Business Administration and Business Economics

The Statistical Analysis of GDP, Tax Pressure and Tax Revenue with EViews 7 between 2000 – 2009

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Abstract: The general characteristic of modern economies is given by the rapid growth of the demand of financial resources as compared to the possibility of acquiring them. Fiscal pressure data series and tax revenues are used to determine descriptive indicators and to conduct statistical or graphical estimation of econometric models. Evolution of the two variables analyzed: the tax burden and tax revenue in the period 2001-2009 is presented using EViews 7.

Keywords: GDP; tax pressure broadly; tax pressure strictly; tax revenue

JEL Classification: C10; C18; C19

1. Tax Pressure Broadly and Tax Pressure Strictly

The obligation to pay taxes appeared along with the emergence of the State and of Law in the human society and the attempt to elude this system was more or less strong according to the increase or decrease of tax burden.

The *tax pressure* indicator (or tax rate) represents the ratio between inland revenues (of the State and of local communities) and GDP or NDP, expressed in percentages. This indicator measures the share of tax in the obtained wealth and thus allows determining the tax burden.

The change of the tax rate and / or of the share of budget resources categories in the total State revenue varies with the economic situation: when economy boost is wanted, in case of recession, the tax rate will be low, direct taxes will be less burdening, etc, while in case of economic overheating, contrary measures shall be adopted.

In the analysis of the impact of State's fiscal policy on the economic growth, an important part is played by the phenomena of underground economy development and of tax evasion stimulation generated by the enforcement of much too high tax rates. Tanzi Vito (1995, p. 15) analyses the effects of a tax system with arbitrary exceptions and other distorter elements: the degree of corruption increases, production and, consequently, physical capital stock decreases; corruption reduces the rate of economic growth through the distortion caused on resource allocation, destroying the relationship between the social profitability and the financial profitability of an investment. (Braşoveanu, 2007, p. 117)

The rate of tax pressure officially communicated by the Statistic Annual drawn up by the National Institute of Statistics is calculated as follows:

$$R = \frac{VF}{PIB} \bullet 100, \text{ where}$$

R – the rate of tax pressure,

VF – tax incomes,

PIB – the volume of gross domestic product

If tax incomes are deemed to be made of taxes, duties and contributions, *the rate of tax pressure, broadly speaking*, is calculated as follows:

$$R = \frac{I + T + C}{PIB} \bullet 100, \text{ where}$$

I – the volume of collected taxes,

T – the total sum of collected duties,

C – State social security contributions;

The rate of tax pressure, strictly speaking, can also be calculated by excluding State social security contributions from the numerator:

$$R = \frac{I+T}{PIB} \bullet 100$$

2. The Evolution of Tax Pressure between 2000 and 2009

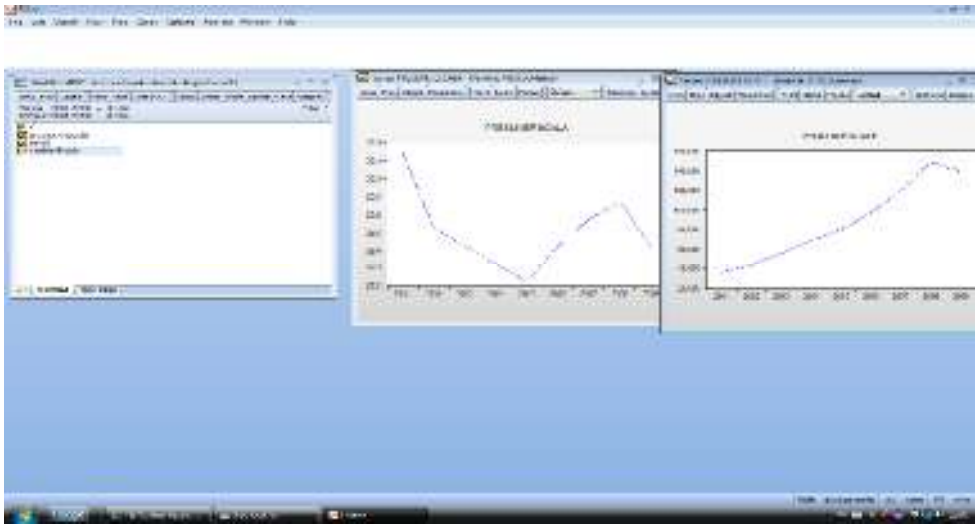
Given the data provided by the National Institute of Statistics and by the Tax Council, we proceeded to the calculation of the level of tax pressure for the period 2000 - 2009, the data obtained being centralized in the table below:

Year	GDP mil. Lei	Tax incomes % GDP	Direct taxes % GDP	Indirect taxes % GDP	Social contributions % GDP	Tax pressure broadly speaking	Tax pressure strictly speaking
2000	80984.6	30.6	7.0	12.2	11.4	30.6	19.2
2001	117945.8	28.9	6.4	11.3	11.2	28.9	17.7
2002	152017.0	28.5	5.8	11.6	11.1	28.5	17.4
2003	197427.6	28.1	6.0	12.2	9.9	28.1	18.2
2004	247368.0	27.7	6.4	11.6	9.7	27.7	18.0
2005	288954.6	28.5	5.3	12.9	10.3	28.5	18.2
2006	344650.6	29.1	6.0	12.8	10.3	29.1	18.8
2007	412761.5	29.5	6.7	12.3	10.5	29.5	19.0
2008	503958.7	28.5	6.7	11.7	10.1	28.5	18.4
2009	491273.7	28.0	6.6	11.0	10.4	28.0	17.6

3. The Analysis of Data Series with EViews 7

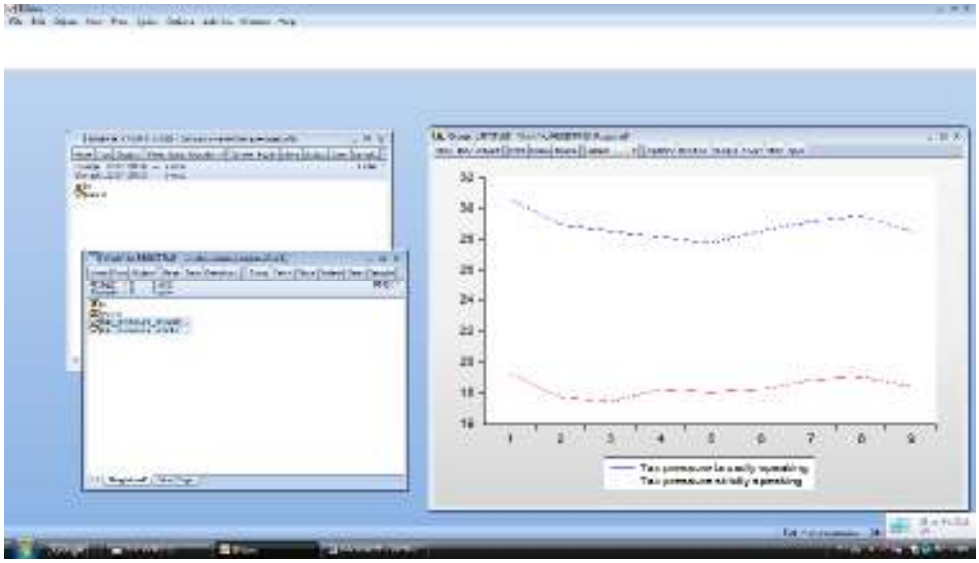
Fiscal pressure data series and tax revenues are used to determine descriptive indicators and to conduct statistical or graphical estimation of econometric models.

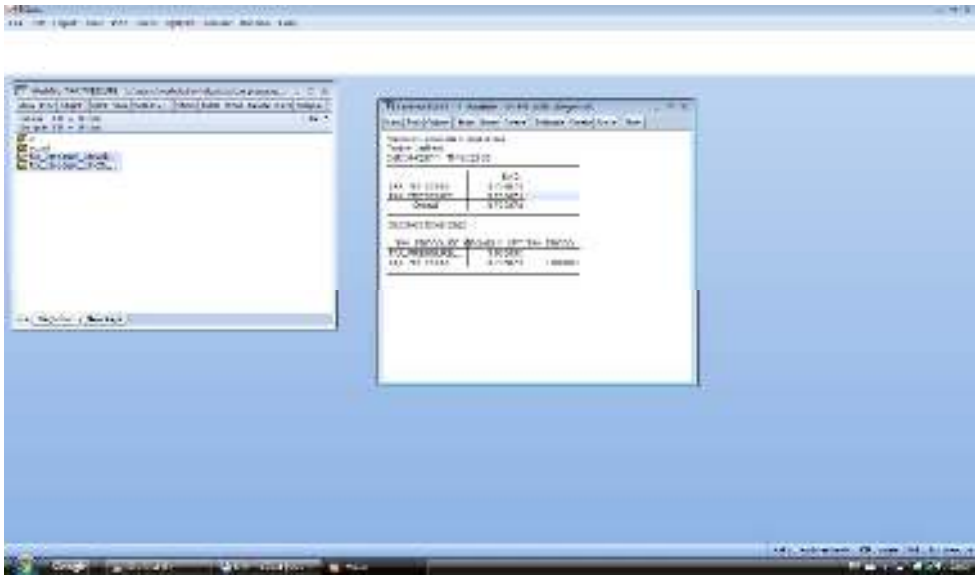
Evolution of the two variables analyzed: the tax burden and tax revenue in theperiod2001-2009ispresentedusing EViews7, as follows:



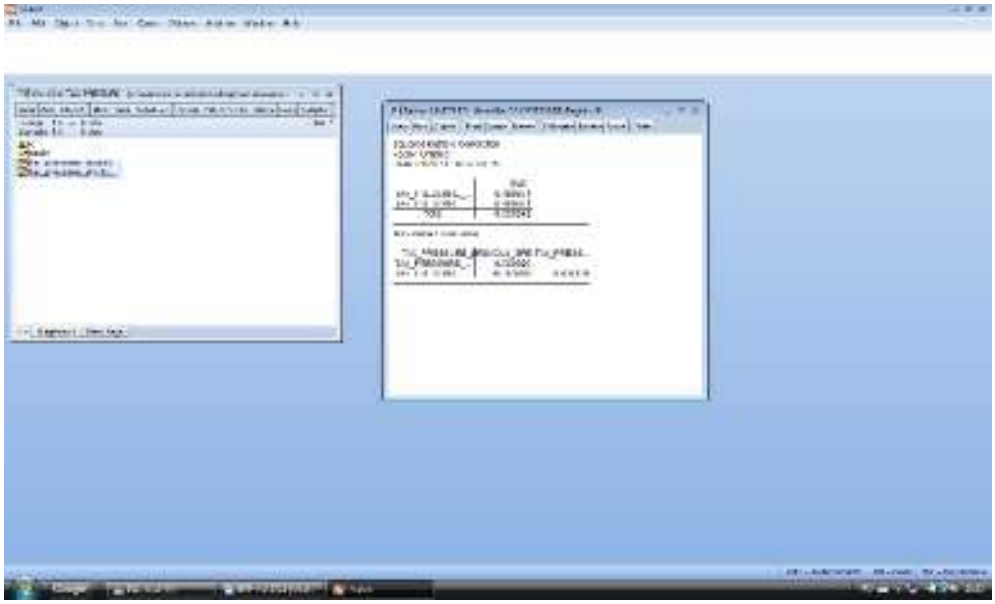
It appears that the tax burden was greatest in the early period, respectively in 2001 and then to decrease continuously and record a minimum in 2005, then began rising again in 2008 achieving a relative maximum. Throughout this period, tax revenues have increased continuously, achieving a relative maximum in 2008 also.

The following figure shows that tax pressure broadly have a relatively similar to that of tax pressure strictly during the nine years analyzed.



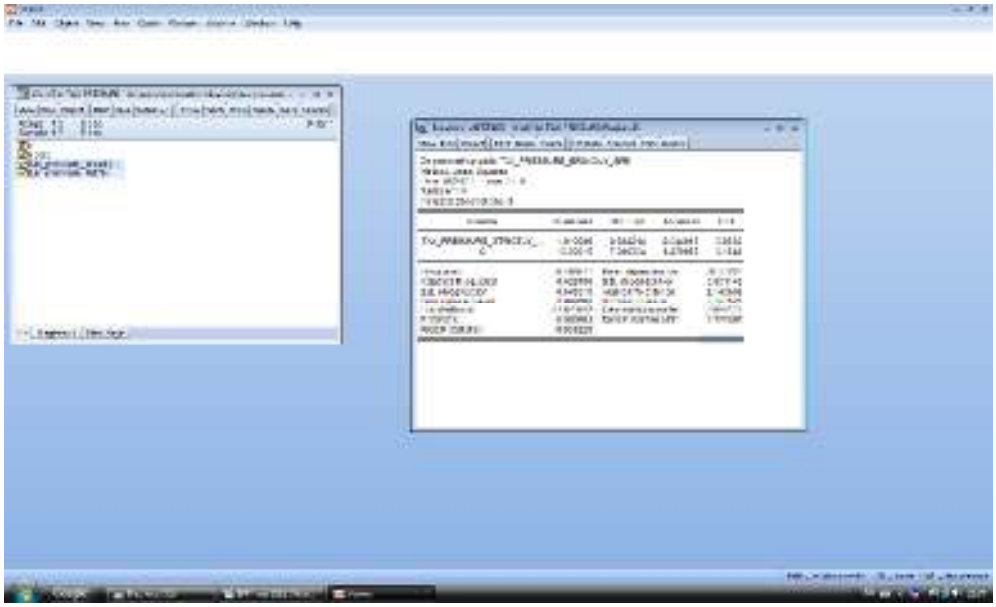


It appears that the two variables broadly tax pressure and strictly tax pressure is a direct correlation and very strong.

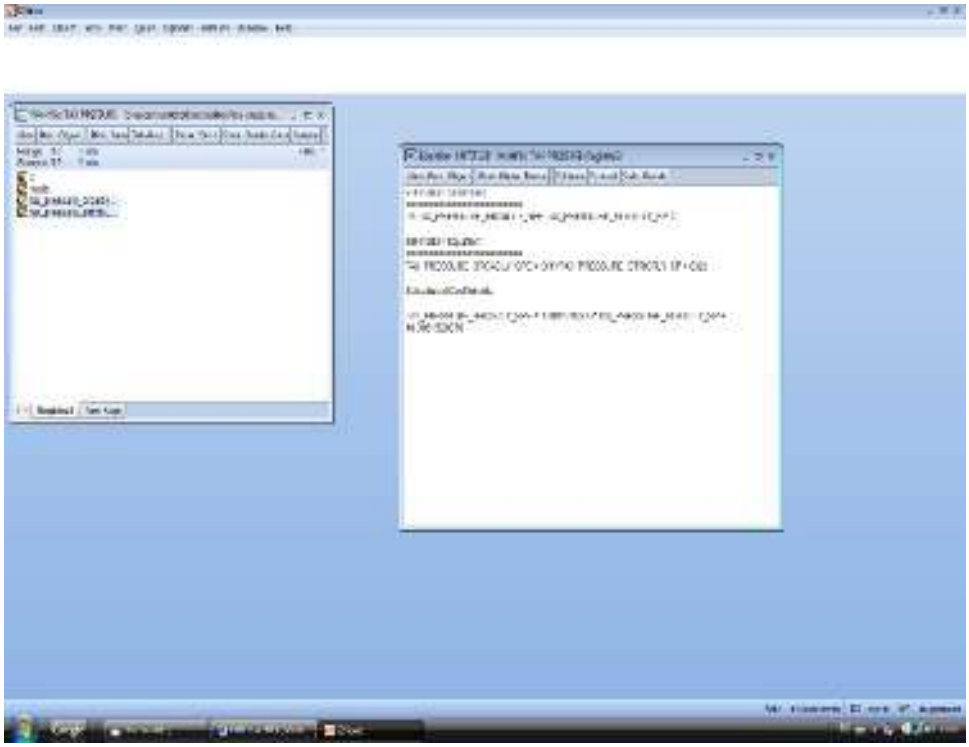


The previous conclusion is confirmed by the Squared Multiple Correlation shown in previous figure.

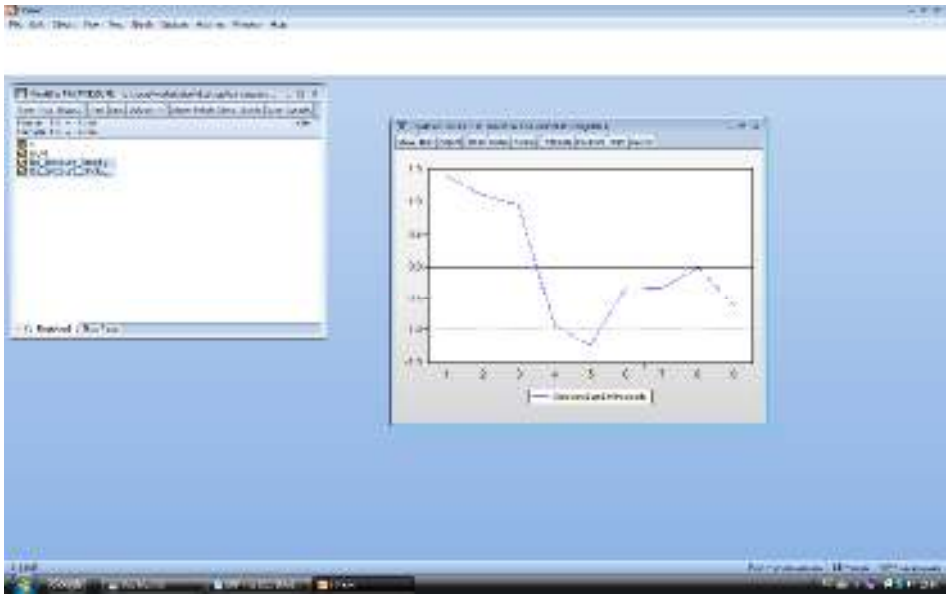
To determine the regression equation applies Least Squares Method.

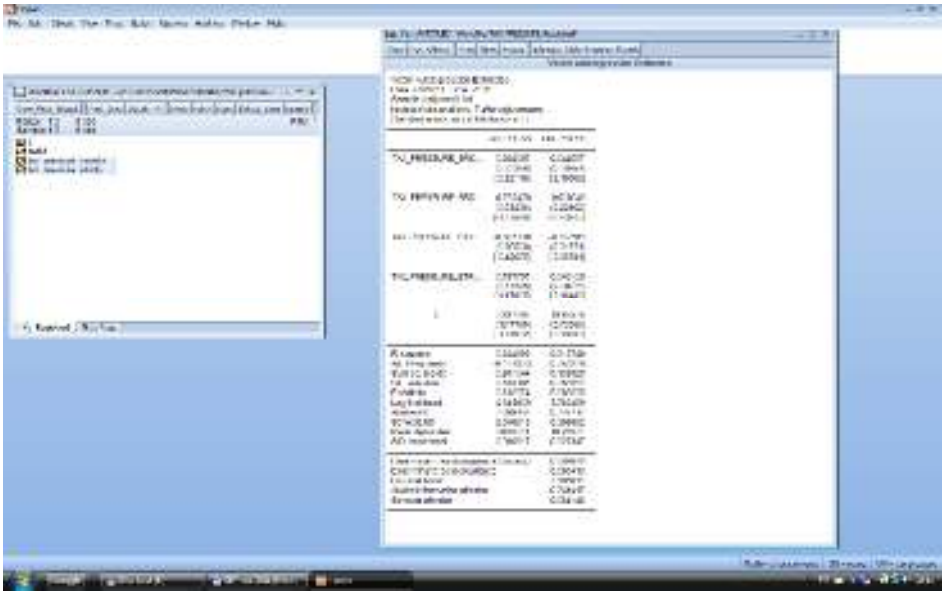


So, we obtain the following regression equation:



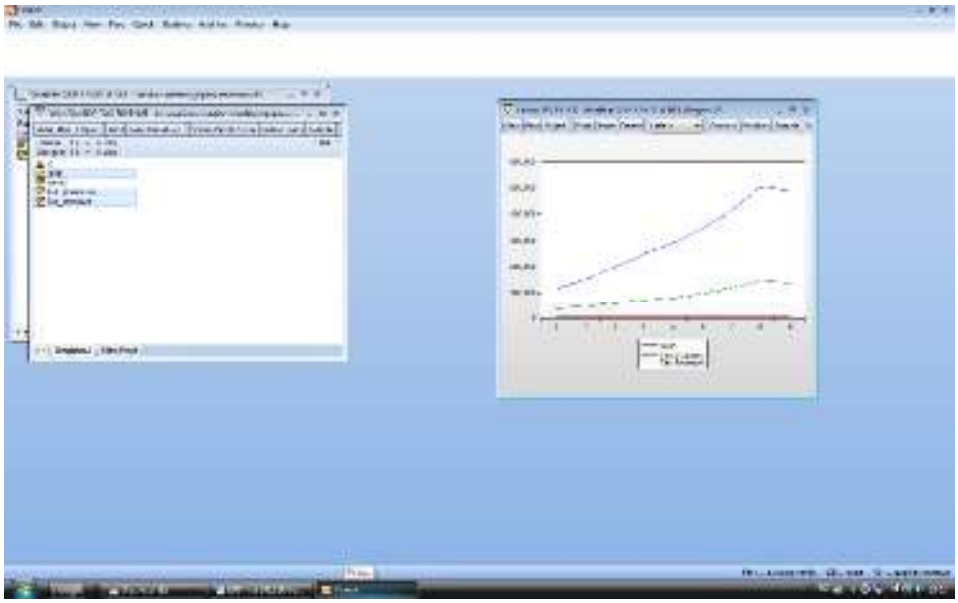
Standardized residuals are represented as follows:



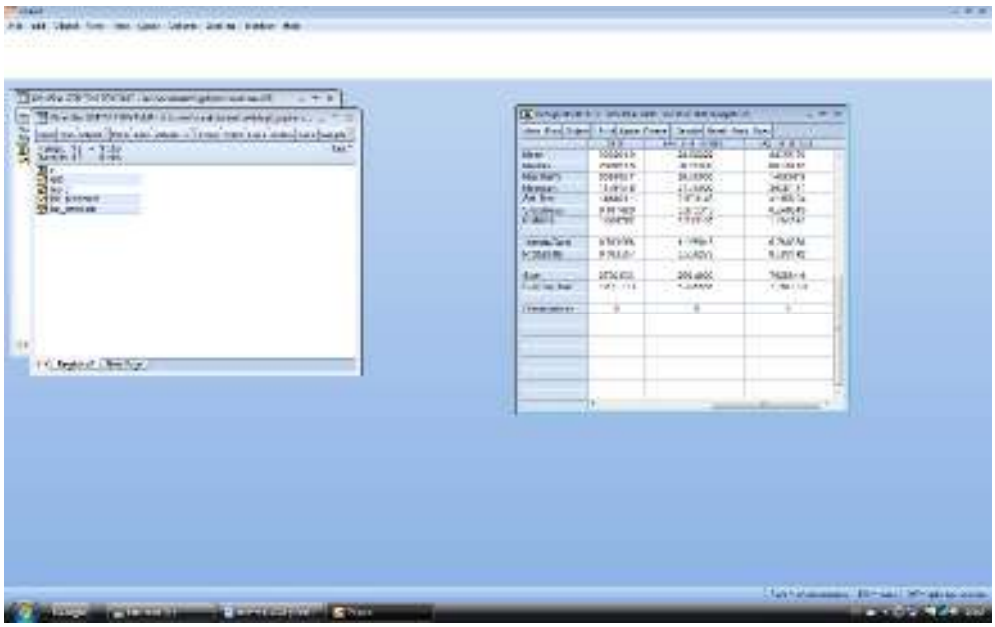


The data series GDP, tax revenue and tax pressure are used to determine descriptive indicators and to conduct statistical or graphical estimation of econometric models.

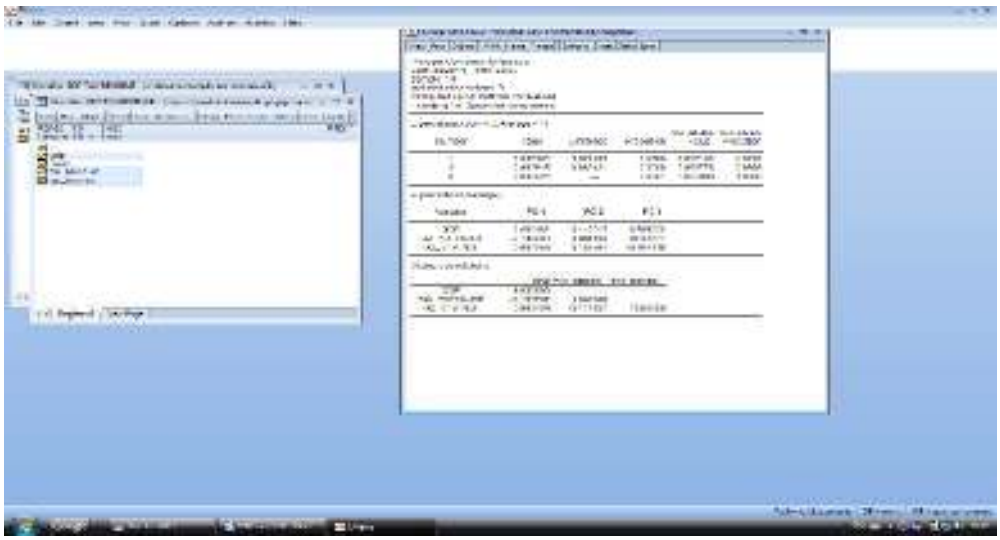
Evolution of the variables analyzed: GDP, tax revenue and tax pressure in the period 2001-2009 is presented using EViews 7, as follows:



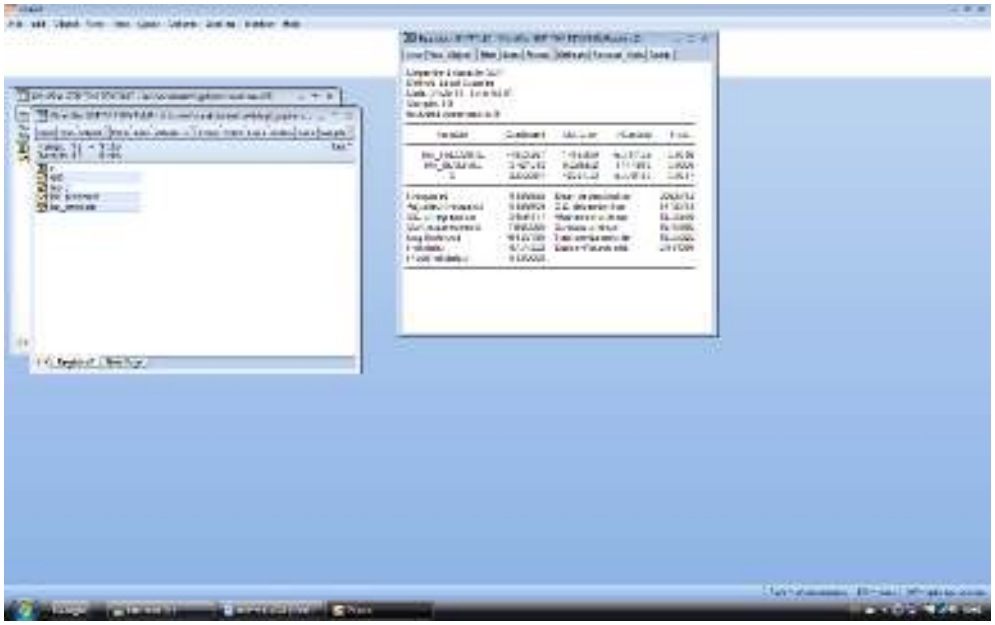
Descriptive indicators for GDP data series, tax pressure and tax revenue is as follows:



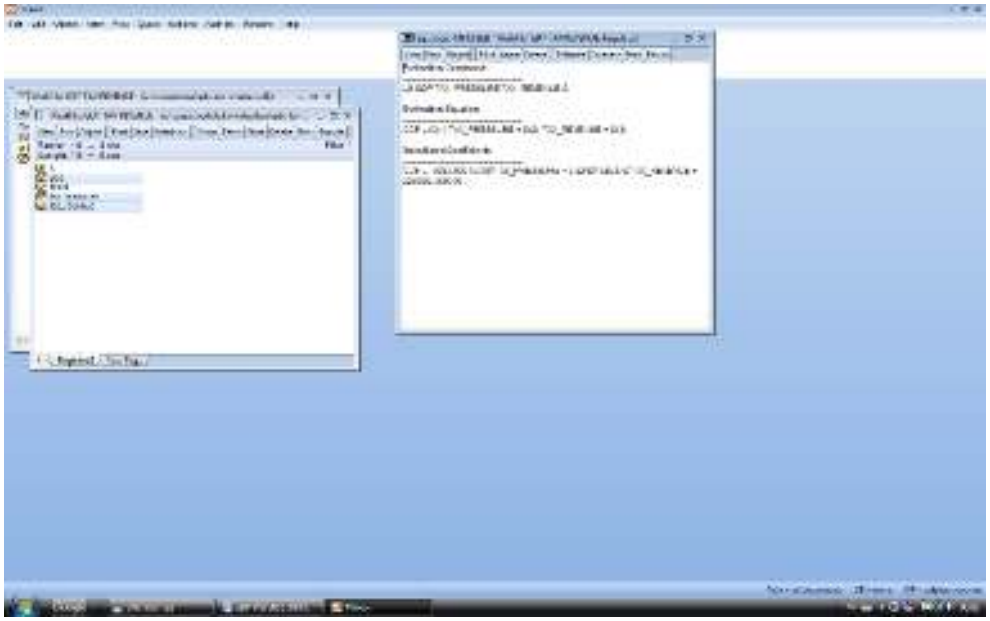
Ordinary correlation between the three series GDP, tax revenue and tax pressure is as follows:

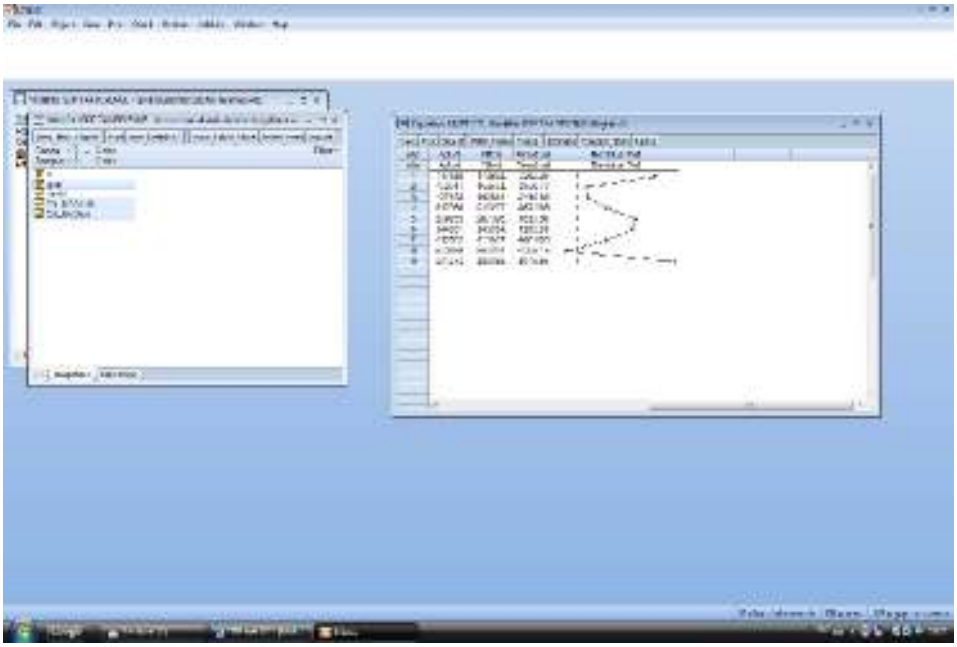


To determine the regression equation applies Least Squares Method.



