Belarus, etc. All these countries are characterized by a quick
  development of the IT sector.
- Imposition of a low level value added tax that should be returned to those companies that plan to reinvest it into software and hardware research and development and into reproduction expansion. This proposition comes from China's legislation, it permits IT firms to accumulate sufficient funds for reinvesting them into production process. This idea perfectly conforms to the business stimulation principle. There is no sense for the

state to obtain a small amount of money now, if it has a possibility to get much more after a certain period.

- Exemption of the tax for the equipment that is imported by software companies for their activity and for technologies connected to the production process, as well as for the spare parts imported with this equipment. This provision can be found in the legislation of China and Romania, its application contributes to the improvement of the entrepreneurial climate in the IT sphere.
- One more provision from China's legislation in order to make software products more competitive, companies that export software should be encouraged to pass the GB/T19000-ISO9000 and CMM (Capability Maturity Model) certification. The expenses connected to such certifications can be defrayed by the governmental institutions for example, Informational Development Department. In this way, the competitiveness of the domestic products on the international market increases substantially.
- A favorable regime for the holdings, taken from Irish legislation. Outsourcing activity could be promoted in a more active way in Moldova, if the foreign IT investors in our country were exempted of the tax for capital growth generated by shares of affiliated companies. A restriction can be put on the size of the shares of such foreign holdings in Moldovan companies' capital.
- Signing treaties with respect to double taxation avoidance. If foreign clients are obligated to pay value added tax twice, the outsourcing activity in the Republic of Moldova will not be convenient to them. Signing such treaties with other states can eliminate this negative moment related to the activity in the IT sphere.

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## TRAFFIC IN HUMAN BEINGS - AN IMPORTANT ISSUE IN THE EUROPEAN SOCIETY

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#### Abstract

The universal principles of our civilization reject the idea that man, irrespectively of race, gender or religion, can be the property of another man or state. If this is the case in the context of ethics and laws in countries with a consolidated democracy, things were very much different in the past and they still are in certain areas in which slavery is a common phenomenon. The dissolution of several states from the former soviet space, the low standard of living in some Asian countries, as well as the lure of a wealthy life in Europe represented business opportunities for the criminals of transnational crime networks specialized in human trafficking. Clandestine migration in the European Union contributes to the change of the social environment, massive communities being constituted, mostly due to this migration. The consecrated freedoms of the European Union render it vulnerable in front of the groups of organized crime operating outside the Union, but greatly affecting it. Given these conditions, the worries of the leaders of the Union and of the Member States are to be expected, as well as the legal and organisational concerns for the prevention and control of human trafficking.

#### 1. Traffic in human beings – a threat to the society

Traffic in human beings represents a type of transnational crime, through which unprincipled people recruit, guide, harbour, organise networks and make traffic in human beings. They break man's fundamental rights, imposing a modern type of slavery. The Criminality and Justice Department of the United Nations appreciates that the global profit of the human trafficking equals that of drug traffic. Therefore, traffic is only about money, like all other types of organised crime. White slavery, as it is also known, causes millions of human tragedies. Present especially in the areas overridden by conflicts and in countries faced with economic difficulties, human trafficking encompassed Romania as well, both as country of origin and country of victims transit.

However cruel the juxtaposition of these two words might seem, "traffic" and "human beings", it is just as real: human beings are reduced to nothing more than "goods", sold and resold, more and more expensively as simple objects, and then used. Also referred to as *modern slavery*, this type of traffic represents a threat to the freedom, to the physical and mental integrity and to the life of those affected by it. Over the last years, there has been a steady growth in human trafficking to, through and from South-Eastern Europe, a major challenge to the police force and a serious breach of man's rights.

People are more and more convinced that the fight against this type of traffic requires an organised and multi-disciplinary approach, at national, regional and international levels, approach which would involve all the decision making factors implied in this particular field. Police actions concerning the fight against human trafficking take place and are linked to a wider context which includes the equality between the sexes, antidiscrimination, observing the fundamental rights and liberties and the democratic principles in the police activity. Apart from studying the phenomenon and the activity of

traffic networks, it is necessary to know a vital element in the anti-traffic fight: the definition of the human trafficking crime, as it appears in various international agreements. In many countries, the criminal law does not refer to human trafficking as to a distinct type of crime. Traffic is punished through other laws or it is not punished at all. In such cases, traffickers of women for the purposes of prostitution are charged for smuggling or for crimes connected to prostitution such as procurement or prostitution encouragement. Due to the limited character of these laws and to the minor sanctions, traffickers get away with fairly small punishments, sometimes only with a fine they can easily pay. This case by no means reflects the seriousness and cruelty of human trafficking, but builds the image of a crime of "high profit and low risk", encouraging thus the criminals of "organised crime" to get involved in such types of activities.

#### 2. The definition of the United Nations on human trafficking

"Palermo Protocol" set a standard for the traffic crimes. In many countries, the legislation specific to the anti-traffic combat has already been elaborated or is being elaborated based on the provisions of this Protocol. The most important article of the entire document is article 3 which defines human trafficking as follows:

"Human trafficking" means the recruitment, transportation, transfer, accommodation or receipt of a person through threats, violence or other types of constraint, through kidnapping, fraud or deception, misuse of authority or taking advantage of that person's impossibility to defend or express his/her will, or by offering, giving, accepting or receiving money or other interests for obtaining the consent of that person. Exploitation includes, at least, the exploitation of the prostitution of other people or other forms of sexual exploitation, forced labour or services, keeping in slavery or other similar practices of confinement or servitude or the removal of organs. As far as exploitation is concerned, the Protocol of the United Nations on human trafficking, stipulates that: "Exploitation shall include, without limitation, the exploitation of the prostitution of other people or other similar practices of sexual exploitation, forced labour or services, keeping in slavery or other small include, without limitation, the exploitation of the prostitution of other people or other people or other forms of sexual exploitation, forced labour or services, keeping in slavery or other similar practices of sexual exploitation of the prostitution of other people or other forms of sexual exploitation, forced labour or services, keeping in slavery or other similar practices of sexual exploitation of the prostitution of other people or other forms of sexual exploitation forced labour or services, keeping in slavery or other similar practices of confinement or servitude or the removal of organs."

#### 3. The definition of the Europol Convention on human trafficking

The definition of the Europol Convention on human trafficking explicitly underlines the predominant sexual nature of victims' exploitation. Concerning the crimes listed in article 2(2), the Convention includes the following definition: "Human trafficking refers to models of subjecting one person to the real and illegal disposal of other persons, by use of force, threat with force, misuse of authority or deception, in view of prostitution, any type of sexual exploitation, minority abuse or traffic with abandoned children.

All the definitions share some key-elements:

- none of the definitions is reduced to the use of force, but all include a wide range of control and constraint modalities through which the victims are made to approve to the trafficking;
- **4** all definitions refer both to traffic within and outside certain borders;
- **4** all definitions contribute to catching those facilitating human trafficking.

#### 4. Modus Operandi

Human trafficking is a global "business field", organised as criminal networks, clandestine crime groups involved in other types of organised crimes as well. Structures vary from not very tight connected groups of private persons up to international criminal organisations.

Traditional organised crime has three characteristic elements:

- it is committed by an organised criminal group;
- in view of obtaining a maximum profit;
- it has international dimensions.

According to UN and to Law no. 39/2003 regarding the prevention and fight against organised criminality:

- Organised criminal group a structured group, made up of three or more persons, which exists for a certain period of time and acts co-ordinately in view of committing one or several serious crimes, for directly or indirectly obtaining a financial or material benefit; it does not constitute an organised criminal group an occasionally constituted group in view of an immediate crime or crimes and which has no continuity or determined structure or pre-established roles within the group for its members.
- *Transnational crime* any crime, which, as the case may be:
  - o is committed both on the territory of a certain country and outside it;
  - is committed on the territory of a certain country, but its preparation, planning, coordination or control takes place, partly or entirely, on the territory of another country;
  - is committed on the territory of a certain country by an organised crime group which performs criminal activities in two or more countries;
  - is committed on the territory of a certain country, but its result is obvious on the territory of another country.

In order to control the victims of traffic in the exploitation stage, various mechanisms are used. Each mechanism can be used separately, but in most cases several are used at once, meaning to create a situation of real or psychological captivity.

#### 5. Debt bondage

One of the basic mechanisms is debt bondage. The victim is asked to pay an exaggerated sum, the trafficker claiming that his/her transport from the destination country cost a lot. Extravagant and cumulative interests add to these sums, as well as overpriced loans for accommodation and job at brothel, the costs for the advertising of the prostitution services and transport. All these lead to permanently increasing sums, and thus become impossible to pay.

#### 6. Isolation by forfeit of identity and/or travel documents

Usually, the victims' identity and travel documents are seized immediately after arriving in the destination country. Thus, they are robbed of their official identity, confirming their status of illegal immigrants. They can no longer ask for help nor escape to another country. Taking into consideration the fact that many of the victims come from countries in which police is not seen as an element of support but as an oppressive force, it is obvious that women will not seek the support of the police.

Traffickers reinforce this perception, telling to the victims that they are free to go to the police, but that this will only lead to their immediate expulsion and reprisals at home, in the country of origin.

Experience has shown that, for most of the times, the trafficker is right when making such claims, because in the countries of the European Union, most of the trafficked victims appealing to the police and who cannot present valid documents are banished at once, instead of being treated as victims of serious crimes.

Or, in other cases, the trafficker tells to the victim that it is no use in asking for police help because the police is corrupted and has been paid by those traffickers.

The traffickers thus exploit the lack of documents and fear of the police.

On the other hand, granting the right of residence to the trafficked victims would be not only in the interest of the victims, as their rights would not be breached anymore, but in the interest of the anti-traffic authorities as well.

Unfortunately, most of the countries of destination refuse to grant to the victims the right of temporary residence. Thus, they do not benefit from a proper protection, care and help, their residence status remains undecided, so that the victims can very rarely collaborate with the police and with the legal institutions.

#### 7. Use of violence and fear

Another efficient means of control is the use of violence and threat with violence. The victims are often beaten and raped, confined, isolated for long periods of time, deprived of food and water, drugged or tortured with knives and cigarettes.

The abuses follow the breach of certain rules by the women or are used as a warning so that the victim knows what will happen is she breaks the rules again. In other cases, the only reason is the sexual sadism of the trafficker.

In sexual exploitation, shame is also a powerful means of control. The trafficker threatens the victim to tell to her family that she is a prostitute. The trafficker often takes pictures while the victim is being raped so as to blackmail and force her to strictly obey the trafficker's orders.

Depending on the culture from which the victim comes, various psychological constraints are used as well. For instance, for the women in West Africa (Nigeria), Voodoo rituals are a source of dread and their use ensures submission. Another example is the terrible impact of the threat with being revealed as prostitutes for Muslim women – in some cases, these women risk to be treated more violently by their own families than by the trafficker.

#### 8. Threatening the victim with harming her family

The most efficient and problematic threat, and which can slow down the investigation of traffic crimes is harming the family of the victim from the country of origin. The trafficker finds out several details about the situation of the family, such as the name, nickname or address of a close relative or other loved one. He does not even have to know too many details about the family – in order to have control of the victim the threat is enough, and

the perception taking shape in her mind. The victim cannot risk the life and safety of those she loves, because she cannot know whether the trafficker is lying when telling that he knows details about her family or he will actually use violence against the loved ones if she tries to rebel or to escape.

#### 9. Captivity and psychological torture

In conclusion, all these control means make up a regime of captivity and psychological torture. It is important to look at the situation through the eyes of the victim: she is alone in a foreign country, isolated from her fellow-citizens, she cannot communicate in her mother tongue, she has been robbed of her identity and travel documents; she cannot get in touch with her family, she is disoriented due to permanent address or locality changes, she is repeatedly physically and sexually abused, she cannot seek police support because she fears the consequences, she must practice sexual contacts which are dangerous from all perspectives, she risks getting ill, working many hours a day with customers she cannot communicate with, she is subjected to threats and reprisals directed towards her and/or towards her family.

All these considered, it is obvious why so few victims try to escape from this captivity. Consequently, police forces play an important part in the prevention of human trafficking.

#### 10. The EU concern for the prevention of illegal human trafficking

Europe is faced nowadays with a considerable challenge concerning immigration and other types of migration flows. The UN report regarding population splitting, as well as the aggravation of development and wealth inequalities, leads to various factors which reveal a growth of the demographic differences until 2005, thus determining a migratory flow. However, even if Europe needs such a migratory flow, it is understood that it has to ensure its moderation and to promote a balanced policy with respect to asylum and immigration. The will to moderate the migratory flow is faced with the reality of a strong illegal immigration. It is therefore necessary to insist upon the importance of organised networks supporting clandestine immigration. The development of the activity of such networks and their more and more structured and well equipped organisation consistently favours the migratory flows. Globalisation is measured in the thousands of kilometres covered by the foreigners going to countries with which they have no cultural, legal or historical bonds.

At this organisational level, we do not fight only against illegal immigration, but against criminality, as the use of fake documents or documentary fraud greatly favours the activity of the networks and constitutes the most important means of smuggling clandestines into Romania for the purposes of transit to western countries. Therefore, the transposition of mafia methods in the management of illegal migratory flows causes real difficulties to the Border Police trying to contract this phenomenon. It is an activity favouring criminal acts (abductions, threats, even seizures, etc.) performed with considerable logistic and technical means.

The illegal immigration networks are international and, generally, highly structured. They defy the organisation of the common police services, especially as the risks they run do not match the revenues they obtain. Nowadays, this criminal activity is, beyond the question,

one of the most lucrative. It is led by a real mafia, also involved in smuggling individuals with no documents and other crimes such as procurement, drug traffic and money laundering.

#### **11. PUSH factors**

The most important reason for illegal immigration in Member States of the European Union is the poor economic state of certain non-member countries. It is mostly about citizens from Serbia and Montenegro, Iraq, Turkey, Russia, Afghanistan, China, India and from the African continent. These people have been forced to leave their country in order to lead a better life. In some cases, these citizens live on the edge of poverty. Additionally, there are several ethnic conflicts which have a strong impact on emigration. For instance, the Kurdish conflicts with the governments from Iraq and Turkey, the conflict from Kashmir between India and Pakistan. As long as the expectations of the above mentioned citizens are not fulfilled, we cannot expect a decrease in their wish to emigrate. Until now, there has been no immigration pressure due to the wars in Iraq and Afghanistan. However, the situation must be kept under observation, because the humanitarian and political situations could change in the future. At a close analysis of the present situation, there is no sign of a migratory movement towards Europe.

#### **12. PULL Factors**

The pull factors in EU are permanent. The most widespread are:

- **the excellent economic and social situation**;
- the either legal or illegal presence of family members or relatives in a member state.

According to a UN statistics in the last years, a large number of immigrants have found a new domicile in the European Union. The wish to complete one's family after a first settlement will be strengthened in the future. Countries such as France, Portugal, Holland and Great Britain are linked through their history of colonial empires with countries from the third world. Other pull factors are the chances to find a better paid job and to financially support the family left behind in the country of origin.

#### Conclusions

By opening the frontiers and granting the right of free movement of the Romanian citizens, there has been noticed a diversification of the modalities to dodge the law, both of the Romanian and of the foreign citizens. At present, organised prostitution has become a real source of income for procurers and it can be seen as an industry which produces incredible revenues.

The continual decrease of the standard of living and the economic and social instability, phenomena which cause powerful frustrations, have led to an alarming development of prostitution and procurement. Apparently legal, a great number of companies were set up in Romania, purportedly with a cultural, artistic, touristic, matrimonial or public alimentation orientation, and taking advantage of the legal void and speculating on the divergent opinions regarding law infliction of the penal prosecution authorities, recruit and cause to practice prostitution young women coming from baneful environments or who do not foresee any possibilities of professional fulfilment. Taking advantage of the naivety and dismay of such people, the leaders of these societies (notorious procurers) off-

handedly deliver these *goods* abroad, obtaining huge profits. In this context, human trafficking is often linked to other crimes as well, such as drug traffic and consumption, fake identity, false imprisonment, blackmail, rapes and even murders, thus aggravating the social danger of these acts.

The efforts made so far by the authorities fighting against organised crime, at the level of human trafficking, represent, unfortunately, only the elimination of certain links from the great chain of crooked business developed by criminals, situation due mostly to the extreme difficulty of proving such acts and to the refusal of the involved persons (prostitutes) to cooperate with the penal prosecution authorities, because of them being unaware of the legislation, but mostly out of fear of the procurers. The analysis of the solved cases led to certain conclusions regarding the way of recruiting victims, getting them out of the country and introducing them in those where they will practice prostitution, the limit situations they are faced with in order to practice prostitution.

In conclusion, in Romania, country involved in a complex and difficult process of democratization of the entire economic, social and political life, aiming to create and to strengthen the mechanisms of the state and of the market economy, and in which man's fundamental rights have acquired their true humanitarian values, the totality of the measures taken for ensuring the right of free movement, as well as the stoppage and control of internal and international human trafficking presents an important challenge.

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## IMPLEMENTATION OF PAYMENTS FOR USE OF WATER AND BIOLOGICAL RESOURCES IN THE REPUBLIC OF MOLDOVA

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#### 1. Introduction

In the process of implementing the payments for the use of natural resources must be taken into account the economy of natural resources, in particular "the beneficiaries paid", "supremacy and socialization of Nature", space differentiation of natural resources subjected to recovery. Such fees for the use of natural resources should include, first, the fee for the right use of natural resources and social costs required for restoration, conservation and improvement of quantitative and qualitative aspects of natural components, directly or indirectly included in the economic circuit. Also, it is absolutely necessary to carry out these duties, functions not only for the collection of funds, but also stimulating, to reorient the beneficiaries, for the purposes of saving and rational use of natural resources, natural raw materials substitution with synthetic ones, recycling waste etc.[1, p. 29-35].

In Republic of Moldova, the payment for the use of natural resources, except for the land and atmospheric air is governed by Title VIII of the Tax Code, which includes: a) the fee for water consumption; b) fee for putting the subsoil; c) fee for wood issued on foot. According to the original version (16.06.1993) of the Law on environmental protection, these charges were intended to complement environmental extra budgetary funds, being in contradiction with the law of the state budget. Later, after the approval of the Tax Code (1997) they were transferred to the state budget, but continued to be transferred to the territorial-administrative units. Fees for use of natural resources reflect cash compensation by the beneficiary of public expenditures for exploration, conservation and restoration of natural resources. These are calculated by the payer, depending on the actual quantity of natural resources used and the amount of payment. In the case of normative use of natural resources, payment shall be included in the prices of manufactured products and services provided, and if the use of redundant, is charged from net income of the beneficiary [2].

## 2. Methodological and geographical aspects of the application to the payment for the use of water resources:

The payments for water consumption are applied to primary users, who capture surface water or groundwater in order to conduct their activities in manufacturing production, of works and services. The fees for water are collected in the following sizes:

a) For every 1 m<sup>3</sup> of water used from any source of general use -0,50 lei;

b) For every 1 m<sup>3</sup> of water used from any source, intended for bottling in bottles and other containers used for healing and as mineral water, drinking and weight - 8 lei.

c) For 1 m<sup>3</sup> of water sources used in surface irrigation land -0,10 lei [2].

The payments for water is calculated by the payer by itself, depending on the volume of water used, according to data meters, or failing that, under the rules of consumption of water. They are subject predominantly by quantitative indices as well as reserves of surface water and groundwater, the amount of atmospheric precipitations and hydrographic network density, technological aggregates and field of water use. Therefore, the current methodology for calculating the payments for water consumption is very simple and can easily be applied by beneficiaries. Also, fees for the use of these resources achieve, with priority, tax functions, the accumulation of funds. In accordance with the Law of the State Budget, these amounts are for work to supply drinking water, maintenance, modernization and extension of sewerage systems and waste water treatment plant.

Despite its simplicity, the current methodology for calculating the payments for water contains and a number of shortcomings, among which we mention:

- the amount equal to 1 m<sup>3</sup> of water sources and surface of the ground. In the decade of 80 and the beginning of the decade of 90, different allowances were provided for those waters. Also, the fee for the use of groundwater should reflect the cost of reproduction of these resources and prospecting costs and operating geological performed for these purposes [3, p. 93-94], [4, p. 65];
- the assurance of territory with water is not directly reflected in the rates of fees in question;

the payments share are not subject to value and price of water, but reduced financial ensuring of the republic [5, p. 66];

- does not take into account the ecological status of surface water and groundwater;
- the amount of payments for water does not express the costs for capturing and transporting water; does not stimulate recirculation and saving water;
- is not based on ecologic-economic appreciation of aquatic resources and river basins, according to Cadastral State Water;
- shares the payments, depending on the consumption of water, are not established on the basin, but on the administrative-territorial units [1, p. 257].

Very low amount of payments for water use makes the overcoming of common rules consumption and increase the volume of discharge of waste water in most industries and the economy, particularly, in the agriculture and the food industry. This is known from Soviet times and developed during the transition period after 1990 [3, p. 94], [6], [7].

The amount of taxes collected annually for water consumption in Moldova is about 17 millions lei. After a growth registered during 2001-2003, in recent years is a reduction of that amount (Figure 1). In 2007, this decline included all the southern districts, majority of the northern districts (10) and half of the central districts [8].

Paradoxically, however, this year was also a maximum consumption of water from agricultural enterprises (because of the drought), municipal, mining and construction from the absolute majority of districts of the Republic [7], [8]. Thus, in 2007, fees collected for water consumption decreased by nearly 2 million lei, and water consumption, on the contrary, increased by 24,1 million m<sup>3</sup>. This "paradox" must be verified by the Tax Control, The Concern of "State Waters Moldova" and other authorities.