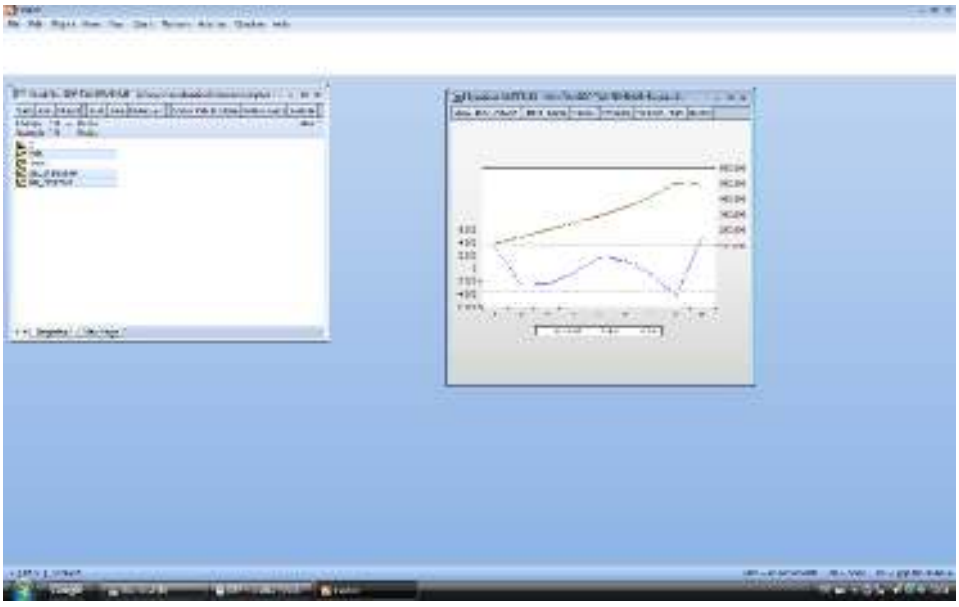
So, we obtain the following regression equation:

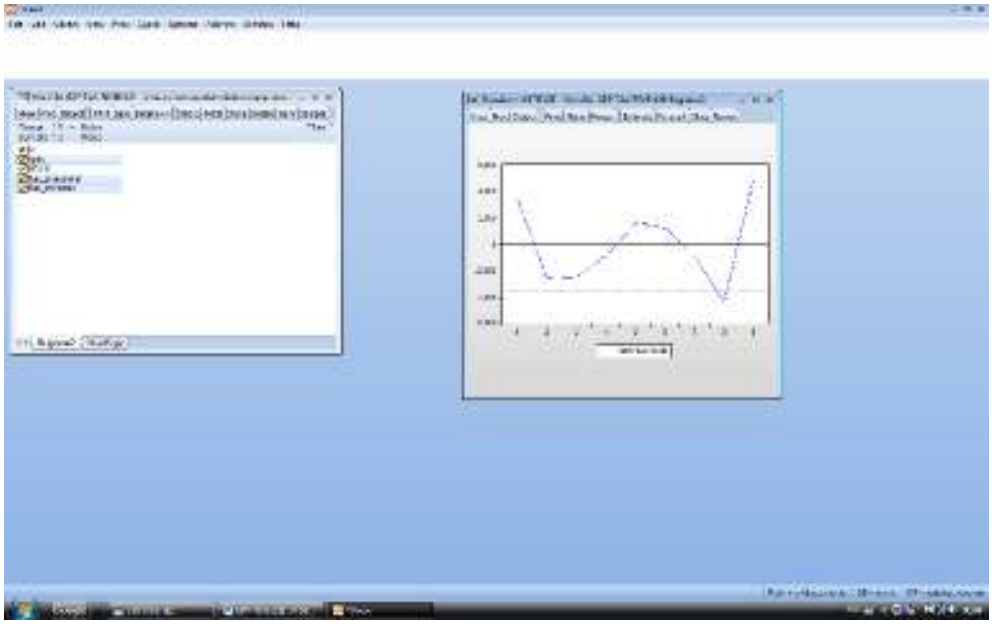


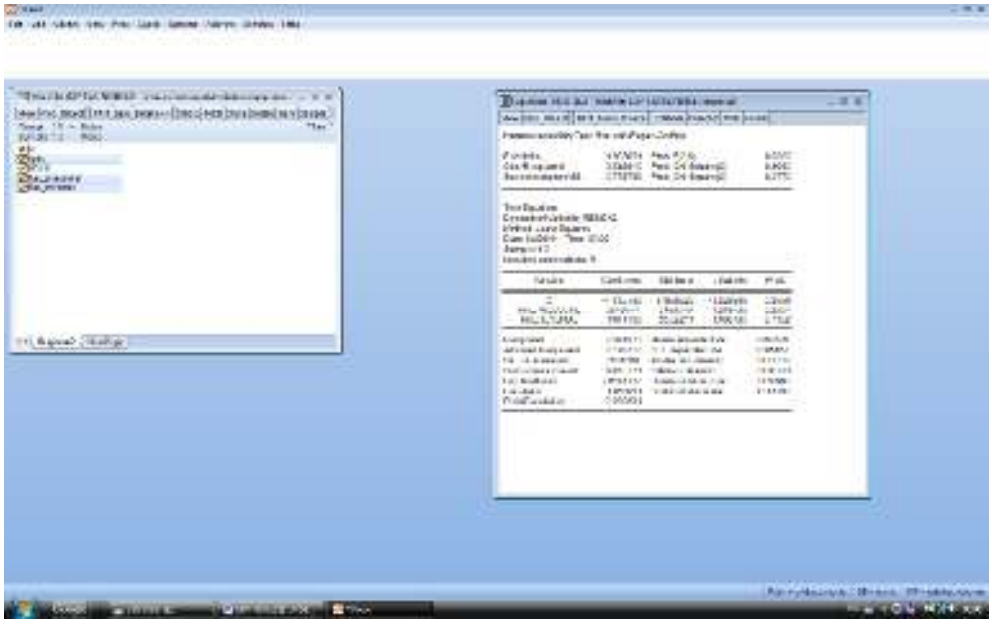


In the previous figure are actual and estimated values of the feature analysis (Y) and the residual variable values and chart series.

Another way of presenting the residual variable: Actual, Fitted, Residual Graphis presented in the following figure:







4. Conclusions

To achieve an as accurate analysis as possible, we must study the following:

- the level of real economy, meaning that it must be calculated after the deduction of the official GDP of the percentages representing hidden economy, given that these incomes are characterized by tax avoidance,

- the existence of a significant amount of activities exempt from certain categories of taxes - the favorable tax regime applicable to free zones, duty-frees, disfavored areas, etc,

- parafiscality, respectively the existence of an impressive number of taxes and duties which are not to be found in the State budget but in the budgets of certain agencies;

- the analysis of the level and of the structure of tax pressure must be correlated with the **intensity of tax regulations**, that is, with the large number of normative documents, frequent amendments, bureaucratic formulations, legal overlapping, etc. The most eloquent example is that of Law no. 571/ 2003 on the Tax Code which between December 2003 and August 2010 was modified by no less than 75 amending documents and Decision no. 92 / 2003 on the Fiscal Procedure Code was amended 15 times during the same period.

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Krugman's Model with Various Values of the Costs of Transport - Under Maple Software

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Abstract: The centrum-peripherical model due to Paul Krugman (1991) with all its merits for grounding the economics crowding, also scored the appearance of a new field in the economic theory, known as "The New Economic Geography". There were some criticism which was focused on this matter, such as the symmetry of the transport costs for the industrial goods, and the ignoring the transport costs for the agricultural goods. These criticisms could be evaded by improving the model, so as this work tries to do. On the other hand, the achieving of a computational program is very useful in numerical simulations, necessary for studying the model, taking into account that the model cannot be analytically solved.

Keywords: core-peripherical model; transport costs; industrial products; agricultural products

JEL Classification: L91; L90; L99

1. Introduction

They suppose an economy composed from two sectors, named in this work as industry, and agriculture. It is assumed an economy formed by industry and agricultural, and with two regions: 1 and 2. These regions are supposed to be identical from the point of view of both the producers' technologies and the consumers' preferences, but different in the matter of transport costs scored both inside and also outside them.

The agricultural sector is one that scores a perfect competition and which produces homogeneous goods, with constant scale economy and which uses only the work of the farmers, as unique production factor, these workers being supposed to be immobile between regions.

The industrial sector is characterized by a monopolistic competition, which achieves infinity of varieties from a good which is horizontally differentiated, and which uses the worker's labor as unique production factor, but which is mobile between the two regions.

They results from the presented assumption that only the existence of different transport costs inside and outside, and also between the regions differ from the framework of the initial centrum-peripherical model due to Paul Krugman (1991).

2. Preferences

The man-power from the entire economy, formed from farmers and workers scored an utility function, due to the goods made of Cobb-Douglas type, supposed to be as follows:

$$U = C_M^{\mu} C_A^{1-\mu} \quad (1)$$

In which C_A appointes the consumption of the agricultural good, and C_M the unit consumption from the industrial good. The parameter μ, represents the share of the expenses from the total income allotted for the acquisition of the industrial goods, and obviously it will be placed in the interval of $0<\mu<1$.

The aggregate consumption from the industrial good is made of a variety of solutions, as this form:

$$C_M = \left[\int_0^N c_i^{(\sigma-1)/\sigma} di\right]^{\sigma/(\sigma-1)} \quad (2)$$

in which N represents the number of varieties horizontally differentiated from an industrial good, c_i represents the consumption from a "i" variety, and σ represents the resilience of substitution between the varieties from the industrial good. So as the (2) relation shows, that means that a reduced size determines the fact that the varieties have a high level of differentiation, or that the consumer economic agents have a great preference for variety.

The supply of the production factors

They suppose that a part of the population $0<\mu<1$ works in the industrial sector, and $(1-\mu)$ works in the agricultural sector. As they can notice, these are the same proportion as the income spent for buying the industrial and agricultural goods and this determine as in equilibrium to score an equal level of the salaries in the two sectors. The farmers are uniformly distributed between the two regions, so as the population which is involved in this sector in each region is fixed and equals with$(1-\mu)/2$.

The population engaged in the industrial sector in the 1 region is designated withL_1, and in the 2 region with L_2, so as $L_1 + L_2 = \mu$. The share of the workers from the 1 region in the total weight of the workers from the economy stands for:

$$\lambda = \frac{L_1}{L_1+L_2} \quad (3)$$

and obviously the share of the workers from the 2 region from the total number of the workers from the economy is $(1-\lambda)$.

The industrial sector

The production of the each variety from the industrial good asks for a fix size $\alpha>0$, and a variable size $\beta>0$ from the production factor – labor, which is offered by the industrial workers, reminding that this factor is the only production factor considered in this model. Under these conditions, the function of unitary cost from the "j" region will be:

$$CT_j = w_j(\alpha + \beta x_j) \quad (4)$$

In which: CT_j is the afferent cost for the producing of one unit, from a variety; w_j is the nominal wage of the workers from the region j; x_j represents the production of the firm.

Taking into account the fact that this sector acts in a monopolistic competition, the behavior of the firms which are watching to utmost the profit will determine that the price of each industrial product from the "j" region to be as follows:

$$p_j = \frac{\sigma}{\sigma-1}\beta w_j \quad (5)$$

The condition of free entrance of the firms into the industrial sector determines the profits to be zero, so as all the firms will have the same production:

$$x_i = \frac{\alpha(\sigma-1)}{\beta} \quad (6)$$

And as result, each firm will engage the same number of workers, which for the 1 and 2 regions will mean:

$$\frac{L_1}{L_2} = \frac{n_1}{n_2} \quad (7)$$

The agricultural sector

The agricultural sector is one which registers a perfect competition, and also constant scale economy. A labor unit offered by the farmers is used for producing an unit of agricultural good.

The transport costs will be also considered in this sector, so as the agricultural good will be different in the two regions, and the wages from the agricultural will be inclusively different, and will exist a relation like this:

$$\frac{w_1^A}{w_2^A} = T \quad (8)$$

in which w_1^A is the nominal wage of the farmers from the 1 region, and w_2^A is the nominal wage of the farmers from the 2 region, and T represents the size of the transport cost for the agricultural good.

The transport costs

Up to now, the above model does not differ from the one exposed by Paul Krugman (1991).We further suppose the existing transport costs, or generally speaking of some commercial costs, both between regions, and also inside the regions; we also introduce commercial costs to the agricultural goods. These transport costs in this model, as otherwise in the majority of the models from this field are supposed to be "iceberg" type. This means that only a part from an unit of an industrial good sent from the "i" region to the "j" region, that means $0 < \tau_{ij} < 1$ effectively reaches to the destination, the rest is "melting" on the way, lost which is equivalent with the size of the transport costs. Consequently, a bigger size of the τ_{ij} will suit to the smaller transport costs. They details these transport costs, as follows:

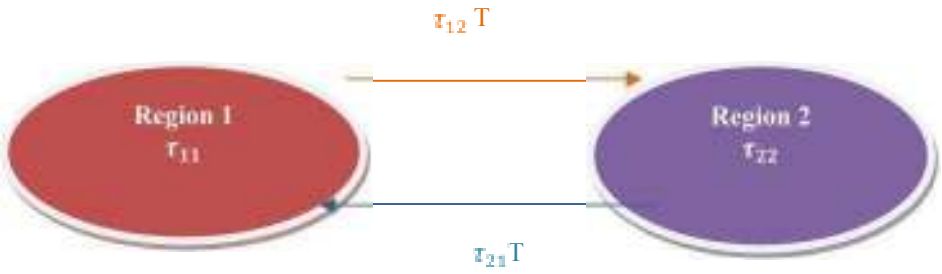

Figure 1. Lop-sided internal and external commercial costs

$\tau_{1\,2}$ represents the transport costs from the 1 region to the 2 region;

$\tau_{2\,1}$ represents the transport costs from the 2 region to the 1 region.

As these refer to the transport of the goods between regions, they could be associated to the external transport costs;

$\tau_{1\,1}$ represents the transport costs of the industrial goods from the producers to the consumers in the 1 region;

$\tau_{2\,2}$ represents the transport costs of the industrial goods from the producers to the consumers in the 2 region. As these refer to the transport of the goods inside a single region, they could be associated to the internal transport costs.

Otherwise, the transport costs represent the elements of a square matrix with all elements, differing between them.

T represents the transport costs for the agricultural goods, and it is symmetrical between the two regions, that is $T_{12}=T_{21}=T$.

The introduction of the transport costs to the agricultural goods determine the nominal prices and wages in this sector to be equal between the two regions, the difference being the commercial costs afferent to this sector.

The equilibrium on the short run

The special distribution of the workers on the short run is a given size, so that they do not score a migration of the industrial labor force.

Consumption of the regions

They appoint the consumption from the "i" region for a representative product of the "j" region, with C_{ji}. In the 1 region, the price or a local product is p_1 / τ_{11} , in which $\tau_{11} < 1$, meanwhile the price of a product made in the 2 region, that means an imported one is p_2 / τ_{21} . The consumption from the two goods inside the region 1 will be:

$$C_{11} = (\frac{p_1}{\tau_{11}})^{-\sigma} \quad \text{and} \quad C_{21} = (\frac{p_2}{\tau_{21}})^{-\sigma} \tag{9}$$

The afferent expense for buying the local industrial goods E_{11} and with the foreign industrial goods E_{21} will be:

$$E_{11} = (\frac{p_1}{\tau_{11}})^{1-\sigma} n_1 \text{si} E_{21} = (\frac{p_2}{\tau_{21}})^{1-\sigma} n_2 \tag{10}$$

Then, they note with Z_{11} the ratio between the expenses for buying the goods for the 1 region and with the most important from the 2 region:

$$Z_{11} = \frac{E_{11}}{E_{21}} = (\frac{w_1 \tau_{21}}{w_2 \tau_{11}})^{1-\sigma} \frac{n_1}{n_2} = (\frac{w_1 \tau_{21}}{w_2 \tau_{11}})^{1-\sigma} \frac{L_1}{L_2} \tag{11}$$

Similarly, they can get Z_{12}, which will represent the ratio between the expenses of the 2 region for the products of the 1 region, and also for those local ones, that means those of the 2 region:

$$Z_{12} = \frac{E_{12}}{E_{22}} = (\frac{w_1 \tau_{22}}{w_2 \tau_{12}})^{1-\sigma} \frac{L_1}{L_2} \tag{12}$$

The nominal wage

They appoint with Y_1 si Y_2 the nominal income of the 1 region, respectively of the 2 region, which will be equal with the sum of the incomes from the agricultural and industry from each region. So, they will be:

$$Y_1 = \frac{1-\mu}{2} w_1^A + w_1 L_1 \text{si} Y_2 = \frac{1-\mu}{2} w_2^A + w_2 L_2 \tag{13}$$

As for the nominal wage of the workers from the 1 region, it is equal with the expense due to the industrial goods of the 1 region, that is:

$$L_1 w_1 = \frac{Z_{11}}{1+Z_{11}} \mu Y_1 + \frac{Z_{12}}{1+Z_{12}} \mu Y_2 \Rightarrow w_1 = \frac{\mu}{L_1} [\frac{Z_{11}}{1+Z_{11}} Y_1 + \frac{Z_{12}}{1+Z_{12}} Y_2] \tag{14}$$

Similarly, they determine the nominal wage of the workers from the 2 regions:

$$w_2 = \frac{\mu}{L_2}\left[\frac{1}{1+Z_{12}}Y_1 + \frac{1}{1+Z_{12}}Y_2\right] \quad (15)$$

The (13) – (15) relations involve the fact that the sum of the nominal wages is a constant one, which means equal with:

$$L_1 w_1 + L_2 w_2 = \mu \quad (16)$$

By replacements, they get the following relations referring to the nominal wages from the two regions:

$$w_1 = \frac{\mu}{L_1}\left[\frac{\left(\frac{w_1\tau_{21}}{w_2\tau_{11}}\right)^{1-\sigma}\frac{L_1}{L_2}\left(\frac{1-\mu}{2}+w_1L_1\right)}{1+\left(\frac{w_1\tau_{21}}{w_2\tau_{11}}\right)^{1-\sigma}\frac{L_1}{L_2}} + \frac{\left(\frac{w_1\tau_{22}}{w_2\tau_{12}}\right)^{1-\sigma}\frac{L_1}{L_2}\left(\frac{1-\mu}{2}+w_2L_2\right)}{1+\left(\frac{w_1\tau_{22}}{w_2\tau_{12}}\right)^{1-\sigma}\frac{L_1}{L_2}}\right] \quad (17)$$

$$w_2 = \frac{\mu}{L_2}\left[\frac{\left(\frac{1-\mu}{2}+w_1L_1\right)}{1+\left(\frac{w_1\tau_{21}}{w_2\tau_{11}}\right)^{1-\sigma}\frac{L_1}{L_2}} + \frac{\left(\frac{1-\mu}{2}+w_2L_2\right)}{1+\left(\frac{w_1\tau_{22}}{w_2\tau_{12}}\right)^{1-\sigma}\frac{L_1}{L_2}}\right] \quad (18)$$

The (17) – (18) equations forms a system with w_1 si w_2 the unknowns under the conditions of a given distributions of the workers between the two regions. If they also take into account the (16) relation, they obtain an equation depending on w_1, or on w_2 .

The indexes of price and real wages

The workers are not interested about the nominal wages, but they are really interested about the real wages in the each region, as these depend on the life cost of each region.

The price indexes P_1 si P_2 the prices indexes establish a link between the expense and the utility of the economic agents from each region. These are depending on the price of the agricultural good, as for the price indexes of the industrial goods from the two regions, respectively P_{M1} and P_{M2} , which are:

$$P_{M1} = \gamma\left[\lambda\left(\frac{w_1}{\tau_{11}}\right)^{1-\sigma} + (1-\lambda)\left(\frac{w_2}{\tau_{21}}\right)^{1-\sigma}\right]^{\frac{1}{1-\sigma}} \quad (19)$$

$$P_{M2} = \gamma\left[\lambda\left(\frac{w_1}{\tau_{12}}\right)^{1-\sigma} + (1-\lambda)\left(\frac{w_2}{\tau_{22}}\right)^{1-\sigma}\right]^{\frac{1}{1-\sigma}} \quad (20)$$

in which $\lambda = \frac{L_1}{L_1+L_2}$ and $\gamma = \frac{\sigma\beta}{\sigma-1}\left[\frac{\mu}{\alpha^{\alpha}\beta^{\beta}(\sigma-1)}\right]^{\frac{1}{1-\sigma}}$.

The real wages of the industrial workers from the two regions will be as follows:

$$\omega_1 = w_1 P_{M1}^{-\mu} (w_1^A)^{\mu-1} \quad (21)$$

$$\omega_2 = w_2 P_{M2}^{-\mu} (w_{2A}^A)^{\mu-1} \quad (22)$$

The real wage, respectively ω_1 / ω_2 will be as follows:

$$\Omega = \frac{\omega_1}{\omega_2} \quad (23)$$

The long run equilibrium

In short time equilibrium, all the variables are determined by assuming as datum a certain distribution of the workers, that is of the λ variable. As for a long run equilibrium, the migration of the workers does not score. It represents a steady equilibrium if it resists to the small changes of the distribution between regions. A scattered equilibrium is that long run equilibrium if the regions score the same real wage. The concentrated equilibrium is that one in which all the workers are grouped in a single region, as that region scores the highest real wage.

3. Simulations on the Base of the Transport Costs

In order to make simulations, there was achieve a computational program on the base of the Maple 14 soft , as it could be seen in the figure nr. 2, which scores the described model.

They could approach the following cases:

a) Internal and external equal costs: $\tau_{12} = \tau_{21} = \tau_e$ and $\tau_{11} = \tau_{22} = \tau_i$;

b) Different internal costs: $\tau_{12} = \tau_{21} = \tau_e$ and $\tau_{11} \neq \tau_{22}$;

c) Different external costs : $\tau_{12} \neq \tau_{21}$ and $\tau_{11} = \tau_{22} = \tau_i$;

d) Transport costs for the agricultural goods: $T \neq 1$.

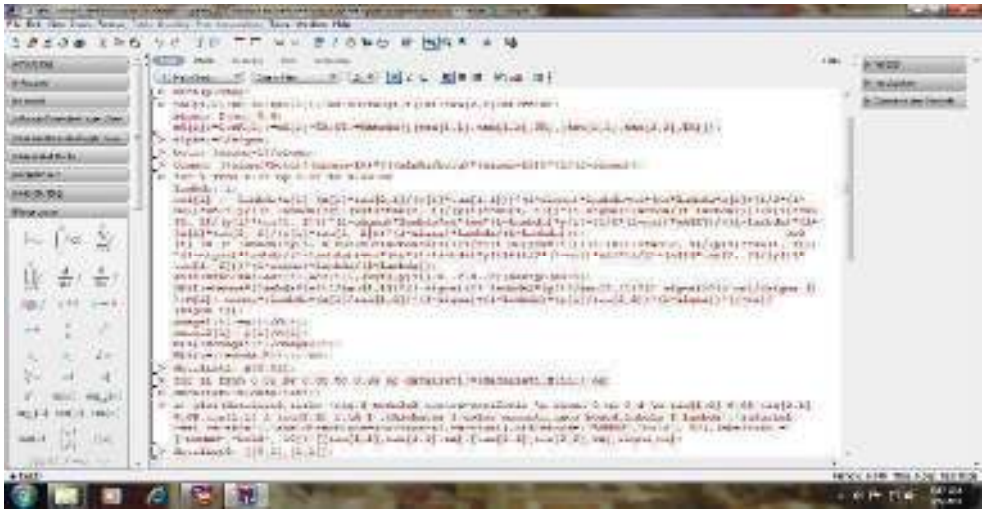

Figure 2 The computational program for simulations

By ignoring the internal transport costs of the industrial goods and of the transport costs for the agricultural products they obtain the same results al for the initial model of Paul Krugman. But this generalization of the transport costs proves useful both from a theoretical and also practical point of view.

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Dynamics of Romanian Tourism in European Tourism in the Global Crisis. Facts and Perspectives

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Abstract: Development of tourism as part of the service activity contributes to the development of national economy and hence to the development of European tourism**.** If tourist industry can cover a significant share of GDP, can cover and reduce unemployment by providing jobs in this field. Economic and financial crisis influences tourism and consumer behavior of tourism services. The dynamics of Romanian tourism in European tourism in the global crisis - facts and perspectives provide a comparative image of tourism in Romania among other European countries, giving an overview of the indicators analyzed in the perspective of marketing research. Tourism activity should be followed not only in terms of existing realities, but also in terms of real opportunities that can provide an insight into the field. To know our direction we need to know our coordinates and our potentials. Policies and strategies applied may also determine the future development of tourism.

Keywords:analysis; tourism; tourists; travel; tourism forms; number of arrivals; trends

JEL Classification: L83; L80; H12

With a rich history and a favorable geographical location, which is displaying various forms of relief, Romania receives tourists in the Carpathian basin. The wide variety of landforms helps to attract tourists to different forms of tourism. So mountain tourism is valued for winter sports and hiking and fresh air, health tourism offers treatments for various diseases, for relaxation and recreation. Besides the spa and mountain tourism, coastal tourism is an alternative way to develop Romanian tourism.

Development of tourism has direct influences on the national economy by increasing tourism share in GDP, creating jobs, but also by developing sectors

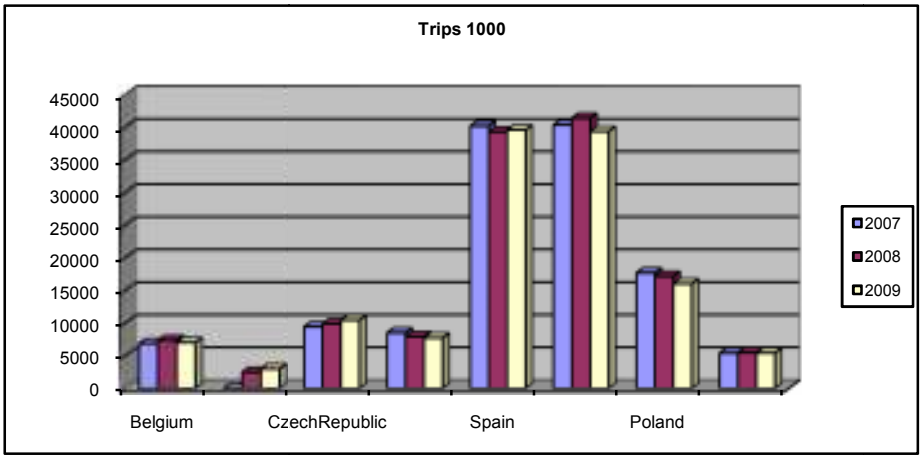
contributing to tourism. A good promotion of Romania can attract tourists from other countries, and the flow of tourists leads to cash flow. Improving the quality of tourism services and their level of performance, their hospitality and customer communication is determining the success of tourism, besides that a developed infrastructure is also required.

The present paper "Dynamics of Romanian Tourism in European Tourism in the Global Crisis. Facts and Perspectives" presents a statistical comparison; Romanian tourism is compared to tourism in other European countries such as Belgium, Spain, Italy, Poland, Czech Republic, Greece and Bulgaria. It is based on a secondary source research aimed to analyze the number of visitors and the number of tourists' arrivals to different tourist destinations, etc.

Table 1. Trips
(1 000)

	2007	2008	2009
Belgium	6865	7357	7022
Bulgaria	:	2476	2993
Czech Republic	9433	9906	10453
Greece	8522	7934	7720
Spain	40180	39282	39567
Italy	40336	41378	39349
Poland	17687	17165	16025
Romania	**5402**	**5474**	**5420**

Source - Eurostat



Graphic 1

The number of trips recorded during the analyzed period shows an overall decrease in varying from country to country. Increases were recorded in Bulgaria by 20.88% in 2009 compared to 2008, the Czech Republic by 5.01% in 2008 compared to 2007 and by 5.52% in 2009 compared to 2008. In Spain, although in 2008 the number of trips decreased in 2008 compared to 2007, in 2009 compared to 2008 the trend was increasing, but did not reach the level of year 2007. Other states recorded decreases by analyzing the number of trips. Thus Greece, Poland and Romania recorded decreases within the analyzed period. In the first period, in 2008, Greece recorded a greater decrease of 6.89% compared to 2007 and of

2.69% in 2009 compared to 2008. Poland recorded a more pronounced decrease in the second period analyzed, as if in 2008 compared to 2007 the decrease was of 2.95%, and in 2009 compared to 2008 it was of 6.64%. In 2008 compared to 2007 Romania recorded a decrease of 1.33%, and in 2009 to 2008 a 0.98% decrease. According to the numbers in case of Romania the decrease was lower in the first period. Italy recorded an increase by 2.58% in the first period and a decrease of 4.90% in 2009 compared to 2008.

Table 2 Tourists
(1 000)

	2007	**2008**	**2009**
Belgium	3962	4140	4131
Bulgaria	:	473[e]	529[e]
Czech Republic	4768[p]	4574[e]	4827[e]
Greece	4040	4106	3977
Spain	16551	16612	16261
Italy	24932	23673	:[u]
Poland	10990	11747	11841
Romania	**5086**	**5264**	**5213**

Source – Eurostat

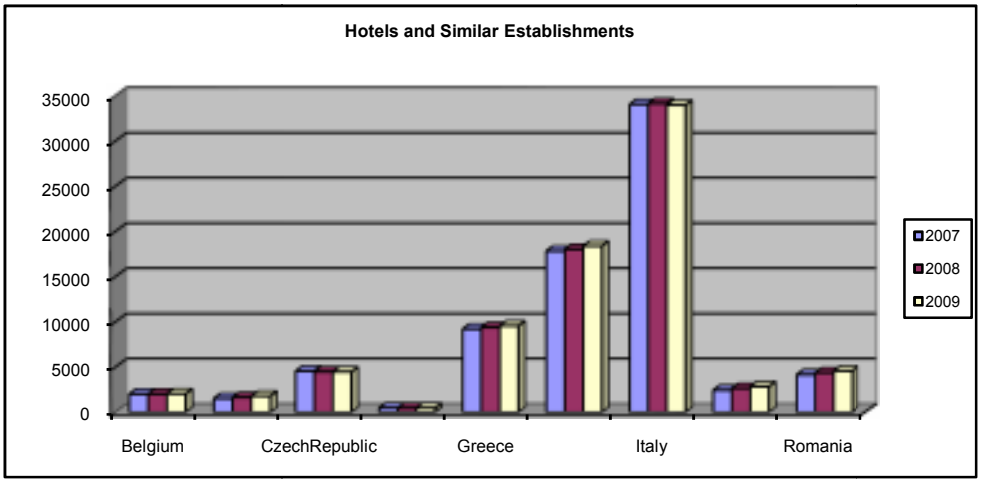
The largest tourist arrival recorded over the analyzed period was in Italy and Spain. An overview shows that the number of tourists grew during the first period and fell in the second part of it. The largest increases in the first period were in Poland and Belgium by a 6.88% increase respectively by a 4.49%. Romania recorded an increase by 3.49% in 2008 compared to 2009. Increasing number of tourists were recorded in Greece (1.63% in 2008) and in Spain (0.36% in 2007), while Italy recorded a significant decrease of 5.04% in 2008 compared to 2007 and the Czech Republic a decrease of 4.08% in 2008 compared to 2007. By analyzing the second period we can conclude that Bulgaria recorded a 11.83% increase in the number of

tourists and the Czech Republic a 5.53% increase. As well as for Poland an increase of 0.80% in 2009 was observed, compared to 2008. On the other hand all other countries recorded decreases in the number of tourists in the second half of the period. The largest decrease in the number of tourists was in Greece by 3.14% in 2009 compared to 2008, followed by Spain with a decrease of 2.11%, and Romania with a decrease of 0.96%.

Table 3 Hotels and similar establishments

	2007	**2008**	**2009**
European Union (27 countries	202353	202046[p]	201544
Belgium	2013	2009	2036
Bulgaria	1526	1646	1784
Czech Republic	4559	4483	4469
Denmark	477	470	471
Greece	9207	9385	9559
Spain	17827	18026	18387
Italy	34058	34155	33967
Poland	2443	2642	2836
Romania	**4163**	**4362**	**4566**

Source – Eurostat



Graphic 2

Other collective accommodation establishments include holiday dwellings, tourist campsites, youth hostels, tourist dormitories, group accommodation, school dormitories and other similar accommodation. Top countries with these facilities are Italy and Spain, which also experienced the largest increases. Thus Italy recorded a growth of 9.39% in 2008 compared to 2007 and an increase of 4.97% in 2009 compared to 2008, while in Spain growth was balanced by 6.49% in 2008 versus 2009 respectively 6.63% in 2009 compared to 2008. A significant increase took place in Belgium (8.06%) in the first period, while in the second period a decrease was shown (2.29%). Otherwise all other countries reported decreases during the analyzed period. Bulgaria also recorded decreases of 2.03% in 2008 compared to 2007, respectively 3.31% in 2009 compared to 2008. In other countries the decreases did not exceed 2%.

Table 4 Bed places in hotels and similar establishments (1 000)

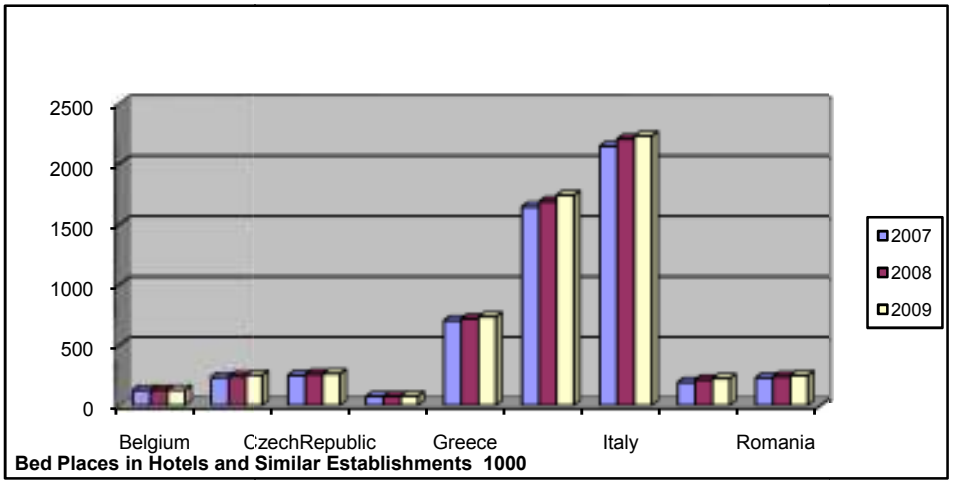
	2007	**2008**	**2009**
European Union (27 countries	11715	11962[p]	12129
Belgium	125	125	126
Bulgaria	231	240	249
Czech Republic	248	258	261
Denmark	73	73	77
Greece	701	716	732
Spain	1642	1685	1737
Italy	2143	2202	2228
Poland	190	211	222
Romania	**228**	**238**	**247**

Source - Eurostat

Countries with the largest number of accommodation facilities are Italy, Spain, Greece, and those with the smallest are Denmark and Belgium, however an overall growth is recorded. The largest increases of 11.05% was recorded in Poland in 2008 compared to 2007 and 5.21% in 2009 compared to 2008.

Data analysis indicates that the increases were more pronounced in the first period analyzed, except Greece and Spain. Romania increased the number of beds in

collective accommodation establishments of 4.38% in 2008 compared to 2007 and 3.78% in 2009compared to 2008. Comparing the two analyzed periods the most significant differences exist in countries like Poland, which recorded a growth of 11.05% in 2008 compared to 2007 and an increase of 5.21% in the second the period, 2009 compared to 2008, and in the Czech Republic who also recorded high growth differences and 4.03% in 2008 compared to 2007 and 1.16% in 2009 compared to 2008.



Graphic 3

Accommodation facilities presented decreases with little exceptions. The largest decreases were recorded in Bulgaria by 8.57% in 2008 compared to 2007, the Czech Republic by 3.34% in 2009 compared to 2008 and Italy by 3.10% in 2009 compared to 2008. Increases was recorded in Italy in 2008 (4.43%) compared to 2007, Denmark in 2008 (1.96%) compared to 2007 and by 0.96% in the second part of the reporting period. The Czech Republic experienced an increase by 2.45 % in 2008 compared to 2007. Romania recorded a decrease of 1.78% in the second half of the period. Countries like Spain and Greece recorded decreases by 2% throughout the analyzed period. It should be noted that countries like Italy, Spain, Denmark and Belgium have the highest number of beds.

Table 5 Arrivals in hotels and similar establishments - (1 000)

	2007	2008	2009
Belgium	2877	3081	3217
Bulgaria	2228	2442	2100
Czech Republic	3795	3954	3726
Greece	6950	6968	7352
Spain	48641	47241	45138
Italy	43282	43498	43698
Poland	8652	9510	9592
Romania	**5186**	**5420**	**4663**

Source – Eurostat

Number of tourist arrivals is best represented in Spain, Italy, Poland, Greece, followed by Romania. Bulgaria recorded the lowest number of arrivals of tourists during the period. Data analysis shows that the number of tourist arrivals significantly differ between the two parts of the period. There were both increases and decreases, the only country which recorded a more balanced growth was Italy. Thus the number of tourists arrivals in hotels and other similar accommodation in Italy grew by 0.49% in 2008 compared to 2007 and by 0.45% in 2009 compared to 2008.

Table 6 Arrivals in other collective accommodation establishments - (1 000)

	2007	2008	2009
Belgium	2191	2183	2212
Bulgaria	309	307	296
Czech Republic	2486	2233	2227
Denmark	1755	1831	1756
Greece	134	160	171
Spain	9188	9188	9332
Italy	9995	10251	10677
Poland	5907	5999	5900
Romania	**235**	**239**	**202**

Source – Eurostat

Bulgaria showed an increase in the number of arrivals by 9.60% in 2008 compared to 2007, while the number of arrivals recorded a major decrease - 14% in 2009

compared to 2008. Poland also recorded a growth of 9.91% in the first period, while the second part of the reporting period the increase was only by 0.86%. Arrivals in Czech Republic grew by 4.18% in the first period and decreased by 5.76% in 2009 compared to 2008. Greece presented an increase in the number of arrivals in hotels and other accommodation by 0.25% in the first period and an increase of 5.51% in 2009 compared to 2008. Romania recorded a growth of 4.51% in 2008 compared to 2007 and a decrease of 13.96% in the second half of the period. The data show that the number of arrivals recorded larger differences between the two periods in the Eastern European states. In other European countries these decreases were moderate.

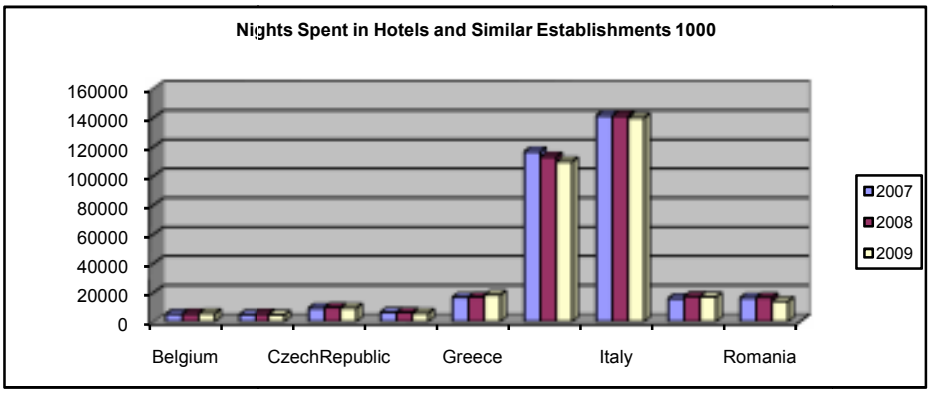
The number of arrivals in other collective accommodation units is best represented by Italy, Spain, Poland and the Czech Republic and the least represented is in Greece, Romania and Bulgaria. For this indicator Bulgaria and Czech Republic recorded decreases throughout the analyzed period. The largest decrease took place in Bulgaria, by 3.58 % in 2009 compared to 2008. Greece recorded an increase of 19.40 % in 2008 compared to 2007, 6.87 % in 2009 compared to 2008, while Italy showed a 2.56 % growth in 2008 compared to 2007 and a 4.15% in the second part of the period. In other countries there were both increases and decreases recorded during this period. Thus Poland showed an increase of 1.55 % in 2008 compared to 2007 and a decrease of 1.65 % in 2009 compared to 2008. Romania recorded a growth of 1.70% in 2008 compared to 2009 and a decrease of 15.48 % in 2009 compared to 2008.

Table 7 Nights spent in hotels and similar establishments - (1 000)

	2007	**2008**	**2009**
European Union (27 countries	848272[e]	849452[e]	839715[e]
Belgium	5220	5422	5604
Bulgaria	4867	5370	4676
Czech Republic	9206	9686	9328
Denmark	6445	6279	5708
Greece	16675	16840	18367
Spain	116597	113083	109757
Italy	141311	141187	139790
Poland	15898	17300	17036
Romania	**16259**	**16580**	**13932**

Source – Eurostat

The nights spent in hotels and similar accommodation types is best represented is Italy, followed by Spain, Greece and Poland, and Bulgaria is the most underrepresented. Data analysis shows a clear differentiation of the two periods, before and after 2008. Bulgaria showed an increase by 10.33% in 2008 compared to 2007, while in the second period presented a decrease of 12.92%, Poland recorded an increase of 8.81% in 2008 compared to 2007, while in the second part of the period showed a decrease of 1.52%. In Romania the number of overnight stays in hotels and other similar accommodation presented an increase of 1.97% in 2008 compared to 2007 and a decrease of 15.97% in 2009 compared to 2008. Greece stood out clearly from other countries because in 2008 compared recorded a growth of 0.98% to 2007 and in the second period the increase was by 9.06%. Italy recorded slight decreases by 0.98% and 0.08%, respectively. Denmark experienced a more than 2.57% drop in 2008 compared to 2007, respectively by 9.09% in 2009 compared to 2008.



Graphic 4

The number of nights spent in collective accommodation units outline Italy, Spain, Poland, Denmark and Greece. In 2009 Romania was the last on this indicator list. Although Greece is not as well represented as Italy or Spain, according to the percentages the largest increases were recorded there. Thus in 2008 compared to 2007 growth rate of Greece on this index was 22.32% and of 20.59% in the second period. Bulgaria declined in 2008 compared to 2007 by 7.25%, and in 2009 compared to 2008 recorded a growth of 11.64%. Romania recorded a growth of 5.21% in the first period and a decrease of 7, 75% in 2009 compared to 2008.

Based on our research we can say that a lot of objectives and performances await Romania in the tourism industry, both in terms of attracting tourists to various forms of tourist accommodation, but also in terms of current infrastructure. An

essential aspect of Romanian tourism is the development of international tourism. It can be seen that the crisis has affected tourism not only in Eastern Europe but in Western European states as well.

The development of tourist infrastructure is essential for Romania as well as the improvement of the personnel in tourism industry. Tourism cannot be effective without adequate infrastructure and personnel.

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Western Balkans: State of Agriculture and its Opportunities on the Eve of EU Accession - II

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Abstract: The Western Balkan countries can be characterized by their shared goal, which is the quickest possible accession to the European Union. Agriculture is an important obstacle to achieving this goal. The role of agriculture differs widely among the analyzed countries but is more important than the average of the EU. This study gives a comprehensive overview of the most important agricultural indicators related to both crop and livestock production. These indicators present a precise picture of the sector's relevance, production structure, efficiency and international relations. After demonstrating changes in input use, production structure, prices, terms of trade and agricultural policies, the next section identifies some of the reasons for these changes. The time horizon of the analysis goes back to the early nineties and tries to capture some transition effects. The consequences of the Yugoslav war can be easily recognized in every country involved. However, since the end of the war Serbia became the leading producer and the only net exporter of agricultural goods in the region. Nevertheless, the current situation is endangered by several issues, such as imbalanced sectoral production, fragmented production structure, relatively low yields, unfavorable export composition, and poor food hygiene and quality control, which anticipate painful and hard actions need to be carried out.

Keywords: Western Balkans; agriculture; trade balance; EU accession

JEL Classification: O13; F15

The Determining Factors of the Agricultural Performance

Changes in Input Use

The most important input of production is the labor force. It was demonstrated earlier that the share of agricultural workers within the total employment shows a decreasing trend. But it is worth examining the absolute numbers behind the percentages. The next figure gives an overview of that (Figure 12.)

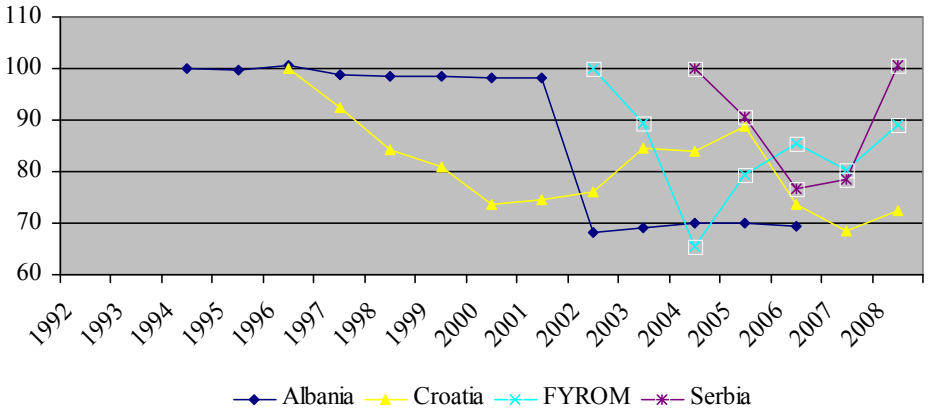


Figure 12. The development of agricultural labour force [initial year = 100]

Source: Author's composition based on ILO database

There is no unequivocal decreasing trend on the figure above, the number of agricultural workers grew at least once during the available time period. Due to the earlier mentioned reasons, it declined by 30 ‰ in Albania in 2002, but since then it stabilized again. It increased between 2000 and 2005 in Croatia, while started to grow in the last four years in FYROM and in the last two years in Serbia. In Serbia it resulted an increase in its share too. In addition, the last numbers of agricultural workers were higher than its previous ones in every country, except Albania. Contrary to this, the number of agricultural labor force declined by 25% between 2000 and 2009 in the EU, mostly in the new member states (Eurostat database).

The next important resource is the available land used for agricultural production (agricultural area) and within that the share of arable land. Table 13 shows its changes from 1992 to 2009.

Table 13. Changes in agricultural area in the Western Balkan countries [1000 ha]

Countries	1992		2000		2009	
	Agricultural area	Of which arable land	Agricultural area	Of which arable land	Agricultural area	Of which arable land
Albania	1 127	51%	1 144	51%	1 181	52%
BiH	2 200	39%	2 130	47%	2 130	47%
Croatia	2 404	50%	2 064	53%	1 201	71%
FYROM	1 307	46%	1 235	45%	1 071	40%
Montenegro	-		-		513	34%
Serbia	-		-		5 056	65%
Serbia and Montenegro	6 188	60%	5 587	61%	-	
Total	13 226		12 160		11 239	
Average		52%		54%		57%

Source: Author's calculations based on FAO database

In the Western Balkan the most significant agricultural land could be found in Serbia, even without Montenegro after 2005, while the less was in Montenegro followed by the former Yugoslav Republic of Macedonia. This order basically follows the total size of the countries except Bosnia and Herzegovina and Croatia, where the bigger county has less agricultural area. The size of the agricultural area decreased significantly in Croatia, where only the half of the area was used for agricultural purposes in 1992 than in 2009. Although it should be mentioned that a significant change was made in the methodology in 2004 which resulted 40% decline in the agricultural area and almost 25% off in the arable land. It added up the remarkable increase of the share of arable land in Croatia. Generally the countries' agriculture suffered loss in the size of their territories but only in a moderate way. The only exception was Albania with a slight increase.

Regarding the relative size of the arable land, it is increased significantly in majority of the countries which led to the increase of the share of arable lands. The exception from this general trend was the former Yugoslav Republic of Macedonia, where this ratio decreased from 46% to 40%. The decreasing agricultural area and the increasing arable land together is an indicative of a positive process of the withdrawal of less favorable lands from the production.

One of the possible approximations of the development of technology in agriculture is the equipment supply. In this case the relative number of tractors was used. Because of the great differences among the nominal values, it was necessary to normalize them. The number of tractors per 100 km^2 of arable land is generally used for this purpose and makes the changes more visible (Figure 13.).

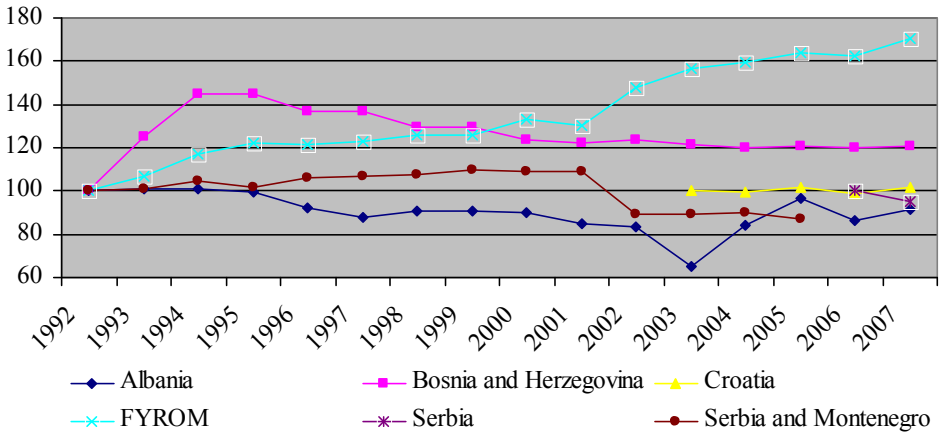


Figure 13. Number of tractors per 100 km^2 of arable land [initial year = 100]
Source: Author's composition based on World Bank database

Regarding machinery, the situation of Western Balkan countries does not draw a nice picture. The relative tractor number showed significant increase only in FYROM. Besides FYROM, it surpasses its initial value only in Bosnia and Herzegovina. In case of Croatia the first period was cut off because the number of tractors increased from 38 to 2188. It was simply not possible to illustrate it on the same graph with the other curves. Its reason was the Agricultural Census carried out in 2003. It can be assumed that its previous low values were inaccurate. There are huge differences behind the relative numbers. The two extreme values are 2229 tractor/100 km^2 in Croatia and 19 tractor/100 km^2 in Serbia. The first value is very high even in the context of EU-15 as only Italy has higher rate (2667 tractors/100 km^2), while the German or French values are about one forth of this (646 and 615 tractors/100 km^2 respectively) according to the World Banks' WDI database. From this aspect even the Macedonian one can be considered as high (1244 tractors/100 km^2 in 2007).

Besides the machinery, the unsatisfactory level of fertilizer use could be the reason of lower maize and wheat yields than in the EU. This is also demonstrated by using relative values (Figure 14.).

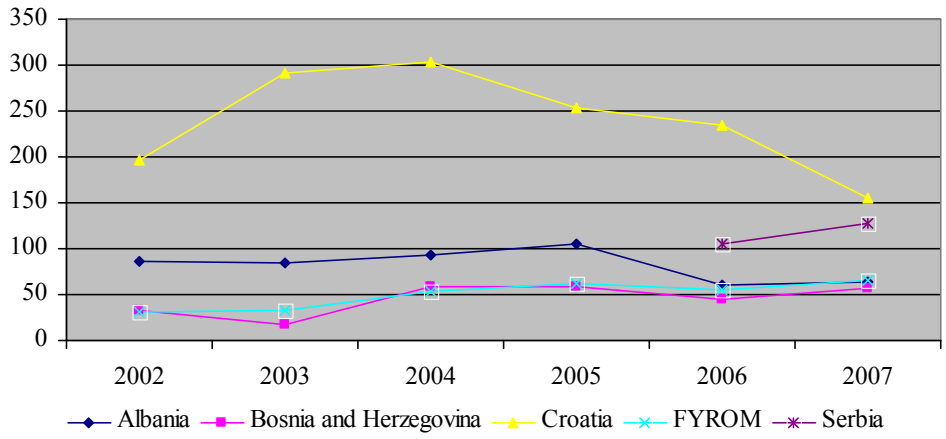


Figure 14. Fertilizer use per 1 ha of arable land [kg/ha]
Source: Author's composition based on World Bank database

The World Banks database contains data on fertilizer use from 2002. The Croatian values are the highest, although they show decreasing trend from 2004. The other countries are around 60 kg/ha which is typical in the new member states, while in the EU-15 plus Lithuania and Poland can be described by values around 200 kg/ha (World Bank's WDI database). It indicates that higher yields can be reached by using more fertilizer in most of the Western Balkan countries.

The Structure of Agricultural Production

Analysis of the structure of agricultural production (number of producers and average farm sizes) gives a good basis to reveal efficiency and competitiveness problems. The fragmented farm structure is obviously disadvantageous in crop production which is the dominant sector of the Western Balkans' agriculture. In most of the cases data for agricultural output by farm categories (agricultural enterprises/private farms) are not available in the national statistics of Western Balkans. Generally it could be stated that majority of utilized agricultural area is in

private hands[1] and private sector dominates the agricultural production. Table 14 shows the number of agricultural holdings and the distribution of utilised agricultural area (UAA) by size groups. Comparing UAA to the earlier analysed agricultural area, there are quite immense differences which can not be explained only by the exclusion of agricultural enterprises. It has multiple reasons. Besides the different data source, the table below does not contain government owned or used (directly or by governmental companies) area. In addition to this, it is a very interesting characteristic of Western Balkans, that some part of the agricultural land is not cultivated. It is especially typical in Serbia, where around 20% of the available agricultural land is not in use (Njegovan – Bošković, 2006). Its reasons are various starting from land mines to intensive out migration (FAO, 2005).

Table 14. Number of agricultural holdings and distribution of UAA, 2005 [1000]

Categories	Albania	BiH	Croatia	FYROM*	Montenegro**	Serbia*
Agricultural holdings	394.9	515.0	449.9	192.4	43.2	778.9
0 - 2 ha	354.6	250.0	299.7	83.5	28.6	360.3
2 - 5 ha	40.0	150.0	86.0	38.6	8.6	244.1
5 - 10 ha	0.2	90.0	42.6	50.4	3.8	131.4
10 - 100 ha	0.05	20.0	15.8	11.9	1.7	36.8
<100 ha	0.0	0.2	5.8	5.1	0.7	6.3
UAA (ha)	427.3	2 444.0	1 077.4	264.4	136.6	2 869.0
0 - 2 ha	305.1	N/A	118.0	188.6	23.3	347.3
2 - 5 ha	120.0	N/A	188.9		29.4	854.4
5 - 10 ha	1.3	N/A	214.2	42.7	27.9	957.7
10 - 20 ha	0.9	N/A	164.4	33.1	24.0	503.4
<20 ha		N/A	391.9		31.9	206.3
Average size	1.1	4.7	2.4	1.4	3.2	3.7

* Data refers only to private family farms (without agricultural enterprises and cooperatives)

** Data for year 2003

Source: ARCOTRASS (2006), MonStat (2003) for Montenegro, SSO (2007) for FYROM

From the table it can be seen that the number of agricultural units refers to the size of agricultural area. Generally countries with higher UAA have more agricultural holdings. Besides their number, their distribution is also very important. It seems to be a general phenomenon of the Western Balkans' agriculture that majority of the producers are small ones (Mizik, 2010). One of its most important reasons is the former Yugoslavian agricultural policy which had limited farm sizes. The 10

[1] Even in Serbia 87% of land is privately owned (Bogdanov et. al. 2007).

hectares maximum was in use until the mid-‘80s (Njegovan – Bošković, 2006). At least around 50% of the production units belong to the 0-2 hectares size category in each country. Moving toward bigger size categories, the number of holdings is continuously decreasing with the only exception of 2-5 and 5-10 ha categories in the former Yugoslav Republic of Macedonia. According to the available data, there are no agricultural holdings over 100 hectares in Albania and only a few ones in Bosnia and Herzegovina and Montenegro. The latter one is a bit surprising as the highest share of large holdings can be found in Serbia.[1]

The distribution of utilized agricultural area shows better picture as farms in the lowest size category use less percentage of the total UAA. One should note that the agricultural production is dominated by small farms in FYROM and mostly in Albania. According to the average size, Albanian farms are the smallest with 1.1 ha/holding. In the other countries majority of UAA can be found in the middle size categories (2-5 and 5-10 ha). Croatia is special from this aspect as the highest share of UAA is in the largest size category (above 20 ha). But the average farm sizes are on a very low level and far behind the EU’s 15 ha/farm which also counts low value on international level.

Generally speaking the private farms can be characterized by low sizes starting form 1.1 (Albania) to 4.7 (Bosnia and Herzegovina) ha/farm. It is low in itself, but in most of the cases they are formed from small parcels, which make the production more costly and less efficient. The major problem is the geographical distribution of these parcels: they are very often located far from each other. Moreover, this type of land distribution is one of the most important barriers of a well functioning lease market. Low-scale production seems to be the bottleneck of the Western Balkan’s agriculture. It is closely related to competitiveness. Consolidation of farm parcels should be a key issue of the agricultural policies. For example in Albania its governmental tool is the promotion of leasehold (World Bank, 2006). But practical experiences show that this is a long process and without strong political will it cannot be carried out. One of its evidences is the slow increase in the farm sizes over the years. For instance it was 1.2 ha/farm in Albania and 1.7 ha/farm in FYROM in 2008 (Volk, 2010).

A well functioning land market requires reliable, precise and up-to-date land registers, which does not exist in the majority of the Western Balkan countries. The

[1] There is no detailed data on large farms in Serbia and Montenegro, but their average sizes were 1,547 and 347 hectares respectively, while in case of cooperatives these values were 326 and 108 hectares respectively in 2005 (Njegovan – Bošković, 2006).

Croatian shift from the old cadastral records to the Eurostat conforming one served this purpose. It has outmost importance from the aspect of EU accession, as the implementation of CAP[1] requires not only sufficient institutional background but also available and reliable data sources (for example for the FADN[2] system).

Prices and Terms of Trade

The development of prices is linked to the analyses above; therefore it follows the same order. It starts with maize, then pork and ends with cow milk prices. Figure 15. shows maize prices in the region.