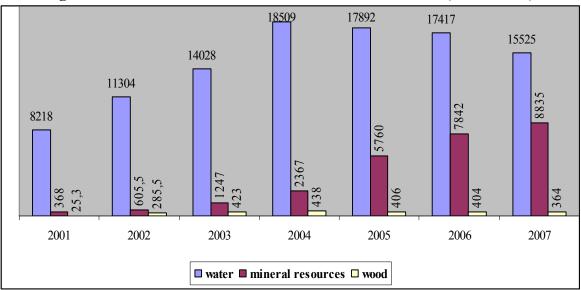


Figure no. 1. The sum of taxes for use of natural resources (thousand lei)

Table no. 1. Taxes collected for the use of water and forest resources, in thousan	ds lei
Table no. 1. Taxes concelled for the use of water and forest resources, in thousand	us ici

Nr.	The adminis-	Water resources					Forest resources				
crt	trative units	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
1	Briceni	89,5	208	123	90,5	44,3	0	0*	0*	17,7	22,9
2	Ocnița	3368	123	94,3	108,4	86,6	0	0*	0*	17,7	32,1
3	Dondușeni	36,3	16,6	14	45,4	18,8	0	0*	0,4*	2,3	11,5
4	Edineț	225	525	433	401	633	27,7	54,7	25,7	13,9	10,4
5	Drochia	151	144	320	214	81,7	0	0*	0,4*	0*	0,0*
6	Florești	249	479	634	648	1194	2,1	0,1	45	5,6	0,0*
7	Soroca	79,5	86,4	79,1	88,4	252	29,2	0	44,1	0	0,0*
8	Sângerei	67,2	65,9	198	247	275	0	0*	0*	0*	0,0*
9	Râșcani	3368	2607	4225	3851	1641	0	43	16,5	24,9	27,5
10	Glodeni	224	235	327	318	250	19,5	0	10	25,3	12,9
11	Fălești	102	76,2	78,9	153	63,5	0	12,3	9,5	15,8	6,0
12	Bălți	1188	1728	1151	1550	1104	5,4	5,3	0	0	0,0
13	Rezina	79,5	58,1	78,7	104	96,1	0	0	7	3	0,0*
14	Şoldăneşti	12,9	13,7	13,7	24	11,6	46,4	0,7	44,4	43,7	24,5
	North Region	9239	6365	7770	7843	5751	130	116	202	170	148
15	Telenești	22,3	28,7	26,4	34,3	20,4	4,7	6,6	7,4	6	6,2
16	Orhei	175	269	270	295	299	0	22	0	44	7,4
17	Criuleni	90,1	107	70,3	117	147	0	0,7	0,7	2,4	2,1
18	Dubăsari	62,1	296	248	219	247	0	0*	0*	0*	0,0*
19	Anenii Noi	96	186	189	236	236	0	23,6	56,1	27,1	15,9
20	Ialoveni	78,4	124	132	109	110	12,6	16,5	10	9,3	10,1
21	Strășeni	50,1	110	84,8	89,1	85,6	16,1	21	28,8	16,5	23,6
22	Chişinău	6348	9341	7526	6744	7288	25,5	4,8	2,6	2,2	2,9
23	Călărași	62,5	97,3	103	98	94,8	6,3	13,6	0	16,9	24,6
24	Nisporeni	27,1	37,5	44,8	33,7	47,2	30,6	35,5	7,8	17,3	9,4
25	Ungheni	240	228	322	314	300	29,2	17,1	4,8	7,1	6,2
26	Hâncești	78,4	95,4	97,6	96,3	71,0	30,6	25,1	35,8	33	42,6
	Central										
	Region	7330	10918	9113	8384	8945	156	187	154	182	151
27	Cimișlia	50,7	80,8	54,5	32,5	30,6	0	1,6	5,6	5,5	7,9
28	Basarabeasca	32,2	32,4	33,3	124	40,1	0	0*	0*	0*	0,0*
29	Leova	9,7	14,5	19,9	33	17,2	24,6	24	0*	0*	0,0*

Nr.	The adminis-	Water resources				Forest resources					
crt	trative units	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
30	Ştefan Vodă	172	225	144	194	59,2	0	4,3	7,8	5,4	10,5
31	Căușeni	55,6	87,3	94,1	69,7	66,2	33,5	0	6,8	11,6	14,4
32	Cantemir	33,7	114	77,9	75	24,3	0	0,8	0*	4,6	0,0*
33	Taraclia	87,4	77,3	50,3	57	62,2	0	0*	0*	0*	0,0*
34	Cahul	271	364	356	402	355	55,9	105	28,4	24,3	32,3
35	UTA										
	Găgăuzia	151	225	179	203	174	0	0	0	0,1	0,0
	South Region	863	1220	1009	1191	829	114	135	48,6	51,5	65,1
	Total	17433	18509	17892	17418	15525	423	438	405	403	364

\*Note - data are transferred to the district, which has its headquarters Forest Enterprise. **Source**: elaborated by the author in accordance with data offered by State Tax Inspectorate about of the tax for natural resources for the 2003-2007 years.

In 2007, out of a total of 15,5 million lei, almost half (7,3 million lei), were collected in the municipality. In the Northern Region were collected 5,8 million lei, including the city of Balti – 1,1 million lei, in the districts Râşcani – 1,6 million lei (2005 – 4,2 million lei), Florești -1,2 million lei, Edineț - 633 thousand lei. În the central districts the amount of taxes collected is 1,7 million lei, including Ungheni and Orhei – 300 thousand lei each, Dubăsari - 247 thousand lei and Anenii Noi - 236 thousand lei. In the Southern Region was collected only 829 thousand lei, including Cahul district - 355 thousand lei and UTA Gagauzia – 174 thousand lei (Table 1). Typically, in the mentioned districts are recorded and the maximum consumption of water [9]. Also, it must be noted that, for the services of the Water Supply and centralized disposal of sewerage by the Stock Company "Apă Canal" (Water-Channel) and its territorial subdivisions in lieu of taxes described above are set out certain tariffs. The amount of these payments is subject to fixed expenses for these works, works and the type of category of consumers. Thus, the population rate is 0.3 - 3 lei to 1m<sup>3</sup>. Charge for sewerage is usually slightly higher than that for wastewater discharge. Water for consumption by other consumers (individuals and legal entities, which do not carry out business activities) are paid a rate of 3 to 42 lei, and for wastewater discharge from 1 to 31 lei [10].

Enormous difference between the share prices set for the districts and towns of our shows, not so much difference in expenses for work and the degree of assurance of safe drinking water to various localities, as lack of a well-reasoned national methodology for determining the amount of these charges and negligence of the central authorities and local, in this respect. In most cases, the amounts transferred to consumers do not cover only a trivial part of the expenditure required. Accordingly, it calls at all times to local budgets and state, which have to solve other problems, not less important, in the areas of social, economic and environmental. This situation affects, ultimately, the effectiveness of management, not only to aquatic resources, but also the financial, human and material one. Also, the amount of these charges do not reflect the quantitative and qualitative indicators of aquatic resources in districts and towns of the Republic of Moldova, particularly the degree of water assurance, water quality, biochemical composition and mineralogy, the state networks of supply and sewerage or the volume of consumed water, which can generate scale economies and high-incomes, consumers income etc. It is therefore urgently needed renovation of the methodology and the whole system of management in this field. The payments and the charges for water use should include the costs of scientific investigations to determine the benefits and social costs of all variants of use to establish not only a fairer price, but also optimal use variant and norms for the use of potable water,

courses and river water. Therefore, it is urgently needed renovation of the methodology and the whole system of management in this field. At the same time, despite the existing gaps, the amount of fees and charges levied on water consumption is much higher than the fees for pollution and, especially, fines imposed and actions brought for violations of the law use of water resources [1, p. 261].

## 3. Methodological and geographical aspects of the application fees for the use of biological resources

In The Republic of Moldova, for the recovery of biological resources are applied two main types of taxes:

- 1. Payments for standing wood release;
- 2. Payments for grazing and hay collecting in forests.

Payments for the right collection and acquisition of species of plants and animals are paid in the form of tickets forestry, for the purpose of collecting, within the limits permitted medicinal plants, fruit, berries and mushrooms, or even for recreation, cognitive or scientific research; hunting and fishing licenses, given by payment by associations of hunters and the Department of Fisheries, fishing permitted, granted by management of fishery resources and River Water; tickets for visiting protected areas and forestry sectors valuable.

Tax allowances for mass harvesting wood is determined depending on the forest species, wood material category and wood issued on foot destination (Table 2). In the case of wood for work and the size of the tax varies depending on the size of harvested trees. Shares the biggest concerns the species value industrial, commercial and environmental maximum. Thus, the highest fee is applied to walnut (52 lei/m<sup>3</sup>), apricot, cherry, pear, apple and mulberry tree (43 lei/m<sup>3</sup>). Minimum fee is established for the soft species (conifers, poplar, willow, etc.).On state's forest land, trees are selected for harvesting by forest engineers and foresters, the masses allocated by the Head of Household Forest and Fold Forest. For the ecological value and scientific particular, it is necessary environmental authorities Notification and opinion of the Academy of Sciences.

For the mass harvesting of wood from forests in the possession of city halls, the green spaces or other owners, there is a need for specialists in the field of flora and fauna of the Agencies' and Environmental Inspections and forest workers, to coordinate with these works. For wood for fire from crown, the amount of tax is 40 percent, and for switch, branches, stubs and roots grubbed, intended for use as fuel (for fire) - 20 percent of the fee set for respectively firewood species. [2].

		l able no. 2		or 1 m3, in lei	
Nr crt			Firewood		
cri		Big	Middle	Small	FIrewood
1.	Pine tree	16	11	6	2
2.	Spruce	14	10	5	2
3.	Oak, ash, sycamore, beech	28	20	10	3
4.	Locust tree	25	19	9	3
5.	Apricot, cherry, mulberry tree, apple, pear	43	30	16	3
6.	Birch, elm, linden, hornbeam, glad	16	11	6	2
7.	Aspen, poplar, willow	10	7	4	2
8.	Walnut	52	37	26	2

Table no. 2

Nr		The fee for 1 m3, in lei							
crt			Firewood						
cri		Big	Middle	Small	ritewoou				
9.	Willow (osier)	-	-	2	-				
10.	Various types of hard trees	22	18	8	2				
11.	Various types of soft trees	9	6	3	2				
	Various types of trees resinous	12	9	4	2				

Source: Appendix 3, Title VIII of the Tax Code of the Republic of Moldova.

Tax issued on foot wood does not apply if it was harvested by forestry companies making cuts for environmental restoration, the conservation and the by-products, making the arrangement forest, a work of research and design for household needs forestry, the liquidation of the effects of natural disasters and other works related to forests health. Excluding charges for mass harvesting wood for forestry enterprises and very low transparency of these works, along with other shortcomings in the management of forestry resources have, as a result, very modest amount of payment of fees involved. Thus, in recent years from all forestry companies, for collecting wood mass were accumulated far only about 400 thousand lei. Since 2004 it recorded a reduction in the revenue question. In 2007 they gained only 364 thousand lei (Table 1), and maximum amounts were collected in the districts Hancesti (42,6 thousand lei), Cahul (32,3 thousand lei), Calarasi (24,6 thousand lei), Rascani (27,5 thousand lei). Some of households, which include, in fact, some districts acquired and transferred to 10 thousand lei each, and others have accumulated a lion.

At the same time, practically next to each locality is observed mass harvesting of wood and forest roads by tractors transporting wood is very dense and always fresh. Do not forget and specialization in cask manufacturing in several localities, furniture from the most valuable species, the doors and windows, and more specifically the manufacturing and even the massive export of parquet, made of oak, etc. of local origin.

#### 4. Conclusions

1. Payments for water consumption are applied for the primary users in purpose of conducting its own production activities and the provision of services;

2. The fees for water may vary depending on volume and destination of water used, according to data meters, or failing that, under the rules of consumption of water;

3. The current methodology for calculating the fees for water consumption is very simple and can easily be applied to beneficiaries;

4. Payments for the use of these resources achieved, in particular, just the accumulation of financial assets;

5. Normative amount of payment equal to the consumption of surface water and groundwater;

6. Methodology for calculating the fees for water is not based on ecologic-economic appreciation of aquatic resources and river basins, according to Cadastral State Water;

7. Very low amount of fees for water use makes the overcoming of common rules consumption and increase the volume of discharge of waste water in most industries and the economy, particularly in the agriculture and the food industry;

8. Annually, for water consumption in Republic of Moldova was collected about 17 millions lei;

9. Payments are applied to the mass harvesting of wood and payments for the right collection and acquisition of species of plants and animals;

10. Tax allowances for mass harvesting wood is determined on the basis of forest species, the category of material wood and wood destination issued on foot;

11. In recent years from all forestry companies, to collect wood mass were accumulated far only about 400 thousand lei.

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# ASPECTS CONCERNING THE ACCOUNTING-FINANCIAL DEVELOPMENT AUDIT IN ROMANIA

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#### Abstract

The information delivered by the companies stand for numerous political and economical decisions of great importance. Thus, the financial reports drawn up and published by the organizations concern a lot of internal and external users: investors, managers, employees, clients, bank creditors and not least, the state. Practice proved explicitly that there is a conflict of interests between those that gather, process and synthesize accounting information and the users of this information. The users often show a lack of trust regarding the information supplied by the accountantship because the producers of accounting information are not generally independents regarding the operations they make and the situations they supply. The important economical consequences that may result determined the creation and the development of audit and implicitly the profession of financial auditor. The clear and determinant purpose was the necessity of enlarging the credibility of financial reports published by the companies and of course, the compliance to the demands of the European Union. The work aims to follow the financial audit development from its first forms to present, taking into account the legal frame as well as the user's informational necessities.

#### **1. Introduction**

Etymologically, the word "audit" has its origin in the Latin word "audire" which means "to listen, to verify, to audit accounts". But we must say that audit development didn't take place only etymologically. A short historical foray highlights the transformations that took place concerning the objectives and the techniques used in auditing<sup>1</sup>.

One can notice that, in time, the primary objective of the audit developed from detecting the swindles and errors to financial reports certification and to the verification of their conformity to certain pre-established criteria. The change of the audit objective needed the evolution of audit techniques. Under the circumstances of the globalization of the economies and the internationalization of financial markets, the traditional methods of verification, which entailed an exhaustive control of trade proved to be too expensive and of long term. That is why they were replaced by sampling techniques and statistic sampling, computer assisted techniques, the auditor insisting especially on the efficiency and the capability of the internal control. Moreover, in order to meet the complexity of the information requested by the users, the auditor must provide not only an improvement of the financial report credibility but also services that bring capital gain i.e. reporting irregularities, identifying the business risk and offering advisory services concerning the

<sup>&</sup>lt;sup>1</sup> R.G. Brown – "Changing audit objectives and techniques" study published in "The accounting Review", quoted by L. Dobroteanu in "Auditing- Concepts and Practices", Ed. Economica, 2002

weak points of the internal control. In modern audit, the evaluation of financial status is often completed by reports resulting from the cash flow audit, which ensure additional reliable financial information.

The elements previously presented highlight the fact that the paradigm of external audit changed and the main role of the auditor was redefined. The changes aim at the following aspects:

- The purpose of the auditing activity
- The essential characteristics of the independence of audit mission
- The promotion of the statistics and mathematics techniques and more recently the informatic techniques (known as Computer Assisted Audit Techniques)
- The defining factor of the responsibilities of the auditors.

In the academic and the practical field there isn't a common point of view concerning the definition of the concept of audit. The most common definition is the one gave in 1973 by the American Accounting Association: AAA as part of the "Declaration concerning the fundamental notions of audit". In this declaration it is specified that " the audit is a systematic process of gathering and objective evaluation of some affirmations concerning the actions and the events with economical character with a view to appreciation of the degree of conformity of these affirmations with the pre-established criteria, as well as a process of communication of the results to the interested users".

#### 2. The financial auditing in Romania : history and present

In Romania, the financial auditing set up in a rudimentary form at the same time with the formation of the state, becoming along centuries one of the most important means of supporting and development of the state functions. In a historical meaning, the financial audit and the financial control have the same source.

From a historical point of view we can say that the incipient stage of the financial audit in our country finds its source in the control of the correctness of the way the economical activities were fulfilled.

After the study of the bibliographical resources, we think that the financial audit development in Romania can be divided in several stages of development, described as it follows:

A first stage also known as the dace-roman stage could be the one during the setting up and the development of the dace state, under the reign of Burebista ( about 82 - 44 B.C.) as well as under the domination of the Roman Empire. We collect the first information about the field of tax institution from the Latin historian Josephus Flavius who speaks in his works about the existence on "some kind of tax and crop collectors"<sup>2</sup>.

The medieval stage begins with the 9th - 14th centuries, when the first political divisions appear (the principality). The political leader of these political divisions (the princes, the voivods), in accordance to the local custom - jus vallachicum -, besides their military and legal tasks, had also administrative functions, implicitly functions of administration and management of the income and of the profit obtained by these divisions without being

<sup>&</sup>lt;sup>2</sup> Marcu, P.L. – "The History of Romanian Law", Ed. Lumina Lex Bucuresti, 1997, page 28

responsible of the way they were used. The prince, with his attribute "dominium eminens" had also the right to collect taxes from all the country citizens, thus **disposing of the country income** as he thought right, at the same time using a taxation which was often extremely overwhelming. In spite of all these, there were some financial books for the incomings and the expenses of the prince and of his employees, which were shown at the landowners council and were kept in a "codice" <sup>3</sup>manuscript containing old text about the incomings and the expenses of the country during the reign of Constantin Brancoveanu (1694 – 1704).

**The interval 1831 – 1858** is marked by the setting up of the financial control, in a time when the confusion between the incomings and the expenses or the "country" and the prince 'budget' still persisted due to the fact that there wasn't an advanced government supervision. Consequently, the Organic Rules were issued in the Romanian Principalities – in Moldavia and Walachia - containing some incipient forms of public finance organization i.e. the setting up of unique capitation, the suppression of direct and indirect taxes, including the boyars privileges and the separation of goods in a single lordly account were they kept distinctly the country incomes and the prince incomes.<sup>4</sup> By introducing the new financial system the right to approve tax collection and expenses was given to the National Assembly from the two principalities, using for the first time the notion of "budget" under the name of "the opinion on the expenses of the next year".

In evolution, the process the public finances modernization witnesses an important democratization after the Convention of Paris was adopted, before the Rules of the public accounting. According to these rules, the taxation was set on a series of budgetary principles of west European issue i.e. the universality of the budgetary incomes, the specialization of credits, the budgetary balance, etc. The control was regarded from two points of view: administrative and legislative. At the administrative extent, the control was made by booking the operations concerning fund administration and public goods in the accounting of the ministries. At the administrative extent, the control forced the ministers to produce, at each meeting, the calculations of the operations conducted during the previous year, which had to be accompanied by supporting documents. Later on, the service of General Financial Inspection, under the headed by the Ministry of Finances, with the object of controlling the accountings and reporting disorders of all institutions it leaded. The approval of the law concerning general accounting of the state, brings forth the state control which establishes the system of "permanent and unforeseen control on the accounting services and on the pay offices of the departments"<sup>5</sup>, task that was given to the Ministry of Economics and Finances in 1864.

The public finances modernization as well as the modernization of the financial control witnessed new evolutions after the administrative Union of the two principalities, especially after the prince Alexandru Ioan Cuza promulgated on 24<sup>th</sup> of January 1864 the Law of setting up the High Court of Accounting which exercised jurisdictional control on the budget execution and which " is the pledge of wish of controlling the use of public money".

<sup>&</sup>lt;sup>3</sup> Codice – Manuscript containing old text ( Contemporary Romanian Dictionary, Ed. Stiintifica si Enciclopedica, Bucharest, 1980

<sup>&</sup>lt;sup>4</sup> Bostan I. – "Financial Control", Ed. Polirom, Iasi, 2000, page 18

<sup>&</sup>lt;sup>5</sup> Popeanga P.- "The Organization and the functioning of the financial accounting control", Ed. Fundatiei "Romania de maine", Bucharest, 2000. page 10

The control exercised by the High Audit Court relied on the principle on the power separation in the state, therefore we witness: the executive power control, the High Audit Court jurisdictional control and the control of the law authority. Meanwhile, in Wallachia as well as in Moldavia, at the Minister's of Justice, Iordache Filipescu, request, another distinctive authorities with control competences were set up as well as a double form of public control exercised by a control staff made up of 13 clerks with the object of " researching thoroughly the incomes and the expenses in their totality" and the parliamentary control, much more complex, which stipulated: " The prince had the obligation, at each meeting of the Popular Assembly, to account for the incomes and the expenses of the treasury and of the other country pay offices".<sup>6</sup>

In 1864 vocational schools of accounting were created in Galatzi and in Bucharest and later on Commercial Schools in Iasi, Craiova, Constanta, Ploiesti, Braila. In 1913, The Academy of High Commercial and Industrial Studies was created in Bucharest, then in 1920 in Cluj. These years put a mark on the process of development and modernization of the economic instruction as well as the education of specialists in the economic field.

Between the two World Wars we can speak about the inter-war stage of financial control creation and development. In 1918 the Financial Control Commission was established and thus the financial control became more and more efficient including the documents drawn up after the findings, these documents functioning as rules. The Financial Control Commission was a "financial control association organized in a military way, which was a part of the Ministry of Finances central administration" the financial control was legislated therefore special approvals were not compulsory. The action field of the Financial Control Commission was very large, including accounting balance control, management discharge and the state income.

The reorganization of the Audit Court, in the '30s, led to a greater control efficiency meaning that its tasks covered three fields: the preventive control field, the management control field and the jurisdictional field.<sup>7</sup>

The preventive control, due to the modifications in the organization and the functioning Rules of the Audit Court, was organized in order to be exercised twice on an expenditure document first on the commitment and secondly on the payment order. Accordingly to the local finances law adopted in 1933 the preventive control was extended also over the local administration and public places finances.<sup>8</sup>

The public accounting law from 1929 brings forth the double entry as a way of bookkeeping also used nowadays; from that point on the book entries and the books closings, concerning the budget execution and the use of public money, make possible the control and the information on the state financial status. Due to this law, a difference is made between the accountants and the managers with respect to the responsibility in case of fraud.

**The modern stage** (1945 - 1989) is marked by the political evolution in our country that influenced the public finances from the point of view of the financial control. It means that

<sup>&</sup>lt;sup>6</sup> Idem, page 11

<sup>&</sup>lt;sup>7</sup> Boulescu, M. – "The Accounting Court – Tradition and Modernity", Ed. Expert Consult SRL, Bucharest, 1993, page 31

<sup>&</sup>lt;sup>8</sup> Marcu, P.L. – "The History of the Romanian Law", Ed. Lumina Lex Bucuresti, 1997, page 33

profoundly democratic institutions were abolished and replaced with institutions ruled by dictatorial politics with nationalistic concepts. Therefore, in 1948 the High Audit Court was abolished and its responsibilities of preventive control were taken by the chiefs of the accounting offices and services as part of companies and institutions. In 1959 the Rules of preventive control organization and execution were established with respect to institutions, companies and national economical organizations. It meant that such a control was exercised by the accounting leader and his mandatory nominated by the department "leader".<sup>9</sup>

Similar measures were adopted concerning the Financial Control Commission which was dissolved<sup>10</sup> and its responsibilities were taken by the Control and Audit Office from the Ministry of Finances and also by the economic Militia.

The Office from the Ministry of Finances had the responsibility to check the correctness of balance reports.

In 1948 the financial internal control Office was established in the ministries, another central and local organizations and institutions etc. The responsibilities of the preventive financial control are taken by the accounting control. The Council of the Ministers, during the meeting concerning the measures for improving the organization and the clerks in the internal financial control, legislated its responsibilities i.e.: the consolidation of the activity for keeping and developing the socialist property, keeping the budgetary and financial rules of conduct, the application of a severe policy of economy and the use of financial and material resources, the fight for respecting the legal advices given by the central offices of the state concerning the economic and financial problems.

The Rules concerning the preventive control organization and execution in institutions, companies and national economic organizations were approved in 1959 and offered the cheif of financial accounting office the preventive control of the company.

After 1990 we witness **a contemporary stage** in the organization of the financial audit. Romania passes to an economy based upon the concept of competition and implicitly comes back again to its ex-financial institutions from the inter-war period, adapted to the actual conditions of the transition period. This state of facts was sanctioned by the Constitution and by the formulation of some normative acts of great necessity. Even if the financial audit already existed in the Anglo-Saxon and francophone countries for about four decades, suffering permanent improvements, the financial audit appeared in Romania after 1990 as a necessity of specialization of the accounting field.

In 1993, financial audit cabinets are opened in our country. Therefore, in 2005, 477 financial audit cabinets were registered at the Chamber of Financial Auditors from Romania.

The cabinets of financial auditing, part of the "Big Four" group opened affiliated companies in Romania as it follows: Pricewaterhouse & Coopers in 1993, Deloitte & Touche & Tomatsu in 1995, KPMG in 1995 and Ernst & Young in 1999.

<sup>&</sup>lt;sup>9</sup> The Decision of the Ministers Council no.1598/01.12.1948 andO.C.H. no.74/1959, published in the Collection of decisions and orders of the Ministers Council no.8/01.02.1959

<sup>&</sup>lt;sup>10</sup> Decree no.352/1948

# 3. The profession of financial auditor in Romania

The conflict of interest between the users and the producers of accounting information must be solved by the activity of a **professional elite** in the field. This elite is represented by: the auditors that have the legal quality of qualified accountants, authorized accounts with high degree license, auditing societies, censors, etc. functioning as members in the Chamber of Auditors.

The organization and management of the financial auditing is realized by the Chamber of Auditors from Romania as a professional organization of public utility.

The Chamber of Auditors from Romania is created by law as a corporate body and functions as a professional organization of public utility without a lucrative purpose.

Its headquarters is in Bucharest. It can create territorial units without legal status, named affiliated companies.

This profession was created with the purpose of organizing and coordinating the financial auditing. The main purpose of this professional organization in to give and to take the quality of financial auditor to persons that match the conditions imposed by the law.

The Chamber of Auditors from Romania functions as a professional organization of public utility without a lucrative purpose and carries on activities for third parties and for the state according to the standards, norms and legal rules.

The directing, administration and control bodies of the Chamber of Auditors are: the Chamber's Conference, the Chamber's Council, the Permanent Executive of the Chamber's Council, the Commission of Statutary Auditors.

The executive management of the Chamber is provided by the Chamber's Council formed by president, vice-president and members. It has executive body structured on functional departments leaded by the Council's vice-presidents.

Some of the main responsibilities and obligations of the Chambers of Auditors from Romania:

• It organizes the exams in order to give the quality of financial auditors and assigns them this quality.

- It coordinates the auditing
- It supervises the schedule of continuous training for financial auditors
- Every year, it appoints financial auditors that would offer guidance during the stage of practical preparation of the candidates to the quality of financial auditors.
- It controls the quality of the auditing carried out by the financial auditors.

The department of supervision and professional competence assure the implementing of the quality control system of the activity and the study of aspects concerning the professional conduct of the members.

This is carried out through visits paid to the auditors that had audit commitment. These visits are previously established and the auditors are informed about them.

• It may take away the quality of financial auditors from the persons previously appointed to guide the auditors in probations if it has been found that they refuse the preparations of the auditors in probations or if it had been found that this guidance is carried on inadequately.

• It informs the Ministry of Public Finances about the necessity of updating the professional procedures of auditing, according to the modifications made in the rules of the European and international institutions.

• It permanently updates the norms regarding the financial auditing where rules are set and taken into consideration by the financial auditors as well as by the employees and the assistants of the auditors.

• It also permanently updates and disseminates the professional standards used in auditing and the way they are put in practice.

• It works out internal rules concerning its own activity;

• It organizes the situation of the members of the Chamber by means of the financial auditors Register which is operated for active and non-active financial auditors and ensures the publishing of their list in the Official Gazette;

• It publishes, every year, in the Official Gazette the changes made in the auditors' situation;

• It creates, under the Ministry of Public Finances control, specific rules and procedures in order to achieve the duties assumed by the Romanian government regarding the support for the harmonization with the European Union instructions concerning the quality of the exams for financial auditor and for the practice strategy.

Financially, the activity of the Chamber of Auditors in Romania is self-financed, their incomes coming from:

• Members' contribution – a fixed amount, differentiated for active and non-active financial auditors but also variable amounts;

• The taxes collected at the exam subscription, the taxes collected from the persons who aim to the quality of financial auditor and also the fees for the services offered by the Chamber;

• Another incomes.

The purpose of the financial auditor activity is to re-establish a reasonable trust between the producers and the users of the accounting information. Therefore, auditors contribute to the protection of interest for different categories of accounting information beneficiaries when they must take economic decisions.

The International Standard of Accounting no.1 shows that "financial information has the purpose of delivering an useful piece of information before taking economic and financial decisions".

Therefore, the auditor stands between the producers and the beneficiaries of the accounting information, in his quality of qualified accountant. The qualified accountant is a professional of high degree with a high theoretical training, with moral qualities and professional ethics, long term practical experience, known in the field as a person with high competence and authority.

Auditing had been defined in national and international specialized books as the justified opinion about the carrying out the perfect image on the annual accounts. The audit means

the professional examination carried out by an authorized, independent person in order to express a justified opinion about the perfect image on annual accounts.

The fundamental objects and principles of the profession of financial auditor are shown in the following pictures (picture3).

The annual accounts must deliver useful information in order to adopt economic decisions, to decide the moment of buying or selling a capital investment, to evaluate the deficiencies in the management, to evaluate the company's capacity of paying and offering another benefits for its employees, to weigh the bonds of the company's loans, to determine the taxation's policies, to calculate the profit and the distribution of dividends, to elaborate statistical data concerning the national income.

Generally, the financial situations are drawn up according to a accounting pattern based on the **recoverable original cost** and on the concept of **maintaining the level of financial capital**. Following this idea, "The General Framework of drawing and presentation of the financial statements" had been created by **The International Accounting Standards Board.** This framework can be used for any accounting pattern as well as concepts regarding the capital and its maintaining, the option for accounting treatments allowed by IAS.

"The general framework of accounting rules harmonization" supports the auditors to create an opinion on the financial statements. If there is a conflict between the General Framework and an International Accounting Standard, IAS demands have the precedence over those from the "General Framework".

The auditors must take into consideration, according to the "General Framework", the accomplishment of the object of the accounting statements, the qualitative characteristics that determine the efficiency of the accounting information in the financial statements, the way of evaluation of elements which are the basis of the financial statements as the users'main source of information.

# 4. Conclusions

Finally we can say that auditing came into being because of objective necessities, as well as accounting and financial control. The purpose of auditing has an indisputable importance for the good conduct of every economic entity.

If the initial purpose of auditing was that of detecting the frauds, it developed through time so that, nowadays, it certifies the correctness of information presented in the financial statements and their conformity with the International Accounting Standards.

In our opinion, financial auditing practices has been introduced in our country in period of transition to a market economy at the desire of Romanian specialists to correlate and adapt Romanian rules to international accounting standards.

Financial auditing grows firm with the development of the reformation process and the effective building of an economy similar to those of the European Union.

Consequently, the expectation of Romania's adhesion to the European Union called for the implementation of financial auditing techniques harmonized with the international ones and the complexity and the perpetual development of economical activities determines continuous improvement of accounting and auditing standards as well as the knowledge of the professionals in the field.

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# SPECIFIC FEATURES OF ECONOMIC ACTIVITY OF MEAT-PROCESSING ENTERPRISES AND INCIDENCE ON MANAGEMENT ACCOUNTING

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The food industry is part of the group composed of the processing branches of the national economy and has the social and economic objective to produce food stuffs for meeting people's demands and to meet the physiological need for food stuffs required by a scientific nutrition. The meat industry is a component part of the above-mentioned industry, which supplies people with a basic food product – the Meat -, covering one of the major portions of the food market. The Moldovan meat market is characterized by several indicators. The meat-processing industry comprises 10 enterprises of high and average meat-processing capacity and over 74 enterprises of average and low meat-processing capacity. On branch scale, the total manufacturing capacity totals about 190 thousand tons of carcass meat. Butchering capacities are only operated at a production rate of 7,5%, while the capacities of manufacturing cooked meats are applied at a production rate of about 35-50% [1]. Two enterprises – out of the 85 enterprises operating in this sector – are the key players, in terms of volume, on the meat market. Those two enterprises are SA "Carmez" (41,9%) and SA "Basarabia Nord" (24,96%). The other participants hold smaller shares on the meat market. Meat and meat products industry is characterized with some basic features that influence the activity of those enterprises as well as the accounting organization at such enterprises. The following are the said basic features:

## 1. Type of raw materials used and of applied technologies.

**Meat** is a product of animal origin, which involves a high level of perishability determining the entire manufacturing process. Such features ensure the establishment of special storage facilities outfitted with specific storage conditions, refrigeration systems and special technologies for meat processing and production of foodstuffs with a longer term of storage etc.

## 2. Specific nature of final product and relationship with consumer.

The final product in the industry under consideration is a foodstuff. Foodstuffs are perishable goods, which fact imposes special manufacturing, conservation and storage conditions throughout the entire life cycle of meat products since, in the long run, such products influence people's health. Upon close analysis of statistic data dating back to 2007, we can state that sausages and frankfurters are on a leading position in the total volume of cooked products (63,71%, i.e. 9333,4 tons per year). Smoked cooked meats cover a considerable share of 26,75%, i.e. 3918,5 tons. The other meat products were manufactured in small quantities due to consumers' low demand and preferences.

## 3. Specific features of suppliers of raw material and condition of supply base

At present, the issue concerning the raw material supply to meat-processing enterprises is one of the main problems in the meat industry. In the Republic of Moldova the manufacturers supplying raw materials (living animals) are dispersed and organized in the form of small and medium businesses based on private or family property. Local meat suppliers are not in a position to provide manufacturers with high quality meat in sufficient amounts. The utilization of imported raw materials increases the dependence of enterprise on foreign market and exchange rates fluctuations and may reduce the competitiveness of manufactured goods. In view of such situation, the manufacturing enterprises are doing their best to create their own base of raw materials. Therefore, the major plants manufacturing meat products have made investments in plants-butcheries.

## 4. Status of meat products manufacturer.

When considering the meat and cooked meats industry in the Republic of Moldova from geographical viewpoint, we can state that meat and cooked meats manufacturing is concentrated in the centre of country, mainly in Chisinau (56,19% of meat market and 67,82% of cooked meats market). Meat and cooked meats manufacturing is shared with enterprises from northern part of the country (43,08% and 22,71%), while enterprises from central and southern part of the country have a minor participation on the market.

# 5. Consumption level and consumer's status.

Presently, the ponderosity of rural population has determined a high level of selfconsumption and the expansion of traditional slaughtering systems, which often involves poor hygienic conditions. In the Republic of Moldova, meat consumption per capita is 39 kg against 68 kg in 1989-1990, which is much lower as compared to European Union where consumption records amount to 78 kg per capita.

## 6. Technical equipment and process automation in meat industry.

The manufacturing processes specific to meat and meat products industry are based on complex highly automated equipment. In the Republic of Moldova, the technical outfitting and re-equipment of enterprises in this branch is polarized, ranging from major highly equipped manufacturers to small businesses with a half-automated production process based on manual work. Meat industry operates with biological products, by transforming them into foodstuffs, which fact renders singular and sometimes difficult the automation process.

## 7. Seasonal nature of meat supply process and strong link with agriculture.

The specific features of meat industry result from the link with the agriculture. Sandwiched between the agriculture and the industry, the meat industry is relatively dependent on processes occurring in agriculture. This fact gives rise to certain fluctuations in relation to meat supply process during the calendar year. The influence caused by the agriculture takes the shape of the dependence on phytoproducts obtained. Thus, the periods of poor harvest are characterized with decreasing forage supply, people abandoning cattle-breeding, raw material missing on the market and increasing meat importation.

The development and enhancement of meat-processing enterprises' operations are determined by a great number of factors, such as:

## • Business size;

The organization of overall management accounting is determined based on the business size. Such accounting can be organized in a separate compartment, in a centralized manner or in separate structures. The business size dictates the amount and governs the circulation of accounting documents.

# • Organizational structure of enterprise;

The enterprise structure is determined by the type of operations, enterprise's profile and manufacturing process. This factor, in its turn, influences the manner of organizing the

management accounting, the accountable objects and the cost centers. The cost centers can be located in the departments dealing with livestock collection, meat processing, cooked meat manufacturing, and in the administrative department.

# • Main type of activity and business integration degree;

It should be noted that not all of the local enterprises hold an integrated cycle starting from cattle-breeding to manufacturing of final product. Therefore, the subsequent development of local manufacturers shall be focused on the implementation of own carving divisions and acquisition of live cattle. In support of the above-mentioned, please refer to the appendix listing the enterprises as classified based on their capacity and profile. By capacity and profile, those enterprises are grouped into integrated works and specialized enterprises. The type of activity and the profile of enterprise entail the existence of production stages, economic operations and additional divisions within the enterprise. In cases where the activity is diversified - as it is at the integrated works, which include both livestock collection and meat-processing -, new calculation methods can be applied, such as ABC method, i.e. the method of calculation per activity.

# • Technology and automation of production process;

This factor defines the successive stages to which meat is subject prior to cooked meats manufacturing. The production cost is calculated on a stage-by-stage basis. The following costs are calculated: production costs related to livestock or meat collection operations, meat-processing costs, meats products manufacturing costs.

The methodology and the organization of management accounting are influenced by the technological and organizational features of production since the specific nature of the branch show up more pronouncedly namely at this stage. In this regard, the more exactly are accounted the organizational and technological schemes, the more the accounting records meet the requirements for productivity enhancement and identification of internal production reserves.

The main specific features of the manufacturing process that influence the organization of the production process and the management accounting are the following:

# Specific nature of processed raw material;

The raw material supply has an impact on the business size, production volume, production concentration and specialization. The range of products and the fulfillment of production and sales budgets are dependent on the type of the raw material. The raw material, the basic materials and semi-prepare foods are the foundation and the main component part of the manufactured goods. In meat industry consumptions related to materials total 80% of their production cost. Those materials include livestock, meat, by-products, fat, flour, starch, natural and artificial membranes.

# • Specific nature and variety (range) of final product;

The grouping and the classification of manufactured products have an impact on the organization of the management accounting. In this regard, certain types of products, which are similar by technology or other criteria, can be clustered in groups that can be analyzed separately during the decision-making process. The classification of the finished products may influence the choice of the optimal base for the distribution of conventionally variable consumptions. Thus, the consumptions related to the operations in the vacuum processing room and to the maintenance of vacuum equipment are taken into account at the calculation of the cost of vacuum packed products.

Another specific feature of the manufacturing process is:

# • Duration of production process and low stock of products in progress.

The duration of the production cycle is an important attribute of the manufacturing process since it has an action on the processing and reception of online information for accounting. Depending on the groups of manufactured products, the production process can last from 1,5 to 25 days.

The duration of the production process affects the creation of low stocks of products in progress, such as boiled, dry and semi-boiled meats. The longer lasts the manufacturing process, the larger is the stock of unfinished products [2].

Other specific features of the production process are as follows:

# Seasonality of raw material production and processing;

The seasonal nature of the primary raw material production and processing, and link existing between the meat processing integrated works and the agricultural production has a substantial impact on the acquisition, storage and transportation of raw material, the technology and the production cycle at meat-processing enterprises. For instance, livestock supply in July equals 50% of their processing in September. For this reason, meat-processing integrated works resort to overwork and additional resources. In the long run, such solution entails irregularities in using the production capacities and, consequently, disruption of meat carcass processing technology and impairment of their quality.

One of the analyzed issues is the establishment of accountable objects in the operations of enterprises of the branch under consideration. The accountable object is related to the production technology applied.

At this point, we have conducted a research of the process flowsheets related to the following:

- Horned cattle and hog butchering;
- Manufacturing of sausages and canned meat.

In our opinion, the division of accountable object can be re-grouped in relation to the phases of the production process since some of the phases are interrelated and can be clustered. The processing phases can be re-grouped as follows: *1. Collection - Supply; 2. Processing; 3. Production.* 

# 1. "Collection – Supply" Phase

That is the phase of livestock collection and breeding up to slaughter condition, i.e. livestock feeding and fattening, zootechnik operations, as well as works related to production of raw material for meat products manufacturing. This phase includes the following autonomous stages that can be treated as accountable objects:

- Livestock collection through acquisition from individuals and legal entities;
- 4 Qualitative and quantitative acceptance of livestock.
- Livestock breeding and fattening;
- **4** Transportation to butchery or to slaughter location.

# 2. "Processing" Phase

The basic objective of this phase is obtaining of meat and secondary products upon slaughtering. At this phase, the following autonomous technological stages can be identified, which can be treated as accountable objects from management viewpoint:

- Preparation of livestock for slaughter;
- Livestock slaughter;
- Hitting;
- Bleeding;
- Initial processing. (skinning, treating with boiling water, depilation, plucking (deplumation), removal of limbs);
- Carcass processing;
- Dissection;
- Cleansing;
- Carcass marking. Carcass airing;
- Weighing;
- Refrigerated processing.

# 3. "Production" Phase

The accountable objects can be pointed out at each phase and stage of meat products manufacturing and processing process:

- Technological groups of livestock per age and sex (at "Collection Supply" Phase);
- Types of meat, meat products (at "Processing" Phase);
- Types of final products (at "Production" Phase).

Record-keeping of livestock by groups per age and sex allows collecting to an analytic account of consumptions related to the maintenance of an animal of specific age. However, such group may contain livestock with different production destination. As a result, it is possible to calculate identical costs for main herd livestock or animals drawn out of main herd, even though the maintenance of such groups of livestock is different and involves different consumptions. Therefore, it would be more appropriate to keep analytical records per technological groups formed based on a single technology and per production destinations. Within the technological group, it is possible to keep records by age and sex.

In cases where the integrated works sells meat, besides its main finished products (cooked meats, smoked products), such meat is considered as semi-finished product. Therefore, it would be more appropriate to apply the method for semi-finished products, used in case of sale of products that have not been subject to processing at all the technological stages.

It should be noted that meat-processing enterprises may omit keeping separate records of semi-finished products of in-house manufacture. In such case, the said products are accounted with the production in progress.

The calculation of cost of products obtained from meat processing includes two main phases:

- Preparation of meat stripped of elastic web for cooked meats, preparation of raw material for smoked meats, semi-finished meat products, canned meat;
- Manufacture of finished products: sausages, smoked meats, canned meat, etc.

At the fist phase, the meat is dissected, i.e. the meat raw material is being unboned and stripped of elastic web (tendons, cartilages). When unboned, the meat is separated from bones; and when stripped of elastic web, the meat is cleared of tendons, web (membranes), fat; in the long run, semi-finished products are obtained for further manufacture of cooked meats. The cost of dissected raw material is calculated in two stages. First, the cost of initial raw material is distributed to the one related to main products (meat stripped of

elastic web, raw materials for smoked meats, etc.) and to secondary products and wastes (bones, fat, veins and tendons, remnants after cleansing). At the second stage, the cost of main products is distributed by calculation objects (categories and types of dissected meat) following the coefficients method.

The second stage consists of the manufacture of finished meat products out of the meat stripped of elastic web, according to the appropriate technology and receipts. For instance, in case of manufacture of sausages, the meat stripped of elastic web is being grinded, mixed with water until dough consistency; minced meat or grinded meat is prepared for stuffing the sausage membrane, which will undergo heat treatment (boiling, frying, smoking, drying and cooling). The finished product is packed and marked.

The consideration of the present issue allows us to emphasize once again that the organization of the management accounting at meat-processing enterprises mostly depends on the specific organizational and technological aspects of certain productions.

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# THE EVOLUTION OF REGULATIONS REGARDING THE MISDEMEANOUR LIABILITY

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#### Abstract

Not all national common law legal systems draw a clear distinction between misdemeanours and felonies, the former being still included, in certain Western states, in the Penal Codes texts, even if only in the las chapter, being looked upon as a type of law infringement with a lower degree of social risk. Originally, the misdemeanour illicit is, on the other hand, of a criminal nature, being established as such since the beginning of the 19th century; to be more precise, starting from the French Penal Code text of 1810. The misdemeanour used to belong, traditionally speaking, to the three sided sphere of the criminal illicit, along with murders and other kinds of offences.

#### 1. Theories regarding the delimitation of misdemeanour from felony

Not all national common law legal systems draw a clear distinction between misdemeanours and felonies, the former being still included, in certain Western states, in the Penal Codes texts, even if only in the last chapter, being looked upon as a type of law infringement with a lower degree of social risk<sup>11</sup>.

Originally, the misdemeanour illicit is, on the other hand, of a criminal nature, being established as such since the beginning of the 19th century; to be more precise, starting from the French Penal Code text of 1810. The misdemeanour used to belong, traditionally speaking, to the three sided sphere of the criminal illicit, along with murders and other kinds of offences.<sup>12</sup> Thus, even the first chapter of the French Penal Code of 1810 used to draw a clear distinction among *crimes*, *offences* and *misdemeanours*, according to the applicable types of punishment, as a consequence of their perpetration. *Misdemeanours* used to be defined as those illicit acts that the law used to punish by *police sanctions*, the *offences* or *trespasses* were the illicit acts that the law used to punish by applying certain *correctional sanctions*, whereas *crimes* used to be considered as the most serious illicit acts and the law used to punish the perpetrators by applying some *severe sanctions*, for instance by *imprisonment*.<sup>13</sup> Moreover, the above-mentioned three sided distinction was introduced since 1791 in the French Penal Code and that of October, the fourth year, being also mentioned in the Code of 1810, this approach being present in most of the criminal laws from Europe and worldwide.<sup>14</sup>

The issue of dividing the penal illicit (in two or three parts), maintaining misdemeanours in the same category of this kind of illicit or detaching them from this part, represented along the ages a comprehensive subject of study and controversies which lead to the foundation of several theories tackled by the chairman of the Law Council of Romania during the inter-war period (the Public Law section), Ion Ionesco-Dolj, in his article "*Sentencing* 

<sup>&</sup>lt;sup>11</sup> This is the case of France or Spain.

<sup>&</sup>lt;sup>12</sup> Verginia Vedinaş, Administrative Law, Universul Juridic Printing House, 2007, page 231.

<sup>&</sup>lt;sup>13</sup> http://www.napoleon-series.org/research/government/france/penalcode/c\_penalcode.html

<sup>&</sup>lt;sup>14</sup> Vintila Dongoroz, Criminal Law, Bucharest, 1939, page 306.

*misdemeanours. Judiciary or administrative instances?*". In the above mentioned article, the author points out the fact that in that stage of the positive law, the distinction among felonies, was founded at the age, on the objective differentiation of their gravity and especially on distinct punishments applied to them.

The first theory brought forward belongs to the positivist school. This used to admit the existence of the dichotomic division of *law infringements* and by the authorized opinion of the late **Enrico Ferri**, a distinction was made between *felonies* and *misdemeanours*, which used to be characterized as *"acts of the same nature, based on the violation of the criminal law*". From the juridical point of view, they are of an identical nature, but what is differentiating them is the *obviously cut distinction among the applicable sanctions*, generated by the public conscience.<sup>15</sup>

Another category of theories would be the one admitting the *distinct nature of the misdemeanour* and which is based on an idea supported especially by the criminal lawyers of the time who used to consider that the nature of misdemeanour is essentially distinct from that of felonies or crimes. Misdemeanour was considered in that context to be a simple material act, with no subjective element of guilt, whereas felonies used to be regarded as acts perpetrated on purpose. This theory was contradicting the text of the Penal Code in itself, which considered that misdemeanour too was a type of infringement, but with an obviously reduced degree of danger than that of crimes and which called for lass severe sanctions to be applied.<sup>16</sup>

One of the most interesting opinions in the context of these theories, was that according to which, misdemeanours used to be considered as being of a clearly distinct nature from that of the crimes, since they bring offence only to some "simple administrative interests".<sup>17</sup>

Apart from the contradicting opinions of the specialists in the field at the time, the Romanian legislation embraced also eventually the three sided system beginning with the implementation of the Penal Code of 1865, which was doubtlessly a replica of the French Penal Code of 1810 and of the Belgian Penal Code of 1851 as well.<sup>18</sup>

# 2 The Romanian Legislation Regarding Misdemeanours in the 18<sup>th</sup> and 19<sup>th</sup> centuries

The debate concerning the acts whose perpetration would bring offence to the social values was not launched at the beginning of the modern era; on the contrary, the issue of punishment dates back in the ancient era, but there are no concrete data left on the territory of the current Romania to certify the ways of applying sanctions, but from the beginning of the 18<sup>th</sup> century. At the European level, the arbitration for punishments has been raised since the Middle Ages at the rank of principle, this fact allowing the judges to chose the most appropriate punishments, either by mitigating them, or by aggravating in any kind, cumulating them unusually arbitrarily and inhumanly.

At the time, the punishments would vary according to the quality of the perpetrators and according to the rank of the victims. The general system of punishments, which remained

<sup>&</sup>lt;sup>15</sup> Ion Ionesco – Dolj, Le jugement des contraventions, page 841.

<sup>&</sup>lt;sup>16</sup> Ion Ionesco –Dolj, Le jugement des contraventions, pag 842.

<sup>&</sup>lt;sup>17</sup> Ion Ionesco – Dolj, Le jugement des contraventions, pag 842.