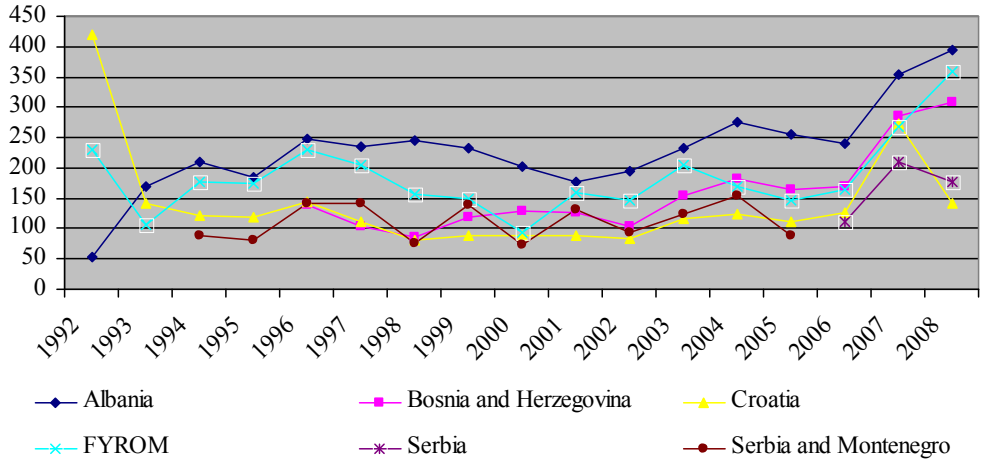


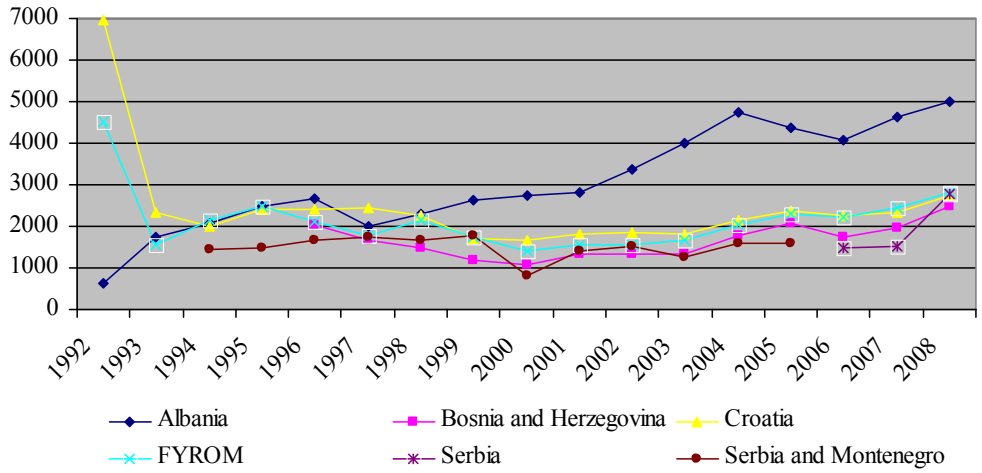
Figure 15. The development of producer prices of maize [USD/tonne]
Source: Author's composition based on FAO database

The high initial Croatian and Macedonian values and their huge drop in the next year indicate data problem. Both of these countries changed their national currencies after the independence and in 1993-94 again due to the high inflation (Croatia introduced kuna, while FYROM switched to new denar). These high prices were not underpinned by the prices nominated in national currencies, which means conversion problem.[3] Besides these two values, prices were moving together. The last few years were dominated by moderate increase. The reason of

[1] Common Agricultural Policy
[2] Farm Accountancy Data Network
[3] It can be seen for pork and milk prices too.

the remarkable price decline in Croatia was a bumper crops in 2007, when one million tonnes (76%) more maize were harvested than in the previous year. Serbia has also higher production (58% more) which caused gentle price reduction. Both the highest and lowest price in the region were observed in Albania in 2008 and 1992. Generally it seems that there are two price centres exist. The prices are around 150 USD/tonne in the big producer countries (Croatia, Serbia); while in the other countries they are above 300 USD/tonne. It is very similar to the EU's pricing; the bigger producers are closer to the lower price centre, while the smaller producers are facing with higher prices.

In case of pork, average prices were on a lower level with strong convergence among them. However, the development of prices is quite similar to the maize prices': the same outlier values for Croatia and FYROM and the almost continuous growth of the Albanian prices. At the end of the analysed period the prices were between 2500 and 2800 USD/tonne, while in Albania it surpassed 5000 USD/tonne (Figure 16.). Compared to the averages of the EU, it is extremely high as the biggest European producers (e.g. Germany, France or the Netherlands) are below 2000 USD/tonne (FAO database).

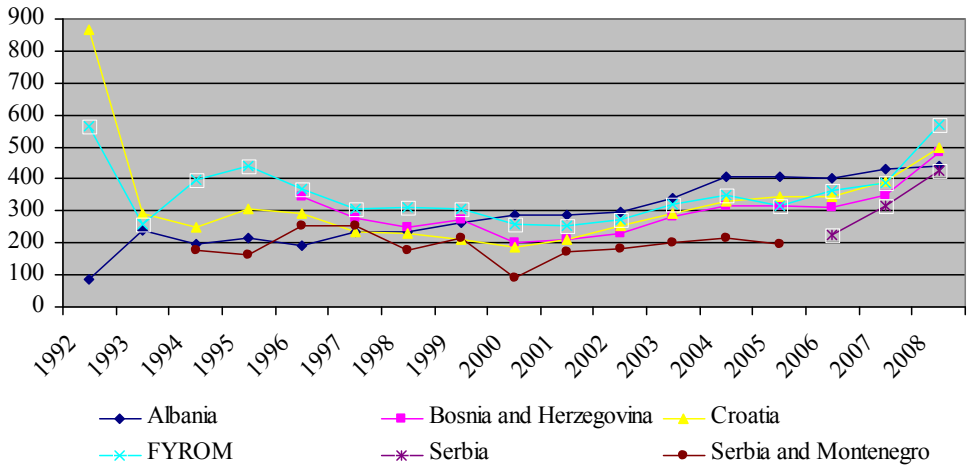


Source: Author's composition based on FAO database

Figure 16. The development of producer prices of pork [USD/tonne]

The price movements of milk smoothly fit into the trend drawn by the other commodities. Countries faced with slightly decreasing prices until the middle of the period which turned into moderate increase in the second half of the period.

Besides the initial outlier values, the highest price can be found in the FYROM. It was 572 USD/tonne in 2008 which is higher than in the majority of the EU member countries. The other countries faced with average prices below 500 USD/tonne, which is line with the EU's prices (Figure 17.). Regarding milk prices, there is no further price convergence needed.



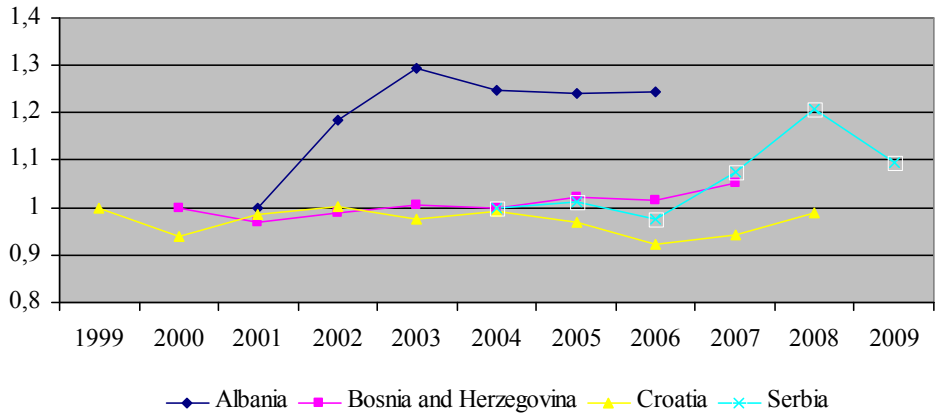
Source: Author's composition based on FAO database

Figure 17. The development of producer prices of milk [USD/tonne]

One should notice a remarkable decline in prices for both commodities in Serbia in 2000. Production data did not explain them, as there was no significant surplus in meat production. In addition to this, the production of the main fodder commodity (maize) halved. Even the export-import data did not indicate this large decline. On the contrary, all these factors pointed toward a price increase. But agriculture faced with huge external shocks: the extremely high inflation together with the depreciation of the Serbian dinar. Due to these shocks, prices declined after the conversion to US dollar. The relatively high Albanian prices gave an explanation to that fact why the share of food products and beverages in the households' expenditure was the highest there.

Analyzing agriculture, terms of trade is an important issue. It describes how the agricultural and industrial price indices developed compared to each other during the time. It is unfavourable to agriculture if the industrial index increases more.

The next figure demonstrates the changes of these indices (Figure 18.). These data were available only in the national statistics and not for every country.



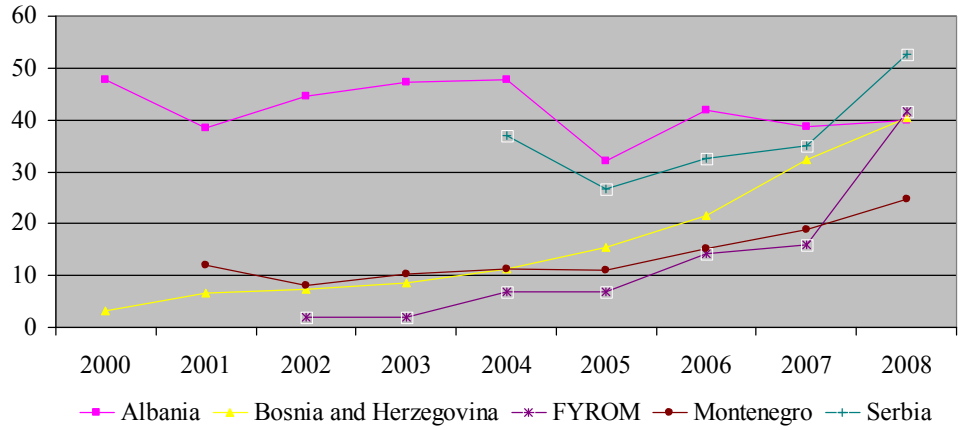
Source: Author's composition based on national statistics

Figure 18. The development of terms of trade

The value above 1 on the diagram indicates that agricultural prices increased more than industrial ones. From this aspect, the Albanian agriculture experienced with the most favourable trend, while in Croatia industrial prices increased more. The Bosnian index shows a slightly downward trend, while the Serbian one declined in 2009 after a big increase.

The Impacts of Agricultural Policy

The competitiveness of agriculture is determined by the size and the type of budgetary supports. From this aspect (again) the Croatian agriculture has the best position; the average support is nearly 400 EURO/UAA. It is very close to the average of the EU, but higher than for example the Czech value (Eurostat database). Basically an increasing trend can be identified on a longer term (Figure 19.). Croatia is excluded from the diagram as its very high values would have made the other countries' ones much less visible.



Source: Author's composition based on FAO database and Volk (2010)

Figure 19. Budgetary supports to agriculture per UAA [€/ha]

Budgetary supports show increasing trend except Albania. One might notice that the Serbian support is twofold bigger than the Montenegrin, although both of them are on a low level compared to the EU average. It is obvious that higher level of support would lead to significant growth in agricultural output. Taking a closer look at the structure of the supports, much of the money can be classified as first pillar ones and linked directly to the production (Lampietti et. al., 2009). From this aspect, the Croatian support structure is the closest to the EU's one, while the Serbian is the most different from that (Erjavec, 2010).

Regarding the land, Western Balkan countries introduced similar regulations. It led to the dominance of private ownership, similarly to the EU. Its legal background was established in early 90's (in 1992 in Serbia and Montenegro and in 1991 in the rest of the countries).[1] The share of individual ownership differs from 80% in FYROM to 95% in Albania (Arcotrass, 2006).[2] The common characteristic of the transition countries can be found here too, the significant role of corporate holdings (former governmental owned companies and co-operatives) in the production.[3] The so-called dual production structure can be identified in every country except

[1]To be precise, although it started in the same time in Bosnia and Herzegovina, but it was finalised only in 1998.
[2] Its share was already 87% in Serbia in 2007 (Bogdanov et. al., 2007).
[3] The breakdown of production by individuals and corporate holdings is hardly available even inthe national statistics, but the dominancy of private sector is beyond question. On the other hand, the share of corporate farms is insignificant only in Albania (Swinnen et. al., 2006).

Albania. The way of privatization was also similar in these countries; the former owners received back their properties. The exception was again Albania, which followed the principle of "the land belongs to whom cultivated that". It was a very popular method in the former Soviet countries, especially in Armenia and Georgia (Lerman et al., 2002).

In the international trade the already WTO members have advantages upon the observer ones (Bosnia and Herzegovina, Montenegro and Serbia). The latter ones will face serious challenges and it restricts their active participation in the international trade. One of the most serious effects of WTO membership is the lowered external protection (basically tariffs) which results higher competition on the internal markets due to the cheaper import products. Nevertheless, the Western Balkan countries have numerous preferential agreements with their most important trade partner, the EU (2007/2000 EC regulation). It allows custom free export with almost no quantity restrictions for the wide range of agricultural products. Beef is an exception and some other commodities have lower tariff or quota, such as wine, sugar or some fishery products. Import ban is quite rarely used by the EU, e.g. in case of swine flu.

Summary and Conclusions

Analysis of the Western Balkan countries' agriculture provided some important lessons. The indicators used to demonstrate the relevance of the sector (value added, share of agricultural employment) generally showed decreasing trends. The most important exception was Serbia, where both the number and the share of agricultural workers started to grow. Another significant result is the higher importance of agriculture in the region than in the EU which was used as a benchmark. It can be especially seen on the export-import data. It needs to be kept in mind that the Western Balkan countries export more raw materials than processed food, while import more processed food than raw materials. This unfavorable structure contains another problematic point: in case of mass products, the most important element of competitiveness is the price, which can be eliminated by high transport costs. Finally, it can cause significant export decline and therefore loss in export revenues. It is more stressful for Serbia, which is the only country with trade surplus. This country relies heavily on agricultural products as they give almost one fourth of the total export. Under the given export structure, it makes the country's export very vulnerable. Serbia has to carry out even more

efforts on higher value added products. The lowest share of agricultural goods in the export can be found in Albania, where that is less than 9%. However it indicates serious efficiency problems as the value added of the sector to the GDP is the highest (21%) among the Western Balkan countries. The importance of the sector is more highlighted by the fact that the share of households' spending on foods and beverages are on relatively a high level.

As a matter of the main commodities (maize, pork and cow milk), the majority of the countries were not able to remarkably increase their output in the observed period. Before 2000, its reason was the Yugoslav war, except Albania. After the end of the war, Western Balkans suffered from droughts occurred in 2000 and 2003. They resulted in huge production losses. Taking off its edge would have been possible with irrigation, but that is on a low level in the region. The two third shares of crops in production in the largest producers of the region (Serbia, Croatia and Bosnia and Herzegovina) make this problem even bigger. This sector suffered more from fluctuation than livestock production.

Concerning efficiency, the value added per worker increased in every country, although it is on a satisfactory level only in Croatia. The negative natural disasters influenced it highly due to the dominance of crop production. The analysis of overall production showed that growing yields are behind the country level increases. But these yields are still far behind the averages of the EU even in the best performing countries (Croatia – maize and milk, Montenegro – pork). The only exception is the pork. The use of leading-edge technologies would remarkably increase the agricultural output of the Western Balkans.

Both agricultural export and import expanded dynamically in the analyzed period, but the higher initial import values conserved the trade deficit. Despite the fact that Serbia was able to gain increasing trade surplus from 2005, which surpassed 800 million USD in 2009, the region had almost 2 billion USD trade deficits at the end of the period. Since the most significant trading partner of the Western Balkans is the EU, it is a very important task for the WTO observer countries (Bosnia and Herzegovina, Montenegro and Serbia) to become members and to implement the EU's regulations on food hygiene and quality control into their national systems. From this aspect, Serbia has the most things to do.

The analysis of input use showed uneven results. The number of agricultural employees did not show unambiguous decreasing trend and it increased significantly at the end of the period. The region had less utilized agricultural area

but higher share of arable lands. The agricultural output did not refer to that thanked to the growing yields. But the efficiency would be increased more by using more (and better) machinery and fertilizer. Except Croatia, these indices are less than the averages of the EU, although not far from the averages of the new member states. It indicates huge efficiency reserves in the region.

The detailed picture of the production structure pointed out one of the largest problems of the Western Balkans' agriculture, the extremely fragmented farm structure. It is not possible to produce cost efficiently and competitively on 1.1 (Albania) to 4.7 (Bosnia and Herzegovina) ha units, which are mostly broken to small parcels with different geographical location. Making it higher requires strong political commitment. Besides that, a reliable and accurate land register, which is available only in Croatia at the moment, is an important element of the accession. Besides these problems, analyzing these countries require increased attention. The methodological changes (e.g. labor classification in Albania or new land register in Croatia) can cause huge differences from one year to an other.

Regarding the prices, the Western Balkan countries do not lag behind the EU as some of the prices are even higher than these benchmark values (e.g. milk in the FYROM). The price movements were determined by the production. In Serbia the monetary policy also played an important role with the large depreciation of the national currency. Except milk, Albania had the highest prices, which explained why the households spent the largest share of their incomes on food products and beverages. The terms of trade drew a favourable picture as the agricultural price indexes grew higher than the industrial ones.

In the field of budgetary support, the region cannot compete with the EU, except again Croatia. However, their values are matching with the new member states' ones when they were before the accession. But the structure of supports, especially the coupled payments, needs to be reformed. Land regulations are uniformed; the private ownership is dominant with no restraint on land sale or rental. As a matter of agricultural trade, due to the preferential agreements, majority of the Western Balkans' agricultural products can access freely to the EU markets.

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WTO website and database: http://www.wto.org

The Reflection of the Current Crisis on the Economic Growth in the European Union New Member States

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Abstract: The paper presents an analysis of the economic growth evolution in the European Union new member states, being part of a more comprehensive research regarding the euro adoption challenges, taking as benchmark Slovakia and Slovenia, countries that already entered the euro zone. The research underlines the fact that, starting with the mid-September 2008, the macroeconomic landscape of the analyzed countries changed radically, registering a decrease of the economic activities determined both by a diminished export activity and by a reduced internal demand, with effects on the firms' profitability and on the deterioration of the labor market situation. The results show that the severity of the financial global crisis effects was different in the analyzed countries, as a response to various "paths" of economic development, with less or more important vulnerabilities, with differences in the extent to which the economies are based on external demand and on credit activity induced from abroad. The countries that are suffering the deepest recessions are those that registered not only a decline of exports, but also a collapse of the internal demand, as a result of stopping the credit activities that were a support for the internal demand.

Keywords: economic growth; global financial crisis; external demand; consumption

JEL Classification: H12; O52

1 Introduction

The forecast for the economic growth remains doubtful in the future, countries just starting to recover from the greatest crisis after the Second World War. The financial crisis and the disequilibria previously accumulated in the economic

world, have led to adjustment processes that imply extended periods of weakness in economic activities.

The tension from the sovereign debt market at the beginning of 2010, determined the uncertainty that prevails in the economic forecasts. In the spring forecast, the Economic Commission anticipated an economic growth of 1% in the European Union in 2010, comparing with the reduction by -4,2% in 2009.

The recession was widespread in the European states, although with noticeable differences. Certain European countries were the subject of an intense and/or extended recession, depending on the exposure to the financial crisis and global economic cycle on the one hand, and, on the other hand, depending on the internal and external disequilibria, including here the substantial correction from the real estate market or other local factors. The economic recovery takes place with different steps; in the big states from the European Union, the GDP rate is forecasted to range between 2,7% in Poland and -0,4% in Spain, in 2010. In Greece, the GDP change is sizeable, being negative and reaching -3%. In 2009, among the biggest countries, Germany, France and United Kingdom started to register again economic growth, while Spain and Italy ended the year with their economies still shrunken.

In EU 27, starting with the end of 2008 until the middle of 2009, the GDP contracted for three consecutive quarters, gradually coming back after that. Even if, from the third part of the year 2009, the economy of the European Union reverted to positive economic growth rates (on quarterly basis), these were modest until now. For 2011, the European Commission forecasts a GDP growth by 1,7%.

2 The Economic Growth Tendencies in Europe

Considering the current circumstance of the economies from the European Union, the path of economic recovery is different, more gradual and mild, comparing with the precedent situations. Notwithstanding, the events' chain should be similar with that from the past. The recovery of the European economy is usually based on the exports: the exports increase is made by investment in equipment, investment's rising leads to employment growth that will lead to the expansion of the private consumption. In this way, an essential condition for outrunning the actual stage is the improvement of the external environment. From this point of view, the conditions are favorable starting with the autumn of the year 2009 - the external

economic environment may continue to surprise positively, helping the revival of the European exports. The economic measures taken until now seem to be efficient, augmenting the confidence in the business environment and between final consumers that will lead to internal demand refreshing.

Albeit the recurrence of exports increasing is at the basis of the modest economic growth from the European Union, prudence is needed regarding the evolution of the medium term exports. Seeing that the global economy is increasing very slowly in the second part of the 2010, and the complete recovery is not yet certain, the exports rise will be gradual in the next period. Thereby, the channel of investment wherewith the passing towards economic growth is made, apparently, this time is less powerful. Similarly, the evolutions at the national level can lessen the traditional link between exports and investment. Actually, the growth that followed the financial crisis tends to be slower, being behindhand by a reduced private demand.

Table 1 The contribution to the GDP evolution in the European Union (annual percent change)

	2006	**2007**	**2008**	**2009**	**2010***	**2011***
GDP	3,2	2,9	0,7	-4,2	1,0	1,7
Internal demand	3,0	2,8	0,8	-3,0	-0,1	1,2
Inventories	0,1	0,1	-0,1	-1,1	0,5	0,2
Net Exports	0,1	0,0	0,1	-0,1	0,6	0,3

Source: European Commission

** Forecast 2010-2011 – European Commission, spring forecast*

The different nature of the European Union recent recession gives the possibility for structural breaks in the traditional relations between economic variables. If we look at the relation between inflation and the difference between real GDP and potential GDP, this link seems to be weaker in the current situation.

One of the consequences of the present crisis is the deterioration of the fiscal position. Although the fiscal incentives and the automatic stabilizers played an

important role in stabilizing the economies of the European Union, the quick increase of the deficit and debt shadowed the evolution of the public finance, fact that will be felt on the medium and long term.

A relative fragile situation is that of the financial markets, where even if the conditions are much better than in the previous year, the uncertainty and risks are abundant. Insofar as the improvement of the banking sector conditions is due to governmental policies, the premature retreat of the governmental assistance can have adverse consequences.

The decrease of the internal demand is another risk that endangers the economic growth perspectives. The suspension of the economic incentive measures between 2010 and 2011 and the stopping of the fiscal consolidation phase may affect very much the internal demand. The possibility of maintaining a high cost of the capital constitutes another negative factor.

In EU10, the net exports were the main engine for the economic growth in the majority of the countries in the first part of the year 2010. The net exports were boosted by the currency depreciation in some countries, and, recently, by the recovery of the destination markets for the exports. The internal demand favoured the economic growth only in some countries, investment coming back in Romania and Lithuania. The consumption increased in Poland with the aid of a stable labour market and of a recovered economy. The weak internal demand from the majority of EU10 countries reflects a low level of production capacity utilization, the corrections from the real estate and constructions sectors, and a modest increase of wages and employment rate. Industrial production increased in April, achieving in some countries values with two digits. The economic recovery in EU10, for the entire year 2010, is mainly based on external demand and on inventories' recuperation. The private consumption remains low due to cut wages and modest increase of the salaries both in the public and private sectors, due to a high unemployment, to a prudent lending and to weakened fiscal positions. The public consumption will be reduced in consequence of the governmental income reduction and of the inquietudes regarding fiscal sustainability.

On the international plan, a new increase of the oil and other commodities prices may temper the recovery of the global economy. The same effect may have the premature elimination of the incentive measures in the main partner states. The amplification of the social tensions on the background of a high unemployment may lead to the increase of the protectionist measures.

While the situation is generally improving in the developed countries, the economic growth in non-European Union emerging countries and in transition economies is more dynamic. A special case is that of the emerging countries from Asia, China being on the first place. Besides these countries, Russia and Brazil are coming back to economic growth in 2010, due to, *inter alia*, the reduction of commodity prices and the amelioration of internal demand. The emerging economies from Asia and Latin America are strongly increasing, being supported by a great internal demand and the recurrence of commercial flows. Among the developed countries, USA and Japan are on the first places in terms of economic recovery, the confidence increasing between consumers, businessmen, and on the financial markets. In Europe, which was the most affected by the crisis comparing with other regions of the world, the economies became stable, and for the first time from the beginning of the crisis are coming back on an increasing trend in 2010.

Table 2 Economic growth perspectives, percent change

	2009	**2010***	**2011***	**2012***
Economic growth on the global level	**-2,1**	**3,3**	**3,3**	**3,5**
EU10	-3,6	1,7	3,3	3,7
Countries with high income	**-3,3**	**2,3**	**2,4**	**2,7**
Euro zone	-4,1	0,7	1,3	1,8
Japan	-5,2	2,5	2,1	2,2
USA	-2,4	3,3	2,9	3,0
Emerging countries	**1,7**	**6,2**	**6,0**	**6,0**
Brazil	-0,2	6,4	4,5	4,1
China	8,7	9,5	8,5	8,2
India	7,7	8,2	8,7	8,2
Mexico	-6,5	4,3	4,0	4,2
Russia	-7,9	4,5	4,8	4,7

Source: World Bank, Global Economic Prospects June 2010,

**economic forecasts*

In EU10, the economic growth recovery is relative, the starting base being very small due to last year recession. The economic growth in the first quarter of 2010 was only 0.2%, comparing with 0.5% in the last quarter of 2009. With the aid of the commerce and economic activities' revival on the global level, we expect an economic growth by 1.7% in 2010 in EU10, comparing with only 0.7% in the euro zone.

3 Developments in the Economic Growth of the European Union New Member States before and after Global Crisis

The **Baltic States** were the first countries which recorded economic slowdown, although the reasons were not related to the initial global crisis. Gradually, they became the most severely affected by the financial market turmoil and by the reduction in the global trade (see Chart 1). The Baltic countries have suffered a collapse of internal demand and lending activity, with a sharp current account adjustment, justifying the idea that, under shock, a rapid economic boom could turn into a dramatic collapse. Such a phenomenon has been caused by the unsustainable growth of these economies in the recent years. Thus, after the Russian crisis during 1997-1998, the Baltic States experienced very fast economic growth rates, enhanced by the rapid integration with the more developed Nordic countries.

The positive expectations regarding the evolution of these economies were boosted further by both the European Union accession and entering the ERM II. On the demand side, the key driver behind this development was the easy access to bank lending which has induced a pickup of the domestic demand. Both, the positive expectations about the rising household incomes and the low levels of real interest rates on euro denominated loans have sustained the borrowing demand. On the supply side, the bank lending activity was largely financed from abroad (by parent banks from the Nordic developed states). The increasing lending activity and the capital inflows to the Baltic countries (as percentage of GDP) have been impressive, exceeding the levels of the other new member states. In this context, the Baltic economies eventually have suffered overheating (especially Estonia and Latvia). Such a phenomenon was fuelled by the increasing absorption of EU funds and by the expansionary fiscal policy. The vulnerabilities of these developments have been reflected, both in a decreasing competitiveness, by the rapid real exchange rate appreciation (on CPI-basis) during the economic expansion, with the wage growth exceeding productivity gains, and in an increasing degree of

indebtedness of the private sector (particularly in Estonia and Latvia). These were the effects of the fixed exchange rate arrangements combined with the inconsistent macroeconomic policies. The economic overheating has also spurred the increase of the public expenditures.

Macroeconomic conditions have deteriorated sharply since the end of 2008, with an economic downturn brought by the decrease of both exports and domestic demand, which have reflected on the companies' earnings and labor market deterioration. Countries with the deepest recessions are those who have registered not only a decline in exports but also a collapse of domestic demand (an effect of this), due to the containment of bank lending – an important driver for sustaining domestic demand (Latvia, Lithuania, Estonia). In contrast, countries that had the lowest decline of economic activity have the strongest recovery (Poland).

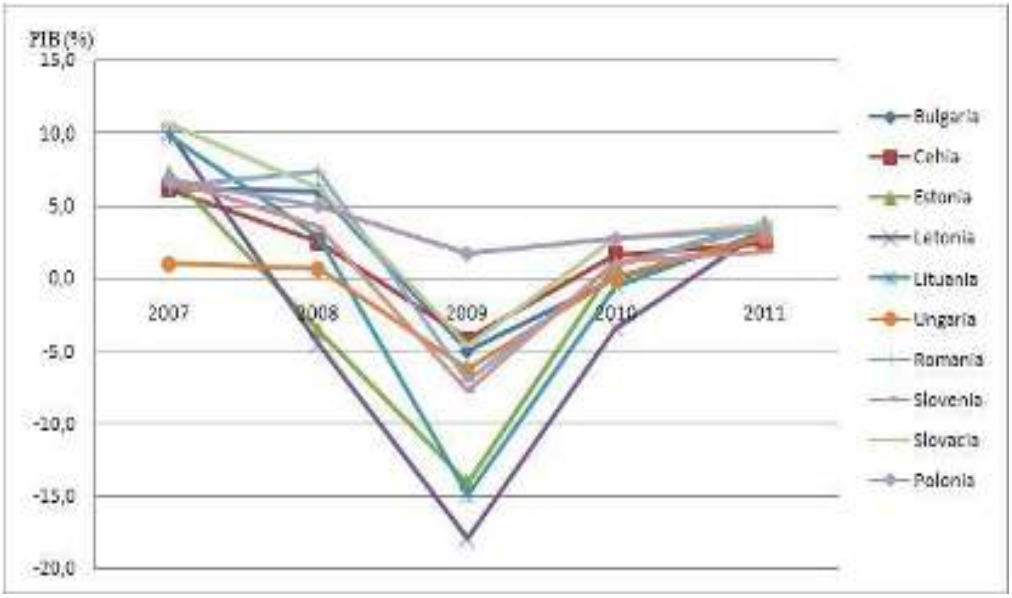

Chart 1. GDP growth rate in the EU new member states, between 2007-2010, and in 2011 (forecast) (Eurostat database)

After several years of buoyant growth the economy of the **Czech Republic**[1] was hit by the global crisis which generated a deep recession. This highly opened and strongly integrated economy was strongly affected through the external trade channel releasing a chain reaction: the decrease of the export activity has brought a decline of the manufacturing sector, with the automotive industry being particularly affected, and the deterioration of economic activity induced adjustments on the labor market. However, the strong economic fundamentals, generated by sound macroeconomic and structural policies, have helped this country to face challenges derived from the global crisis. The Czech economy is still lagging below the EU average in terms of labor productivity, but the catching-up process runs fast. The main drivers of economic growth are the total factor productivity and the capital deepening.

The **Polish** economy has experienced a favorable period (between 2003 and 2008) characterized by a robust economic growth, a decline of the inflation phenomenon and a decrease of unemployment rate. The global crisis has changed the picture, bringing a significant slowdown of the economic activity, in 2009. However, there have been some factors which helped the economy to be kept afloat: the strong economic fundamentals with a well-capitalized and sound financial sector, a relatively low degree of economic openness, a significant depreciation of the Polish zloty at an early stage of the crisis, and timely reactions from monetary and fiscal policies. Therefore, Poland was the only EU country with positive growth in 2009 (see Chart 1). In the future, the expectations regarding economic recovery remain optimistic.