<sup>&</sup>lt;sup>18</sup> Antonie Iorgovan, Treaty of Administrative Law, All Beck. Printing House, Bucharest, 2005, page 374.

almost unchanged along the Middle Ages, used to include, at the beginning of the modern era, **capital punishments** (death, lifetime galleys and lifetime exile), **afflictive and infamous punishments** (galleys on limited time, reclusion, mutilation, setting to the pillory, public flogging, exile on a limited period of time), **exclusively infamous punishments** (blame, fine, deprive of the religious service right) and **non-infamous punishments** (reprimand and the council room), the last categories **being similar**, in terms of substance, to the types of sanctions applied nowadays too to the felons.<sup>19</sup>

It was not until the second half of the  $18^{th}$  century that the writer, the jurist and publicist Cesare Becaria revolutions the modern criminal law by his work - **Dei delitti e della pene** – On infringements and punishments, Beccaria stating by way of his work a tough fight against the juridical outlook and practices of the time, pleading thus for a humanist approach of the criminal law. The author would plead in favor of the necessity of creating a general and clear rank as regards the infringements and their corresponding punishments, proposing that the trespasses of attempting to the citizens lives should be set on the highest level. The same author would bring to attention also a new hierarchy of sanctions, starting with the most serious and ending with those which would not cause a special degree of social risk.

Coming back to how things stand in the Romanian law, although it is constantly claimed that the tripartite division of the criminal illicit in the drawing up of the Penal Code of 1865 was taken over from the French law, a three sided approach in the Romanian law used to be present also previously to the emergence of this Code in Romania.

Therefore, a three sided division was stipulated by the *Organic Regulations* – articles 262, 416, 317 for Muntenia and 342, 345 for Moldavia, and subsequently in the *Criminal Registers* of 1841 and the old Manuscripts containing Şerban Vodă's laws, the infringements used to be divided into three large categories: **transgressions**, guilts and crimes.<sup>20</sup>

As an example, there are the legal dispositions at the end of the 18<sup>th</sup> century and the beginning of the 19<sup>th</sup> century of Transilvania, specific to the border districts, where special preventive rules have been established with view to maintaining the public peace and order and to prevent the border type of trespasses, these being specially set up for the district of Năsăud, in the North of Romania. These roles were in fact prohibiting the parties or gatherings at night or during the important religious holidays or restricting this kind of activities between certain hours during the other holidays of the year. The rules also stipulated that the military commanders and the offices of the locum tenens should be informed on the noticed cases of immorality. They imposed as well on the priests having a good behavior in public.<sup>21</sup>

A *tripartite division* criminal illicit in our country is to be found, as already mentioned above, in the *Criminal Records* of 1841 and in the *Criminal Manuscripts* of *Ştirbei Vodă of 5 December 1850*, both works dividing the law infringements into three large categories: **transgressions, guilts and crimes**. Apart from these, there is another two-folded division

<sup>&</sup>lt;sup>19</sup> Ioan Graur, Contributions to the Study of Punishment, PHD thesis, Chişinău, 2008, manuscript.

<sup>&</sup>lt;sup>20</sup> Antonie Iorgovan, op. cit., 2005, pag. 375.

<sup>&</sup>lt;sup>21</sup> The Academy of Social and Political Sciences R.S.R, The History of Romanian Law, vol., II, part I, Academiei R.S.R,

Printing House, Bucharest, 1984, page 332.

stipulated in the so-called *Callimach Code*, although without mentioning the term of "misdemeanour", just like in the works establishing a three folded structure.<sup>22</sup>

The Penal Code of 1865 has stipulated *misdemeanour* exactly in article no. 1 which used to delimitate the felonies into *misdemeanours, offences and crimes*, according to the criterion of the applied sanction. Following the model of the French Penal Code of 1810, the misdemeanour used to be regarded as that kind of law infringement punishable by police imprisonment or fine.<sup>23</sup>

*Starting with the stipulations of the Penal Code of 1865*, the defining elements of the juridical regimen, applicable to misdemeanours, have been outline. Thus, misdemeanours, either resulting from a special law, or from the Penal Code, used to be acts not perpetrated on purpose and the moral or juridical persons could not be sanctioned from the misdemeanour approach, being only subject to civil compensations. The attempt to misdemeanours was not subject to punishment and the perpetrators were given the extenuating circumstances and responsibility exonerating causes, especially an act of God, while punishments for misdemeanours used to be the imprisonment from 1 to 15 days, the fine from 5 to 25 lei. Besides these, there was added the "confiscation of certain works which may have been caught"<sup>24</sup>.

A particular situation is met in **Transilvania**, where the **Penal Code of 1878** used to stipulate a *bipartite system* in the division of infringements (either crimes or offences), specifying in the text the following freedom depriving punishments:

- for *crimes* – severe lifetime or on a limited time imprisonment, from 2 to 15 years, reclusion and detention from 5 to 15 years;

- for *offences* – detention and correctional imprisonment, both from one day to 5 years, whereas *misdemeanours* were specified in a special text, entitled the *Misdemeanour Code of 1879*, this text mentioning the police imprisonment from three hours to two months.<sup>25</sup>

Applying the progressive principle *nulla poena sine lege praevia*, in relation to establishing and applying sanctions, both the *Penal Code of 1878*, as well as the *Misdemeanour Code* of *1879* from Transilvania, mentioned that nobody can be punished except for the specific punishment settled by a normative act existent before the perpetration of the infringement.<sup>26</sup>

As for the Romanian United Principalities, *The Law for the Urban and Rural Locations of March 31, 1864*, under article 77, used to establish the competence of the local councils to designate "punishments for the trespassers of their internal regulations and ordinances; unless these punishments are not decided by the existent laws. Nevertheless, they cannot exceed the punishments given by the ordinary police". The phrase "punishment given by the ordinary police" used to be used frequently by the doctrine and the case law and even by a series of special laws, although the Penal Code from 1864 did not mention it.<sup>27</sup>

<sup>&</sup>lt;sup>22</sup> Antonie Iorgovan, op. cit., 2005, pag. 375

<sup>&</sup>lt;sup>23</sup>« L'infraction que les lois punissent des peines de police est une *contravention* », article 1, French Penal Code, 1810.

<sup>&</sup>lt;sup>24</sup> Antonie Iorgovan, op. cit., 2002, page 377.

<sup>&</sup>lt;sup>25</sup> The Academy of Social and Political Sciences R.S.R, The History of Romanian Law, vol., II, part II, Academiei R.S.R, Printing House, Bucharest, 1987, pag. 183.

<sup>&</sup>lt;sup>26</sup> This principle was stipulated by art. 12 of the Misdemeanour Code of Transilvania, since 1879.

<sup>&</sup>lt;sup>27</sup> Antonie Iorgovan, op. cit., 2005, page 378.

Not only the Penal Code or the Misdemeanour Code of Transilvania used to make reference in the same period to the misdemeanours; there used to be references on this subject also in the texts of the Civil Code of 1865 and even in the text of the Commercial Code of 1887. Thus, in the provisions of the article 1078 of the Civil Code, it was mentioned that ,, *if the obligation consists in not acting, the debtor who has breached it is due to offer compensations only for the simple misdemeanour*" while according to the provisions of the Commercial Code ,, in case of misdemeanour, *the goods loaded by the captain into his personal account will the profit of the stakeholders*".

## 3. Regulating Misdemeanours by the Penal Code of 1936

The penal code of 1936, also known under the mane of the Penal Code Carol the 2nd<sup>28</sup>, would preserve the tripartite system and would divide punishments into three categories : *criminal* (for murders), *correctional* (for offences) and *police-like* (for misdemeanours).

This Penal Code maintained, generally speaking, the regime of the previous Penal Code with view to misdemeanours, bringing though further details in terms of defining certain aspects of this type of infringement in case of **defining misdemeanour according to articles 579 and 580**.<sup>29</sup> As per to the text of this code, the punishments for misdemeanour were the **police imprisonment and the fine from 50 to 500 lei**<sup>30</sup>, but probably the most important aspect highlighted here, was the application of the punishment personality principle. Thus, article 581 would specify: "whenever an act of misdemeanour has been committed by a person under somebody else's authority, the management or the surveillance of the respective person, the person invested with authority is also held responsible and is to be punished in addition to the felon."

It is worth mentioning that between the Code of 1865 and the one of 1936, the legislation regarding regulating misdemeanours in different fields has evolved, with new legislative regulations coming into being and being applied with view to the types of misdemeanour committed in the economic or social sectors.

As an example, here are the *dispositions of the Law of 04.12. 1925 for the reorganization* of the Chamber of Commerce and Industry where, as per the article 4, there used to be considered an act of misdemeanour "the refuse of getting access to the requested information or the communication of incorrect information on purpose" or the provisions of article 30 of the Law of 04.05. 1929, regarding the working permits. According to this article, the "employers affected by the skills stipulated by the 3 and 4 of the same law, who will employ despite that apprentices, will be sanctioned with a fine from 1000 to 5000 lei." On the other hand, Law 236 of 1930 – the law of health stipulated under article 119 the fact that "it is strictly prohibited to physicians to receive medical fees from the 3<sup>rd</sup> degree patients ( i.e. it should be mentioned that patients used to fall under three large categories, according to the gravity of their health problems and their social status). The physicians infringing the provisions of this article would be sued in front of the disciplinary commission, the act being considered at the time a serious disciplinary misdemeanour. During the war, Law 139 of 02.27. 1940 would consider the delay in

<sup>&</sup>lt;sup>28</sup> www. cnaa. acad.md\_files\_thesis\_2008, consulted on 11. 28. 2008.

<sup>&</sup>lt;sup>29</sup> Article 579 of the Penal Code of 1936 mentioned "Misdemeanour is the specific act stated as such by: 1. the law, 2.

the regulation; 3. the ordinance of administrative police authority".

<sup>&</sup>lt;sup>30</sup> Dana Apostol Tofan, Administrative Law, vol II, All Beck Printing House, Bucharest, 2004, page 188.

carrying our requisitions because of negligence or dishonesty of the on the part of the administrative authority, an act of misdemeanour for which, according to article 14 of this law , the military authority will proceed by its own responsibility, concluding a protocol of misdemeanour".

By the time it was republished, in 1948, the Penal Code would stipulate 88 types of misdemeanour by which there used to be sanctioned acts of infringement of legal provisions regarding the defense of authority, of public peace order and morals, of decency for the people and assets. **200 more misdemeanours** were established by means of several normative acts issued by the central authorities in the fiscal field of a few trade authorities (for instance: monopoly over the production and selling alcoholic drinks or planting vines.<sup>31</sup>

## 4 The stage of des-incriminating misdemeanours

Subsequently to the year 1950, in the ex-communist countries, among which Romania, there has been started a process of des-incrimination of misdemeanours which, after being taken out of the criminal illicit, were qualified as deflections of administrative nature.

This operation of des-incrimination, and especially this new juridical qualification of the nature of facts, generated theoretical confusions. In other words, it was stated that the replacement of penal responsibility for certain offences with administrative or disciplinary responsibility is an issue regarding mainly the criminal law, but being at the same time interesting to other fields of law (administrative, disciplinary) since this kind of replacement had the purpose of excluding certain acts qualified as infringements and including them among the acts which call only for an administrative or disciplinary responsibility.<sup>32</sup>

Unlike the previous system, the Decree no.184 of 1954 has introduced the possibility of sanctioning also the socialist organizations of Romania, consequently the juridical persons, in the special situations stipulated by the law or any other kind of normative act. It has been settled that the fine sanction has an administrative character and that it can no longer be rendered into a freedom privative punishment. Along with the fine, also as a main type of sanction, the admonition has been introduced too, with the introduction of sequester which was qualified as a safety measure or as a complementary measure.<sup>33</sup>

Due to the often usage of the collocation "administrative infringement" in the text of regulation of 1954, Professor Valentin Prisăcaru considered that the correct denomination of these illicit acts would be "administrative infringements" instead of misdemeanours which, had been part of the category of felonies for 90 years, even if they had been part of the 3<sup>rd</sup> category of felonies. There are other opinions opposing this thesis<sup>34</sup> considering that if there are administrative infringements besides misdemeanours and the usage of the

<sup>&</sup>lt;sup>31</sup> Iulian Poenaru, Resposibility for Misdemeanours, Bucharest, 2002, page3.

<sup>&</sup>lt;sup>32</sup> Valentin Prisăcau, Treatee of Romanian Administrative Law, General Part, 3rd Edition, revised and completed.

Lumina Lex Printing House, Bucharest, 2002, page 688. <sup>33</sup> Antonie Iorgovan, op. cit., 2005, page 381.

<sup>&</sup>lt;sup>34</sup> Dana Apostol Tofan, Regulating Responsability for Misdemeanours. Aspects od material law, the Judiciary Courier 2/2006.

same denomination for misdemeanours too would only make things complicated. Moreover, according to Professor Antonie Iorgovan's opinion, the administrative infringement is regarded as an infringement which is not subjected to misdemeanour.<sup>35</sup>

The transfer of the misdemeanours from the criminal illicit domain into the administrative field had also a political purpose, not only a social one. Apart from the wish of the author to diminish (artificially) the number of infringements, rendering a part of these, having a lower degree of social risk, into misdemeanours, the Decree had also a political stake – creating a favorable image for the new socialist society which was supposed to have at its basis the "new man", much more biased to felonies and, especially more under control and sanctioned by a new socio-political system which was intended to be extremely efficient.

At the same time, there were other laws and decree in force which would stipulate types of infringements specific to different branches of activity – post and telecommunications, practicing liberal professions, health, taxes and duties or the traffic on public roads – and also types and limits of sanctions applicable to perpetrators.

Some examples for this would be *Decree 592 of 12.17. 1955* with view to regulating the practice of profession for some categories of artists and organizing shows, whose article no. 8 established, in case of infringements of this particular decree, a number of **fines** which did not exceed 5000 lei for the collective organizations and 4000 lei for the people.

On the other hand, the *Resolution 925 of 07.24.1959 of the Ministers Council* with view to the infringements perpetrated in the field of post or telecommunications stipulated as sanctions to article no. 2 "a fine from 10 to 150 lei or an admonition", while the *Resolution 2723 of 01. 11. 1957* regarding the infringements in the fields of post, telephone and radio, under article no. 1 used to stipulate the sanction with "a fine from 5 to 100 lei in case act, by the way of being committed, is not a crime".

A similar system to the one known today under the title of the *ablation system* was valid also at the time, a fact demonstrated by the article 116 of the *Resolution* 772/31.05.1966 regarding the traffic on the public roads, an article stipulating the possibility for the trespasser to pay at the Loan Bank in 48 de ore, half of the minimum fine established by law.

What could be noticed as a consequence of the des-incriminating misdemeanour was an unexpected increment in their frequency, so that the positive impact on the social plan was not the one intended by the author. Moreover, it can be mentioned that in 1966, there were already 50 normative acts issued by the central authorities that used to establish and sanction 850 types of infringements in different fields of activity, out of which 400 only being stipulated in the resolution of the Ministers' Council no. 541/1960 for identifying the infringements to the sanitary and epidemiologic norms.<sup>36</sup>

It is worth mentioning that at the same period, the Decree no. 329/1966 was published, with view to sanctioning certain infringements of the train traveling rules which instituted, for the first time in Romania, *the imprisonment* - as the main *sanction for misdemeanour*.

<sup>&</sup>lt;sup>35</sup> Dana Apostol Tofan, op. cit., page 189.

<sup>&</sup>lt;sup>36</sup> Iulian Poenaru, op. cit, 2002, page 4.

## 5. Regulation the misdemeanours by Law 32 of 1968

Law 32/1968 regarding the identification and sanctioning of misdemeanour acts was targeted at improving the regulations in the field<sup>37</sup>. It has abrogated Decree no.184/1954 and had as purpose: the reinforcement of lawfulness, the reduction of normative acts stipulating infringements, as well as a more judicial establishment of the facts for the perpetration of which, the author was to answer administratively.

As already noticed, the provisions of Law no. 32/1968 were supposed to be a general guide of the special infringement norms but, no matter the intent, they have been from the very beginning far too synthetic for setting in order a legislative phenomenon so complex dynamic.<sup>38</sup>

The law included the general rules based on which, certain deviations from the rightful norms could be considered misdemeanours, establishing at the same time the nature and the limits of state constraints which could be used to sanction and prevent them.

Paradoxically, as compared to the stated intention – that of reducing the number of normative acts which stipulated misdemeanours as a consequence of a step by step reduction of the criminal illicit sphere, after 1968 the misdemeanour illicit sphere increased significantly, reaching an impressive number of regulations which constituted dispositions regarding the misdemeanour.<sup>39</sup> Unlike the previous regulation (Decree no. 184 of 1954), it has been established by way of articles no. 1 and 2 of the law, that solely the Ministers Council and the Popular Councils, except for the rural ones, may issue normative acts of identifying and sanctioning misdemeanours, the same being valid for their executive committees only in urgent situations.<sup>40</sup>

Similarly, the sectors of activity that the popular councils could identify misdemeanour acts have been delineated, these being expressly mentioned under article no. 2 let. g of the law text: "the retaining and usage of the state locative fund, for the roads, streets and other ways of communication, maintaining the public order, protecting health, sanitation, common transportation inside cities".

It is important to extract from the text of the law no. 32/1968 the following aspects:

1. the physical entity was considered to be a passive subject of responsibility, the active subject being even a non-state authority, if involved into carrying-out a public service;

2. the physical entity was responsible for infringements if full of age (i.e.14 years old), (article 11);

3. the perpetration of an act by an under-aged person was not considered to be misdemeanour;

4. the sanctions could be also applied to the legal entities (but only if stipulated by a law or by a decree of the State Council);

5. the fines applied to the legal entities could be cast on the guilty physical entities;

<sup>&</sup>lt;sup>37</sup> Mona Pivniceru, P. Susanu, D. Tudorache, Misdemeanour. A Theoretical and Practical Guide, The European Institute, Iaşi, 1997, page 5.

<sup>&</sup>lt;sup>38</sup> Antonie Iorgovan, op. cit , 2002, pag 392 , covered from "The Current Juridical Regime of the Infringements. Aspects of Material Law", The Judiciary Courier, new series, no 6/ 2002, All Beck, Bucharest, page 4.

<sup>&</sup>lt;sup>39</sup> Iulian Poenaru, Responsability for Infringements., 1998, pag. 6.

<sup>&</sup>lt;sup>40</sup> Article 2 let. b last alignment

6. the sanctions stipulated for the legal entities could be only established by laws or decrees of the State Council.<sup>41</sup>

Under these legislative circumstances, articles 5 align. 2 of the law 32/1968 established the rule of applying sanctions for infringements to the physical entity, while *the sanction for the legal entity was understood as derogation from the same rule*, mentioning the fact that the fines will be applied to the physical entities found guilty.<sup>42</sup>

It is worth mentioning that the legal entities, under the circumstances, did not have the possibility of committing infringements. In truth, the physical entities such as employers, administrators, managers, censors or clerks, associates, were only those who broke the law or omitted to comply with certain legal obligations. This is why article 5 of the law stipulated that "fines applied to the legal entities will be cast on the guilty physical entities"<sup>43</sup>.

As compared to the current legislation which no longer brings up the report of the degree of social danger of the misdemeanour, in article no. 1 of the former law, the misdemeanour was defined as *being the act committed guiltily, which presents a lower degree of social danger than any other felony and it is sanctioned and stipulated as such in the normative act.* 

It was considered that, unlike other kinds of felonies presenting a lower degree of social risk with more serious consequences and which last in time, in the case of misdemeanour, this danger is lesser and the consequences are reduced. The general criteria of drawing a clear distinction between the felonies and misdemeanours can be **intrinsic** or **external**, depending on how they are related to the nature of acts or if they are external to those.

Among the **intrinsic criteria**, there are first of all the values and the corresponding social which are violated or endangered by the perpetration, and the external criteria of differentiation reflect the difference in the degree of social danger among the two categories of social acts. Among the **external criteria**, there are the legislative source, and consequently the headquarters of the juridical norms which stipulate the two types of illicit, the type of sanctions and the way of application and execution of the above-mentioned sanctions<sup>44</sup>.

It is beyond doubt that all the illicit acts – either administrative or civil transgressions, are acts with a more or less dangerous social character. The misdemeanours or the disciplinary transgressions are clearly of a different kind of social risk, which justifies the way that they are being sanctioned. Most of the times it is hard to operate a clear distinction between a disciplinary transgression (having an administrative character) and a negligence in service as they are both dangerous from the social point of view. There is nevertheless a distinction in degree de risk between a felony and an administrative transgression (for instance a misdemeanour). This quantitative distinction can be rendered from the juridical perspective in a qualitative differentiation. The facts presenting a greater degree of social

<sup>&</sup>lt;sup>41</sup> Rodica Narcisa Petrescu, op. cit., 1997, page 142.

<sup>&</sup>lt;sup>42</sup> Antonie Iorgovan, Treaty ...., 2005, page 398.

<sup>&</sup>lt;sup>43</sup> AlexandruŢiclea, Ion Niță Stan, Indentifying and Sanctioning Misdemeanours, Atlas Lex Printing House, Bucharest, 1996, page 14.

<sup>&</sup>lt;sup>44</sup> Constantin Bulai, Felonies and misdemeanours, Criteria of distinction in the theory of dreptului and legislation, Juridical Studies and Researches 2/1973, page 270.

danger call for a special juridical treatment which gives qualitatively another juridical characterization to the perpetration<sup>45</sup>. Currently, this comparison has disappeared completely of the definition of misdemeanour, with a clear reference to the type of normative acts stipulating and sanctioning misdemeanours, although that the proper practice and especially the jurisprudence of the European Court of Human Rights bring frequently to discussion the misdemeanour – felony ratio.

Meanwhile, along with Law no. 32/1968 which used to make up the common law in the field, there have been adopted other kinds of normative acts which have established derogatory regimens, the most important being the Decree no. 153/1970 for establishing and sanctioning certain types of misdemeanour regarding of social cohabitation, public order, currently replaced by Law 61/1991.

At the same period, a series of normative acts have been drawn up with the purpose of organizing the phenomenon of rendering felonies into misdemeanours, one of the example being the sector of sanitary and epidemic norms where the 400 existent misdemeanours in 1960 have been reexamined, being reduced to 150 by H.C.M. 2492/1969.

As a consequence of restricting the sphere of the criminal illicit after 1968, in the following decade, there was an extension of the misdemeanour range, an impressive number of normative acts and implicitly, of misdemeanour acts<sup>46</sup>.

A remarkable legislative aspect at the time was the publication of the Decree no. 329/1966 regarding the sanctioning of certain misdemeanours infringing the regulations in the field of traveling by train<sup>47</sup>, speaking for the first time of the *sanction of imprisonment for misdemeanour* under article no. 10: "Enforcing the resolution, as far as the imprisonment for misdemeanour is concerned, is to be performed as per the provisions of the Penal Procedure Code, which are to be applied accordingly. The sanction with the imprisonment for misdemeanour is executed either inside the sections of the detention institutions, either in the Militia custody". Currently, the imprisonment for misdemeanour as a main sanction has been suppressed by the Government Emergency Ordinance 108/2003, approved by Law no. 28/2004, as a result of the prevailing text issued by The European Convention of Human Rights, whose article no. 5 was considered to be breached by the application of such a sanction (imprisonment for misdemeanour).

Historically speaking, in the '70, the late Professor Antonie Iorgovan proposed the improvement of infringement legislation by elaborating and publishing a specific *Code for Misdemeanours*. It was considered that, since the des-incrimination of the misdemeanours had been established – therefore the criminal responsibility for such acts had been replaced with the administrative responsibility in the legal system, the content of these acts was about to be exclusively established by way of traditional methods, of principles, categories and notions proper to the Administrative Law. The author initiated also the emergence of a distinct branch of law – that is the *law of misdemeanour* – which was supposed to include the appropriate application of institutions, specific both to the penal material and trial law

<sup>&</sup>lt;sup>45</sup> Vintilă Dongoroz, Ion Fodor, Constantin Bulai, op. cit, page 111.

<sup>&</sup>lt;sup>46</sup> According to certain prominent appreciations of the time, there were 114 laws, decrees or resolutions of Ministers Councils, including over 2000 misdemeanour acts, in force in 1978. In addition to those, there was also an impressive number of resolutions of the popular councils and decisions of the committees and their executive bureaus.

<sup>&</sup>lt;sup>47</sup> Dana Apostol Tofan, op.cit., page 214.

such as the participation or the relapse. In addition to that, since a Code of Misdemeanours was elaborated as a consequence of re-evaluating the entire normative background, it was no longer necessary for the responsible authorities to be stipulated in order to issue acts of identifying and sanctioning misdemeanours<sup>48</sup>.