Hungary was already in a difficult economic situation when the financial crisis broke out in autumn 2008, although it had been consolidating its public finances some years before that moment (in 2006). For several years, the labor productivity and the potential output began to decrease, while domestic demand was boosted by the relaxed fiscal policy at the beginning of 2000s, and also by the increasing of private sector indebtedness. The program for fiscal consolidation has been implemented in order to redress the old problem of twin deficits[2]. In 2007 these deficits have decreased, but at the same time the GDP growth rate has been also decreasing. The increase of investors' risk aversion induced by the global crisis has

[1] IMF ranks the Czech Republic among the developed countries, in line with Sweden, United Kingdom, Slovenia or Slovakia. Such a rating for the Czech Republic and Slovakia is available since 2009 (IMF, 2010). By that moment, they were considered emergent countries (IMF, 2010)
[2]The values of fiscal and current account deficits were rather at high and close levels.

deteriorated the economic activity in Hungary and the government's external financing needs could no longer be met through the market channels. In 2009, the foreign trade (exports) and the industrial production have strongly diminished, after the sharp decrease in external demand and the high uncertainty about the severity and duration of the crisis.

Between 2004 and 2008, **Romania** has recorded one of the fastest economic growths among the countries of the European Union, with an average annual growth rate of 6,8 percent. This performance was induced by the buoyant domestic demand, both consumption and investment, which has been fuelled by large capital inflows, including those related to the rapid expansion of bank lending (financed mainly by foreign parent banks), and by positive expectations on higher incomes. However, the economic growth has been accompanied by the increase of external and fiscal imbalances. The deepening of the global crisis and the increase in risk aversion on the international markets caused a strong downturn in capital flows and exchange rate depreciation. While the economic activity has lowered significantly, with the contracted domestic demand, the inflation rate has decreased only slightly, remaining at high levels compared with other countries in the region, reflecting the labor and product market rigidities. In this context, the current account deficit has suffered dramatic adjustments. Also, the potential output of Romania has been lowered by the global crisis, through the decrease in capital accumulation, and by the effects of aging of population and migration. The capital accumulation, both in the public and private sectors, has been undergone by the decrease in foreign investment and by the constraints on the credit availability. The economic forecasts are not so optimistic, because the applying of austerity measures has had only a limited and temporary effect on the internal imbalance, the recession becoming chronic.

Before the crisis, **Slovenia** has enjoyed robust economic growth based on the buoyant exports and investment. On the other side, the inflationary pressures since 2007 have widened the external deficit. Slovenia entered the euro zone in an optimistic period, with strong international liquidity. The lower real interest rates have fuelled households borrowing and the domestic demand has increased. This tendency inflamed imports, while accelerating wage growth worsened the country economic competitiveness. In autumn 2008, the rapid expansion of Slovenian economy ended, due to the impact of the global crisis. The trade channel was the most important transmission channel of these effects. Thus, the economic growth has abruptly contracted in 2009, being estimated as one of the largest contraction in

the euro area. The drivers of this collapse were exports and investment, including a massive drop in inventories. The economic slowdown caused a rapid worsening of budgetary position, but on the other side, this economic downturn has brought the inflation rate downside (narrowing the gap against the euro area average inflation rate), as well as the current account deficit. The Slovenian economy has a better position than other European countries in terms of structural adjustment or imbalances. Therefore, the economic recovery for Slovenia is estimated to be faster, and the impact of global crisis on the potential growth will last only on the short time. However, the persistent vulnerable factor remains, like in the other European Union new member states, the large gap between Slovenian productivity and other euro area countries productivity, in terms of capital deepening and total factor productivity.

Slovakia has experienced several years of rapid real convergence and GDP per capita (in purchasing power parity) gradually approached the level existing in the developed countries of the European Union. In 2009 economic activity was reduced due to a drop of the external demand and investment, but in 2010 the economy returned to growth trend (GDP growth rate is positive). The explanation for this return is given by the increasing exports and domestic demand, the latter being supported by the free operation of automatic fiscal stabilizers and to a certain extent by the anti-crisis measures taken.

4 Conclusions

This financial and economic crisis has affected the new member states of the European Union through three main channels: the external demand channel (a lower demand for exports), the investment channel (a lower foreign direct investment) and the credit channel (the slowdown in credit growth). The impact of the global crisis has been reflected to a different extent on these three channels in the European Union new member states, depending on the internal characteristics of these countries. The decline in external demand has been felt more strongly in countries that have followed an export-led growth model, e.g. the Czech Republic and Slovakia. The investment sluggish induced by capital flight and the slowdown of lending were significant in those countries which have developed either on the consumption-led growth model, or on the foreign investments directed towards the non-tradable sector.

Looking ahead, the economies of the European Union new member states will recover slowly, given the weak domestic demand, which is the main economic growth driver in these countries. Domestic demand will remain in a vulnerable position, as a result of several factors which work in the environment created by the global financial crisis. Thus, the net capital flows and the lending growth rate for the private sector will continue to be at low levels in most European Union new member states. The net FDI levels are below those recorded before the outbreak of the economic and financial crisis, and other investments flows are negative (in Bulgaria, Estonia and Lithuania) reflecting the debt payments of banks and corporate sector. The credit growth of the private sector remains low due to the high volume of bad loans, as well as the sizeable financing costs (including external sources) which tend to reduce the supply of credit. Moreover, the investments tend to be hampered by the excess capacity of utilization, because the output is yet below the level recorded before the crisis episode in most European Union new member states, particularly in the non-tradable sector, where the booming activity during the "overheating years" has frozen. Besides these factors, the bad conditions in the labor market, as well as the declining of population wealth, will confine the consumption.

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Ecotourism - the Main Form of Tourism Exploitation of Protected Natural Areas

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Abstract: The ecotourism has a significant role in the economic development of this zones or regions as tourist attractions. The most important positive contributions refers to the state revenue generated by tourist spending and export / import of goods complementary for receiving countries, and the boost of investment in various sectors, so the multiplier effect of tourism by contributing to the economic prosperity of the country. Tourist activities carried out under the banner of ecotourism offer opportunities specific to the local population and tourist industry is forced to use natural resources in a sustainable manner and to assess the valuable natural and cultural objectives. As reflected in the various views reflected in literature, ecotourism is also an industry in the tourist market, designed to meet the special travel needs. Because these approaches can be considered ecotourism and tourism market segment, having a common language with cultural and rural tourism, as demonstrated previously. Originally designed as an alternative to mass tourism, ecotourism is materialized as a solution to combat negative effects and minimize impacts on natural ecosystems.

Keywords: ecotourism; protected natural areas; form of tourism

JEL Classification: P48; L83; N5

1. Introduction

In eco-tourism, there are several situations that are based on the current significance of eco-tourism and sustainable development, and reach the actual notification of organic products in the ecotourism destination. Any form of tourism without environmental changes, that is why the tourism industry recognizes the need to keep those items that he finds attractive for tourist, trying to reconcile the costs and benefits of ecotourism in natural protected areas. Leaders of the tourism industry and natural resource managers face many problems in the development of quality tourism in protected territories and in addressing the impacts on biodiversity and local communities. Tourism development can occur in various situations of uncertainty, including both negative effects on the economic, social and environment, and the lack of functional strategies for prevention and monitoring of such situations.

2. Considerations on Ecotourism

As reflected in the various views reflected in literature, ecotourism is also an industry in the tourist market, designed to meet the special travel needs. Because these approaches can be considered ecotourism and tourism market segment, there is a common language in cultural and rural tourism, as demonstrated previously. Originally designed as an alternative to mass tourism, ecotourism is materialized as a solution to combat negative effects and minimize impacts on natural ecosystems. As a form of tourism-specific sustainable development, some features different from the known form of mass tourism.

Distinct characteristics between mass tourism and ecotourism

Characteristics of mass tourism	Characteristics of ecotourism
Large groups of visitors.	Small groups of visitors.
Urban.	Rural.
Touristic general marketing activities.	Eco-marketing activities.
Average prices for purposes of market penetration.	High price with purpose of filtering the market.
Impact on natural environment.	Little impact on the natural environment.
Advanced control options.	Limited possibilities of control.
Management based on macroeconomic	Management based on local economic principles.

principles.	
Anonymous relationship between visitors and local community.	Personalized relationships between visitors and local community.
General development goals.	Local development objectives.
Behavior-oriented leisure activities / entertainment, opponents to education and training actions.	Loyalty in the process of training and education for appropriate conduct for the natural environment.
Intensive development of tourism facilities.	Reduced development of tourism facilities.

Source (Diana Rosca, 2008)

Any form of tourism brings an environmental change that is why the tourism industry recognizes the need to keep those items that he finds attractive to tourism, trying to reconcile the costs and benefits of ecotourism in natural protected areas. Leaders of the tourism industry and natural resource managers face many problems in the development of quality tourism in protected territories and in addressing the impacts on biodiversity and local communities. Tourism development can occur in various situations of uncertainty, including both negative effects on the economic, social and environment, and the lack of functional strategies for prevention and monitoring of such situations.

D. Diamantis, offers three models to assess situations of uncertainty, appropriate in eco-tourism:

- Precursor crisis. It involves conflict between providers of tourist destination in the respective strategic objectives and requirements set by relevant state authorities, local community, to the conditions imposed by the local community;

- Acute crisis. The economic crisis, social and environmental in existing tourist destinations where ecotourism is intended as an alternative to solving problems, the trends for the renewal of its status;

- Chronic crisis. It expresses the crisis in tourism destinations that have already made some strategies for overcoming the negative effects by implementing predetermined objectives.

In eco-tourism, there are several critical situations, which are based on the current significance of eco-tourism and sustainable development, and reach the actual notification of organic products in the ecotourism destination. Crisis phase precursors relates to the existing disagreements in the organization of sustainable

development and ecological tourism. Acute phase of the crisis can be located among mass tourism destinations and other tourism sectors which, because of existing problems related to the optimum capacity of delivery, use ecotourism as a means of regenerating the economic environment, social and political environment of the country. Chronic phase can be recognized in destinations that have developed certain strategies to overcome the negative effects of eco-tourism development within them self. Using the analysis of the crisis permits to avoid the various eco-tourism destinations uncertainty.

3. Ecotourism as a Market Segment

The eco-tourism is a small but rapidly growing industry, operating in a market segment that is governed by specific rules and market forces. Ecotourism is promoted mainly in the market as equivalent to nature tourism. Some countries, companies and destinations have rules and social and environmental programs on ecotourism, others not. This led to confusion in the world of what the term eco-tourism as applicable on the market.

In eco-tourism, the primary motivation is the observation and appreciation of nature and culture related to it. From a functional perspective eco-tourism market has individual characteristics and requires a small-scale tourism, tourist groups up to 25 people and hotels with more than 100 beds, type of tourism that is practiced by small and medium companies. It is a market segment that focuses on small-group accommodation and management of natural places, as little affected by human intrusion in an educational way, using local materials and guides.

4. Zoning Touristic Potential

Customizing the tourism potential of Braila County the grouping it is done in areas of tourist interest. Thus, we identified seven areas within the county with tourism development prospects:

- area tourism-Balta Braila Braila "including the city of Braila, Baldovinesti, Sarat Lake Resort, Corotisca, Blasova, Zaton, Island of Braila, Gropeni;
- tourist area -Jirlau Ciineni "with the lake with the same name;
- tourist area - Knoll-Miresii Ianca "Knoll Miresii including lakes, Ianca, Plopu, Lutu-White;

- tourist area "Siret Valley" including Siret Valley, Maxineni, Vadeni;
- tourist area "Batogu" with the lake and Lake Vultureni-Batogu Sarat;
- tourist area "corner-Dudesti" forest-cover area Tataru corner;
- tourist area "Intercourse" including thermal water sources and forest Viisoara.

5. Forms of Current and Future Tourism

Now, in Braila county tourism activity are materialized in three known forms of tourism - health tourism, and the weekend traffic, but the register forms of tourism are quite low. Spa tourism traffic has the largest share. As new types of tourism we retain: treatment tourism, tourism and recreation associated with a form accept, sport fishing, nautical tourism, which is done spontaneously, picnic, and as a form included, valid for all types is also the knowledge tourism, confusing up to a point, with cultural tourism.

Ecotourism in the Small Pond of Braila Danube Natural Park and the Big Island of Braila

First, the main river arteries - Cremenea and Macin - Vilciu can be used for boat trips. Both the arms and protection flood dams, for the most part, black poplar planted are covered with natural forests since the willows.

To these are added the arm Cremenea with a beautiful natural landscape - forests of willows, canals, small lakes, which attract many visitors. These marginal areas, together with the islands of the busiest waterways can be used for leisure travel. Also, areas around the lakes and backwaters Blasova, Poplars whit Filipoiu prival can be for leisure and recreational attractions. Plain Călmăţui Braila, although dull at first glance, there are no landscape elements to attract attention of tourists. Salt lakes, brackish and fresh water are the most important objectives in this regard.

The chemical composition of water and sludge quality, a series of lakes are or may be involved in the tourism spa. It stands out in this the Salty Lake -Braila Ciineni, heap-Miresii, Salty Lake -Batogu, and navigate UP Bentu-Batogu.

Objectives are also valuable fisheries resources, with large audiences in the application retain existing real opportunity for the two arms of the Danube, Blasova, Ianca, Jirlau, Dudesti and Maxineni.

A special attraction, both nationally and especially internationally, is the hunting. In some areas of Braila are very good condition for hunting: Vadeni, Siret Valley, Blasova, Little Island, and Camnita Viisoara. Natural beaches are other tourist attractions in terms of design appropriate, may acquire the status of tourist attractions themselves. Thus, it can rearranged beaches at Braila (on the left bank of the Danube - Lippovan Beach ") Corotisca, Blasova, Ianca, etc. Ciineni. Also on the left bank of the Danube, in the Braila city, but not limited to, the public food units can be set on pontoons and scrapped boats.

Small Pond of Braila Natural Park (NP-BMB) is a wetland of international importance, declared RAMSAR site in June 2001, which preserves an area of 205 km2 last complex aquatic ecosystems, land and mixed freely under the flood are impoundment ponds left from Braila and Ialomita (i.e. 8% of the former Inner Delta - 2413 km2).

Unlike the Danube river delta, where forest ecosystems are 3.6% (1.2% under flood alluvial forests, maritime forests on the banks 1.0% and 1.4% embanked enclosures forests), the Small Pond Braila forest ecosystems represent 52% of the total protected area. That participation in different proportion in the alluvial forest aquatic and complexes terrestrial ecosystems results in structural uniqueness of biodiversity and landscape. While impressive the aquatic and terrestrial biotopes on Delta covered with reeds (reed largest expanse in the world), Little Marsh attraction of Braila is due to permanent change of view alternating between forest ecosystems and aquaculture.

Sustainable development of socio-economic cooperation area of progress involves the application of that model that does not affect the foundation of the natural heritage of PN-BMB. The Integrated Management Plan and the PN-BMB adapted in Braila Small Pond are allowed the following categories of tourism:

- ecotourism, a rural tourism;
- scientific tourism;
- educational tourism.

According to PN-BMB Administration, within the category of ecotourism, the fastest growing in the short term will be recorded for bird watching and angling. Most important is that by angling management plan in PN-BMB is considered a form of ecotourism, not a way to use renewable resources renewable resources (ichtyofauna) provided by natural capital. According to the integrated and adaptive management plan and park in PN-BMB Regulation are:

- nautical tourism practiced individually (kayak) and group (rowing boat or motor boat);
- equestrian tourism or horse harness;
- cycling;
- pedestrian tourism.

The PN-BMB Rules are the conditions under which access is regulated within the protected area for tourists, motor means categories that can be used to form the Tn in Ostrov islands and buffer zone, how as tn, tn park where camping is allowed. Touristic package proposed: Introduction to Pond's hidden Terente without hotel accommodation in Braila or in the Salt Lake Resort:

- Duration: 8:30 hours;

- Price: 122 € / group of five persons, composed of the following administration charges levied by the park;

- 15 € / 30 minutes / craft boat motor transport park administration (maximum capacity 5 people) Braila (Nautical Base) - Shut Hogioaia prival and return, May 1 tour information visit Hogioaia € - 1 € per person (fee Entry into the park);

- 22 € / day park fee accompanying guide (English speaker). Companion guide, land agent, which makes transportation whit the boat frames or is one person employed by the park administration. o 80 € / 8 hours / transport boat rowing boat.

- it is composed of a route: Nautical Base - Shut Hogioaia - Hogioaia weir (visiting tour information Hogioaia) - rowing boat boarding - Privalul Hogioaia - Lake Chiriloaia (Chirui, Chiralinei footsteps) - mixed colony visiting cormorants, herons and egrets from Hogioaia - bird watching from the lookout tower at Darna - Terente's visiting from Darna ascunzătorii - observing the eagle family from the Observatory on Lake Mishael - observations on aquatic and terrestrial ecosystems on Lake Fundu Mare - rowing boat trip at weirs Hogioaia.

6. Conclusions

A complex phenomenon characteristic of the last century, tourism can be characterized in the late twentieth and early this century as one of the industries with the highest degree of economic efficiency. All these are supported by high growth rates registered in this area and also the increasing trend trends. But there is

a law of compensation, there is an absolute winner, whenever someone wins, someone loses.

The eco-tourism is a lucrative business but you must be a responsible business that tends to achieve higher goals of ecologically. Therefore, ecotourism is dependent on the involvement of companies and business owners must agree to apply a single set of standards activity.

Many people ask why ecotourism should be treated differently from other forms of tourism. In essence, should be planned and managed ecotourism, for this need:

- a specialized promotion to attract passengers who are mainly interested in visiting natural places;

- leadership skills to work with individual tourists visiting natural places protected;

- guiding and interpretation services should preferably be organized by the locals and be placed on natural history and legacy of ecosystem development;

- the methods adopted by the government using taxes from tourism to generate funds for both objectives to consider: the conservation of wild places and the development of local communities;

- attention focused on residents who should have the right to be informed ahead and give their consent to participate and if they are involved should be given school to support ecotourism.

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Trusting Policies, a New Instrument for Data Protection in Business Reporting

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Abstract: Controlling access to data and information within organizations is an important concern today and also our aim. This paper is based on the concept of trust, which allows access control and control of actions that can be applied to data and information in documents held in computer systems. Methods we have used are: defining trust and assigning trust levels. Results we have obtained are trust policies based on trust hierarchies.

Keywords: trust; document; privacy; trust hierarchy; trusting authorization policy

JEL Classification: H30; L80; L89

Business Reporting

A growing number of companies use the Internet in the replacement of written reports on paper. These organizations built intranet, extranet networks, and their own sites in an effort to help employees, businesses and other partners to access the reports of the company. (1)

Development of Internet-based reporting is problematic for entities involved in reporting (reporting organizations, internal financial services, financial community) who have their own reasons and intentions for gathering and storing information, but all require rapid and standardized communication. Development of Internet technologies has had a large impact on organizations and in the near future impact may increase with the introduction of a standard reporting language based on the Internet. (1)

Business reporting is defined as "public reporting of financial data and operating a business enterprise." Business reporting is generally divided into two types:

External reporting: for business partners; involves spreading a selection of information from the records (financial and nonfinancial) of an organization.

Internal reporting: for management; contains periodic information required to control and drive the business.

Pragmatic and social world can be linked directly with partners, which, for decision-making intention, should be able to access information anywhere, anytime and under certain conditions.

Thus, it seems essential to establish a trusted framework for reliable data exchange between organizations, departments and users.

For most organizations, the interest in computer security is proportional to how they are perceived threats (2) and vulnerability of the information systems (3).

For the overwhelming majority of successful organizations, information and information technology are the most important values. Databases, financial information, accounting data, employee profiles and many other documents are cores of estimates and business plans, resulting in the final steps of a business future in a highly dynamic market.

Companies now understand that to be competitive, you must receive process and send information faster and more secure to all partners. At the same time, this openness to the outside brings with it many risks that modern management should assume with the effort to minimize them. But as the communication is always two-way, threats come not only from the outside.

The role of a program that implement and ensure a certain degree of information security in a company, is to reduce and keep under control the level of risk to which the company is exposed. Risk level is close to zero only by reducing system functionality and making major investments in security technologies. The organization management shall be the one who decides the level of acceptable risk and the value of the investment to secure the system, so that the ratio of these values to be balanced financially. The objective is to determine the equilibrium in which the costs are minimal compared to the level of security desired.

A ***threat*** to a computer system may be a person, a program or an event that can cause damage or destruction of the system. These threats can be malicious in nature (such as intentional modification of sensitive information from the system) or accidentally (such as accidentally deleting data). They are also considered threats, natural disasters such as floods, earthquakes, fires, etc.

Vulnerabilities are weaknesses of the system that can be exploited by threats. For example, unauthorized access to system resources can be obtained by a foreign person by guessing a password. The vulnerability exploited in this case is the choice of weak passwords by legitimate users of the system. Reducing or eliminating existing vulnerabilities can reduce or eliminate the risk of threats.

Security Service is the collection of security mechanisms and procedures that helps to protect the system against specific threats. For example, authentication service helps to protect the system against unauthorized access to resources by identifying users who require access to the system. Integrity and confidentiality services help to protect confidential data within the system.

Trust between business partners

Trust is a universal concept and makes in any context, positive effects. Most commonly used definition of trust in scientific contributions is given by Mayer, Davis and Schoorman (1995): "The consent of a party to be vulnerable to the actions of another party, based on the premise that this party will take some significant action for the one who gives trust, regardless of ability to monitor or control the other party.

In the structure of relations within the organization and relationships between organizations, where the performance takes place using information and communication systems and where player's behavior is influenced by social restriction and formalities should be given attention to different types of trust:

– personal trust: actor has the experience and appreciation of its intention to build, with a strong sense of safety, the dependence of another person or group of persons, being aware of possible negative consequences. For this intention is evaluated in advance a person's confidence level.

– impersonal trust: it is the expectation that a system or institution to permit a positive future development. The system is evaluated before being trusted.

"Trust is the intention to act as individuals or impersonal systems behave in the manner expected and provided. These expectations are based on experiences and the actor is aware of the risk involved."

The importance of trust in corporations and networks based on a hierarchical structure or a structure based on different groups, has sparked interest both in economic practice and economic literature.

In traditional business, trust is influenced by formal or organizational hierarchy. Measures to form a potential network represent a reliable research.

Trust Hierarchies

An organization consists of a number of members involved in achieving a particular purpose. In general, any organizational structure is a hierarchical type structure, which is a leader and members to execute various activities under his directions.

Organization does or does not trust the people involved in information-decision process within it. Information-decision process is manifested by the creation of documents containing data and information that are processed by individual (called subjects) belonging to the organization.

Trust is manifested by allowing access to various data and information, according to the position *subject* to that information. *Subjects* may thus acknowledge, change information, to quote, modify, etc. or do not have access to them.

Subjects are part of various working groups, formal and informal. Formal groups are those that form the organization (departments, services, departments, offices, workshops, etc.) and informal groups or instant groups are created for a certain project and outgoing from achieving the goal. During the activity of these groups (formal and informal), access to objects or classes of objects stored, created or used, is based on trust given by the organization to each topic that is part of a group. Granting trust is differentiated, depending on the *subject's* position, activity and importance within the group (formal/informal) and the organization.

There may not be a simplistic approach to these levels of trust, such as *allowed/deny* (*trust /distrust*) (4). Sociology professionals have determined that the trust level takes fuzzy values (5), i.e. values between 0.00 and 1.00, values which have roughly assigned corresponding levels of trust. Levels correspond to ranges of values presented in the table below:

Table 1 Trust levels

Value	Trust level	
1	Blind Trust	BT
0.9	Very High Trust	VHT
0.75	High Trust	HT
0.5	Medium Trust	MT
0.25	Low Trust	LT
0	No Trust	NT

In general, the top level of an organization receives the highest level of trust and the execution receives the lower trust level, in direct proportion to the importance of the work within the organization.

The document built on the concept of "privacy and trust"

This concept arose because of observations on the need for information both intra and inter-organizations, access to various documents for all members.

From the first observations we can see that how to access a document is fairly simplistic ('allowed' or 'deny'), which may lead to a lack of information to the user who wants to access a document, but because the document contain prohibited information for this, it cannot access any information that is entitled to access. Yet, the documents contain both public information, and information that are subject to varying degrees of confidentiality based on the confidence enjoyed by the person who has access to them.

Also, to access data and information through the two previous methods, the user must be connected to the organization network and can only see online, while the new solution proposed here allows the document to be consulted both on-line and off-line.

Suppose that is made a report to be circulated to all staff, shareholders and business partners. Each of these categories and category members are in different "trust" relationships with the organization. Therefore, everyone has access to the public part of the document and also each of them has access to certain confidential information under the policy of "trusting" of the organization.

Therefore, if the organization has 1,000 employees, 10 shareholders and 25 partners, should be made a minimum of 1035 of various documents to enable everyone to have access to both document and data tailored to the policy of "trusting ".

The new system proposed here, allows to create only one document processed by each employee, according to the "trusting" policy, and to reveal only the information that has right of access.

Thus, each department will create part of the document which will be part of the whole. Then it apply the "trusting" policy on the part of the document and submit the document with the policy applied, which will make confidential data to not be

seen by those who are not allowed. Then the document will be assembled and distributed. Each of the receivers will use keys that allow them to open various parts of the document. Thus, each read only what is allowed to read in the document. Therefore, it is created a unique document that will meet the organization's privacy policy.

Assigning trust levels (6)

There are two categories of trust levels:

– The local trust level (is the level of the Working Group);
– The global trust level (is the level of the organization).

This can be seen directly in the following example:

X belongs to a working group and it has to create a report on a situation at a time. X is also a member of a formal group which trust level is MT, but has been taken in a working group which should create a document whose trust level is HT.

At the organizational level, X trust level can't be increased to HT, but X have BT level for his part of document, which is contrary to its general level. Therefore, the document will be divided in parts (objects, classes of objects), some to which X may have the BT level (author, co-author) and some to which X might have the NT level. Generally, apply the NT level if the difference value between the SL (subject trust level) and the OL (Object Level) are equal to or less than zero. In other words, if the subject's trust level is lower than the level of trust required to access the object.

$$NT <= SL\text{-}OL \leq 0$$

In this way groups of objects can be created by groups of subjects that can then be assembled and presented. But each of those who access the final object will have access to only those objects that meet the above inequality.

To implement this policy of securing data and access to them, was created TAP (Trust Authorization Policy).

Trusting Authorization Policy TAP

TAP (Trusting Authorization Policy) is a mechanism for implementing trusting policies within organizations.

TAP Objectives

- To codify trust levels of organization;
- To create security policies of data and information;
- To be flexible and easy to implement, regardless of platform;
- To be easily understood and maintained;
- To enforce the necessary trusting policy;
- To be platform independent.

A TAP is a set of rules applied by a user of to a class of objects with a purpose.

Objects during their lives, go through four stages:

1. Creation stage. The stage at which an originator creates the object and the object is classified as "private".

Initiator's private key encrypts the object and sends it through the chain for verification, completion and approval. At this stage, it is proposed to apply generally trusting level to the object and its constituents. Subject receiver opens it with the originator's public key, and will check. If it considers that to be changed, it will send to the originators encrypted with his private key. The receiver will complete the object, if necessary, with other elements that will also have trusting levels, than send the encrypted object through the chain that serves the approval of the object.

2. Approval and classification stage. Final receiver of the object, which acts for its approval, receives the object and approves the trusting level applied to the object and its constituents. This moment can be considered the enforcement moment of TAP. Since then, the subject may be:

a. *Public* - access from inside and outside organization (partners);

b. *Trusted* - have access only subjects belonging organization;

c. *Archived* - no one longer has access without approval.

3. Publication stage. Depending on the object, it can be *public* or *trusted*. In both cases, the policy applies to the object and constituents, and only if it is *trusted*, it can be accessed by only organization members.

4. Archiving stage. The object is archived for future consultations.

The following is a document circuit on which applies trusting policy.

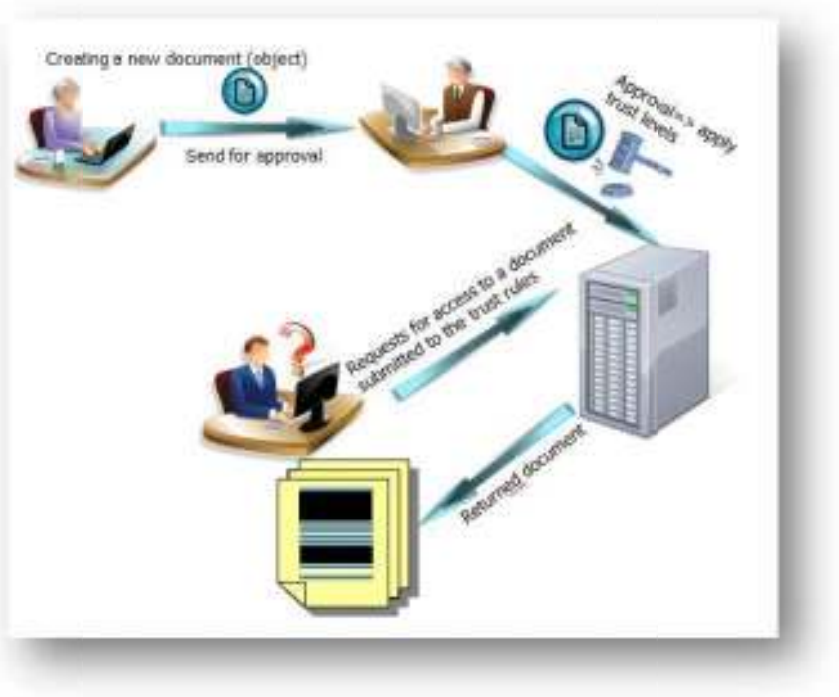

Figure 1 Trust policy applied on a document

Conclusions

Considering that Network and Information Security became a priority for most enterprises, TAP comes like a good instrument for writing enterprise privacy policies to govern data handling practices in IT systems.

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Long-Run Implications of Public Debt on Economic Growth

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Abstract: Many European countries faced with large fiscal deficits have adopted great plans of austerity to limit their public debt. In Romania, despite many measures to reduce public sector wages and some social allowances, in the 2009 and 2010 has been recorded only a small contraction of governmental expenditure *but a fast growing public debt. However, the main effects of the* austerity measures have materialized in a significant reduction in domestic demand and an important reduction of gross domestic product. Also, despite a substantial reduction of supply, the unemployment rate has not exceeded 8% in Romania. This paper aims to analyze how much the policies restricting budget deficit and public debt in Romania delayed the resumption of economic growth. Even the euro adoption perspective impose a stricter management of Romanian budgetary policies and other nominal convergence criteria, the hard core of economic policies must be the reinventing a new path to sustainable growth. It is necessary to conclude a new financing agreement with IMF for the next two years? We also intend to test the tolerance degree of the Romanian economy to public debt expansion (according to Reinhart & Rogoff model, 2010*)* as reflected in the growth rate of real gross domestic product.