After December 1989, under the circumstances of a new constitutional regime and therefore of a new socio-political and economic reality, the Law no. 32/1968 was modified and partially abrogated by Government Ordinance no. 12/1994 and completed by the Law 97/1998 which introduced a new paragraph to article no. 7 regarding the fine for infringements, by means of which the Government has been authorized to update yearly, by resolutions, the limits of the fines stipulated in the normative acts containing also regulations with view to establishing and sanctioning certain acts of misdemeanour. Similarly, by means of the Government Emergency Ordinance no. 55/1994, the minimum and maximum limits of the fines established by laws and decrees adopted by 12. 31. 1989 and in force up to the 1st of July 1994, whose quantum had not been modified after the 1st of January 1990, have been increased 50 times<sup>49</sup>.

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# TOURISM AND THE INTERNET

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#### Abstract

One of the major limits of all the distribution channels of the tourism is that they all finally pass, in most of the cases, through GDS (Global Distribution System). Most of the providers wish to avoid GDS and to use electronic distribution in order to directly sell the product to the consumer. Along with the extraordinary growth of the use of the internet and World Wide Web, at home as well as at work, the opportunities also began to develop by the decrease of the communication prices, the tourism providers taking now advantage of this potential in order to distribute the information and to process the reservations for the direct buyers.

Keywords: internet, site, hotel, reservations, tourism

## 1. Internet and World Wide Web

Internet exists from some time, but has recently entered into the business field. By simple usage, it is a vast network (through the computer networks) that unifies all computers from every corner of the world so as they could communicate and share information.

Its structure can be best described as a "spaghetti ball" – without any limit or specific form, without a center and with the networks that are linked almost arbitrary. It is not owned, managed or controlled by anyone, even if different organizations voluntarily contribute with services and systems that help the consolidation of its architecture. The origins of the internet are in the communication system known as Arpanet, being developed after 1960.

The computer mainframes were linked altogether in order to facilitate the transfer of the information, but the connections were made in such a manner that the information should be safely distributed, so if the network was partly destroyed, the information could reach the destination through another path. The Internet was used both by the army, the governmental departments and non-governmental organizations, by the research laboratories and universities, as well as businessmen and even common people.

Technically, communicating through Internet is made easier by the use of the protocol known as *transmission control protocol/Internet protocol* or *TCP/IT*. All computers with Internet connection use TCP/IT because this protocol is indeed an independent platform allowing computers and other networks with different forms, dimensions and structures to exchange information between them (or with other networks or computers). Thus, it doesn't matter if you use an IBM or Macintosh PC, if you are connected to a mainframe, the TCP/IP protocol allows you to use the internet in a transparent manner.

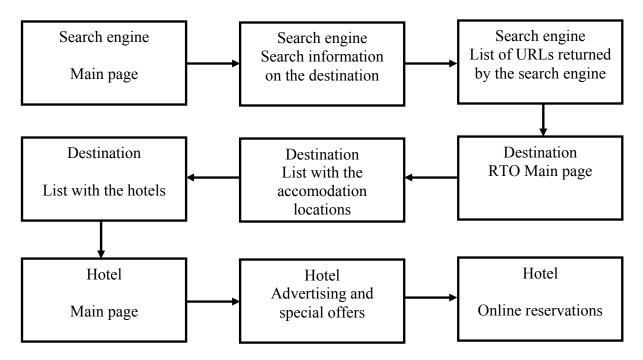
In the last ten years, the internet has developed from a capacity that could be measured in hundreds of units, to one that must now be measured in millions of units. Any network from anywhere connected to Internet can contain a few to several thousands computers.

Whereas some of the products are designed to be ineffectively sold on-line, services as travels, where the product is less tangible and the clients rely more on information, are more appropriate to the on-line business. Recent researches have shown that tourist products are among the most popular products to be purchased through the web. **Jupiter** 

**Communications** evaluates that in 2007 more than 3,5 thousand million tickets were sold on the Internet. Even if it represents less than 10% of all incomes in the field of the tourism, during 2008 it is estimated that 55% - 80% of all travel reservations, representing over 100 thousand million dollars in sales, will come from the web.

The Internet is not without problems. Among them, a problem represents the difficulty with which the users are able to find concrete information. The web offers a vast universe of information: 820 million pages have been recently registered. Still, there is no unique ingoing portal or folder that centralizes the content. Each site is free to develop its own information hierarchy. This lack of structure makes it difficult and baffling, for the beginners as well as for the professional users who try to localize the information they are in search of. Although the development of search engines and content folders as Google, Yahoo, Altavista, made, in a way, easier the search of information, it is still easy to get distracted during the search of the information until the proper reservation, presented in the next figure, demonstrates the fact that, without knowing the web address before, the clients will follow several steps and, in all this time, they can be distracted by the different multitude of subjects.

Figure no. 1. Steps for a hypothetical search, starting from the initial search of the information to the proper reservation



Another restrictive factor is speed. Web performance has become "poor", so poor that many times it has been named "World Wide Wait". Problems related to speed lead to two major causes: the first problem represents the growth of the constant number of internet users. As more and more people share the same resources, the communication channels become more and more crowded, and thus the growing traffic cannot be handled anymore. "Crowded" means a longer "journey" of the information that "travels" on the Internet.

The second problem is, in the fact, that information that is transported becomes "richer". In the first years of the Internet, only text data were transmitted from one computer to another. Nowadays, encouraged by the professionals in marketing, bright advertisement is used more and more often, flashy images full of color, animation, sounds and even video images are irregularly transported on the same routes, which reinforces the problem of crowded internet.

The last big problem is also the most urgent one. In the public's opinion web is not secure. Though many people want to buy travel services directly, they actively search for products that are fitted, but they are not willing to continue the transaction by sending the details of their credit card on the Internet. This phenomenon delayed the development of e-commerce, not only for tourism, but also for business in general. However, there have been developed security systems and technology necessary for the secure transactions with credit cards on the Internet. Trademark association, like SET (Secure Electronic Transactions), developed in association with Visa and MasterCard, helps reduce the lack of safety for this type of transactions.

# 2. Marketing on the Internet

It is considered that the Internet constitutes a new and important channel of distribution offering workers in the marketing field the possibility to interact with potential consumers. The Web is considerably different than previous distribution channels. It has some characteristics that render traditional practices inefficient and sometimes counterproductive. One of the most important characteristics of the Web is his global network. Providing information regarding a company on the internet, you are providing it simultaneously and instantaneously to world-wide clients. 24 hours per day and 365 days a year.

For example, British Airways traditionally used newspaper and TV publicity for their lastmoment sales. The fact that news travel faster on the internet gives them more flexibility and now is their favorite way of introducing special offers to the market.

Marketing controls content, time, location and frequency. Advertising on television and press are common examples of this promotion type. The content is limited by factors as costs or capacity, and frequently it turns out to be wasted space. With an internet presentation, the client is in control. Using hyper-links, the client decides what to see and when. If they don't like what they see, they can exit with a single click, so notions of captivating passive audiences will not apply to the Internet.

The content of an Internet site must be relevant to the visitor's needs, easy to use and include logical links to areas of main interest. Its contents must be changed regularly so that the user should be inclined to visit it regularly.

Unlike traditional marketing techniques, the client comes to the company to require information, and not the other way. On the internet the customer actively searches for information. Actually, they already have an idea about the product - by searching it on the internet they are interested in it – and they need information and will buy from the one that satisfies their needs best. The internet gives a company access to persons already inclined to know more about their products. Even when traditional marketing principles are used, it is desired that the target shows an interest in the product. For example, with search engines like Google and Yahoo a client looking for information about trips to Ireland may receive a banner of an Irish hotel chain with search results.

One of the benefits of marketing on the Internet is the fact that its efficacy can be immediately and precisely determined. Servers can supply usage statistics and give an accurate client count on different pages. With Internet-based promoting, you can accurately determine who is accessing your information, where they come from, what pages they have opened and the order in which they were opened. Unlike a typical brochure, you can determine if no one reads the restaurant page or if they are looking for information on facilities and then on the actual place.

A good example of how this information can be used is the hotel chain Best Western, who started its internet activity with 160 properties on the www.travelweb.com site. During the first month they had more than 80.000 hits and the system provided an electronic address for every one. That way Best Western could figure out that half of the users were from outside of U.S.A and that the reservations were individual and not by institutions or corporations – this would have been much harder to establish using conventional methods. They were also able to tell that there were few users that wanted information and pictures about their rooms, which indicated that this was not so important in promoting their products.

# 3. Tourism and World Wide Web

One of the problems in trying to evaluate the impact on the internet and the World Wide Web in the field of the tourism is the huge growth rate. Statistics are changing everyday and they are thus inaccurate even before they get published. A change is clear though: all major players in the field of the tourism are joining on-line. In January 1996, Arthur Andersen estimated that there are 5.000 related sites; in 2007 this number raised to 120.000. The following table presents the tourist distribution on the Web:

Numper of traver	ing sites on the	WED TADIE IIU I	
ТҮРЕ	NUMBER	ТҮРЕ	NUMBER
Airlines	550	Other types of	107
		accommodation	
B&B	8520	Resorts	10020
Bus companies	226	Reservation services	1254
Casinos	405	Tour operators	9281
Rent a car companies	156	Travel agencies	15025
Cruise companies	480	Railway companies	170
Hotels	10902	Other companies	264

Number of traveling sites on the Web Table no 1

Source: www.yahoo.com

An interesting analysis is the classification of traveling sites on the Web in generic categories based on the type of companies that operate. Normally, sites can be categorized in sites operated by the tourism providers and sites operated by intermediates. The first ones can be sub-classified in those that operate for important international chains and those that operate for independent companies.

The sites of the international hotel chains include those of the major hotel companies and the sites of car rental companies. These sites promote and distribute the information on a single type of product and only the products of one single company. The budget in the economic sector, much too small to allow the distribution of information through traditional distribution channels, allows in particular the internet potential by distribution. Most of the chains provide a central site that contains information on the company in general. Most of them contain a search engine, made easier for the potential clients in order to find the product that satisfies their needs. For example, in the case of a hotel, the users are filling in the location and any desired criterion (for example pools or baby-sitting facilities) in a Web page, and the site responds with a list of properties that satisfies their needs. Certain companies also use Web sites as channels in order to avoid the dangerous inventory. For example, **American Airlines** presents every Wednesday its successful advertising product named **"NetSaver"** to sell out all tickets left unsold for the following week-end.

The sites for independent tourism providers tend to be diverse and more difficult to find. Most of the sites contain only a few static Web pages, but sometimes there are also innovative sites of smaller operators, which are effective and full of information. A successful site is best measured by the number of reservations that are created. Some of the reasons of its success result from the fact that there are pieces of information upon B&B but also upon surrounding areas, presented in a friendly way that encourages the use of Web by new persons.

At the beginning of the Internet traveling phenomenon, most of the observers pointed out that the biggest travel agencies chains would become leaders in the preparation of selling on-line tickets. However, except for **American Airlines**, it seems that most of them have failed in successfully exploiting this opportunity. In exchange, new companies have distinguished themselves and dominated the market. As you can see in table no 2, most of them are major sites which offer a large variety of products and services and with high potential to replace the traditional travel agencies.

	Top 10 best trave	ling sites Table no 2	
Name	URL	Description	
Microsoft Expedia	www.expedia.com	Offers information and reservations for flights, hotels, car rental services, through a large variety of providers, including Worldspan for flights and TravelWeb for hotels.	
Travelocity	www.travelocity.com	Offers information and reservations for flights, hotels and car rental services, based upon SABRE GDS system.	
Excite City.Net	www.city.com	Site with information based upon its own search engine, offering reservation facilities through Preview Travel.	
United Airlines	www.ual.com	Offers on-line information and reservations for flights.	
Map Quest	www.mapquest.com	Offers maps and several services for travel planning.	
Asia Travel	www.asiatravel.com	Offers information upon the geographical location of hotels.	
American Airlines	www.americanair.com	Site of airlines offering information upon the company's products and services, as well as an extended series of advantages.	
Carnival Cruise Lines	www.carnival.com	Promotional site for the largest cruise organizing company.	

Name	URL	Description	
Intellicast	www.intellicast.com	Offers information on destinations and weather	
		forecast.	
Preview	www.previewtravel.com	Site that offers the possibility to reserve	
Travel		airplane tickets, hotels, packages or to rent	
		cars.	

The fundamental concept upon which lays the construction of mega sites is that of a travel e-shop; by combining travel products from different sources and by offering the user a standard mechanism to search information and to order products. Despite the originality of the concept and the relative immaturity of the sites, they had a dramatic impact with sites like Travelocity, Microsoft Expedia and Preview Travel, having weekly ticket sales in the territory of 1-2 million dollars. Some of these sites were born from the GDS system, which tends to balance the existent investments in reservation systems in order to reach the client directly.

Such sites offer a wide range of travel services and allow the users to search information on flights, car rental services and hotels using the same variable database for tour operators through its terminals, but also with a friendlier interface.

Hotel rooms or car rental services can be easily reserved on-line and the confirmation can be received on-line. However, in the case of flights, because of the international rules that organize air transport, the process of ticket sale is easily transferred to tour operators that are related to ticketing sites.

A common characteristic of the success of the mega sites is the variety of useful resources offered to travels, along with the commercial information. They often include general pieces of advice related to travels, a guide with all destinations that contain information on show places, latest news on the trips, local weather forecast, exchange rate, maps etc.

Travel distribution on the internet is still in its beginning phase, and as long as nobody knows for sure which is the most effective strategy to adopt, it is clear that the Web is the cause for which most of the traditional distribution channels become less well-defined.

However, most of the companies continue to recognize the importance of tour operators, but also of travel agencies. For example, **Novotel** has chosen to respond by not accepting the facilities related to on line reservations on their site, for fear they should offend the associated travel agencies.

Others have concentrated specific parts of their sites especially for their intermediate partners' needs. For example, **Almo**, a car rental company, profited a lot from introducing in due time the facilities related to on line reservation for tour-operators on their site – a move that helped them reduce their administrative expenses with approximately 1 million dollars.

**Pegasus** not only allows travel agencies to make hotel reservations on their site, TravelWeb, and to collect regulate commissions by adding the identification number of the agency on the reservation form, but they also pay an incentive in order to stimulate the agents to make reservations in this manner, and not only by GDS or by phone. Many agencies have started to use the Internet more, rather than appeal to other on-line agencies, or to use the Web as a supplementary information resource in order to offer better services to the clients.

Whereas many of these sites accomplish the roles of traditional travel agencies, to act as an information channel between the providers and the clients, making reservations and issuing tickets also helps navigating through the multitude of tourist information that are available.

As tourism becomes more and more global and as destinations and travel providers make the travel products more and more available on-line, it is possible that potential clients need to study some data, to localize and to save that information.

As internet is becoming more powerful, finding information will become easier and electronic reservations will become more convenient.

## Conclusions

As we've seen, the Internet has the potential to be a major influence in the way travel products are distributed, redefining the way in which tourists discover and buy them. Also, the Internet has the potential to overcome many of the problems associated with the more traditional electronic distribution.

By addressing directly to the consumer, the Internet bypasses the Global Distribution System (GDS), resulting in smaller costs and making cheap product distribution possible. The absence of requirements in terms of structure gives a flexibility to distribute heterogeneous products, while simplicity and general acceptance of user interface standards gives consistence to the way in which information is accessed – an essential condition in tourism.

The Internet stands for freedom of entry, low costs and the fact that no special equipment is needed to make it attractive as medium distribution for small operations, while the multimedia capacities and global-wide network make it very efficient as a marketing medium. Its potential was thus officially acknowledged by the travel sector.

It was foretold that the Internet will be the key to future leadership in the travel sector. Only those operations that will exploit technology to correctly identify the consumer's needs and serve appropriate products will survive.

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# REGULATORY REFORM AND DEVELOPMENT OF THE SMES OF THE REPUBLIC OF MOLDOVA IN THE INTERNATIONAL CONTEXT

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#### Abstract

Broadly speaking the problems of small business of Moldova coincide with the problems of enterprises of European Union. Here internationalization of SMEs shows up. The problems are the following: a necessity of finances, big bureaucracy, lobby of large business. There is also a problem of penetration to the overseas market, null information. Certainly, distinctions of the problems essence are large. And difference in that convergence of resources is impossible to compare. Now for Moldova it is important to conduct a regulatory reform. In this area, this article is devoted to the successes and problems. Keywords: regulatory reform, small business, internationalization, convergence, EU.

Generally, the SMEs problems of EU-27 and those of Moldova coincide in may directions of evolution: the necessity of adequate funding, excessive bureaucratization of the public institutions, powerful and influent lobby of the big enterprises, the unsafe situation of the micro enterprises, a relatively limited access to the information and consulting, difficult penetration to the overseas markets. The difference consists in the level of these problems and their degree of gravity. Their negative burden differs naturally from that of the small business in Moldova by the potential of a balanced solving.

The convergence of the EU resources is incomparable as well as the possibilities of SMEs unbinding by the formalities and social – economic, financial and regulatory blockages. In this case the resources decide everything, particularly the management, intellectual, material and innovative ones, the potential of concentration and directing, income and its amount included. [1]. The efficient use of the available resources depends on the way the relations between the business and the state are built and how they are regulated by the executive and legislative power. Thus, two functional blocks work: a) SMEs determination and b) regulation of this sector activity [2]. In our case, the block b) is of the first importance, since it is the most sensible both in the course of development and in the endogeneous as well as in international context.

Currently, one may assert SMEs Europeanization in virtue of the immediate vicinity, which presupposes taking of the constructive models[3]. Therefore, internationalization and its context leaves a mark on the small business development in the Republic of Moldova and on the regulatory institutional course considered as a structural reform, implementation of which will make the national economy competitiveness rise [4]. The regulation of the entrepreneurial activity is of especial importance under the conditions when Republic of Moldova has become a close country to the EU, starting from January 1, 2007. But this activity was set up long time before. A decisive step was adoption of the Economic Growth and Poverty Reduction Strategy [5], where the measures were stipulated for the small business development as one of the ways of social stability and necessities of the business environment regulation for SMEs. But only after adoption in 2004 of the law in this field [6] on revision and optimization of the legal acts regulating the entrepreneurial activity, the abovementioned Guillotine 1, the situation started to change and influence positively on the business environment, especially concerning SMEs. The purpose was well determined: elimination of the administrative barriers, realization of

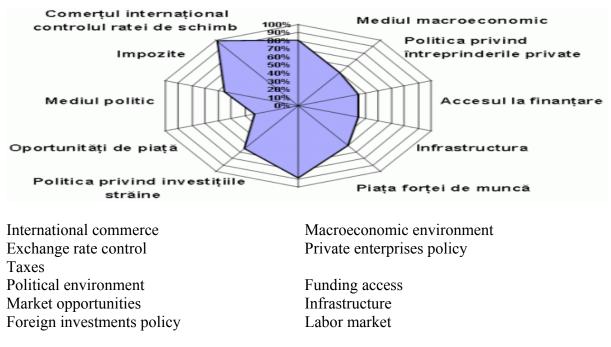
the real reforms in direction of optimization of regulatory acts including on the small business and improvement of the tax policy and implementation of the European Book for small enterprises, to which the Republic of Moldova adhered in 2004. Therefore, if we refer to the approached subject, the deregulatory / debureaucratizing activity has started, which continues now with the only one mission: creation of the proper environment for the entrepreneurship, for the private initiative, elimination of the obstacles for SME development. However, this activity is not carried out as work isolated from the international context, though it is a major problem of the apparent endogeneous character. If up to the beginning of the 90s the economic activity had a content of internal coherence, then after declaration of the principles of activity in the market economy, Moldova joined the circuit of the global requirements, the regulatory reform became an obligatory component for the state that declares adherence to the European Union requirements [4, 5 ]. Naturally, the shortages of a conceptive and paradigmatic character, lack of the clearly determined and exact, long-term and durable directions has always placed the Republic of Moldova on the less prestigious rating places, in spite of the country's high non-realized potential. In Figure 1 the problems of funding access, infrastructure, poor market opportunities and policies on private enterprises are clearly seen. We assert that the SME have to resolve the same problems, which are especially sensible at any deviation of the social-economic environment.

In the context of reforms the actions have been recommended, which had been identified also in the country economic Memorandum for the Republic of Moldova [ 14 by the World Bank ( Chisinau, September 9,2005). Among them there are market competitiveness growth by reduction of the barriers of administrative regulations at the business setting-up and carrying-out and at its liquidation / insolvency declaration, including with the foreign capital; increase of the access to the foreign markets by liquidation of and long-term costly constraints on the commerce and investments; implementation of measures to increase the access to funding and growth of the banking system efficiency; finalization of the economy structural transformations; growth of the quality of communications infrastructure; liquidation of the barriers on the way of accessing the international markets, including through the reform of the existing system of standards and conformity evaluation, costs of the customs regulations and procedures; real implementation of the institution of liability of the public authorities having the regulation functions and of the representatives of the private sector for failure of fulfillment of the obligations or their violation – the balance of rights and obligations [ibidem].

Evidently, these requirements place directly in the international sphere the SME on the state, which is a integral part of the economy, constituting 98,3 % of the total number of the national enterprises with a share in the GDP at more than 34%.

However, the Europeanization of the Moldavian small business does not protect it automatically from the problems generated by the excessive regulations. Therefore, it is mandatory to note that in the frameworks of UE-27, approximately 1400 legal acts have been asserted that form certain barriers in functioning of the small enterprises in the community and in 2008 at the European Commission a problem of regulations was approached and abrogation of 25% acts from their total number [15]. The SME specificity and their problems naturally internationalize both the regulation necessities and the way of development and cooperation. Therefore, the national SME are involved in the complex international context, but with a special economic feature characteristic to the emergent countries.

# Figure no. 1. Political environment of the Republic of Moldova in comparison with the new member states of the European Union.



Source: Evaluation of competitiveness in the economy of Moldova. BIZPRO Moldova Project (USAID), Chisinau, 2004.

The State Commission for the entrepreneurial activity regulation and the working group as a body of this Commission were instituted to solve the problems of concordance of the content and spirit of the legal acts of Moldova [16]. With contribution of BIZPRO Moldova project experts, the working group has examined the legal acts of the Government, the ministries and departments, other central public authorities, which regulate the entrepreneurial activity for conformance of these acts to the provisions of the "guillotine" law. All documents establishing the obligatory norms for execution or some restrictions in the businessmen's activity, failure to observe of which leads to the sanctioning or the entrepreneurial activity interdiction in a respective field, have been attributed to the official acts regulating the entrepreneurial activity.

In accordance with the provisions of the "guillotine" law, the revision of the legal acts was carried out in three stages. At stage I of revision of the legal acts, each authority of public administration examined the official acts of its activity. As a result of this process, the authorities have made the lists of the official acts and presented hem to the working group of the state Commission. In total, 1130 legal acts have been sent to the working group for examination. Each official act was accompanied by the informative note, which contained the ample information on the act. Stage II included examination and a detailed revision of the official acts and the notes presented by the authorities of public administration by the working group. The working group was divided in subgroups on fields, where the specialists of the given sector as well as the independent experts were included. At 18 meetings held by the working group, it examined each act apart and decided on inclusion/non-inclusion in the draft of the Register of the official acts regulating the entrepreneurial activity. The working group also examined a number of disputes arising between the authorities of public administration and the businessmen.

The official acts presented by 40 central public authorities and the subordinated organizations were examined at the meetings of the working group, where the public officers and the specialists of the authorities participated. Of 1130 acts presented, 807 were attributed to the acts regulating the entrepreneurial activity. At Stage III of implementation of the "guillotine" law, the public was enabled to participate in finalization of the Register draft by accessing the telephone line opened and the website where the Register draft had been placed, administered by the Ministry of Economy and Commerce [17]. Through the dedicated telephone line more than 400 calls have been received, representing suggestions and opinions on the legal acts and on the whole regulations of the entrepreneurial activity. This fact denotes significance and response, which the regulatory reform has in the business environment. As a result, the Register draft was presented for approval by the state Commission, which approved of it at its session (of July 26, 2005). The disputes and objections appeared at some public institutions were also discussed at that time that were taken in consideration in finalization of the Register draft. As a result of examination and discussion, the legal acts regulating the entrepreneurial activity have been grouped as follows:

- 1. The official acts that conform to the provisions of the "guillotine" law and may be included in the Register of the official acts regulating the entrepreneurial activity;
- 2. The official acts of the Government and the authorities of central public administration that contradict the provisions of the "guillotine" law and are to be abrogated;
- 3. The acts issued by the independent structures that contradict the provisions of the "guillotine" law and are to be recommended for abrogation;
- 4. The acts that totally do not conform to the provisions of the "guillotine" law needing being amended to be included in the Register subsequently.
- 5. At the session of August 10, 2005, based on the materials presented by the state Commission for the entrepreneurial activity regulation, the Government of the Republic of Moldova adopted the Decision on the Register of the official acts regulating the entrepreneurial activity, which was published on October 7 under the number 1030 of October 3, 2005 [13].

By this Decision, the following acts were adopted:

- 1. Register of the official acts regulating the entrepreneurial activity in a total number of 426 (Annex No. 1),
- 2. List of the abrogated legal acts in a total number of 99 (Annex No. 2),
- 3. List of the legal acts that are suggested to be abrogated by the independent structures, in a total number of 7 (Annex No.3),
- 4. List of the legal acts that are subject to be amended and published in Monitorul Oficial of the Republic of Moldova in a total number of *285* (Annex No. 4), with obligation of making these modifications until January 1, 2006.

According to the statements of the regulatory reform, the legal acts presented by the institutions of state and public administration have been studied and regulated. The national working group for the entrepreneurial activity regulation studied the set of documents in detail, which were subsequently entered in the state register of the legal acts and the amendments as well as the replacement with the new rules and instructions that would conform to the market economy demands were required. By the governmental decision the lists of acts, authorizations and permits, the acts being still in effect and partially needing to be revised, were published [9]. The set of the documents foresees administrative regulation of the entrepreneurial activity and of the financial expenses incurred by the enterprises to obtain the licenses, authorizations, permits, including the

expenses on the paid services provided by the competent authorities of the supervision and control functions. In fact, based on the governmental decision, the reform of the entrepreneurial activity regulation sprang the reform of state regulation of the entrepreneurial activity [10] simultaneously with the law on revision and optimization of the legal acts of the entrepreneurial activity regulation ("Guillotine I") [6] and the law on the basic principles of the entrepreneurial activity regulation, called "Guillotine II" [11]. Although these documents appeared successively from 2005 to 2006, they kept a deregulatory /regulatory spirit and express a will of the certain economic policy to create a friendly business environment in virtue of the real resistance of the public officers having the strong lobbyist orientations. In total, as a result of "Guillotine I" implementation, in 2005, 818 legal acts were revised, but in 2006 496 acts were included in the Register of the official acts regulating the entrepreneurial activity, 184 acts were abrogated and 7 acts were proposed for abrogation by the independent public authorities [9, 12].

Simultaneously, the legality of issue of the authorities of public administration of the administrative acts, by which the business entities are allowed to carry out a certain was examined. As a result of their examination, in the "Nomenclature of activity authorizations, permits and certificates issued by the authorities of central public administration and their subordinate authorities to the individuals and legal entities to practice the entrepreneurial activity", only 125 authoritative documents were included, 82 or 65,6% of which are issued free of charge [13]. The charge is annulled for 24 types of authorizations that had been issued for pay before. The validity term was increased for 7 types of authorizations - from 1 year to 3-5 years. The term of issue of all types of authorizations is set for 10 working days at the most, except those, for which the respective laws or the international agreements and conventions foresee otherwise. The year of 2006 was a year of finishing of the work of revision of the Government and the authorities of central public administration according to the provisions on revision and optimization of the legal acts regulating the entrepreneurial activity called "Guillotine I" and passing in August 2006 to a massive revision of the law on the basic principles of the entrepreneurial activity regulation, called "Guillotine II" [6, 7]. An important step was adoption of the Strategy of the reform on state regulation of the entrepreneurial activity in 2007, by which the following priorities were established:

- Harmonization of the national legislation with the community acquis,
- Competitiveness growth, state subsidies reduction,
- Increase of the global commerce volume,
- National private sector development,
- Support of the small and medium enterprises,
- Revival and consolidation of the policies of regional development and environment protection,
- as well as the social and labor ones,
- creation of a favorable investment climate for business development.

The work performed is of importance for the business environment of the Republic of Moldova for inclusion of the economy in the European Union space and in the international turnover. The impact of these activities is felt partially in the small business, but the formalizing pressing of the public institutions is still felt. This process is of a continuous necessity and it cannot be considered as a measure of a single time in virtue of the legislative and normative base dynamic. The international experts place the Republic of Moldova in the rating " Doing Business 2009 " on the 103<sup>rd</sup> place of 181 countries analyzed and as it is seen in Diagram 1 on the accessibility/facilitation of a business

production, where Poland, the Czech Republic, Bulgaria are ahead, while Singapore is on the 1<sup>st</sup> place.

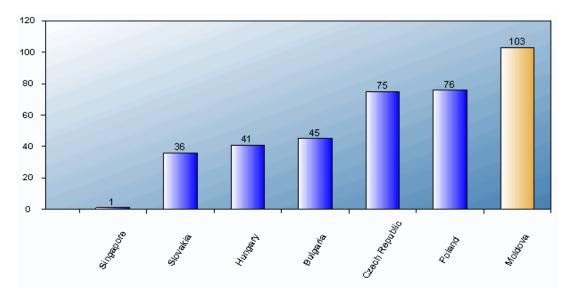


Diagram 1. Place of the Republic of Moldova on the accessibility/facilitation of a business production of 181 countries

Source: Doing Business 2009, Country Profile for Moldova, The International Bank for Reconstruction and Development / The World Bank, <u>www.worldbank.org</u>, 2008

At the same time, in the Republic of Moldova a certain dynamism in the other spheres of regulation is recorded, such as a business start, where it is placed on the  $89^{th}$  place (Diagram 2) before Poland, but after the Czech Republic, Bulgaria, Slovakia, Hungary, whereas New Zealand is the leader in this rating. Simultaneously, in the property registration, the Republic of Moldova ascends to the  $50^{th}$  place, in insurance of the contracts execution – the  $17^{th}$  place, crediting- the  $84^{th}$  place, liquidation of enterprises – the  $88^{th}$  place.

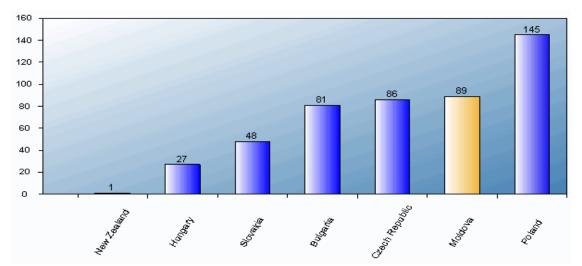


Diagram 2. Rating of the Republic of Moldova of 181 countries in a business start.

Source: Doing Business 2009, Country Profile for Moldova, The International Bank for Reconstruction and Development / The World Bank, <u>www.worldbank.org</u>, 2008

The reform on the entrepreneurial activity regulation is an undoubtedly difficult process involved in debureaucratization and discarding of the obsolete concepts on the business environment. Excessive administrative domination, lack of the resources and competence influence direct this activity of a vital importance for the Republic of Moldova. The internationalization of the regulatory necessities are materialized in the paradigms of the more adequate private initiative and the market economy. However, conceptually such activity demands to be supported officially permanently and realized by creation of the friendly environment for the SME, which are called a vertebral column of the market economy and the first to feel any attempt of an aggressive bureaucratic supervision. Meanwhile, the direct involvement of the executive and legislative power creates premises for a successful implementation of the reform on the entrepreneurial activity in the Republic of Moldova.

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# ASPECTE PRIVIND SUPRAVEGHEREA FINANCIARĂ A ASIGURĂTORILOR

### Anatolie ȚUGULSCHI ASEM Chișinău, Republic of Moldavia

### Abstract

This scientific article is dedicated for forms and actual modalities of integrate regulation of national sector of insurance. In the same connection there was analysed existence regulation of insurance subject, being remarked in this sense some problems that has some actual confrontation of Integrate Institution of regulation of the insurance activities. There are also identified a necessity of collaboration with another regulation institution of markets and other sectors by financial markets, simultaneous to couch some proposal oriented towards of modernization and efficiency of national sector of insurance.

A national economy position in the framework of world wide economy depends in the major part by the mode of organization and administration of the economic processes, and of the built-in economic stabilizer of the national economy. Any economy has specific forms of organization of the economic agent activity and at the same time multiple institutions with different functions. At the same time those are using different instruments for stimulate and braking some activities, methods of efforts quantifying and measures of effects etc. In other words every economy has a proper mechanism of functioning.

Financial mechanism has a complex structure that includes: financial system, financial levers that are used for influencing of economic activity, administrative methods used on financial domain, institutional frame, formed by institutions and bodies with financial prerogatives, legal framework, formed by laws, decisions and other regulations that have normative character in the financial domain.

Economic and financial levers occupies an important place in national economy administration. Using a fiscal – budgetary instruments, of credits, currency rate of exchange, price change etc doesn't exclude using in parallel some instruments of administrative types. Here we're taking into consideration preparation of programs and activity plans, utilization of permits and import – export limitation of some products, limits of money stock exchange, book keeping on the basis of rules established by competent public authorities, exercise financial controls by special managing body about fulfillment fiscal duties regarding state budget, respecting legal settlements regarding single output costing, wages, depreciation etc.

In accordance with existing practices, financial contemporary market represent legal framework, on the basis of which there are effected financial instruments circulation, simultaneously with selling and raising money under different forms of credits. In his turn, financial institution are represented by corporate body founded for purpose to spread with professional title resources activities and financial instruments, being constituted in form of investments found, bank, insurance company etc, and that can function in some cases, so much in commercial regime, as in non commercial regime.

In the process of national economy regulation, a special place are occupied by financial problems.

National economy management suppose decision making that causing the expected financial effects in the short run or for long period of time, in that various domains of activities.

There are a lot of authorities that participate at solvency of financial problems that are part of representative democracy system, part of administrative authority or setting up special organs of executive power, financial compartments of enterprises and institutions. From representative democracy organ category there are central and local organs of state power: Parliament, town councils, and other different institutions. Under direct guidance of those there are functioning state administrative organs, central and local: Government, ministries, prefects, town halls.

From special institution category there are: Ministry of Finance, National Commission of Financial Market, National Bank of Moldova, commercial banks, insurance and reinsurance companies, financial sections and departments of public institutions and organs. Some of this organs are acknowledged by law with the right to take decisions and their controls, others carry out superior organs decisions. Some organs and special institutions have some attributions in financial planning, executing financial plans, controlling and guidance.

In correlation with fundamentals changes produced on economy of Republic of Moldova, non banking financial market in 2007 register some important changes on institutional and regulator plans as a result of constitution of National Financial Market commission(CNPF) on the legal basis of Law nr. 129-XVI from 07.06.2007 "For changing and completion of Law nr. 192-XIV from 12.11.1998 regarding National Commission of Exchange Security". New institution started its activity on 06.09.2007 and becoming successor of National Commission of Exchange Security (CNVM), State Inspection of Insurance Supervising and Pension Non state Founds and State Supervising Service of the loan and economic association activity of the citizens By Finance Ministry, that was being reshaped through absorbtion with entire capital at CNPF.

The main goal of that modifications in insurance industry, is the constitution of the stable insurance market, distinguished and functional, capable to become a real instrument into protect a citizens interests, of the economic agents and of the state.

Insurance represent important sector of the national economy, which influence is feeling so much of risks protection in social and economic domain, in role of saving idea, how as founds supplier for financial markets.

Public intervention on insurance industry is too important. The main modalities of public intervention are:

Control of the characteristic contracts: this control can be realized either aposteriori, in Great Britain, for example, or apriori, for example in France, where all of the spreaded information by companies about insurance contracts, are controlled by supervisor authority. It's suppose a type of standard that are realized in every country and present some disadvantage that operate to the prejudice of diversity of products – services available insured persons, especially regarding the differentiation of protect levels.

- Control of the insurance reinsurance companies solvency: we are talking about of solvency limit taxation for the insurance companies, destined to cover eventual deviations from growth number rule. Net current assets of the insurance company must be at least equal with fixed action of its rate of turnover, taking as an index of its quantum engagement. Balance control, consider technik commissions value. It verify if future engagements of the company are correctly covered with commissions. The evaluation of the insurance companies turnover, as its composition, are at the same time, object of the state control. Checking the security, solvency and profitability of capital investments are important. We have to take into consideration that, often, the controlling operations are accompanied with taxation of minimum tariffs.
- Insurance obligations and its consequences: insurance obligations interferes in the major states of the world. It involves taking by state obligation to protect presumptive insured persons that can't find an underwriter. For example, in states where exists a lot of stipulations, as Germany, the insurance reinsurance companies have not the right to refuse to clients. In liberal states as USA, the insured persons have a possibility to appeal to one of the last competence underwriter, and just in case to be subsidized by them. In France there exist an intermediary situation: in case that one of the insured person doesn't find an underwriter, he can require at Insurance Direction to oblige one of the selected company by them to accept himself in quality of client, in this case the insurance premium will be fixed by public organism, called central Bureau of Tariffs.
- Market enter regulation of the new insurance companies: In France, the future insurance companies must present a minimum capital, a program of activity for minimum 3 years and to obtain Insurance Direction agreement.

State control is less oppressive. The state is obliged to do public all of information about insurance companies management. The unique control is exercised only on solvency of underwriters. The law stipulate a minimum solvency limit from gross quantum of insurance premiums offered for selling.

In general there are three argumentation of public intervention in insurance industry:

- Population protections;
- Supplying market imperfections;
- Redistribution of the profit.

To characterize the importance of the insurances in the economy and analyze the role of them, we have to use a set of indexes that analyzing in tightly interdependence: total volume of insurance premiums receipts, penetration of the insurances (ratio between insurance premiums and gross national product), ratio between insurance companies investments and gross national product, density of insurances etc.

Analyzing basic indexes of the insurance companies activities, we're establishing, that decreased number of the insurance companies comparatively with 2003, there were registrate a constant growth of capitals that was constituted for analyzed period -63%. From other viewpoint the profits of the insurance companies are modest, real small. The general profit was grossed in medium with 1 mln. USD per year, fact that do moldavian insurance market for foreign investors not attractive.

		iova 2003	- 4007			
year indexes	2003	2004	2005	2006	2007	Growth in %, 2007 comparatively with 2003
Nr.of registrated companies	43	28	32	33	33	76,74
Authoized share	108,281	137.945	145,345	176,703	364,878	163,19
capitalpaid,thousands of lei						
Compensations value, %	26,06	26.79	29,35	34,16	46,17	131,1
Insurance premiums, mii lei	289,900	379.010	413,360	558,983	724,2	192,82
For facultative insurance	242,126	301,900	333,055	415,152	507,127	171,46
contracts, thousands of lei						
Insurance compensations,	75,54	101,54	121,33	190,95	235,3	252,79
thousands of lei						
incl. For facultative insurance	55,403	77,256	94,706	146,663	215,452	264,72
contracts, thousands of lei						
Registrated profit, , thousands of lei	24,15	30,775	39,484	54,773	78,624	

Dynamic of the basic indexes of Insurance Companies activity from republic of Moldova 2003 – 2007

Source: Dates elaborated by the CNPF

Insurance market in republic of Moldova has a possibility to surpass in 2008 one milliard lei, if the market will continue to follow a growth rate with 35% that was in 2007. "More than sure that the market will continue to registrate high growths rates" there are talking the representatives of the insurance companies.

It's too difficult to have a comparison of Republica Moldova with occidental countries on evolution sphere of insurances.

The proportions are not compatible with real contents of the insurance operations. The quantum of insurance premium in the USA per person are 2000\$, for Sweden - \$ 3000, for Japan - 4500, and then in Republic of Moldova the similar index in 2007 was 18\$. The total of social capitals of the national insurance companies can be equaled with similar index of one or two underwriters from USA.

At the most serious problems of the insurance market can be attributed and applied types of mandatory insurances, in absence of informational framework adequate economy market exigency. As a rule, the protection through insurance reduce considerable, but the insurance companies collect big sums by that type of insurance. Consequently, the compulsory insurances constitute a redistribution modality of financial resources in favor of some insurance companies.

The problem of national insurance market liberalization present a distinct interest for foreign underwriters activity, fact imposed by members quality of World Trade Organization. This is imposed at the same time by the validity of accordance as for partnership and collaboration between Republic of Moldova and the European Union. It is necessary to revoke gradual of the restrictions as for foreign insurance underwriters, being necessary considerable intensification of the national underwriters potentials through accordance of the considerable protection by the state.

There was be better an elaboration for a long period of time, one of the program – concept, as for national insurance market evolution, that will determine the extension of the and will take into consideration the objections of the insurance legal framework professional association of the underwriters of the Trade and Industry Chamber of the Republic of Moldova. This program may will be adopted by the Government of the Republic of Moldova. It may will include a set of the thesis and objectives that will determine some principles for taking some actions by the govern as for national insurance market evolution. The conceptual part of this program will determine that insurances will exempted a state budget from expenses generated by extremal situations, but will constitute one of the most stable investments resources. So, the system of insurances will may be recognized by the state as an important strategic frame, being necessary to protect and evolving it. The state will stimulate the economic agents and organizations to contract the insurances, exempt the restriction that regulate the passibility to attribute to insurance premiums for products costs, that is in glaring contradiction with the economy market exigence, contributing in this case for extension of the facultative insurances.

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# PROBLEMA RISCULUI ÎN EVALUAREA DEZVOLTĂRII INOVAȚIONALE

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Rezumat:

Innovative process, generalises results of innovative activity, and contains four basic stages, united in a cycle **«researches - workings out - manufacture»**. For potential investors financing of research works is connected with presence of economic risk. It is caused by high probability of reception of negative results. The property of risk, alternativeness, assumes necessity of a choice from two or several possible variants of the decisions, directions, and actions. The absence of an opportunity of a choice testifies to absence of risk: there, where there is no choice, there is no also risk. In modern enterprise activity the special value gets innovation risk, which is connected to financing and application of scientific and technical innovations. The receptions of management of risk consist of means of the sanction is brave also of receptions of reduction of a degree of risk.

**Key words:** Statistics indicators, Science and Technology (S&T), Researching-Development (R&D), Innovation, Scientific activities, Scientific and Technological innovation processes, innovation, innovate, investor financing, economic risk, innovational risk, management of risk.

### Introducere

În prezent dezvoltării economiei inovaționale se acordă un interes sporit. Cercetarea științifică, dezvoltarea tehnologică și inovarea reprezintă forța motrică a economiei bazate pe cunoaștere, factorul cheie al dezvoltării și competivității. Susținerea cercetării-dezvoltării și stimularea unui climat inovațional stabil devine o prioritate strategică în dezvoltarea social-economică a Republicii Moldova. Însă este evident că având acces la tehnologiile avansate naționale și internaționale Moldova va putea să se ridice la un nivel cu țările dezvoltate, doar numai dispunând de resurse financiare suficiente.

### Rezultate și discuții

Complexitatea procesului de inovare constă în legătura strânsă a acestui proces cu activitatea de cercetare-dezvoltare Procesul de inovare generalizează rezultatele activității de inovare și cuprinde patru etape principale, întrunite în ciclul "cercetare - elaborare – producere".

Procesul de inovare începe nemijlocit de la etapa de efectuare a lucrărilor de cercetare științifică (LCŞ), care realizează rezultatele cercetărilor teoretice fundamentale și sunt efectuate în instituțiile academice și în organizațiile științifico-tehnice mari. Sursele principale de finanțare ale LCŞ sunt mijloacele bugetului de stat, care sunt nerambursabile.

La următoarea etapa a procesului de inovare se efectuează LCŞ aplicative. Pentru potențialii investitorii finanțarea LCŞ aplicative ține de existența riscului economic, fapt condiționat de probabilitatea înaltă de obținere a rezultatelor negative. De aceea investițiile în aceste scopuri se numesc investiții de risc.

La etapa a treia a procesului inovațional se efectuează LEC, după care urmează procesul de comercializare a produsului de inovare - de la lansarea producției până la ieșirea pe piață

în calitate de marfă. La lansarea producției sunt necesare investiții mari în renovarea capacităților de producție, cheltuieli pentru pregătirea personalului, activitatea publicitară etc. La etapa respectivă a procesului de inovare reacția pieței la produsul nou încă nu este cunoscută și investițiile continuă să posede caracter de risc.

Conform cercetării Pricewaterhouse Coopers, circa jumătate din conducătorii a 355 companii americane private respondente încearcă să evalueze inovările. Aceștia măsoară succesul deciziilor sale de inovare, utilizând următoarele criterii: influența asupra creșterii veniturilor companiei (78%), satisfacerea clienților (76%), creșterea veniturilor de la produsele noi (74%), sporirea productivității muncii (71%), dinamica profitului (68%). În același timp organizațiile utilizează diferite metode pentru măsurarea activității sale de inovare.<sup>50</sup>

Sistemul de indicatori al inovărilor creează bază pentru adoptarea deciziilor administrative, exprimă interesele strategice ale instituțiilor științifice sau ale firmelor, motivează personalul la inițiativa de afaceri.

Indicatorii respectivi ajută la analiza capacității organizațiilor în adoptarea deciziilor inovaționale și servesc drept criterii de succes ale companiei în acest domeniu. Necesitatea utilizării indicatorilor respectivi constă în următoarele:

1. Sistemul de indicatori propune baza formalizată (datele numerice obiective) pentru adoptarea deciziilor administrative, deoarece multe proiecte de inovare posedă o perspectivă pe termen lung și riscuri înalte.

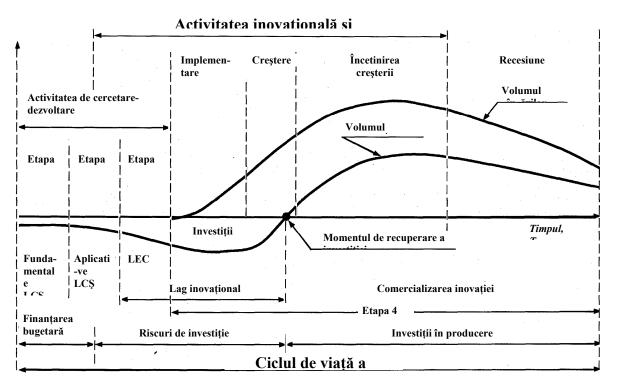
2. Indicatorii inovărilor exprimă interesele strategice ale companiei, permit de "a introduce" inovările în procesele-business și de a organiza relațiile dintre cei, care generează idei noi, și echipa administrativă.

3. Indicatorii ajută la distribuirea argumentată a resurselor între sistemul corporativ de administrare a ideilor și inițiativelor de inovare.

4. Sistemul de indicatori stabilește scontările referitoare la potențialul de inovare al companiei, iar compararea indicatorilor planificați cu valorile lor în perioadele de raportare permit de a constata locurile "slabe" – procesele, finanțarea cărora nu corespunde scopurilor propuse.

5. Indicatorii inovărilor motivează personalul către inițiativă. Scopurile clar formulate îi face pe colaboratori să fie mai întreprinzători, mobilizându-i către tendința de executare a sarcinilor propuse.

<sup>&</sup>lt;sup>50</sup> Хомутский Дмитрий, журнал <u>"Управление компанией"</u>№2, 2006, <u>Изд. России</u>



Des. 1. Ciclul vital al inovărilor<sup>51</sup>

Însă, în condițiile contemporane ale dezvoltării economice este necesar de a avea la dispoziție un sistem integru de indicatori ai inovărilor, care ar include de asemenea și evaluarea riscului de inovare, și ar fi în armonie cu interesele strategice ale companiei.