Keywords: Convergence; budget deficit; public debt; GDP; monetary union

JEL Classification: E61; H61; H63

Brief Review of Classical Economic Theory

Fiscal deficit and public debt were certainly the most affected nominal convergence criteria by current economic crisis. The influence of excessive deficits and debt on macroeconomic stability and the ability to resume economic growth has been a constant concern since the Second World War.

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Since the ‘50s, James Buchanan and Richard Wagner have proposed to define the burden of public debt from its analogy with the tax burden and paying attention to the following issues: who pays, how much and when? For Buchanan and Wagner (1958: 29)the burden of public debt is nothing but “the opportunity cost of public goods, which are financed through debt”. In the standard sense, the opportunity cost is measured by the value of sacrificed alternatives. With public debt, opportunity cost is the value of private goods that are given up in exchange for the public goods that debt issue makes possible.

With the same objectives, James Meade and Franco Modigliani have analyzed long-term implications of public debt on economic growth and the consequences in the field of intergenerational equity.

James Meade (1958, p. 163-183) believes that a clear distinction must be made between external debt and domestic debt. While external debt is a burden for the community, because it produces real goods and services transfers between debtor and creditor, domestic debt is a transfer from citizens, as taxpayers, to citizens as property owners and so nothing is lost.

Franco Modigliani (1961: 82) argued that despite the fact that government action to expand the deficit could involve a future cost for society this does not mean that action should be taken. In terms of intergenerational income gains Modigliani sees much more significant the present than the sacrifices in the future, and if government spending for projects that produce a yield in the future, gross debt burden could be offset by the expense and the gross yield net result would be quite positive.

Robert Barro (1979, p. 940-971) has demonstrated that the public debt will be, sooner or later, moved into taxation field, leading to a higher taxation and reducing the production potential. Barro approved that there are also alternative like the limitation of government spending, which will have as well contractions effect on production. Debt maturity structure is also important to note that as Robert Barro is an obvious link between inflation and real cost of debt as long-term government debt is extremely vulnerable to inflation.

In the 1988, Paul Krugman has introduced the new concept of “debt overhang” (1988, p. 2) referring to inheritance or accumulate a large volume of governmental debt, leading to mistrust the ability of creditors for early repayment. In other words, Krugman believes that a country has a real problem with debt if the expected present value of future potential resources transfers is less than the debt.

Reinhart and Rogoff (2010, p. 22) have shown that a higher public debt is generally associated with lower rates of long term growth (at a debt level over 90%). According to Reinhart and Rogoff, the EU public debt (about 88.5% in 2010) is still below the threshold at which growth is adversely affected. They suggest that the debt of many developing countries already may have a negative impact on GDP growth.

In the latest work of Iron and Bivens (2010, p. 6) we find the argument that a lower economic growth than the expectation of decision makers will strongly increase the deficits in developing countries. Large annual deficits, leading to a higher public debt will cause higher interest rates, lower levels of private investment and lower growth opportunity in the future.

What Kind of Convergence We Want to Reach?

The strong need to establish some nominal criteria was primarily determined by the particular structure of European economy, which requests a harmonious economic development of their members that have chosen or wish to participate to European Monetary Union (EMU). These nominal conditions are intended to remove any tensions between members, caused especially by the spread of negative effects of economic imbalances.

The nominal convergence criteria laid down in the Maastricht Treaty of the European Union, in the February 1992, were related to the introduction of common monetary policy, based on a single currency, managed by an independent central bank. Four years later, the Stability and Growth Pact aimed toward the coordination of national fiscal policies to ensure stability and prudence for budgetary climate, essential conditions for the success of EMU.

For the new member states of European Union (EU), one of the targets sets in Copenhagen, in the 1993, was the adoption of European single currency within the shortest possible time. This objective has been misunderstood by the new member states, because the adoption of the Euro currency in not the end of the complex process of convergence but rather its beginning. Entry into the Euro area does not mean removing the need to solve macroeconomic imbalances existing in the Member State wishing to join (Popa, 2009, p. 2).

Another illusion of emergent economies from Central and Eastern Europe has been linked to the false idea that macroeconomic imbalances are a natural component of the convergence process, than the result of a bad management.

Moreover, the most of new members have been misunderstood that the achievement of real convergence will be easily accomplished and that is a short time process. The harsh lessons learned from previous accession processes, such as Greece, Ireland, Spain or Portugal, have shown that the catching up process takes a very long time and continue also a long time after accession, did not end with accession. For example, despite the fact that these four countries have had more solid economies than the new members from Eastern Europe, it is important to note that for the Greece the revenues fell soon after accession, for Ireland the revenues growth came much later than would be expected and Portugal has needed over 10 years to gain 17% GDP per capita growth.

Analyzing the evolution of the most used indicator for measuring the real convergence into EU, the GDP per capita (PPS), we can see that the catching up process of new member states was strongly influenced by the negative effects of economic crisis, turning into a *stop and go* process after the 2008.

Table 1. GDP per capita in Purchasing Power Standard (PPS)

Countries	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EU 27	100	100	100	100	100	100	100	100	100	100	100	100	100
Bulgaria	26	27	27	28	30	32	34	35	37	38	40	**44**	**44**
Estonia	42	42	42	45	46	50	54	57	62	66	69	**68**	**64**
Latvia	35	36	36	37	39	41	43	46	49	52	56	**56**	**52**
Lithuania	39	40	39	39	41	44	49	50	53	55	59	61	55
Poland	47	48	49	48	48	48	49	51	51	52	54	**56**	**61**
Portugal	78	79	81	81	80	80	79	77	79	79	79	78	80
Romania	29	27	26	26	28	29	31	34	35	38	42	**47**	**46**
Slovenia	78	79	81	80	80	82	83	86	87	88	88	**91**	**88**
Slovakia	51	52	50	50	52	54	55	57	60	63	68	72	73

Source: Eurostat April 2011

It is also important to note that countries such as Romania has received a massive support of the population to join the European Union, over the 85% of population in the 2005 Barometer, support led by the expectations that after accession the revenues and standard of living will instantly increase. In this context, Romanian policy makers have tried to respond to the huge population pressure by increasing public wages and pensions over the national budget capacity.

Many times it was considered that the process of nominal convergence has been privileged in relation to the real convergence, nominal fulfillment efforts influencing negatively the real economic variables. In fact, the two processes cannot be seen but complementary. Even if nominal convergence produce a slowing of real economic performance, fulfilling all the Maastricht criteria ensure a greater economic stability and a solid economic growth.

For example, reducing inflation rate will lead to higher economic performances and an increase of real convergence of wages. Lower interest rates will also stimulate the growth of investments and the growth of real GDP.

Why the Real Convergence has slowed down?

The most frequently asked question that European governments have tried to respond in the last three years has been related to the optimal fiscal behavior over the business cycle and especially in the economic downturn. If we analyze the European economic recovery measures we can observe that they did not followed Keynesian model which recommend that fiscal policy should be countercyclical: in bad times the government should increase government spending and should reduce the taxes for helping production. European decisions have not be framed nor neoclassical pattern of *tax-smoothing* (Barro, 1979, p. 940-971) which suggest that fiscal policy should remain essentially neutral over the business cycle and respond only to unanticipated changes that may affect the government's budget constraint.

Empirical research has shown that opposite to developed countries, the emergent markets tend to promote pro-cyclical policies even in times of recession or before to entry into recession (Gavin & Perotti, 1997, p. 11-72). In addition, the international credit markets do not trust the developing countries and so become more difficult for government to finance the budget deficits.

In most cases pro-cyclical temptation is due to "distortions" coming from political arena, which may engage projects and government spending over the national ability to finance them (Talvi & Vegh, 2005, p. 156-190).

If we look at Romanian's fiscal behavior in the last three years, the Talvi and Vegh hypothesis is verified, especially due to accelerated growth of public wages and public pensions. This action overlapped the parliamentary and local election and may repeat in 2012 and 2014, when elections will be held again in Romania.

The new Romanian agreement with International Monetary Fund will aim to give not only a psychological signal to international markets, but also to impregnate continuity for fiscal reforms, without delaying or altering them by the electoral events.

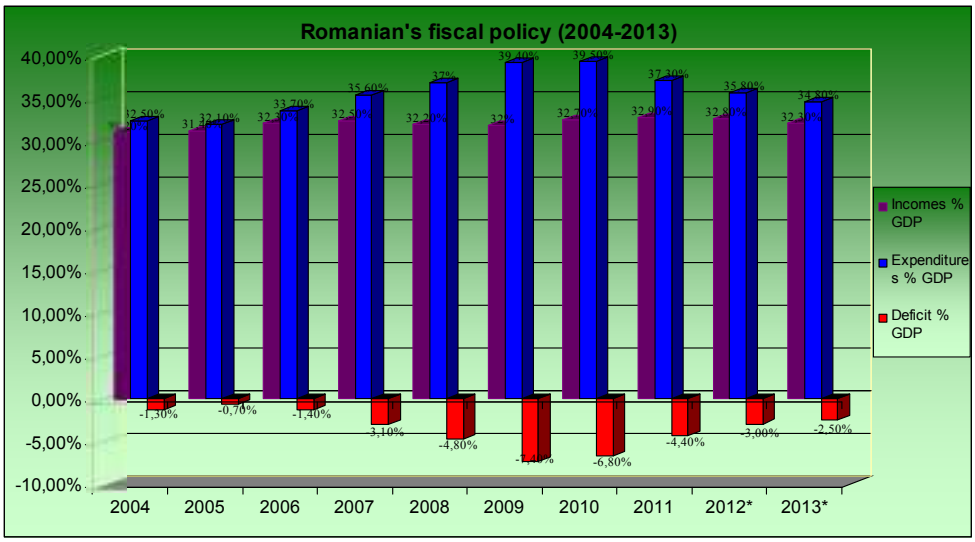

Figure 1. Romanian fiscal policy

Source: Romanian Ministry of Public Finance

In Romania, the *catching up* process was based on an economic growth rate higher than the European average, but this growth has halted abruptly in the last quarter of 2008. Also, the process of real convergence has a strong partner in the productivity growth, more than 10% annually, led by very low initial levels, the progressive reduction of the rate of employment in agriculture and especially by the growth of foreign direct investments. This substantial increase in labor productivity has been brought forward by the accelerated growth of wages, leading to a worsening of external deficit and a further inflationary pressure.

The effects of economic crisis were felt in the most macroeconomic indicators since the beginning of 2009, on the one hand as a result of relatively low flexibility of the Romanian economy and on the other hand because of the inability of Romanian government to immediately adapt its macroeconomics policies to a radically changed economic environment.

We must redraw the Main Criteria for Public Finances Stability

Main arguments to prevent the excessive budget deficits and high public debts into EMU were related to the transfers between generation and to the public investments with a large social return. Following Blanchard and Giavazzi (2003, p. 2) the present condition of the European fiscal stability has been based on the estimation of nominal growth rate of potential output of 5%, without taking into account potential external shocks, but merely the cyclical economic fluctuations. For example, a deficit *d*% would lead to an increase of public debt as ratio to GDP as *d*=*g*, where *g* is the nominal potential output. Thus, if *g* will be *g* = 3% (real growth) + 2% (inflation) = 5% and *d* proposed by SGP d = 3%, the ratio of debt to GDP will be estimated as:

$$d=g$$

(*d* =3%) =[*g* = 3% (real growth) + 2% (inflation)] lead to a 60% debt ratio to GDP, level of EU Treaty.

If we will estimate this level for an emerging country like Romania, we will find out that 60% ratio is overvalued:

Table 2. Estimation of public debt ratio

Year	SGP deficit	Real deficit	Real growth	Inflation	Debt ratio by SGP deficit	Debt ratio by real deficit
2007	3%	3,10%	6,30%	4,90%	26,79%	27,68%
2008	3%	4,80%	7,30%	7,90%	19,74%	31,58%
2009	3%	7,40%	**7,10%**	5,60%	15,15%	37,37%
2010	3%	6,80%	**1,30%**	6,10%	34,48%	78,16%
2011	3%	4,40%	1,50%	**7,00%**	**35**,29%	51,76%

Data source: Eurostat April 2011

The Reinhart and Rogoff (2010, p. 7) estimation of debt threshold cannot be tested on Eastern European countries due to lack of data for long time, especially in the communist regime. In addition, countries like Romania have not ever faced with higher rate of debt of 40%.

It seems to be too clearly that a public debt threshold of 35% of GDP for Romania is the highest limit of confidence, especially for foreign investors and credit markets too. This debt threshold is lower than the IMF estimation, 40% of GDP

(Cottarelli, 2010, p. 7), which took into consideration the negative perspectives of aging population.

Unfortunately, Romania is not the only new Members State to which the accepted level of public debt on GDP in terms of nominal convergence should be revised. Countries with similar position are Bulgaria, Hungary, Latvia or Lithuania.

Then, it is really difficult to predict when the economies of new Members States will be able to fit into the central bank inflation targets. For Romania, the failure to target inflation was mainly driven by the requirement to adjust the minimum European duty level, by increasing the value added tax, from 19% to 24% as a result of government failure to find alternative solutions to restrict the huge governmental expenditures and the dynamics of imported food prices and the increase of international fuel prices.

It must be said that the nominal condition of 3% of GDP sets by SGP for fiscal deficit may affects the real convergence of those economies in which the investment volume is really weak. For this reason, the governments may choose higher deficits than 3%, in order to stimulate the public investments.

The public investments have been the strong argument used by the new Members States of EU in order to justify their excessive deficits. Unfortunately, we cannot say exactly if there is a strong relationship between a higher fiscal deficit and public investment levels in the new Member States, an unconfirmed hypothesis even by the IMF research (Graeme & Paliu, 2006, p. 10).

Moreover, this kind of financial stability evaluation, used by European Commission, do not respond to other critical conditions of macroeconomic stability like structural imbalances of developing economies, exchange rate, interest rates and a huge demand for finance in the international shocks circumstance. Recent history has shown us that there were emerging countries, especially in Latin America, that have entered into *default* at a lower level of debt ratio than 40%. For example, Romania faces the following situation: a steady decline in young people which can be involved in the labor market accompanied by a fast growing number of pensioners, the dependence degree in pay as you go system is already of 0.79 employees to one pensioner. The structural budgetary deficit created only by such negative demographic situation has already reached 2.64% of GDP and is expected to increase until 2050.Other structural difficulties are related to low capacity to collect the revenue from economy, corruption and tax evasion affecting over 11% of GDP from revenues potential.

We also have to specify that there are more ways to count the fiscal deficits and public debt too. Eastern economies still holding huge enterprises and companies whose losses are not quantified neither into so-called quasi-fiscal deficit. It is also important to mention what kind of public debt we are talking about. Because there is a debt contracted directly by governments and a debt contracted by other public authorities but guaranteed by same governments.

We believe that for a more accurate assessment of fiscal sustainability will have take into account the debt of state-owned companies when we estimate the fiscal deficit and must to include the debt guaranteed into total public debt.

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Wealth Taxes in the Context of European Integration and Globalization: a Reconsideration?

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Abstract: In the last decades, in some states, wealth taxes have been reconsidered. Amid the problems outlined, our paper aims to highlight states options on wealth taxes and to analyze the impact of reforms on wealth taxes in recent decades, in the member states of the European Union and the U.S., through the financial, economic and correcting inequalities role, played by taxes, in general, and taxes on wealth, in particular. Amid the rise of social inequalities, especially in the U.S., A second objective of our paper, adjacent to those already mentioned, is the analysis of the degree of reduction of social inequalities, through taxes on wealth in the countries concerned. By a survey in OECD member states, on the role of wealth tax, we find a series of opportunities and limits in the increase of their financial and redistributive role.

Keywords: tax; redistribution of wealth; globalization; growth

JEL Classification: F15; F00; F01

1 Introduction

Les impôts sur le patrimoine sont une constante du system fiscal, depuis de sa création, parce que la fortune a été et est plus "visible" qu'autres éléments imposables, ce qui a facilité son imposition. Les raisons pour justifier l'utilisation de ces impôts sont nombreuses et varient selon la catégorie d'impôts auxquels nous nous référons. Il y a aussi des arguments assez forts contre ce type d'impôts.

Dans les dernières décennies, les techniques d'application ont connu un long processus d'adaptation aux nouvelles conditions socio-économiques, de nombreux pays réformant cette catégorie de taxes, dans le but de les moderniser, car, étant

classé dans la catégorie des impôts immobiliers, les impôts sur le patrimoine, par rapport d'autres catégories de taxes, sont considérés comme plus «archaïque». Mais leur personnalisation, afin d'assurer l'équité fiscale horizontale, implique des coûts administratifs élevés, de sorte que dans certains Etats, où il n'y existe pas, ni ont également été introduites. Beaucoup de réformes fiscales dans de nombreux pays, visant à déplacer vers d'autres bases imposition que le revenu, la fortune est une des orientations possibles.

Notre document est structuré dans les directions suivantes, comme on peut le voir dans la suite: l'analyse des avantages et des inconvénients que implique ce catégorie d'impôts, en distinguant pour chaque forme d'impôts sur le patrimoine, les implications de la nouvelle stratégie de l'Union Européenne, « L'Europe 2020 », le rôle que les impôts sur le patrimoine, ayant dans l'avant-plan, le rôle financier et de corriger les inégalités de richesse entre les membres de la société; conclusions.

2 Pour et contre les impôts sur le patrimoine: analyse conceptuelle, des formes, techniques et leurs implications

Les principales formes trouvées dans la pratique internationale sont liés à trois catégories d'impôts sur le patrimoine: les *impôts sur la détention du patrimoine* - les principales formes sont les impôts sur les propriétés immobiliers et sur l'actifs nets (fortune) – *les impôts sur la patrimoine transmis*- les principales formes étant les droits de mutation à titre gratuit et à titre onéreux - et *les impôts sur la plus-value du patrimoine*. Tenant compte des objectifs poursuivis dans le présent document, l'attention se portera surtout sur les deux premières catégories mentionnées ci-dessus, et parmi eux, sur l'impôt sur les propriétés immobilières et sur l'impôt sur les successions, sans exclure des références aussi à d'autres catégories et formes.

Les impôts sur la propriété comprend un certain nombre de insuffisances, tant sur le plan de l'administration fiscale et du point de vue des contribuables, en particulier celles liées aux procédures techniques adoptées par les différents pays dans leur mise en œuvre. Leur existence a conduit à une certaine reconsidération, au cours des dernières décennies, qui a ciblé des objectifs différents: d'accroître l'efficacité dans leur gestion, l'assurance de l'équité fiscale horizontale et verticale, etc. Ensuite, nous analysons les raisons pour lesquelles ont été introduits de divers types et formes d'impôts sur le patrimoine et, simultanément, leurs lacunes, de

bienfaisance surtout pour la consolidation de la politique fiscale, pour présent et en perspective.

Quand on parle d'impôts sur la détention du patrimoine, la raison principale pour laquelle on a été et est appliquées, c'est que ceux sont le moyen idéal pour financer les dépenses publiques locales. Si l'impôt sur l'actif net, ne pas prendre des arguments pour son application, en particulier la collecte des recettes fiscales de l'Etat, parce que leur taille est modeste, mais surtout d'assurer l'équité fiscale, car il donne aux contribuables de capacité contributive supplémentaire. Par conséquent, ce type d'impôt, avec l'impôt sur le patrimoine transmis et l'impôt sur la plus-value du patrimoine, sont principalement utilisé pour corriger les inégalités de richesse, existantes entre les membres de la société, que de collecter des recettes fiscales au budget publique de l'Etat.

Les critiques de l'impôt sur le patrimoine, et en particulier d'impôt sur la propriété immobilière, couvrant plusieurs aspects, notamment en matière de procédures techniques appliquées. Tout d'abord, les personnes morales, même si elles offrent la plus grande partie des recettes publiques locales, ni ne votent pas, ni ne participe pas à l'élection de l'offre locale des services publics. Deuxièmement, la perception des contribuables est négative, ce type d'impôt étant considéré injuste.

L'aversion des contribuables est maintenu par le caractère plus «visible» de celui-ci, puisque les paiements sont effectués annuellement par les propriétaires, et non par retenue à la source, ce qui aurait donné le maintien de l'illusion fiscale, ce qui se manifeste dans d'autres catégories d'impôts, dont plusieurs sont à la charge eux, mais en faisant un paiement effectif de tiers (généralement, les entreprises).

La perception des contribuables d'en est négative et qu'il ne prend pas en compte ou prendre en compte très peu de la situation personnelle du contribuable, même si on accorde de certaines exonérations et réductions. En outre, les contribuables à faible revenu considèrent l'impôt très élevé par rapport au revenu. En plus, il existe des situations dans lesquelles ceux dont les revenus ont diminué considérablement, sont contraints de renoncer à un certain nombre de biens, de se procurer des ressources financières exigé par le paiement d'impôt.

Toutefois, les autorités fiscales ne sont pas restées insensibles à ce nombre de critiques, de nombreux États ont introduit d'un seuil maximal, appelé le "bouclier fiscal", déterminé par le rapport entre le montant de l'impôt sur le revenu et l'impôt foncier et le total du revenu imposable, le seuil, s'il est dépassé, il donne droit à un remboursement d'impôt, même si les études ont montré qu'il existe un lien direct

entre la taille des biens et du revenu, dans de peu cas la règle a été violée. Pour les contribuables, la perception est aussi influencée par la possibilité de déduire dans l'impôt sur le revenu ou sur profit, le montant d'impôt sur les propriétés immobilières payées.

Une autre explication de l'aversion pour les contribuables est que l'assiette fiscale résulte par estimation et que les méthodes d'approximation ne conduit pas toujours à sa juste valeur. En outre, l'application de taux différenciés en fonction de la résidence, parfois pour la même valeur imposable, viole l'équité horizontale, parce que les autorités locales ont le droit, dans de nombreux pays (en particulier ceux du gouvernement fédéral) d' établir les taux d'imposition, dont la valeur varie à certains intervalles.

L'impôt sur la fortune a existé dans la plupart des Etats membres de l'OCDE, au cours des dernières décennies, mais ces dernières années a subi des changements significatifs, et même dans certains États il a été supprimé. Ainsi, ce type d'impôt, initialement, était typique de la germaniques et scandinaves (Allemagne, Autriche, Suisse, Luxembourg, Pays-Bas, Danemark, Suède, Norvège, Finlande et l'île), a été élargi dans quelques pays latins (France, Italie et Espagne) ou même pays anglo-saxons (Irlande). En raison des coûts administratifs et, en particulier, de l'impact négatif d'impôt sur le capital et l'activité économique en général, la plupart des pays développés l'a supprimé, dans le contexte de la mobilité croissante des capitaux. Ainsi, il a été éliminé successivement en Irlande (1977), Suède (1991), Italie (1992), Autriche (1994), Allemagne et Danemark (1997), Pays-Bas (2001), Luxembourg et Finlande (2006), Espagne (2008), Grèce (2009), France (2010). Les statistiques ont montré que, malgré de sa existence, les inégalités de revenu et richesse se sont accentuées dans la plupart des pays développés, son objectif n'étant pas atteint.

Dans le cas des droits de mutation à titre gratuit par décès, les critiques sont basés sur le fait qu'ils peuvent être un obstacle vers les transferts volontaires et aussi l'existence d'un impôt sur le don peut contribuer à une plus grande inégalité de la richesse entre les générations. L'introduction des droits de mutation à titre gratuit entre vifs, tient également compte d'autres raisons: ses absences seraient un moyen d'éviter l'impôt sur les droits de succession.

L'existence de deux modalités techniques pour la mise en œuvre des droits de succession sur la entière fortune héritée (dans la littérature anglo-saxonne est appelé «estate tax») et séparément pour chaque fraction de la fortune héritée par

chaque héritier ("inheritance tax») implique également un certain nombre d'avantages et d'inconvénients.

L'imposition des biens hérités séparés, si les droits de succession, favorise la distribution de la fortune, parce que, comme une plus grande fortune est dispersée, le taux d'imposition beaucoup plus faible et la montant de l'impôt est plus faible. En outre, cette méthode permet de personnaliser l'impôt, avec des implications positives sur le degré d'équité fiscale. En revanche, la version globale, l'avantage est pour l'administration fiscale, car elle nécessite moins de coûts administratifs (un seul contribuable, pour même matière imposable) et en ayant un rendement fiscal plus élevé. Pendant les dernières décennies, la tendance dans l'UE et l'OCDE a été vers d'une imposition séparée de la fortune héritée, gagnant le principe de l'équité fiscale plutôt que l'efficacité. En 2010, quinze États membres ont appliqué explicitement l'imposition distincte de la fortune héritée, contrairement aux quatre États, qui ont mis en place une imposition globale, ainsi qu'il ressort du tableau ci-dessous.

Tableau 1 Les options des Etats en matière de droits de succession

	Nombre d'états	**Etats membre**
Imposition séparée	15	Bulgarie, République tchèque, Danemark *, Finlande, Allemagne, Grèce, Hongrie, Irlande, Italie, Lituanie, Luxembourg, Pays-Bas, la Pologne, la Slovénie
Imposition globale	4	* Le Danemark, la Grande-Bretagne, France, Belgique
Autres formes	9	L'Autriche, Chypre, l'Estonie, la Lettonie, Malte, Portugal, Roumanie, Slovaquie, Suède

** Le Danemark utilise simultanément ces deux variantes.*

L'assiette de l'impôt sur la plus-value du patrimoine comprenne la plus-value de la propriété qu'on a enregistré certains biens (bâtiments, terrains) pendant une période de temps. Outre la taxe supplémentaire sur des biens acquis en temps de guerre, qui est un impôt exceptionnel sur la propriété, il s'en trouve dans la plupart des pays développés étant un impôt permanent.

Dans les dernières décennies, dans les États membres de l'OCDE, la tendance a été d'introduire où il n'existe pas (France, Espagne, Royaume-Uni, Canada) ou étendre (Italie, États-Unis, Suède) le champ d'application d'un tel impôt sur la plus-value.

Seuls les Pays-Bas et la Nouvelle-Zélande l'ont éliminé, pour des raisons d'efficacité (coûts d'administration élevés). Du point de vue technique, l'imposition de la plus-value de la fortune se réalise soit par l'impôt sur le revenu (Canada, France, Suède, Espagne, USA, Japon) ou seulement pour les entreprises (Allemagne, Italie ou les Pays-Bas) ou par un impôt distincte (Italie, Irlande et au Royaume-Uni). Dans la dernière décennie, le rôle financier de ce type d'impôt, à coté de l'impôt sur le transfert de propriété à titre onéreux (actes de vente et l'achat de biens immobiliers) a augmenté, en particulier dans les États où le marché du logement a connu un développement significatif.

3 Le rôle des impôts sur le patrimoine: passé, présent, perspectives

Les impôts sur le patrimoine, bien qu'ils représentent une constante du système fiscal dans la plupart des Etats, ne produisent importantes recettes fiscales comme l'impôt sur le revenu et sur la consommation. Ainsi, en 2008, les recettes fiscales provenant de cette source ont représenté 1,8% du PIB de l'OCDE. Les valeurs les plus élevées ont été enregistrées en Royaume-Uni (4,2%), Canada et en France (3,4%), tandis qu'en Slovaquie et en Autriche ont été de 0,4%, respectivement 0,5% du PIB.

Dans l'ensemble des recettes fiscales, en OCDE, en 2008, le poids a était de 5,9%, contrairement à 1970, lorsque les recettes provenant de cette source ont représenté 7,42% du total. L'analyse en dynamique, dans les années 1970, 1990 et 2008, nous montre que le poids des impôts sur le patrimoine au total des recettes fiscales a baissé en Australie, Autriche, Danemark, Allemagne, et les Grecs, tandis qu'en France, a considérablement augmenté. Dans d'autres pays analysés, il est à noter que depuis 1970 la part des impôts sur le patrimoine s'est diminuée en 2008, mais a augmenté par rapport à 1990. Une explication pourrait être que, en retour, les recettes de TVA ont connu une tendance à la hausse, en particulier dans les États membres de la Communauté Economique Européenne, depuis les années '90, accompagnée de profondes réformes de l'impôt sur le patrimoine, qui ont considérablement réduit les montants des recettes provenant de cette source. Cependant, au milieu de boom immobilier, en particulier après 2000, la forte croissance des prix des immobiliers a été traduit, en partie, par la hausse des recettes tirées d'en.

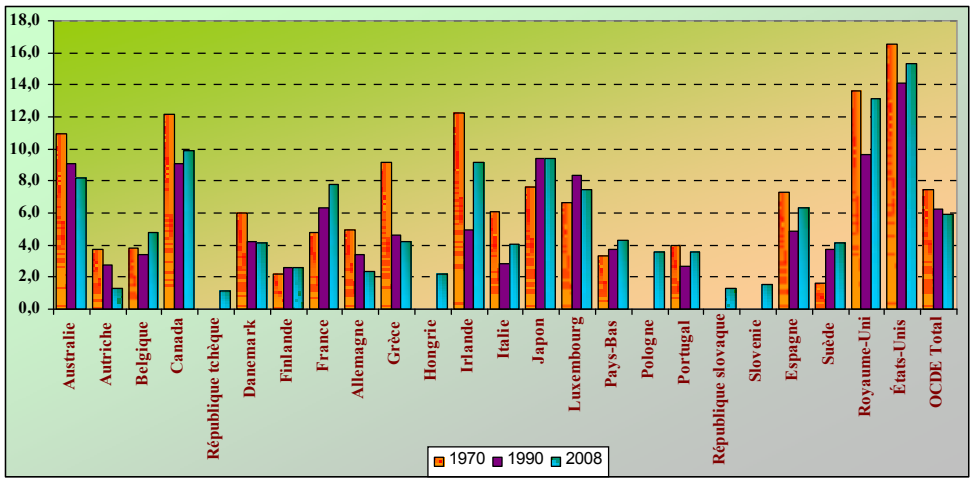

Figure 1 Le poids des impôts sur le patrimoine en recettes fiscales, dans les états membres de l'OCDE (en pourcents)

Source: propres calculs selon les données existantes sur le site www.oecd.org

Dans les états fédéraux, les impôts sur le patrimoine contribuent avec recettes fiscales significatives pour le budget d'État, comme on le voit dans la figure ci-dessous. Ainsi, aux États-Unis, ils représentent plus de 15% des recettes fiscales totales et environ 10%, au Canada et en Australie. En outre, un pourcentage plus élevé a été enregistré au Royaume-Uni, Irlande, Japon, Luxembourg, France et Espagne.