În condițiile relațiilor de piață riscul reprezintă un element important în antreprenoriat. Sistemul administrativ de echipă tinde către lichidarea inițiativei reale odată cu condiția ei inevitabilă – riscul. Lipsa posibilității de alegere denotă lipsa riscului: acolo unde nu există alegere, nu există nici risc. În activitatea antreprenorială contemporană, care se află la etapa de sporire a capitalurilor, utilizate atât pentru fabricarea mărfurilor și serviciilor existente, cât și pentru crearea celor noi o importanță deosebită capătă *riscul de inovare*.

Riscul de inovare ține de finanțarea și aplicarea inovărilor tehnico-științifice. Deoarece cheltuielile și rezultatele progresului tehnico-științific sunt extinse și depărtate în timp, ele pot fi prevăzute doar în unele limite (de obicei foarte largi). Prin urmare, riscul de inovare este probabilitatea pierderilor, apărute la investirea de către firma antreprenorială a mijloacelor în producerea noilor mărfuri și servicii, care, posibil, nu-și vor găsi (în timp scurt sau chiar deloc) solicitarea scontată pe piață.

Riscul de inovare apare în următoarele situații:

La implementarea unei metode mai ieftine de producere a mărfii sau serviciului în comparație cu cele deja utilizate. Astfel de investiții vor aduce firmei antreprenoriale superprofit temporar până în momentul, până când ea va fi unicul deținător al tehnologiei respective. În această situație firma se confruntă doar cu un singur tip de risc – evaluarea posibil nejustă a cererii pentru marfa produsă;

<sup>&</sup>lt;sup>51</sup> Инновационный менеджмент: Учеб.-метод. Пособие / Сост. С.В.Васильев/, Великий Новгород, 2006. – стр.35

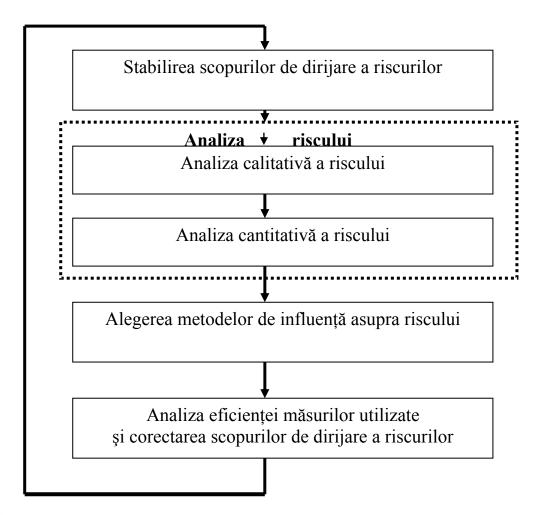
- La fabricarea noului produs (marfă; serviciu) la utilajul vechi. În acest caz la riscul evaluării eronate a cererii la marfa sau serviciul nou se mai adaugă și riscul necorespunderii calității mărfii sau serviciului în legătură cu utilizarea utilajului învechit;
- La producerea mărfii sau serviciului nou cu ajutorul tehnicii şi tehnologiei noi. În această situație riscul de inovare include: riscul faptului, că noua marfă sau serviciu nuşi va găsi cumpărătorul; riscul necorespunderii utilajului şi tehnologiei noi cerințelor necesare pentru producerea mărfii sau serviciului nou; riscul imposibilității de vânzare a utilajului creat, deoarece acesta nu se potrivește pentru fabricarea unei noi producții, în caz de insucces.

Metodele de gestionare a riscurilor sunt deosebit de variate. Întregul proces de administrare a riscurilor poate fi reflectat în modul următor (vezi schema). Etapa de întocmire a scopurilor de administrare a riscurilor se caracterizează prin utilizarea metodelor de analiză și prognozare a conjuncturii economice, constatarea posibilităților și necesităților întreprinderii în cadrul strategiei și planurilor curente de dezvoltare.

Etapa principală, care permite de a elabora strategia de mai departe de administrare a riscurilor, este etapa de analiză a acestora. Deseori analiza calitativă și cantitativă este efectuată în baza evaluării influenței factorilor interni și exteriori: se efectuează evaluarea pe elemente a ponderii influenței lor asupra activității întreprinderii respective și valorii ei monetare. O atare metodă de analiză este deosebit de complexă din punct de vedere a analizei cantitative, însă își are aportul său necondiționat la analiza cantitativă. În acest context este necesar de a acorda o atenție mare descrierii metodelor analizei cantitative a riscului financiar, deoarece ele sunt diverse și pentru aplicarea lor corectă sunt necesare cunoștințe profunde.

*În expresie absolută* riscul poate fi determinat prin mărimea pierderilor posibile în expresie materială (fizică) sau valorică (bănească).

*În expresie relativă* riscul este determinat drept mărimea pierderilor posibile, raportată la o oarecare bază, care poate fi sau starea patrimonială a întreprinderii, sau cheltuielile totale de resurse pentru tipul respectiv de activitate antreprenorială, sau venitul (profitul) scontat. Atunci drept pierderi vor fi considerate devierile întâmplătoare ale profitului, venitului, câștigului în partea reducerii, în comparație cu mărimile scontate. Nivelul de risc depinde de raportul mărimii pierderilor scontate la volumul patrimoniului firmei antreprenoriale, precum și de probabilitatea apariției pierderilor respective.



În dependență de mărimea pierderilor posibile este rațional ca acestea să fie divizate în trei grupe:

- 1. *riscuri admisibile* pierderile, mărimea cărora nu depășește profitul calculat;
- *riscuri critice* pierderile, mărimea cărora este mai mare ca profitul calculat

   aceste pierderi este necesar de a fi restituite din patrimoniul
   antreprenorului;
- 3. *riscul catastrofal* cel mai periculos risc, în care antreprenorul riscă să suporte pierderi, care depășesc patrimoniul.

Procedeele de gestionare a riscului constau din mijloacele de soluționare a riscurilor și metodele de reducere a gradului de risc. Mijloacele de soluționare a riscurilor sunt evitarea acestora, menținerea, transmiterea, reducerea gradului lor. Evitarea riscului înseamnă abaterea simplă de la măsurile, ce țin de risc. Însă evitarea riscului pentru investitor deseori înseamnă refuzul de a obține profit.

Unul dintre motivele principale de gestionare a riscurilor este lipsa bazelor metodologice distincte ale acestui proces. Analiza principiilor de gestionare a riscurilor denotă privitor la neconcordanța acestora, iar puținele încercări de a le sistematiza au condus la multiple momente contestabile. Cu toate acestea, analiza cercetărilor în domeniul metodologiei de gestionare a riscurilor cu contul cerințelor economiei contemporane permite de a crea sistemul de principii de gestionare a riscurilor:

- Decizia, ce ține de risc, este necesar de a fi corectă din punct de vedere economic şi să nu influențeze negativ asupra rezultatelor activității financiar-economice a întreprinderii;
- Gestionarea riscurilor trebuie să se efectueze în cadrul strategiei corporative a organizației;
- La gestionarea riscurilor deciziile adoptate trebuie să se bazeze pe volumul necesar de informație veridică;
- În procesul gestionării riscurilor deciziile adoptate trebuie să țină cont de caracteristicile obiective ale mediului, în care întreprinderea activează;
- Managementul riscurilor trebuie să poarte caracter sistemic;
- Managementul riscurilor trebuie să presupună analiza curentă a eficacității deciziilor adoptate și rectificarea operativă a setului de principii și metode utilizate de administrare a riscurilor<sup>52</sup>.

Însă nu în toate cazurile managementul riscului este posibil, și mai ales în așa domeniu ca domeniul inovațional în care riscurile au un specific aparte.

Riscul de inovare este interpretat drept realitate obiectivă și inevitabilă. Astfel, experiența mondială denotă, că cota obținerii rezultatelor preconizate la etapa cercetărilor fundamentale de obicei depășește 10%. Cota elaborărilor științifice aplicative constituie 80%. Preventiv se presupune, că chiar la selectarea strictă, în decursul căreia 80-90% din propuneri sunt respinse, totuși printre proiectele care au obținut finanțare din contul fondurilor de inovare, până la 10-30% din acestea pot să fie finalizate cu insucces. Însă obținerea unui rezultat negativ denotă totuși un rezultat.

Problema constă în aceea că antreprenoriatul inovațional, cere investiții esențiale în perioada inițială de dezvoltare, iar proiectele sunt de un risc înalt. Așa în lanțul de investire există "o slabă verigă" – proiectele la etapa de inițiere<sup>53</sup>, când încă nu se știe care pot fi câștigurile.

Iată de ce în occident se practică donațiile gratuite instituțiilor științifice, iar firmele de venture, antrenate în experiența de asimilare a noilor tehnologii, posedă înlesniri impozitare, precum și sunt susținute prin acordarea suportului din partea statului. În aceasta și constă paradoxul principal al dezvoltării inovaționale, că nu este posibil de a pronostica, în cât timp se vor resimți rezultatele finanțării în cercetări? Acest lucru nu î-l cunoaște nimeni.

În sectorul real al economiei termenele îndelungate de realizare a proiectelor, volumul insuficient al investițiilor, circulația și recuperarea redusă a mijloacelor, nivelul relativ redus al cunoștințelor economice a personalului administrativ împiedică evaluarea obiectivă a privilegiilor concepției de reducere a riscurilor în activitatea întreprinderii și creează o barieră psihologică de neîncredere referitoare la recomandările științei economice de minimizare a riscurilor.

<sup>&</sup>lt;sup>52</sup> Романов В. С. Механизм управления рисками предприятия в современных условиях хозяйствования. Ульяновск, 2002, стр.7.

<sup>&</sup>lt;sup>53</sup> Finanțarea proiectelor la etapa inițială în toate țările dezvoltate se produce din mijloacele investitorilor privați

În realitate activitatea financiar-economică a întreprinderii este efectuată în condiții de incertitudine. Alegerea unei sau altei strategii de dezvoltare poate conduce atât la sporirea, cât și la pierderea mijloacelor investite. În condițiile de nesiguranță întotdeauna există o multitudine de variante alternative de adoptare a deciziilor. Probabilitatea realizării cu succes (obținerea veniturilor maxime cu pierderi minime) a oricăror dintre ele depinde de numărul esențial de factori interni și exteriori, care influențează asupra întreprinderii. Aceste realități integral reflectă esența și noțiunea riscului.

Una dintre regulile principale ale activității financiar-economice spune: "A nu evita riscul, ci a-l prevede, încercând de a-l reduce până la nivelul cel mai de jos posibil"<sup>54</sup>, iar pentru aceasta este necesar de a gestiona corect riscurile antreprenoriale.

### Concluzii

Examinând problema evaluării inovaționale în ansamblu, putem concluziona următoarele. Activitatea de inovare se bazează pe **prioritățile**, care sunt create în sfera comercializării rezultatelor cercetărilor și elaborărilor în interacțiune cu sectorul antreprenorial al economiei, reieșind din interesele naționale ale țării și ținând cont de tendințele mondiale ale dezvoltării științei, tehnologiilor și tehnicii.

Fără produsul intelectual, obținut în rezultatul activității de inovare, practic este imposibil de a crea un produs competitiv, cu grad înalt de sciento-intensivitate și inovare<sup>55</sup>. Anume potențialul inovativ determină competitivitatea organizațiilor, regiunilor și țărilor.

În Republica Moldova este necesar de a elabora *un Plan de acțiuni*, conform tipului UE, *în sfera științei și inovării* cu anumite direcții prioritare de activitate în domeniul inovării. Reieșind din faptul, că în condițiile relațiilor de piață finanțarea cercetărilor științifice aplicative ține de existența factorului economic, decizia neargumentată sau evitarea riscului influențează negativ asupra calității rezultatului, de aceea elaborarea și adoptarea deciziei optime reprezintă conditia principală de prevenire a riscului.

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# PARTICULARITĂȚILE ACTIVITĂȚII ECONOMICE ALE ÎNTREPRINDERILOR DE PRELUCRARE A CĂRNII ȘI INFLUENȚA ASUPRA CONTABILITĂȚII DE GESTIUNE

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Industria alimentară face parte din grupul de ramuri prelucrătoare a economiei naționale, al cărei rol social și economic este de a produce bunuri alimentare pentru satisfacerea nevoilor populației și de a asigura necesarul fiziologic de alimente solicitate de o alimentație științifică.

Industria cărnii este o parte componentă a ramurii date și asigură populația cu un produs de bază al alimentației – **Carnea**, produs care formează unul din cele mai importante segmente ale pieței alimentare. Piața cărnii în RM este caracterizată de mai mulți indicatori. Industria de prelucrare a cărnii include în componența sa 10 întreprinderi de capacități mare și medie și peste 74 de unități de capacități medie și mică de prelucrare a cărnii. Capacitatea totală de producție pe ramură constituie anual cca. 190 mii tone de carne în carcase. Capacitățile de abatorizare se utilizează la un randament de doar 7,5%, iar cele de fabricare a mezelurilor de cca. 35-50% [1]. Din 85 de întreprinderi din această ramură ponderea cea mai mare în totalul volumului fabricat de preparate din cane ponderea cea mai mare o dețin SA "Carmez" cu 41,9% și SA "Basarabia Nord" cu 24,96%, ceilalți participanți de pe piață deținînd o cota parte redusă.

Industria cărnii și a preparatelor din carne are unele caracteristici de bază care influențează activitatea acestor întreprinderi și organizarea contabilității în cadrul lor. Se poate de menționat următoarele caracteristici de bază:

### 1. Natura materiilor prime utilizate și a tehnologiilor aplicate.

**Carnea** este produs animalier, ceea ce îi imprimă un grad ridicat de perisabilitate, care are influență asupra întregului proces tehnologic. Aceste caracteristici fac crearea unor depozite cu condiții speciale de stocare, sisteme de refrigerare și tehnologii speciale de prelucrare a cărnii și de obținere a produselor alimentare cu durata mai îndelungata de păstrare etc.

### 2. Specificul produsului final și relația cu consumatorul.

Produsul final al acestei industrii este un aliment. Alimentele sunt produse ușor alterabile, fapt care impune condiții speciale de producere, conservare și păstrare pe tot parcursul lanțului de viață a produselor din carne, deoarece în final ele influențează sănătatea oamenilor. Analizând datele statistice din 2007 putem menționa că ponderea cea mai mare în totalul produselor fabricate au salamurile, crenvurștii și cârnăciorii cu 63,71% sau 9333,4 tone anual. O cotă parte considerabilă ocupă mezelurile afumate cărora le revin 26, 75% sau 3918,5 tone. Celelalte preparate din carne au fost produse în cantități mai mici datorită cererii scăzute și preferințelor joase ale consumatorilor

**3.** Caracteristicile furnizorului de materie primă și starea bazei de aprovizionare. Actualmente una din problemele de bază în industria cărnii este problema asigurării cu materie primă a întreprinderilor producătoare de carne. În Republica Moldova producătorii furnizori de materie primă (animale vii) sunt dispersați și organizați sub întreprinderi mici și mijlocii cu proprietate privată sau proprietate familială. Furnizorii autohtoni de carne nu pot asigura producătorii cu carne calitativă în cantități suficiente. Utilizarea materiei prime de import majorează dependența întreprinderii de piața externă, de fluctuațiile cursurilor valutare și poate reduce competitivitatea produselor fabricate. Ca urmare a acestei situații întreprinderile producătoare încearcă să creeze o bază proprie a materiei prime. Astfel, cele mai mari uzine producătoare de preparate din carne au făcut investiții în complexe de tip abator.

### 4. Statutul producătorului de produse din carne.

Analizând sub aspect geografic ramura dată în Republica Moldova putem menționa că producerea de carne și mezeluri este concentrată în centrul țării, în special municipiul Chișinău cu o pondere pe piața cărnii de 56,19% și pe piața mezelurilor de 67,82%. Producerea de carne și mezeluri este împărțită cu întreprinderile din zona de nord a țării a căror cotă este de 43,08% și 22,71%, cu o participare minoră a întreprinderilor din zona centru și sud.

### 5. Nivelul consumului și statutul consumatorului.

Actualmente în Republica Moldova datorită ponderii ridicate a populației rurale există un nivel ridicat al autoconsumului și extinderea sistemelor tradiționale de sacrificare a animalelor, proces care deseori este efectuat în condiții reduse de igienă. În Republica Moldova consumul de carne pe cap de locuitor este de 39 kg față de 68 kg în anii 1989 – 1990, iar în comparație cu Uniunea Europeană este cu mult mai mic, unde consumul este de 78 kg pe cap de locuitor.

### 6. Asigurarea tehnică și automatizarea proceselor în industria cărnii.

Procesele tehnologice specifice industriei cărnii și produselor din carne se bazează pe utilaje complexe și cu un înalt grad de automatizare. În Republica Moldova tehnologizarea și reutilarea tehnică a întreprinderilor din această ramură este polarizată, de la producători mari cu grad înalt de echipare tehnică pînă la agenți economici ai micului business unde procesul de producere este la nivel semiautmatizat, bazat pe munca manuală. Industria cărnii este o industrie care operează cu produse biologice pe care le transformă în produse alimentare, fapt care specific și uneori greu procesul de automatizare.

# 7. Caracterul sezonier al procesului de aprovizionare cu carne și legătura puternică cu agricultura.

Caracteristicile industriei cărnii rezultă din legăturile acestora cu agricultura. Industria cărnii, fiind la hotar între agricultură și industrie este într-o relativă dependență de procesele care au loc în ramura agriculturii. Acest fapt face apariția unor fluctuații în cursul anului calendaristic cu privire la procesul de aprovizionare cu carne. Influența agriculturii se concretizează prin dependența de produsele obținute în fitotehnie. Astfel, în perioadele cu recoltă proastă se micșorează nivelul de asigurare cu furaje și refuzul populației de creștere a animalelor, lipsă a materiei prime pe piață și creșterea importul de carne.

Dezvoltarea și perfecționarea activității întreprinderilor din industria cărnii este influențată de un număr mare de factori. Printre acești factori pot fi menționați:

### • Dimensiunea întreprinderii;

Mărimea entității economice impune organizarea contabilității de gestiune în general. Această poate organizată printr-un compartiment distinct sau nu, centralizat sau pot exista structuri separate. Mărimea întreprinderii influențează numărul și modul de circulație a documentelor contabile.

## • Structura organizatorică a întreprinderii;

Structura întreprinderii este influențată de tipul activității, specializarea întreprinderii și procesul tehnologic. Acest factor influențează modul de organizare a contabilității de gestiune, obiectele de evidență și centrele de cost. Centrele de cost pot fi localizate în secțiile în care are loc colectarea animalelor, prelucrarea cărnii, producerea mezelurilor, secția administrativă.

## • Genul principal de activitate și gradul de integrare al întreprinderii;

Trebuie menționat că nu toate întreprinderile autohtone dispun de un ciclu integru - de la creșterea animalului și până la fabricarea produsul finit. De aceea dezvoltarea ulterioară a producătorilor autohtoni se va axa pe punerea în funcțiune a secțiilor de tranșare proprii cu cumpărarea animalelor vii. În această ordine de idei am anexat în funcție de capacitate și profil am arătat în anexe clasificarea întreprinderilor. După capacitate și profil aceste întreprinderi se clasifică în combinate și specializate. Genul de activitate și specializarea întreprinderii impune existența unor etape de producere, operațiuni economice și secțiilor suplimentare în cadrul ei. În cazul în care activitatea este diversificată, cum ar fi combinatele de carne care includ atât colectarea animalelor și prelucrarea cărnii, pot fi utilizate metode noi de calculație cum ar fi metoda ABC adică metoda de calculație pe activități.

### • Tehnologia și automatizarea procesului de producție;

Acest factor influențează etapele succesive pe care le urmează carne a până la producerea mezelurilor. Calculația costului de producție are loc pe etape (faze) pe care le parcurge produsul Astfel, se calculează costuri de producție aferente operațiunilor de colectare a animalelor sau cărnii, de prelucrare a cărnii, de producere a produselor din carne.

Metodologia și organizarea evidenței manageriale sînt influențate de particularitățile tehnologice și organizaționale ale producției, deoarece anume la această etapă se manifestă mai accentuat specificul ramurii. În acest sens, cu cît mai exact sînt reflectate schemele organizațional-tehnologice în contabilitate, cu atît mai mult ea corespunde cerințelor sporirii eficienței producției și găsirii rezervelor interne de producție.

Particularitățile de bază ale procesului tehnologic care influențează organizarea procesului de producție și contabilității de gestiune sînt următoarele:

### • Specificul materiei prime prelucrate;

Asigurarea cu materie primă influențează asupra mărimii întreprinderii, volumul de producere, condițiilor de concentrare sau specializare a producerii. De tipul materiei prime este legată mărimea sortimentului de preparate fabricat și îndeplinirea unor bugete de producere și vînzări. Materia primă, materialele de bază și semifabricatele constituie baza și componenta de bază a producției fabricate. În industria cărnii consumuri privind materialele reprezintă 80% din costul de producție a acestora. Aceste materiale includ animalele, carnea, subprodusele, slănina, făina, crohmalul, membranele naturale și artificiale.

## • Specificul și varietatea (nomenclatura) produsului final;

Gruparea și clasificarea produselor fabricate influențează organizarea contabilității de gestiune prin faptul că unele tipuri de produse asemănătoare prin tehnologie sau alte criterii pot comasate în grupe care pot fi analizate separat în cadrul procesului decizional. Clasificarea produselor finite poate influența alegerea bazei optime de repartizare a consumurilor convențional variabile. Astfel, consumurile care apar în sala de prelucrare sub vacuum, de întreținere a utilajului sub vacuum sînt luate în calculul costului produselor împachetate în ambalaj de vacuum. O altă caracteristică a procesului de producere este

# • Durata procesului de producere și stocul redus de producție în curs de execuție.

Un atribut important al procesului tehnologic este durata ciclului de producție care influențează prelucrarea și obținerea informației operative pentru gestiune. În funcție de grupele de produse fabricate procesul de producție poate avea o durată de la 1,5 zile pînă la 25 zile.

Durata procesului de producție influențează formarea unor stocuri reduse de producție în curs de execuție a mezelurilor fierte și uscate, semifierte. Cu cît e mai mare durata procesului tehnologic cu atît este mai mare stocul producției neterminate[2]. Alte caracteristici a procesului de producere pot fi menționate:

## • Sezonalitatea producerii și prelucrării materiei prime;

Caracterul sezonier al obținerii și prelucrării materiei prime primare, legătura combinatelor de carne cu producția agricolă influențează considerabil achiziționarea, păstrarea și transportarea materiei prime, tehnologia și ciclul de producție a întreprinderilor de prelucrare a cărnii. De exemplu, predarea vitelor în luna iulie constituie 50% din prelucrarea lor în septembrie. Din această cauză la combinatele de carne se recurge la ore suplimentare de muncă, se atrag resurse suplimentare. Aceasta, în ultimă instanță, generează neuniformități în utilizarea capacităților de producție și, drept consecință, încălcarea tehnologiei de prelucrare a carcaselor de carne și scăderea calității lor. Una din problemele analizate este stabilirea obiectelor de evidență în cadrul activității întreprinderilor din ramura dată. Obiectul de evidență este în raport cu tehnologia de producere utilizată. Aici am făcut o cercetare a schemelor tehnologice de:

- Abatorizare a bovinelor și porcinelor;
- Fabricare a salamurilor și conservelor din carne.