Au niveau local, les impôts sur le patrimoine fournissent d'importantes ressources fiscales dans l'Australie, le Canada, l'Irlande et la Grande-Bretagne, en 2008, en représentant plus de 95% du total. En France, Grèce, Pays-Bas, le Portugal et les États-Unis, les impôts sur le patrimoine représentent environ la moitié des recettes fiscales locales. En Allemagne, par exemple, la part relative réduit des impôts sur le patrimoine s'explique par la particularité de son système fiscal, par les impôts sur le revenu et sur la société bénéficient directement et partialement les budgets locaux.

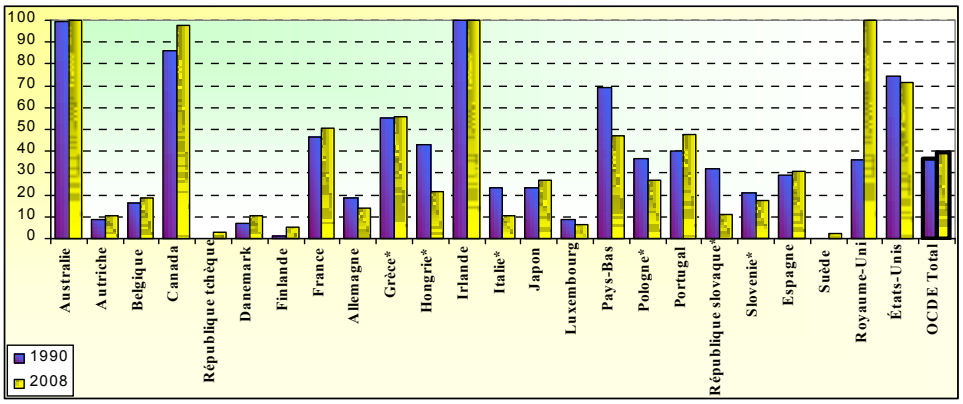

Figure 2 Le poids des impôts sur le patrimoine en l'ensemble de recettes fiscales locales, dans les pays membres de l'OCDE

Source: propres calculs selon les données existantes sur le site www.oecd.org

Note: Pour quelques états, la comparaison a été fait pour autres années que l'année 1990: Grèce (1995), Hongrie (1991), Italie (1993), Pologne (1991), République slovaque (1998), Slovénie (1995)

En OCDE, au cours des deux périodes analysées, on est observée une tendance croissante de l'importance des impôts sur le patrimoine dans l'ensemble des ressources fiscales locales, un phénomène expliqué par le processus de décentralisation, qui a commencé l'année 1990. En moyenne, le rôle financier de l'impôt foncier au niveau local a légèrement augmenté en 2008, ceci en fournissant environ 40% des ressources fiscales du budget local, comparativement à 36%, en période précédent.

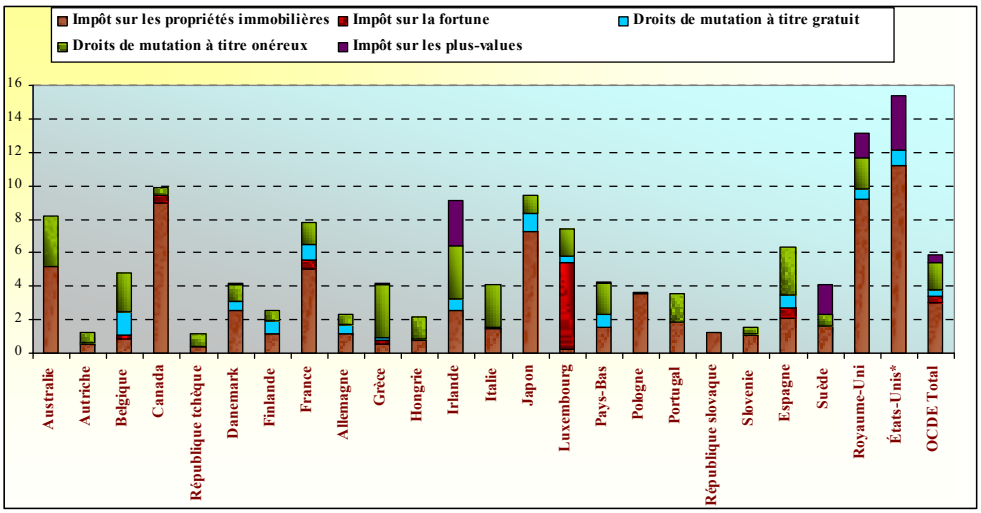

Figure 3 La structure des impôts sur le patrimoine, dans l'OCDE, en 2008, en % des recettes fiscales totales

Source: propres calculs selon les données existantes sur le site www.oecd.org

*Pour les droits de mutation à titre onéreux, il n'y a pas des informations.

Considérées en structure, les impôts sur la propriété (en particulier sur les terrains et bâtiments) mettent les ressources les plus importantes de toutes, dans la plupart des Etats membres de l'OCDE, comme on peut le voir sur la figure ci-dessus. En OCDE, en 2008, ils ont fourni 2,99% du total des ressources fiscales de l'Etat. Dans les Etats où la bulle immobilière a été une constante ces dernières années, le prix de l'immobilier et le nombre de transactions avec eux d'augmenter considérablement, les recettes provenant aux impôts sur les transactions représentaient une part plus importante dans tous les impôts sur le patrimoine. C'est le cas de l'Espagne, l'Irlande, l'Italie, la Grèce, la Grande-Bretagne et le Portugal. Toutes les mêmes, la forte croissance des prix des propriétés immobiliers a déterminé, en grande partie, à accroître les revenus provenant aux impôts sur la plus-value. C'est le cas des États-Unis, de la Grande-Bretagne, de la Suède, de l'Irlande, en Espagne, Grèce et en Portugal, il n'y a pas un tel impôt. Les impôts sur l'actif net a apporté, en 2008, les recettes fiscales importantes qu'au Luxembourg, Espagne, France, Grèce et Canada, tous les autres Etats analysés ce type de taxe étant éliminée.

Le rôle redistributif de l'impôt sur le patrimoine a été confirmé par des études. Ainsi, les droits de successions contribuent à réduire les inégalités de richesse et permettent l'imposition d'en au moins une fois chaque génération, à quelques exceptions. Cependant, à cet égard il y a des positions contradictoires: entre les générations, le transfert de propriété est l'événement le plus riche, aux moins riches, naturellement, contribuant ainsi à promouvoir l'égalité.

Une autre étude, menée aux Etats-Unis, sur les données enregistrées dans la période 1916-1996, dont les droits de successions, montre que l'augmentation du taux d'imposition de la fortune héritée, dans le temps, conduit a la réduction de la richesse accumulée. Cependant, "depuis sa création, les droits de successions a été perçue comme un contrepoids à la concentration accrue des richesses." Le problème de la concentration des actifs dans les mains d'un petit nombre de personnes est un problème politique: il s'agissait parce que les gens riches ont tendance à avoir une certaine influence dans les milieux politiques, avec des effets de distorsion de la démocratie. Du point de vue des auteurs, la politique de réduction des inégalités de richesse est réalisée avec succès par le biais des droits de succession, en particulier pour les droits de succession dus, si une personne est décédée avant la retraite.

Toutefois, la fortune reste relativement concentré, dans la plupart des pays développés, le coefficient de Gini, l'indice utilisé pour mesurer l'inégalité des fortunes, est très élevé, avec des valeurs de deux ou même trois fois plus élevé que pour le revenu, comme on peut le voir *Tableau. 2*. Ainsi, la Suède a le plus haut coefficient de Gini dans le LWS et le deuxième plus grand coefficient de Gini, dans les estimations de (Davies et al, 2008). Sur toutes les mesures disponibles, la Finlande a un des niveaux les plus bas de l'inégalité de l'avoir net et les États-Unis a un des plus élevés.

Dans Europe, la Suède a un des pourcentages les plus élevés de la richesse détenue par haut 10% dans l'ensemble de la population. Elle est suivie par l'Allemagne et le Royaume-Uni, la Finlande et l'Italie.

Il est intéressant de noter que la Suède et l'Allemagne semblent être les pays les plus inégalitaires en Europe en termes de répartition de la richesse, qui n'est pas dans tout le cas en termes de revenus. Une des raisons en est qu'une grande proportion des ménages ont très réduite ou négative richesse - en Allemagne, environ 38% et en Suède, 32% (Sierminska et al, 2006). Le faible niveau de la richesse peut refléter des erreurs de mesure, mais aussi le faible taux d'accession à

la propriété (en Allemagne) et une dette élevée (en Suède), ainsi que l'effet modérateur des pensions publiques sur d'épargne.

Tableau 2 La distribution de la fortune et le coefficient Gini, en quelques pays de l'OCDE

	Parts				Gini					
	DSSW		LWS		Fortune				Revenu	
	haut 10%	haut 1%	haut 10%	haut 1%	L'année	DSSW	L'année	LWS	L'année	LIS
Danemark	76,4	28,8			**1975**	0,8				
Finlande	42,3		45,0	13,0	**1998**	0,6	**1998**	0,7	**1995**	0,2
France	61,0	21,3			**1994**	0,7			**1994**	0,3
Allemagne	44,4		54,0	14,0	**1998**	0,7	**2002**	0,8	**2000**	0,3
Irlande	42,3	10,4			**1987**	0,6			**1987**	0,3
Italie	48,5	17,2	42,0	11,0	**2000**	0,6	**2002**	0,6	**2000**	0,3
Norvegie	50,5				**2000**	0,6			**2000**	0,3
Espagne	41,9	18,3			**2002**	0,6			**2000**	0,3
Suède	58,6		58,0	18,0	**2002**	0,7	**2002**	0,9	**2000**	0,3
Suisse	71,3	34,8			**1997**	0,8			**2000**	0,3
Royaume-Uni	56,0	23,0	45,0	10,0	**2000**	0,7	**2000**	0,7	**1999**	0,3
Australie	45,0				**2002**	0,6			**2001**	0,3
Canada	53,0		53,0	15,0	**1999**	0,7	**1999**	0,8	**1998**	0,3
Japon	39,3				**1999**	0,5				
États-Unis	69,8	32,7	71,0	33,0	**2001**	0,8	**2001**	0,8	**2000**	0,4

Notes: DSSW: Davies, Sandstrom, Shorrocks et Wolff [Davies et al.] (2008).
LWS: "Luxembourg Wealth Study" en Sierminska et al. (2006).
Espagne en LWS: Bover (2010).

Rosen (2005) montre que en élaboration de la politique fiscale, l'Etat ne doit pas être intéressé à réduire les inégalités de richesse, mais devrait plutôt viser à réduire les inégalités dans la consommation. Par les droits de successions, les contribuables sont influencés de consommer plus d'argent pendant la vie, donc, théoriquement parlant, les effets de l'impôt sur les successions en but de la réduction des inégalités de richesse sont pour le moins ambiguës.

En ce qui concerne le rôle des impôts sur le patrimoine à influencer l'activité économique, une analyse est souhaitée mais pas exhaustive, nous ferons par la suite, poursuit la relation avec le thème de notre travail.

4 Les impôts sur le patrimoine dans le cadre de la nouvelle stratégie européenne, « L'Europe 2020 »

La période où a commencé et a eu lieu la crise financière et économique, a coïncidé avec la présentation d'une nouvelle stratégie à moyen et long terme, dans l'UE, une stratégie qui s'inscrit dans le prolongement de celle à Lisbonne. La nouvelle stratégie, appelée «L'Europe 2020», mis au premier plan des objectifs économiques et sociaux en gras. Dans un synthétiseur de parole, les objectifs de la stratégie "L'Europe 2020" se reflètent par la promouvoir d'une croissance économique "intelligente, durable et globale."

Mais le problème le plus aigue qui doivent être abordées et corrigées, car il influe négativement la croissance économique, c'est la situation des finances publiques. La réduction du déficit budgétaire et de la dette publique est absolument nécessaire et urgente, comment a indiqué dans les rapports pour 2009 et 2010, la Commission européenne, dans la surveillance de la croissance dans l'Union européenne, pour briser le cercle vicieux créé par l'existence d'une énorme dette publique, qui affecte des marchés financiers (en élèvent le taux d'intérêt) et qui réduit ainsi la croissance économique (Commission européenne, 2010, 2011).

La consolidation budgétaire tandis que la diminution de la dette publique, dans les circonstances actuelles, où il est absolument nécessaire de stimuler la croissance, doit faire avec prudence, afin que les mesures prises doivent être à la fois «convivial» avec la croissance économique. Deux solutions possibles : réduire les dépenses publiques et la croissance des revenus, en particulier de les recettes fiscales, peut conduire à réduire le déficit budgétaire.

On ne devrait pas augmenter les taux d'impôt à ceux qui ont un impact majeur sur la croissance économique, en particulier impôt sur le revenu et sur la société. Comme le montre la littérature (Johansson, 2008), différents types d'impôts peuvent être classés en fonction de la relation avec le produit intérieur brut. Dans le cas des impôts sur le patrimoine, leur existence ou modification en aucune manière affecter l'évolution du PIB par habitant, le coefficient de corrélation étant presque nul.

Étant donnée la conclusion ci-dessus, l'Union européenne appelle au renforcement du rôle financier de l'impôt sur le patrimoine, en parallèlement avec l'impôt sur la consommation, en tant que condition indispensable pour garantir une croissance économique durable. Dans le même temps, il veut réduire les impôts sur le travail, afin d'atteindre un autre objectif de la stratégie communautaire: la réduction du

chômage, tout en augmentant la part de la population active. Les impôts sur le patrimoine, avec des impôts sur la consommation représentent une alternative viable aux impôts sur le revenu, de tant de critiques en raison des effets négatives des ceux-là. Beaucoup de réformes fiscales dans de nombreux pays, visant à déplacer vers d'autres que la base de l'impôt sur le revenu, aussi la fortune est une des orientations possibles.

Les impôts sur le patrimoine peuvent être utilisés simultanément comme un moyen d'augmenter les recettes fiscales, et comme un moyen de corriger les inégalités de richesse entre les membres de la société, compensant en partie un degré inférieur de l'équité fiscale des impôts indirects.

Ainsi, par rapport aux impôts sur le revenu, les impôts sur le patrimoine ne faussent pas la décision de travailler. De plus, la tendance à éviter des taux marginaux élevés d'impôt sur le revenu par les propriétaires d'entreprise, par l'achat de produits coûteux (par exemple les voitures de luxe), est compensée par l'impôt sur la fortune nette. Toutefois, l'appel à agir par l'impôt sur le patrimoine a certaines limites, en particulier de nature politique: ils sont très «visibles» pour les contribuables, en raison de modalités techniques de collecte, ce qui pourrait conduire à une réaction négative à l'introduction ou l'augmentation de eux, tandis que le facteur politique peut rester réticente à adopter des telles mesures, qui ont, en principe, des le coûts politiques élevés.En conclusion, l'augmentation du rôle financier des impôts sur le patrimoine est limitée par un certain nombre de problèmes, y compris le phénomène de la globalisation et le facteur politique sont les éléments de poids dans les décisions de politique fiscale. Ainsi, la croissance exponentielle de la mobilité des capitaux, peut déterminer la fuite d'en vers des pays à une faible imposition. Si l'impôt sur l'actif nette, ce qui a conduit à son abolition dans de nombreux Etats. Dans le cas des autres impôts sur le patrimoine, les matériaux imposables en raison de leur faible mobilité, ils ne peuvent pas être évités par le déplacement vers les pays à faible imposition. Si les impôts sur la propriété immobilière, en particulier pour les entreprises, celles-ci peuvent décider de transférer leur siège social en pays où la propriété immobilière est plus facilement imposée. C'est l'existence de coûts politiques, qui peut être un obstacle à l'accroissement du rôle financier de ce type d'impôts, en raison de leur visibilité, comment une direction tracée par «L'Europe 2020». Dans le cas des impôts sur les successions, un rôle financière accru peut être obtenu en éliminant de nombreuses réductions ou d'exonérations, qui conduisent souvent à l'évitement de l'impôt. Par

exemple, aux États-Unis, moins de 2% des défunts sont effectivement soumis aux droits de succession.

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Financial Institutions and Services

Challenges of the Banking Integration Process in the Case of the New EU Member States

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Abstract: The creation of the single European market represents a 50 years long process which aims at developing the most advanced economy in the world. In order to achieve this, political actions must be accompanied by economical and juridical changes in order to stimulate and foster the creation of the single European market. A key component of this process is represented by the integration of the financial sector. While several component of it have registered major transformations and achievements in the integration process, one of the least integrated parts is represented by the European banking sector. Most of the European economies are funded directly through the banking sector, thus the integration of this sector represents a major benchmarks in the European integration process. This problem becomes more complex in the context of the European Union enlargement to 27 member states. Thus, the *aim of this paper* is to underline the progresses achieved by the banking sectors of the European Union new member states from Central and Eastern Europe in their integration process. In order to achieve this *we will use* an empirical analysis based on the *Law of One Price*, which will underline the progress made by the banking sectors of the panel countries: Poland, Czech Republic, Slovenia, Slovakia, Romania and Bulgaria. The results of the research will provide an overview of the main achievements registered by these countries, while also underling how national particularities of these sectors affect their integration.

Keywords: integration process; banking sector; law of one price; new member states

JEL Classification: F15; F36; E59

1. Introduction

Taking into account the historical evolution of the European Union we can acknowledge that the European integration process and implicitly the financial integration process represent a strategic component of the whole European project, this fact being underlined by the central role that the European legislative initiative

regarding this matter are having at the Union level. The basic framework of the whole European financial integration process has its roots in the Treaty of Rome, being after wards also enclosed in the Treaty of Maastricht and in the Lisboan Treaty, and through which the European Union aims at: *developing the most advanced knowledge based economy in the world, capable of sustaining long term economic growth which will offer better employment opportunities and a higher degree of social cohesion*.

The European Union Council held on March 2002 in Barcelona acknowledge that financial services represent a fundamental component that will help the achievement of the Lisboan Agenda because: „*only through an integrated financial market the consumers and the enterprises will be able to fully benefit from the adoption of the single currency. Competitive financial markets will provide additional financing options and also will diminish the price that the investors may have to support, providing also adequate protection measures*."

The adaptation of the single European currency and also the legislative measures taken in the last years at European level have led to an acceleration of the financial integration process, at least in the euro zone area. Thus, according to some empirical studies undertaken in the last period there are suggesting that wholesale financial services (e.g. money markets, corporate and government bonds market, investment banking sector) tend to be almost fully integrated at European level, the benefits of this process being already visible: the diminishing of finance costs, at least in the euro area, the diversification of the investment products offered on European markets and also the drop of the fees and taxes charged for the providing of investment banking services.

Despite these developments, the European banking sector tends to remain still nationally fragmented, which in turn hinders a deepening of the European financial integration process. The European banking sector tends to be mainly focused at a domestic level, being surpassed only by the media and telecommunications sector as one of the least Europeanized economic sectors. Only 27% of the sales made by the top 22 banks in the European Union are at European level, this fact being illustrated in the table below.

Table 2. The Europeanization rate of the assets held by the main companies in different economic sectors of the European Union

Sector breakdown of Europe's top 100 listed companies	Europeanization Rate
Life sciences	84%
Consumer products and services	74%
Manufacturing and business services	66%
Oil, gas and mining	57%
Insurance	53%
Energy and water utilities	31%
Banking	27%
Telecommunications and media	24%
Overall Europeanization avrage	49%

Source: Own simulation based on data retrieve from Bureau Van Dijk Amadeus and Bank scope databases (https://amadeus.bvdinfo.com/; https://bankscope2.bvdep.com/)

We must take into account the fact that the European Union has almost doubled its members through the two waves of adherence that took place in 2004 and 2007. Most of the new member states are former communist countries, which mean that their economies have gone in only 15 years through two major phases of transformation: first the transition period to a market economy and afterwards the European economic integration process which was necessary in order to ensure that there are able to join the Union.

The impact of these developments on the economies of these countries was tremendous, especially if we take into account the changes that have arise in the banking sectors. Thus, the banks from these countries had not only to adjust to the requirements imposed by the transition process to a market economy but also needed to face the high external pressures which were determined on the one side by the enhancement of the competition and on the other by the structural changes in the banking activity prompted by the technological and financial progress (the

mass usage of electronic payment methods, the usage of internet banking, the development of regional and pan-European business models which raised challenges for bank in regard to their possibility to correctly assess risks, the development and implementation of new techniques and methods for risk assessment and risk management).

This is the reason why we considered the opportunity to analyze the changes that took place in the structure and the dynamics of the banking sectors of the new member states, while also underlining the challenges that these are facing in the deepening of the European banking integration process. Our panel is composed by Poland, Czech Republic, Slovenia, Slovakia, Romania and Bulgaria. We choose these countries as they are former communist countries, which had to transform their centralized economies into market economies and afterwards to align them with the European standards in order to be able to join the European Union.

Taking these aspects into account we have organized our research in five parts. The first part contains introduction remarks regarding the study undertaken, the second part presents the characteristics of the methodological approached used, while the third part is focused on the dynamic development of the banking sectors from the panel countries, part four provides an overview of the main challenges that the panel countries are facing in the deepening of the banking integration process and the fifth part contains the final conclusions of the study.

2. Methodological Considerations

The European banking sector has suffered in the last decades o series of deep changes, which have been the focus of a large body of academic literature, these researches using both quantitative and qualitative approaches (see: Gual,2004). The liberalization and deregulation of the European financial markets, prompted by the London Stock Exchange Big Bang in the eighties, followed by European initiative aimed at enhancing the integration process and the development of pan-European payment systems, both for grows settlements and retail transactions, have put a tremendous pressure on the traditional way in which European banks carried out their activity.

Faced with these new challenges, the European banks have tried to adapt their business model by diversifying and universalizing their products and services lines, offering both to retail and corporate costumers along with traditional instruments:

insurances, the possibility to buy investment funds units, private banking instruments and the possibility to manage investment portfolios. Nevertheless, the outside competition has also grown as insurance companies and investment funds have developed their own products and services which offered viable alternatives for saving and investment in regard to the banking offer (Goddard et al., 2007). These developments have lead to a blurring of the demarcation line between banks and other financial intermediaries (see the study of Rajan and Zingales, 2003). At the same time, because of the changes determined by the European integration process, banks have developed a more widen pan-European network of branches and subsidiaries, which have helped the development of the overall European banking system thru an enhancement of the completion level, especially in the case of the new member states (Lensink & Hermes, 2004, p. 5).

Despite the many legislative initiatives at European level in order to harmonize the integration of the European banking sector and match the achievements from the monetary and bonds markets (Baele et al., 2004; Manna, 2004), most of the academic literature underlines modest progresses in this direction (Dieckmann, 2006; Staikouras et al, 2008).

The main challenges identified by the academic literature that prevent the deepening of the banks integration process, especially in the case of the new member states, are represented by the particularities of the local business environment, the cultural and linguistic barriers that exist which are enhanced by the different legal and fiscal systems which are in place in these countries and which tend to be very heterogeneous (ECB, 2010; Buch & Heinrich, 2002).

In order to underline the progresses made in the integration of the banking sectors from the new European Union members countries from central and eastern Europe we will use the methodology set for law of one price.

In order to underline the progresses made in the integration of the Romanian banking sector we will use the methodology set for *the law of one price*. Thus, according to the law of one price, as a result of the integration process the nominal interest rates should converge toward the most low registered level (for detail methodological considerations regarding the law of one price see the paper of Baele et al., 2004).

In order to completely underline this complex process we will also take a look at the changes that have been registered in the competition level from the analyzed banking sectors, as a deepening of the integration process should point out to an

increased competition level, as entry barriers are removed and the cost for accessing these new banking markets drops significantly.

In order to underline the annualized growth of the banking sectors we will use the *CAGR index* which is calculated based on the formula:

$$CAGR(t_0, t_n) = \left(\frac{V_{(t_n)}}{V_{(t_0)}}\right)^{\frac{1}{t_n - t_0}} - 1$$

where V_{t0} represents the starting value and V_{tn} is the last value, $t_n - t_0$ represents the number of years. The *CAGR Index* deepens the effect of volatility of periodic variations that can render arithmetic means irrelevant.

In order to establish the dynamics of the competition on the banking sectors from the new European Union member states we will take in to consideration two main indicators.

The firs indicator that we will use is the *CR5 Index*, which represents the percentage that the top five banks are having in the total assets of the system and which reflect the concentration degree of the market. The indicator is calculated based on the formula:

$$CR5 = \frac{A_1 + A_2 + A_3 + A_4 + A_5}{AT} x100$$

where A_1, A_2, A_3, A_4 and A_5 represent the value of the assets held by the top five banks in the system and A_T represent the value of the total assets of the banking system. It can take values between 0.1% and 100%, where the low value represents a highly dispersed market and 100% represents an oligopoly or monopoly.

The second index that we will use is the *Herfindahl Index*, which underlines the degree of competition which exists on the market and is calculated based on the following formula:

$$H = \sum_{i=1}^{N} s_i^2$$

where s_i is the market share (in our case the value of banking actives) of firm (bank) i and N represents the number of banks that exist in a certain market. It can take values between 0 and 10000. If the values are below 100 it underlines the existence of a highly competitive market, if the value is below 1000 it reflects a

dispersed market, if the vale is between 1000 and 1800 it indicates a relative moderate concentration in the market and if the value is above 1800 indicates a highly dense market.

3. Characteristics of the Banking Sectors of the New Member States

As mentioned before the new member states from our panel have underwent through a transition process form centralized economies to fully functional market economies. The fact that these countries have managed to join the European Union underlines the fact that these economies have achieved tremendous structural economic reforms and important progresses regarding the creation and functioning of a functional market economy. The economic growth that these counties have managed to achieve in the period before the economic crisis has surpassed the one registered by the euro area while the inflation has dropped significantly from two digit values to levels comparable to the average of the euro zone. Despite the successful achievements of progresses by these states in the convergence process of their economies, still their GDP per capita ration remains low, when compared with the euro zone average.

As we can see from Chart 1 the panel state based their financing of the economy more on the banking sector and to a lesser extent on direct financing through the stock market.

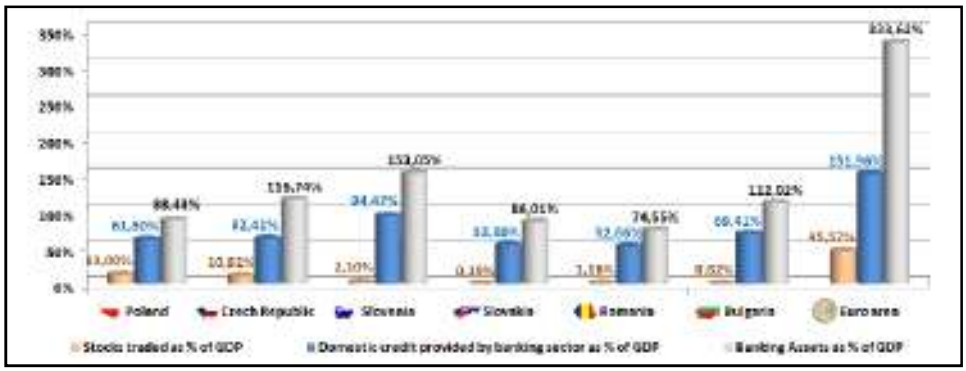

Chart 1. Development of the banking sector in the analysed countries in 2009

Source: Own simulation based on data retrieved from the World Bank (*http://data.worldbank.org/*) and the European Central Bank (*sdw.ecb.europa.eu*)

Despite this fact, the overall assets held by the banks in the case of the panel countries, as showed in Chart 2, are below the euro zone average, pointing out the potential for further development of these banking sectors.

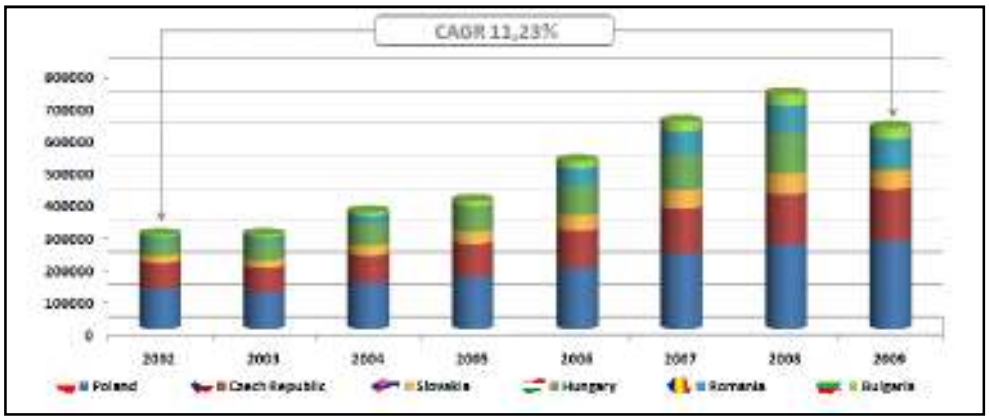

Chart 2 Evolution of the banking assets in the case of the analysed countries between 2002 and 2009

Source: Own simulation based on data retrieved from the European Central Bank (sdw.ecb.europa.eu)

Most of the banking sectors from the analyzed countries are dominated by commercial banks, which owned in 2010 approximately 85% of the assets in these banking markets. In countries like Hungary and Poland there are also several important cooperative banks. As the European integration process deepened the number of banks presents in these countries tended to decline. Despite the fact that there were several bankruptcies that took place in these countries, most of the banks that disappeared from these markets were the subject of mergers and acquisitions both at local and pan-European level. Mostly, the banks from the EU-15 states were the ones which acquired local banks in these markets as a way to extend their operations in the new member states. This is underlined also by the fact that almost 87% of the whole banking assets of these countries are owned by foreign banks, either through subsidiaries of branches that operate in these markets. The concentration ratio of these analyzed banking markets is relatively high as a result of the entering of the foreign banks, especially the ones form EU-15 countries and as a result that most of the former state owned banks have lost a significant market share. In general the CR5 index varies in the case of the analyzed states from 43,9% in the case of Poland to 72,1% in the case of Slovakia.