În raport cu etapele procesului de producere în opinia noastră divizarea obiectelor de evidență poate fi regrupată deoarece unele stadii sînt legate una de alta și pot fi comasate. Regruparea stadiilor de prelucrare poate fi efectuată astfel:

# 1. Colectare - Aprovizionare; 2. Prelucrare; 3. Producere.

# 1. Faza "Colectare – aprovizionare"

La faza dată au loc procese de colectare și aducerea animalelor pînă la starea de tăiere, adică hrana și îngrășarea animalelor, operații caracteristice zootehniei, precum și lucrări prin care se obține materia primă pentru producerea preparatelor din carne. Această fază include următoarele etape independente care pot fi ca obiect de evidență:

- 4 Colectarea animalelor prin procurare de la persoane fizice și juridice;
- **4** Recepția calitativă și cantitativă a animalelor.
- 4 Creșterea și îngrășarea lor;
- **H** Transportarea la abator sau locul de sacrificare;

## 2. Faza "Prelucrarea"

Obiectivul de bază a acestei stadii este obținerea cărnii și produselor secundare la sacrificare. La această stadie pot fi identificate următoarele etape tehnologice independente care pot fi considerate ca obiecte de evidență sub aspect managerial:

- Pregătirea animalelor pentru tăiere
- Primarea vieții animalului.
- Asomarea
- Sângerarea
- Prelucrarea inițială. (Jupuirea, Opărirea, Depilare, Jumulirea (deplumarea), Îndepărtare extremități);
- Prelucrarea carcasei.
- Despicare.
- Toaletare.
- Marcarea carcasei. Zvântarea carcasei;
- Cântărirea
- Prelucrare frigorifică.

### 3. Faza "Producere"

Obiecte de evidență pot fi evidențiate la fiecare fază și etapă a procesului de producere și prelucrare a preparatelor din carne:

- Grupe tehnologice de animale după vîrstă și sex (la faza "colectare aprovizionare");
- Tipuri de carne, preparate din carne (la faza "prelucrare");
- Tipuri de produse finale (la faza "producere").

Ținerea evidenței animalelor pe grupe după vîrstă și sex permite colectarea la un cont analitic a consumurilor aferente întreținerii unui animal de o vîrstă anumită, însă în această grupă pot fi animale cu destinație de producere diferită. Ca rezultat pot fi calculate costuri identice pentru animale din turma de bază sau scoase din turma de bază, deși întreținerea acestor grupe de animale este diferită și implică consumuri diferite. De aceea ar mai corect ținerea evidenței analitice pe grupe tehnologice și pe scopuri de producere. În cadrul grupei tehnologice se poate ține evidența după vîrstă și sex.

Dacă combinatul de carne, pe lîngă produsele sale finite de bază (mezeluri, afumături), mai comercializează în exterior carne, atunci aceasta se consideră semifabricat. De aceea ar fi corect utilizarea metodei pe semifabricate, aplicată în cazurile comercializării unor produse, care n-au fost supuse prelucrării la toate etapele tehnologice.

Vom remarca că întreprinderile din industria cărnii pot să nu ducă evidența separată a semifabricatelor de producție proprie. În acest caz produsele menționate se reflectă în componența producției în curs de execuție.

Calculația costului al produselor rezultate din prelucrarea cărnii se realizează în două faze principale:

- pregătirea cărnii deflaxate pentru mezeluri, materiei prime pentru afumături, semifabricate din carne, conserve;
- fabricarea produselor finite: salamurilor, afumăturilor, conservelor din carne etc.

În prima fază are loc tranșarea cărnii, care constă în dezosarea și deflaxarea materiei prime din carne. În procesul dezosării carnea se separă de oase, iar în procesul deflaxării din aceasta se îndepărtează tendoanele, țesutul conjunctiv (pielițele), grăsimea, în rezultat obținându-se semifabricate pentru producerea mezelurilor. Calculația costului materiei prime tranșate se face în două etape. Mai întîi, costul materiei prime inițiale se distribuie la cel care se referă la produsele de bază (carnea deflaxată, materiile prime pentru afumături etc.) și la produsele secundare și deșeuri (oase, grăsime, vine și tendoane, reziduuri după toaletare). La etapa a doua costul produselor de bază se distribuie după obiectele calculației (categorii și tipuri de carne tranșată) prin metoda coeficienților.

A doua fază a producției constă în producerea din carnea deflaxată conform tehnologiei și recepturii corespunzătoare a produselor finite din carne. De exemplu, la fabricarea salamurilor carnea deflaxată se mărunțește, se amestecă cu apă pînă la consistența aluatului și se pregătește bradtul sau șrotul, cu care ulterior se va umple (șprițui) membrana de salam, supusă ulterior tratării termice: fierberii, prăjirii, afumării, uscării și răcirii. Produsul finit se ambalează și se marchează.

Examinarea acestei întrebări ne permite să subliniem încă o dată că organizarea contabilității manageriale la întreprinderile din industria cărnii depinde în mare măsură de particularitățile organizaționale și tehnologice ale unor producții aparte.

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# TRENDS IN MARITIME INTELLECTUAL CAPITAL DEVELOPMENT

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### Abstract

In the Knowledge-Based Society, not financial assets, but knowledge and competencies have become the most important resources for most companies. This paper objective is to make an initial critical exploration of the essential condition of intellectual capital in maritime transport and it starts with defining what intellectual capital is. In this paper there are also discussed means of stimulation of intellectual capital within the maritime company.

### **Defining Intellectual capital**

We currently live in a period when knowledge and competencies have become strategic resources that brings a company's success. The company's ability to use intellectual capital and proper technologies is what makes it competitive on market and makes it able to develop innovative integrated solutions that create value for customers.

Intellectual capital in maritime transport represents the <u>knowledge</u> and brain-power capital that makes a maritime company benefit. Intellectual capital includes essential skills and strategic knowledge that a maritime company has developed and the needs to make successful transport of cargo or passengers. It also referees to documents about transport processes, customers, research results, harbour activity and other information that gives competitive advantage.

Examples of intellectual capital are the following: knowledge, competent employees, reputation, brands, customers, R&D, innovation, patents, IT, workplace organisation and management systems, networks and relationships.

The term "intellectual capital" was firstly mentioned by John Kenneth Galbraith, in 1969 in a letter to Michael Kalecki, a Polish economist with contributions to macroeconomics. In 1980, the Japanese specialist Hiroyuki Itarni studied the effect of *invisible assets* on the management of Japanese corporations. After that, Thomas A. Stewart, Editor-in-Chief of Harvard Business Review, approached intellectual capital to products, processes and people in order to obtain and manage profit. In 1991 in the article *Brain Power - How Intellectual Capital Is Becoming America's Most Valuable Asset*, published in Fortune magazine, he defines intellectual capital as "the sum of everything everybody in your company knows that gives you a competitive edge in the market place". In 2001, he considers that today's companies are applying the concept of intellectual capital into day-to-day operations to dramatically increase their success.[1] Nick Bontis of McMaster University in several academic papers considers that intellectual capital includes *human capital, structural capital and relational capital*. Human capital refers to the skills and knowledge that make value for an organization. The origin of this concept comes from Adam Smith who defined four types of fixed capital: machines, buildings, land and human

capital. The second element of the intellectual capital is structural capital and it represents <u>formulas</u>, <u>information</u>, <u>patents</u>, processes etc., that result from the <u>products</u> or <u>systems</u> the firm has created over time and not from the heads of the <u>employees</u> and remains with the <u>organization</u> even when they leave. Relational capital, the third component of the intellectual capital is represented by good relationships with stakeholders (clients, employees, suppliers, government agencies, competitors and other organizations that come in contact). Leif Edvinsson, a Corporate Director of Intellectual Capital function at Skandia AFS, a Swedish insurance company, developed an intellectual capital "hidden values" management model for the firm.[2]

In European countries, a large importance is given to concepts like knowledge and intellectual capital in private and public economic sector. The Northern countries made a tradition in developing he intellectual capital concept in all the fields, including in the maritime domain. For example, the Danish Ministry of Science, Technology and Innovation republished and distributed since 2000 a guideline for the Intellectual Capital Statements [3].

An intellectual capital statement is an integrated part of a maritime company knowledge management. It identifies the company's knowledge management strategy that refers to the identification of objectives, initiatives and results, application and development of the company's knowledge resources. It also communicates this strategy to the company and to the extern environment. Intellectual capital statements regard the improvement of the knowledge resources management.

The guideline says that intellectual capital can be understood as a relation between four elements:

(1) A knowledge strategy, which defines how knowledge can make a difference to the firm's activities regarding its users.

(2) A business model of knowledge that identifies the relatively durable problems facing the management of the firm in order to develop the usefulness of knowledge.

(3) A set of actions, which point out how knowledge is to be managed concretely as a set of activities.

(4) A series of indicators that monitor whether the actions are implemented. Together, this model allows the institutions to appreciate how their activities develop and use knowledge are helpful to their services [4].

Several companies managed to establish a way of accounting intellectual capital, in order to establish the value of knowledge that is owned by the organisation.

Authors Garavan, Morley, Gunnigle and Collins review definitions of intellectual and human capital. They considers human capital from individual (employability, performance and career development) and organization (investment, ownership, skills and knowledge management) perspectives and highlights the implications for human resource development, both at individual and organizational levels.

Author	Definition of Intellectual Capital
Edvinsson	Intellectual capital is structural and human capital, thinking and non-
(1997)	thinking assets and it requires a different management approach.
Sveiby	Intellectual capital is represented my invisible assets if an organization:
(1997)	employee competence (skills, education and experience) and their

Author	Definition of Intellectual Capital
	capacity to act in a wide variety of situations; internal structure (management, structure patents, contracts, concepts, models, research and development capability, software); and external structure (image, brands, customers and supplier relations).
Stewart (1997)	Intellectual material is intellectual material – knowledge, information, intellectual property and experience – that can be put to use to create wealth
Edvinsson and Malone (1997)	Intellectual capital consists of humans, system and market components. Employees and managers in the organisation represent human capital. Human capital refers to what people can do individually and collectively. The system component represents the knowledge in the firm which is independent of people and includes patents, contracts, data bases, and information and production technology. The market component consists of the relationship between the organization and outsiders, e.g. suppliers, distributors and customers.
Kaplan and Norton (1992)	The intellectual capital component of the balanced scorecard consists of three linked perspectives: customers, internal business processes, learning and growth.
Sullivan (1999)	Intellectual capital is knowledge that can be converted into profits. It comprises two elements: human capital and intellectual assets. Human capital consists of the firm's individual employees who possess skills, abilities, knowledge and know-how. Within each employee resides the tacit (not codified) knowledge the firm seeks to utilise. Intellectual assets are created whenever human capital is codified.
Mayo (2000)	This author focuses on a definition of human capital: a capability, knowledge, skill, experience and networking, with the ability to achieve results and the potential for growth; individual motivation in the form of aspirations, ambition, drives, work motivations and productivity; work group effectiveness in the form of supportiveness, mutual respect sharing and values; leadership in the form of clarity of vision and ability to communicate that vision; organisational climate in the form of culture particularly the freedom to innovate, openness, flexibility and respect for the individual.
Haanes and Lowendahl (1997)	A distinction is made between the intangible resources of competence and relationships. Competencies are conceptualised as the ability to perform. They are manifested at the individual and organisational levels. Relationship-type intellectual capital is manifested in the reputation if the company and customer loyalty.
Source	e: Garavan Morley Gunnigle and Collins (2001) [5]

Source: Garavan, Morley, Gunnigle and Collins (2001).[5]

### Stimulating the intellectual capital in a maritime company

For a maritime company, the intellectual statement is to create values for its customers like making competitive shipping services, high levels of safety, health and qualifications for employees and responsible attitude towards suppliers and other stakeholders. In order to acquire such values, maritime company have to use IT to support production and knowledge management internally and externally, it must be able to retain and attract highly qualified personnel and be a permanently attractive workplace.

For stimulating the intellectual capital, the maritime company has to train employees to use IT and proper communication equipment, both at the organization quarters and on sea, it has to develop and use system supporting knowledge management by being user-friendly and accessible to all and to share knowledge internally and externally.

For a maritime company to attract, retain and develop intellectual capital and highly qualified employees, it has to make and analyze employee satisfaction surveys. The results should be noted in employee satisfaction polls. According to such surveys, the company should give a prior interest to the employees needs and to act accordingly. The management have to identify new methods for development of knowledge competencies. In order to develop the intellectual capital, the employees and the crew must be sent to technical and for personal development trainings and seminars. The working time policy should be flexible, especially for the crew members that stay a long tome on sea.

The efficiency of the simulative practices will be measured with the help of some indicators like competency development activities, number of employees who are active in experience groups/project groups externally, evaluation of workshops and professional courses, or staff turnover. After each management challenge has been reviewed, conclusions can be drawn on the objectives achieved in the current year and in the next year will be proposed other objectives and special initiatives.

A critical aspect of a maritime company that develops the intellectual capital is the open attitude towards innovation. Innovation is a must if the company wants to deliver tailored integrated solutions and to meet the most demanding customer requirements. The company should also understand the value of win-win partnership.

In Nordika – a project on intellectual capital initiated by the Nordic Industrial Fund – in collaboration with a task force of government representatives and a round table drawn from business and professional associations in the Nordic countries it is considered that IC management and reporting is about the non-physical and non-financial resources of a maritime company, how they are built and retained, how they contribute to value creation. Knowledge, expertise, stakeholders, customer relations, brands and other intangibles are the basic factors for identifying and analysing the maritime company's key values [6].

### **Trends in Maritime Intellectual Capital Development**

According to S. Mthethwa and P.C. Zandee in "Transformation in the South African Maritime Industry – a BEE Case Study" [7], maritime industry is one of the oldest industries and the community is international in flavour and very traditional. It is an industry for people who are seeking a long-term investment and appreciate the value of personal relationships. It is important to invest more time and resources in fewer investments and cultivate strong relationships than spread oneself too widely too quickly. To function effectively at board level without any maritime knowledge or insight creates a lack of 'value-adding'. This is as much a prerogative of the established business as it is for the Board members/investors/shareholders.

In maritime transport, ships are multi-functional systems that require highly information processing and management systems.

Major changes are taking place in maritime markets and influences intellectual capital. Changes in demography and energy consumption are key factors. Global companies tend to focus on their core-business. Logistics services and transportation are likely to be increasingly outsourced. Some shipping companies, notably amongst container lines and specialised carriers, will expand their scope of operations and develop into logistics providers, not merely delivering transport services in the logistics chain. [8]

The nowdays technologies send and receive fast and easily large quantity of information inside each maritime company or between company and ship. They will influence both the markets and the shipping industry and the organisation of the work in the companies. These kind of changes will modify the structure of intellectual capital inside shipping companies.

Recruitment of qualified officers and acquiring proper intellectual capital is a major challenge for most shipowners and maritime managers world-wide. A similar need is identified for shore-based functions. In the major labour supplying countries, the demand for officers is increasing faster than the supply and some owners are compelled to look for alternative labour supplying countries. It will take time to develop alternative labour supplying countries. An overall shortage of qualified officers in the coming decade can be anticipated and is to be addressed. Career paths must be developed in order to be attractive for the competent human capital.

### Conclusions

Intellectual capital represents a strategic asset for maritime business. Several specialists made definitions for this term and as a common charactheristic of all definitions, intellectual capital consists of essential skills, knowledge, documents about transport processes, customers, research results, harbour activity and other information that can give competitive advantage. In generally, intellectual capital is formed by human capital, structural capital and relational or customer capital. Human capital refers to the skills and knowledge that make value for an organization. Structural capital represents formulas, information, patents, processes etc., that result from the products or systems the firm has created over time and remains with the organization even when employees leave. Relational capital, the third component of the intellectual capital is represented by good relationships with stakeholders (clients, employees, suppliers, government agencies, competitors and other organizations that come in contact).

For a maritime company, intellectual capital involves making value for customers. Intellectual capital is responsible of making competitive shipping services, and for taking into account the measures of safety, health and qualifications for employees. Suppliers and other stakeholders must be treated appropriately.

Technologies of today evolve so quiqly and they influence markets, the shipping industry and the organisation of work in the maritime companies. These kind of changes will modify the structure of intellectual capital inside shipping companies and will accentuate it's vital importance.

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# KANBAN SOFTWARE VERSION FOR ROMANIAN INDUSTRIAL REFORM MANAGEMENT

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### Abstract

In order to become more and more competitive, the nowadays firm could face many problems and constraints. These could be solved by implementing the Japanese management techniques, which were not only successfully verified in the origin country, but also their implementation in other contexts (European or American ones) proved to be the solution for the survival and development of the firms in the present turbulent economic environment. The author's proposal is a software system (its professional version) which realizes the application, in a perfect logic of the KANBAN system, of the algorithm that synchronizes the final assembly line of an industrial firm, in order to permit the small-batch production. There are presented the principles of the Toyota system. The software elaborated on the base of these principles uses the ACCESS medium and was already applied to the bearings industrial plant from Birlad.

**Keywords**: Just in Time, Kanban, sequential order, final assembly line, software professional version

### 1. Toyota's system history

The development of the Japanese auto industry in the postwar period is exceptional in industrial history. When the Japanese auto industry began to expand under heavy state protection, the production system of the American car industry was the reference point. The labor and product market conditions were very different in Japan; firstly, because there was much less room for mass production in Japan than in United States. Secondly, because the Japanese companies had a wide product spread. Moreover, the economic resources of the companies and the purchasing power of the home market were very limited. It was therefore necessary for the car manufacturers to adapt American methods to fit efficient manufacture of lower volumes and, despite limited resources, to be able to expand.

The Japanese firms succeeded in combining high manufacturing productivity with efficient design processes which assured the reduction of the resource consumption. The Toyota Revolution created by Taichi Ohno in the 1950s and 1960s was based on a new way of organizing production, materials and suppliers. Demands for far-reaching economizing in the use materials and workers formed the departure point for this revolution and Ohno met these demands with new methods. New materials-control methods, the *KANBAN* system and *Just in Time* deliveries were developed to manage this small-batch production. "Inventoryless" manufacturing gradually became an overall method for streamlining processes and the flow of materials.

The small-batch manufacture led to the need for a highly flexible work force, with rapid and frequent relocation of personnel according to the production needs of the moment. The flexible capacity requires that the machines were simplified, so that a new operator can perform his job independently after two or three days' training. Taichi Ohno also introduced the rationalization of cycle times on the assembly lines and multimachine tending in the machines shops. As a result, each operator had an average of five to ten machines to tend. But cycle-time rationalization, multimachine tending and the integration of inspection work into the production line as the responsibility of the operators and foremen also contributed to greatly heightened work intensity.

The Toyota executive made having small inventories a priority and chose therefore to concentrate on small-batch manufacturing. The main objective was to produce the highest possible cumulative volume of each product and the main tools for achieving this were: the standardization of the operations, methods and tools, the development of the JIT flow.

All of these do not permit us to say that the Toyota system is the antithesis of mass production. What we can say is the fact that this system is the opposite of the large-batch manufacturing. The Toyota system's flexibility of mass production could be considered an extension of the scientific management approach, as it implies the quickly switching between a number of standardized models. The high frequency of the switching means also that the whole work could itself be standardized.

Many authors in the field of management consider that Toyota's production policy shows a total break with taylorism, which implied a high degree of predetermination, standardization and control, a high degree of division of tasks and functional specialization. In regard to these features, the Japanese model entails a complex combination of continuity and change.

### 2. KANBAN organizational technology

The main characteristic of the KANBAN technology is the following: the closest department to the market, considered as a client, makes orders for the upper department only if it's strictly necessary. This technology represents the most important innovation in management of the last fifty years<sup>1</sup>.

As the consequences of using this technique, two of them are most important:

- decentralizes the production planning operations which become the foremen/production leaders responsibility
- **4** allows to perform the quality control in the same time with the production itself

In fact, the KANBAN technique is a *pull system*, which means that the market pull the production from the end to the beginning of the production chain.

It is important to mention that the KANBAN technique could definitely well function only inside a JIT system and only for small-batch production.

In order to create a proper sequence of the final assembly line – as an important prerequisite for a successfully adoption of a JIT system and its specifique KANBAN technique – we have to accomplish two objectives:

**t** to obtain the well balanced loading of the final assembly line

to synchronize the production rhythm all the way long of the process

In the *KANBAN* system, the precedent process which are linked with the assembly line must be very well organized. In fact, the *pull principle* of the *KANBAN* technique supposes the minimization of the quantitative variations regarding the production or the time parameters. The per-hour quantity (i.e the consumming speed of the components ) must be constantly maintained.

### 3. The KANBAN application for Romanian industry

Using the Goal chasing algorithm, we managed to define an integrated soft which can generate the well balanced loading of the final assembly line by synchronizing the production routines.

We have created two separate soft wares, having in mind two levels of importance and complexity: one for personnel training (with many visual and intuitive aspects) and another professional one (more complex, for the use of the industrial firms).

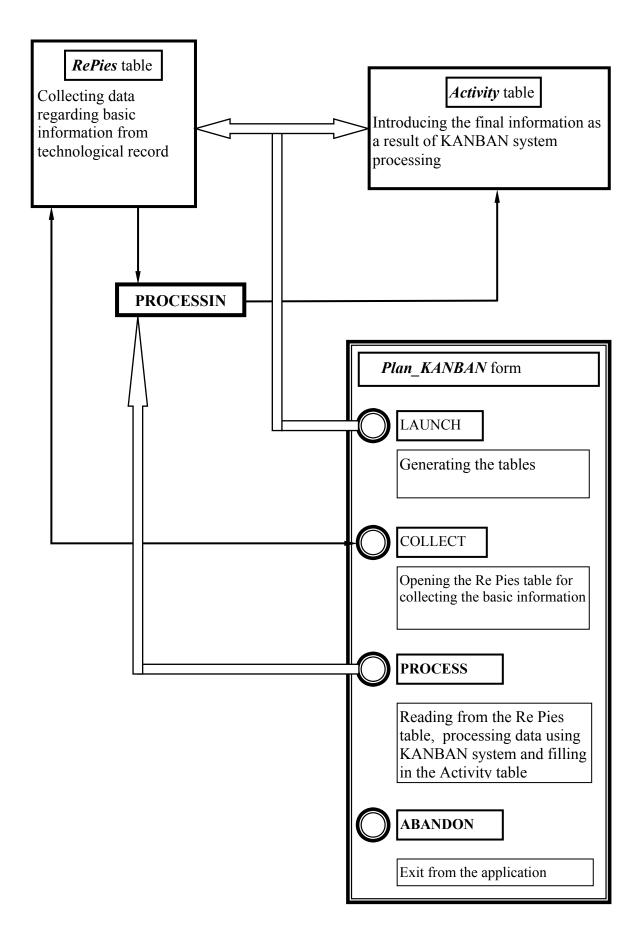
The software-sources are developed in the ACCESS medium, their architecture being structured in three databases and two final reports (\*RePies\* and \*Activity\* tables). The architecture of the professional version is presented in the fig. no.1.

The KANBAN plan form has many buttons which determine a specific procedure. Each database has some "work buttons" which activate specific procedures in the soft-programs and create final reports used by the production planning department.

The RePies table is automatically generated by the KANBAN plan form, the number of columns being established by using the dialog box which is available in the LAUNCH button. The Repies table works as a Datasheet system, by activating the COLLECT button. For filling in, we use the technological records for the pieces consuming and the command register/work dispositions concerning the per-pieces quantities. The data collecting could be done in many work sessions. In order to protect the collecting process (from the damage of an erroneous press of the launch button), the RePies table could be saved and doubled with another identification code. It could be restored when it is necessary, by activating a specific button of the application in a manual or automatic way. Does not matter the order or the moment of data collecting, the application can treat correctly the information. By ending the datasheet of the RePies table, we can come back to the plan KANBAN form. The Activity table is also generated by the LAUNCH button, considering the same number of columns as for the RePies table. If the RePies table could be manually fill in, the Activity table is automatically generated by using the KANBAN algorithm and the collecting data from the RePies table, procedure which could be activated by pressing the Process button.

The professional version which was presented is more simplified in terms of architecture, but more complex concerning the specific routines: the LAUNCH and the PROCESS ones.

For the professional version we have already run the soft for a concrete study case: it was integrated into the assembly line for the bearings produced by the industrial plant from Barlad.



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