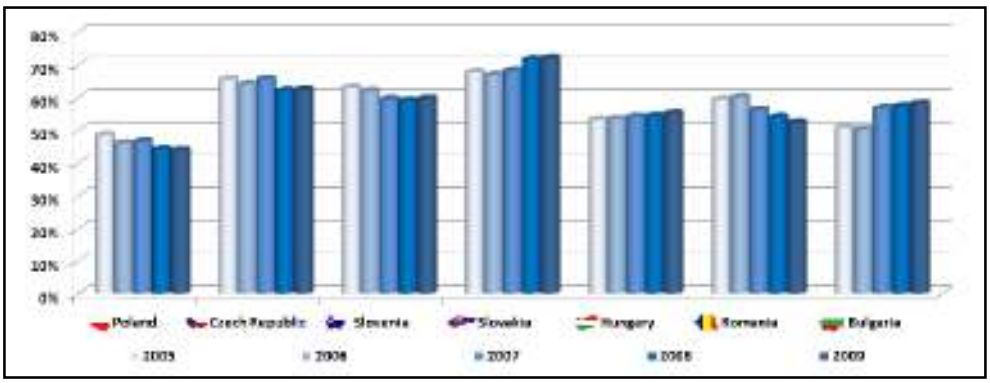

Chart 3. Evolution of the concentration level (CR-5) in the case of the analysed banking sectors

Source: Own simulation based on data retrieved from the European Central Bank (sdw.ecb.europa.eu)

From our analysis we can see that that the analyzed banking sectors have registered a consolidation of the activity, as a result of the diminishing of the competition level. Most of the bigger banks present in these markets have undertaken several aggressive campaigns which have solidified their presence making it more difficult for smaller competitor to develop lucrative niches. We can also observe that as a backlash of the financial crises and of the economic depression that has hit these new member states since the mid of 2008, the share of the top 5 banks has dropped, but the Herfindahl index has registered approximately the same values.

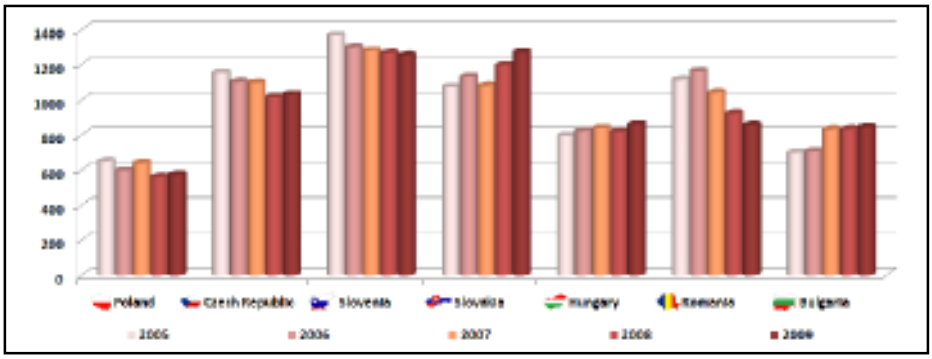

Chart 4. Evolution of the competition level (*Herfindahl index*) in the case of the analyzed banking sectors

Source: Own simulation based on data retrieved from the European Central Bank (sdw.ecb.europa.eu)

Taking into account these developments we can argue that the banking sectors from the analyzed countries have registered a strong development in the last period, which can be partially attributed to the European integration process. Nevertheless we consider important to underline the fact that the banking sectors from these countries are far from reaching their full potential for development, especially taking into account that these sector can benefit from the latest technological advancement in this field and thus having the possibility to compress development stages through which they need to go.

In regard to the evolution of the bank's credit activity, this has registered a period of strong development between 2002 and 2008, especially as a result of the aggressive promotion of the consumer credits in most of the analyzed countries. This period of boom was followed by a freeze in the loaning activity in 2009 as a result of the financial crisis and economic depression which has hit most of the new European Union member states. Moreover the projections made by the European Central Bank suggest an average contraction of the lending activities of the banks from the panel countries with about 6% in 2010, as a result of the depreciation of the economical and financial environment of these countries.

Despite of the negative impact of the financial crisis we can observe form the analysis of the convergence of the nominal interest rates a deepening of the integration process of the banking sectors from our panel, which tends to confirm the *law of one price* – at least until 2006.

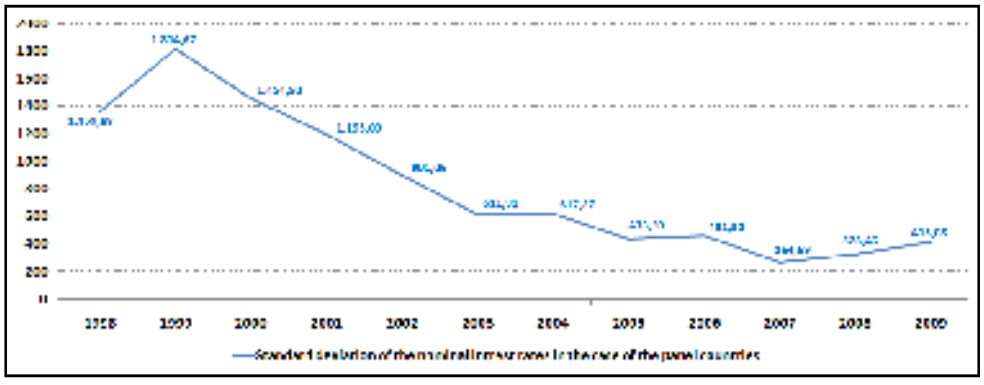

Chart 5. Convergence of the nominal interest rates in the case of the panel countries

Source: Own simulation based on data retrieved from the World Bank (http://data.worldbank.org/) and the European Central Bank (sdw.ecb.europa.eu)

Despite these, the standard deviation of the nominal interest rates still remains high, taking in to account the values registered in the euro zone or in the case of money markets or bond markets. Still, the progress is remarkable and is mostly the result of macroeconomic stabilization and development which has been achieved by these countries starting with the end of the 90 and the firm engagement to join the European Union.

4. Challenges for the Deepening of the Banking Integration Process

Despite the strong development of the banking sectors in the last 20 years in the case of the analyzed countries, there is still sufficient space and potential for further development and enhancements of the banking activity. In another train of thoughts we must take into consideration the fact that the banks from the panel countries are facing for the first time in their existence a global banking crisis which has affected them directly and at multiple levels, diminishing their short term potential for growth and development. Also, in the context of the economic downturn the banks have adopted an extra caution attitude, which has been translated into a raise in the divergence of their interest rates. In this context, the main challenge in the face of the deepening of the European banking integration process in the case of the panel countries is represented by the way in which the banks will be able to surpass the financial and economic crisis which at the moment is in full swing in the European Union. The depreciation of their balance sheets as a result of bad credits and a negative economic perspective can only have a negative effect on the integration process. Banks must act as soon as possible in order to clean their balance sheets and restore their lending activities. Authorities must provide also the financial incentives in order to stimulate the landing activity and provide the necessary arguments and measures for the private sector in order for it to re-launch its productive activities.

Also a major obstacle for the deepening of the banking integration process in the case of the analyzed countries is represented by the low level of completion that exists on these markets. Despite the fact that several major foreign banks are present here, competition never picked up. The high economic growth registered for several years before the economic crisis and the ever expansion of businesses and individual consume, allowed banks to expand their business rather easy and without a real challenge, as the same market share provided each year addition incomes in the context of an expanding market. The financial crisis provides the

right opportunity for the banking systems to rethink and re-evaluate their growth and development strategies. Banking margins are relatively high and opaque, allowing banks to obtain additional profits as the market has been mainly driven by the suppliers and not the consumers. Better services and low interest rates, will provide the willing banks the right tools in obtaining critical market share while also closing the gap, between the euro zone and the new member states in regard to lending rates and services quality.

We can thus conclude that on the short and medium term the main challenge for the deepening of the banking integration process in the context of the panel countries will be represented by the return to a normal and sustainable banking activity, which will provide the incentive for further deepening of the banking integration process.

5. Concluding Remarks

We must underline the fact that the deepening of banking integration process in the case of these banking sectors, and at the European Union level in general depends now much more on the decisions of the market players and also to some collateral factors and to a lesser degree to issues which can be regulated and harmonized away by pan-European legislation initiatives. *This is the reason why we consider that the integration and development of these banking sectors is a process still underway, far from being complete, which has just entered in the fundamental changes phase, which will take some time to be achieved but surely will provide greater benefits*.

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Banking Services Based on High Information Technologies and their Implications

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Abstract: The paper approaches the most advanced information technologies, whose implementation gives shape to a new type of bank the bank of the future. Within the context, there are characterized the banking services, offered by this bank, such as home-banking, electronic banking, virtual banking and on-line banking from the point of view of their operation and of the performances, brought by using them, for the modern banking systems, including the Romanian one, presently and for the future.

Keywords: information technologies; modern banking services; home-banking; electronic-banking; virtual banking

JEL Classification: G24; L 86.

The mutations, which define the current stage of human society's development, outline the creation of an information society, respectively of a knowledge one, bringing in front the electronic systems' operation, which offer more and more efficient means for gathering, storage, processing and transmitting of information. Especially, it has been remarked that by using the personal computers, within the framework of Internet development, people can easily access a higher quantity and diversity of information and, at the same time, they can enrich their knowledge, as elements for progress and civilization.

Also, it becomes increasingly evident that new technologies of information and communication may influence the evolution of the entire economic and social life, including conducting financial activities, out of which the ones made with the involvement of banking institutions are occupying a privileged position.

Within this framework, the banking institutions are called to implement, continuously, more and more advanced information technologies for improving customer service. So, it has been emerged, in recent years, an outstanding model of

bank, what stands out, especially in terms of organization and the performance of remote banking operations.

Considered as image of the bank of the future, the new type of bank offers all the services of a traditional bank, starting from money transfer operations, national and international, and up to the granting of loans, without the client having to move to a physical location of the bank. Such a bank becomes for the clients only their interaction with a computer (Gandy, 1999, p. 2) and it works based on adequate technologies like home banking, electronic banking, virtual banking and online banking, which allow customers direct access to banking services at home, at work or any other location them.

On the background of the new type of bank appearance, we appreciate that is necessary for traditional banks, including those in Romania, to develop also banking services based on high information technologies, as a more effective alternative than that to extend the number of subunits, which became a characteristic of the current banking system. By promoting this new alternative the banks have the advantage of reducing investment costs in new locations, but, and most important, the advantage of keeping customers, whether they change their home and attracting new customers in areas where there is not a previous bank influence. Likewise, it is significant the fact that bank costs can be reduced from about $ 1.07 per transaction, for traditional banks, to only 2 cents in the case of using such high information technologies. (Efraim, 2000, p. 231)

From the same perspective, it has to be admitted that present era, called the "consumer's era", determines the focus of the banking services on the client and abandoning the traditional vision of banks' activity in favor of relational banking. If the traditional vision had as central element the bank product, the new vision, relational, puts the client (the beneficiary of the services) in the foreground. Within the same framework, it has emerged the idea of developing of some systems that allow the bank to provide personalized services in real time, at the doorstep of the client. A first version of remote customer service, by using high information technologies, is the "home-banking", whose name signifies the idea of a Bank at home.

The structure for the operation of a Home Banking service can be summarized as in Figure 1):

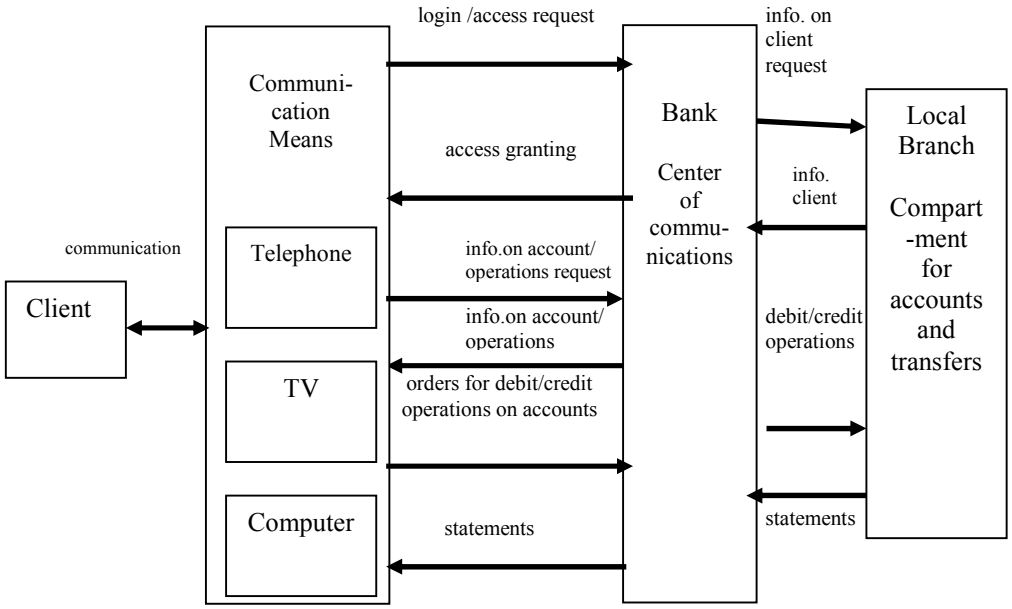

Figure 1. Operating structure of the Home banking service

According to Figure 1, the Home banking software application gives customers the ability to connect to the computer centre of the bank via phone, TV or PC, as means of communication. In this way, it is made a "two ways interactive computer system," through which can be transmitted information as text or graphics, adapted for representation on the screen and easily accessed through simplified controls, regarding the requested operations. Such communication channels used for the bank at home services are developed within the framework of the electronic systems as Videotex and Viewdata. The client must identify himself with a password in order to access the bank system. After the access validation, he can request and obtain information regarding his accounts or operations or may request to be performed debit / credit operations on his accounts. After performing these operations, the bank will submit the statements confirming the execution of the orders for debit or credit.

The bank at home service includes financial services performed outside the banking unit. It can provide transfers of funds through payment orders, but also through payment agreements. Through this service, the clients can transmit to the

bank orders for debit and credit operations on personal accounts, in the form of specialized files, and can receive from the bank account statements, notifications, summaries of operations, etc.

On the other hand, the electronic banking has a broader content to the home-banking, including automated acquisition and processing of banking information regarding the money transfer operations. In relation to these, the operating structure of a money transfer service supported by "electronic-banking" technology may be represented as in Figure 2.

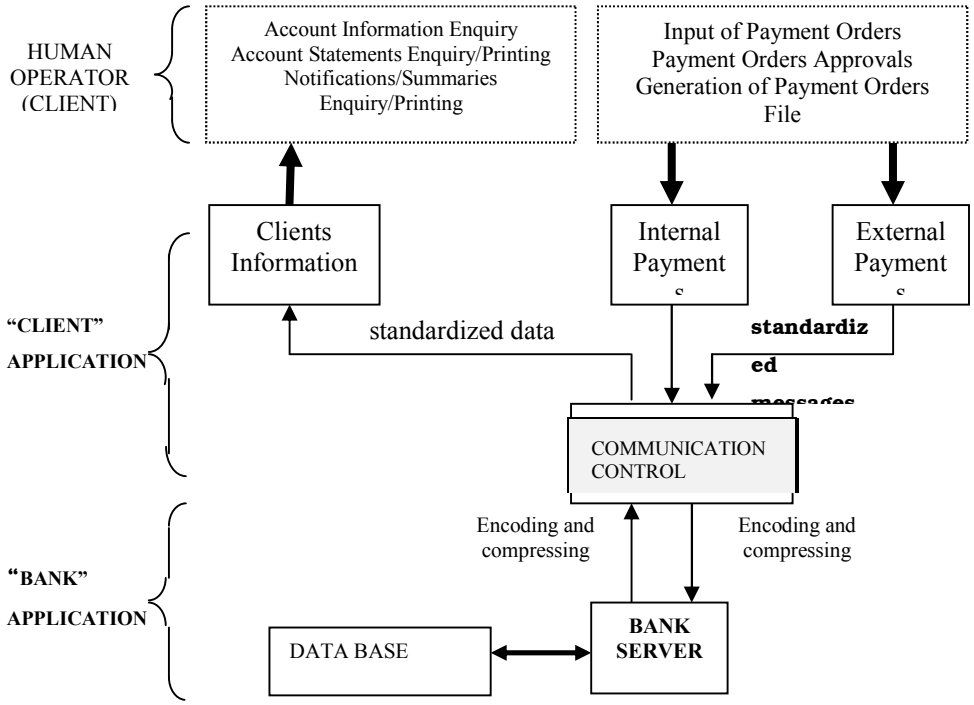

Figure 2. The structure of money transfer service operation based on "electronic-banking" technology

(remake after User's Manual of Multicash Electronic-Banking Application, made by OMIKRON, Germany)

As shown in the previous figure, the operating structure of this service (of money transfers) involves completion of three hierarchical levels, starting from the human operator (the client initiating the money transfer, respectively the client that is beneficiary of it) and continuing with the application levels "Client" application and "Bank" application.

The “Client” application allows, on one hand, taking orders from the clients, in domestic and foreign currency, their correctness checking, the generation and compaction of payment messages and their transmission towards the bank. On the other hand, it allows taking over the server bank account statements, notifications, summaries, etc., processing them for customer’s accounting management and, also, offers information regarding the reasons for any possible rejection of orders.

The “Bank” application provides automatic download of orders from customers and their integration into the bank's electronic system, validation of orders by account managers or rejection and generation of warning messages to the client on that rejection. Also by this module is done taking over account statements generated as SWIFT messages, and directing them to account holders.

The third service offered by the new type of banks is virtual banking, also called "virtual bank". If, until recently, branch banking was considered the main conventional channel for delivery of banking services, currently, customer preferences are turning to unconventional channels. For banks, such delivery solutions avoid high costs related to construction of branches and delivery of services through conventional channels, against a much lower cost for communications and computer equipment. Thus, it appeared virtual-banking technology, which offers services through unconventional channels. As defined by the Banking Technology magazine, the virtual bank is "the Bank where the contact can be made through a variety of channels, but maintaining the same interface for the client and offering access for the same services." To access the virtual bank, for the purpose of transfer operations, the customer can choose between a variety of channels such as ATM, telephone, remote terminal, POS terminal, Video Kiosk, mobile phone or Internet, as shown in figure 3).

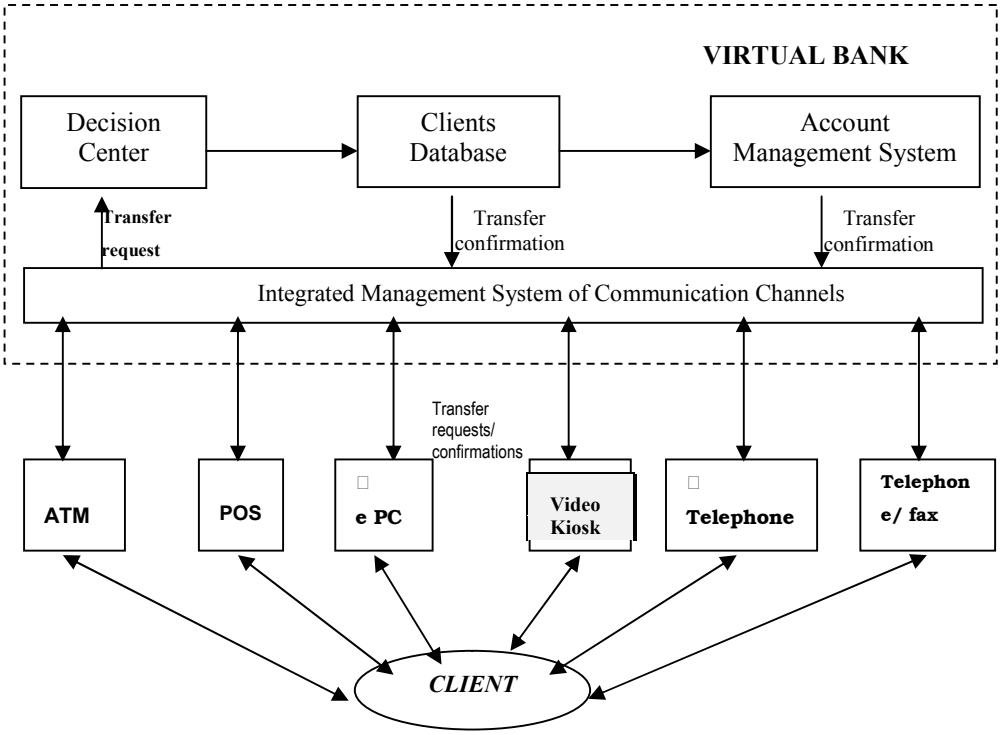

Figure 3. The Operation Structure of a Virtual banking service

Virtual Bank appears as a bank without officials, existing only in the memory of a very powerful computer system and being served by automated software. Its customers can fill in their checks and electronic payment orders by using the computer, can pay any bills electronically, and have access to current information and special offers at anytime and anywhere.

In order to make a money transfer, the client can access the virtual bank's computer system through various technical means, such as computer terminals, telephones, modems, POS and especially through Internet, by transmitting to the bank the request for making the operation. Through an integrated management system of communication channels, the bank takes the client request and directs it to its own decision centre. The Decision Centre goes for the verification of security features and of the conditions and information required for the money transfer (the existence of payer accounts, that of the beneficiary, there is availability in the payer's account, etc.) and authorizes the operation if they are accomplished. Following authorization, automatically by electronic computers, carries out the

money transfer and its effects are recorded in databases of customers and accounts, respectively. Following these, prepared statements are obtained for the payer and payee and are transmitted to them in order to carry out confirmation of the money transfer, on a reverse route.

Virtual Bank offers customers only the image of a traditional bank, partitioned on services such as personal accounts, financial services, etc. Significant characterization of virtual banks is that it provides financial services that may otherwise be provided only by real financial institutions. Moreover, it does not encounter the problem of limited offer of banking services, characteristic for a real bank. This bank can provide a comprehensive package of both financial and non-financial services, thanks to the opportunities created by the electronic market.

Another way of serving clients, used by the new type of bank, is based on online banking technology, which connects it with remote clients and is designed primarily to support bank lending activity away. Its operation is influenced by the look of the consumer credit market for small business, which has changed dramatically, as lenders have adopted new technologies designed to make the lending process quicker and as non-traditional lenders and the banks have increased competition.

The Internet has made it possible for credit market players to show an active and extensive presence. The occurrence of non-traditional competitors, represented by virtual financial companies without a physical presence, using the Internet to place financial services, especially in the lending, has led banks to focus efforts to develop services such as on-line banking, based on Internet, which can attract a significant segment of the market as credit applicants. These services are attractive to potential bank customers both by the reduced costs they must bear as loan applicants, and by the convenience and speed of obtaining the loan. The costs of an application for credit are reduced by up to 50% less than those for loans made in the traditional banking units.

Likewise, the time required for obtaining a loan per applicant drops significantly when using online banking services. This is demonstrated for a mortgage loan application (for example) and in this case the reduction of the lending decision is from 8-56 days for traditional banks to only 7-21 days. The significant time difference comes mainly from the data processing and decision making phases, the time being reduced from 5-45 days to 3-7 days, by using advanced technologies of

automatic data processing, based expert systems and advanced computer algorithms of data processing. (Zask, 2001, p. 182-183)

From the point of view of the use of high information technologies, Romanian banking system has passed an important stage of modernization, closing to the level of the banking systems from developed countries. But, in turn, the latter show a continuously amplified tendency for implementing the latest information technology and extending of electronic banking services, moving from a traditional approach to an information approach. Within this new framework, the high information technologies are the spearhead, through the benefits they generate both for the customer (convenience, speed, reduced costs) and for the bank (efficiency, gain a greater market share, automatic marketing and diversifying of services, reduced costs, etc.).

It occurs, this way, the transition from traditional banks to the new type of banks, which implies, also for our banking system, the existence of certain prerequisites, as: a high degree of computerization of society; encouraging electronic business development; affordable access to electronic payment means (cards, electronic checks, etc.); a logistics infrastructure of means for electronic information transfer etc. These phenomena are present also in Romania, where it ca be observed a significant increase in the use of new information technologies, implying the development and improvement of telecommunications technologies (through the development of computer networks, Internet access, development of fixed and mobile networks and communications by cable and satellite). Also, the attractiveness of payment instruments, as credit and debit cards is rising and, furthermore, there is rising the use of the banking services as home-banking, electronic banking, on-line banking, etc. Out of these, we can remark the Voice Teller – Fax Teller service of home-banking, offered by Banca Transilvania; the Mobilis mobile-banking service offered by BRD; the Multicash electronic-banking services offered by BCR, BRD or Royal Bank of Scotland; the services using Internet connections, offered by many of the banks acting in Romania, which are the base for the operation of online-banking and, also, virtual banking services.

Within the current conditions of amplification of bank's competition on the banking services market and of the continuous progress in the sphere of high information technologies it is necessary and natural the enhancement of the concerns, both of the banks and of the clients, regarding the extension of the area of implementation and use of these ones, aiming to turn to account as much as possible the advantages offered by them.

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Miscellaneous

Doctrines and Contemporary Economic. Theories in the Economic Development

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Abstract: Contemporary economic theories justify economic polarization, both before and after the Second World War, through enhanced differences between the rich countries and those in course of development. The instrument quantifying this economic gap is represented by the high price for industrial products and a very low one for essentials thus maintaining at minimal level the purchasing power of the agrarian countries (of the under-developed states). Through the agency of some institutions and specialized organizations like U.N., U.N.E.S.C.O. or the E.U., there are conducted international programs for the sectorial support mainly aiming the resolution of all kinds of problems.

Keywords: contemporary economic theories; economic development; EU

JEL Classification: D89; N00; N01

The principle of free competition, expressed as the guiding principle of liberalism began to be deliberately disregarded, as the economic development allowed the emergence of corporations and companies with monopoly power in certain fields of activity. The effectiveness of these practices questioned the liberal conception through new perspectives thus leading to the upgrading of neoclassicism or neo-liberalism in contemporary thinking.

Legitimacy was even more questionable, as the model of socialist economic and political organization was settling into shape in the Soviet Union. Later, after the war, in other geographical areas, as in Central and Eastern Europe, China, Cuba, it was implemented the communist model of economic development, the relative success of the planned economy failing to eliminate the neo-liberalism and neoclassicism out of the contemporary economic mentality. The connection between economic and political freedom was absolutely essential in defining a company as being democratic. The advocates of this view criticized the partisans of the dirigiste theory which was seeking to grant a large role to the state market,

claiming that "the key areas of the government policy relevant to the economic stability were the following: monetary, fiscal and budgetary policy. Neoclassicism in Europe spread under the authoritarian political regimes, consequently, the central authority's implication in organizing the economic life contributed to the emergence of the dirigiste economy which had to take into account the individual freedom of the economic agent on the market. Neoclassicism was successfully represented in the economic thinking by illustrious names like: Friedrich von Hayek and Milton Friedman. (Tanasescu, 2004, Galati)

Neo-liberalism was a reappraisal of the economic liberalism's ideas at the level of theory and economic policy. Thus, neoliberals acknowledged the concept of natural order, place the notion of economic individualism at the centre of their doctrine and paid a particular attention to market and price analysis. In relation to the economic policy, they were in favor of privatization, tax and public spending cuts. Since both classical liberalism and marginalism failed to cope with the economic and social difficulties of prime importance, such as unemployment and economic crises, and dirigism reduced citizens' liberties and evolved towards dictatorship, neoliberals, following an old tradition, asserted themselves in the process of a harsh criticism both against dirigisme and orthodox liberalism. Dirigism, they said, either of Keynesian orientation, Nazi or Soviet, could not possibly ensure a sustainable economic balance, while creating a large, parasitic and inefficient bureaucracy which inevitably inclined towards the establishment of dictatorships of all sorts. The state's massive intervention in the economy implied not only the risk of infringement on economic freedoms, but also on the political ones.

The originality of the neoliberal intercession resided in accepting a distant implication of the state in the economy. But this intervention had almost nothing to do with the economic activity as such. The goal of the state's intervention did not lie in reducing the economic freedoms (as proposed by the dirigists), but on the contrary, in creating a legal framework that could protect the market and the competition. Neoliberals argued that, in order for the market economy to function effectively, there should have been an appropriate legislative framework, a framework that could be developed and maintained solely by the regulation. However, few followers of neo-liberalism questioned the necessity of the government's intervention in the economy, the subject of controversy between them being the determining of specific areas, shapes and volume of such action. The state paid a special attention to the organization and protection of competition, without which a normal functioning of the economy would have been impossible.

Neoliberals made a clear distinction between competition and the laissez-faire policy. Competition was an essential element in the functioning of the market economy, while the laissez-faire policy, in defending the idea of complete freedom of economic agents and state's total passivity, had brought great harm to the market economy. It was this policy which favored the emergence of monopolies, the economic crisis and the unjustified distinction between producers. This position, favorable to competition, and against the laissez-faire principle was one of the most original ideas of neoliberals. Competition maintaining and strengthening could be guaranteed by the state through active intervention in the economic life. The state had also the mission to intervene in prohibiting certain forms and methods of economic activity and to encourage the emergence and the development of small companies. (Salajean, 1994)

Practical successes of the monetary policy from the United States and Great Britain (the unprecedented economic growth in the 80's) brought further into discussion the state's role in the economy, this being considered the engine of the economic development, and had in view building a new concept- that of rational expectations which tempered the enthusiasm of the followers of neo-liberalism. Globalization had only amplified the phenomenon as the economic interdependence of states grew at a level so high that none of these states were able to recoil from the advantages or disadvantages of the economic cycles (see the current economic crisis). The distinction between the dirigist economic development policies and the neo-classicist ones was easily nuanced, both having a common denominator such as the aim to stabilize the market by resorting to state's support in key-moments like economic crisis. The increasing economic interdependence, after the World War II, of all countries of the world brought into the focus of the economic sciences preoccupations, the external trade policy of the Great Powers and its influences arisen on the internal and external market. Moreover, the main beneficiary countries of the Second World War suffered significant human and material losses, thus the states had to accelerate the economic recovery. Except the United States and Canada, the other belligerent states were heavily affected by the war thus becoming dependent on economic aid from overseas. The Marshall Plan and the Truman Doctrine had, in addition to the obvious political component, a purely economic goal such as -the economic recovery of the Western states in order to restore the pre-war economic balance. (Gheorghe, 2009)

The surprise lied in Western Europe's incapacity to shuffle of the USA militarily, politically and economically especially since Central and South-Eastern Europe

countries had shirked themselves from market economy laws and had separated from the civilized world through the Iron Curtain. The solution was back then represented by the efforts of the Western European block to create a unique market and a common economic policy of the EU.

Although the theory of relative advantage was unanimously approved in the international trade system, afterwards there was a focus on the international division of labor and implicitly on production with minimal costs through. The present unequal economic changes between the countries of the world show that in other situations there is not necessarily a loss for the one who resort to importing more than to exporting, on the contrary, if for instance, the technology imported is used to produce products that are sold on the internal or external market this was in the state's advantage These approaches pertain to unconventional theories and are based on ideas expressed by the critics of classical liberalism and economists preoccupied with protecting national economies and wishing the reformulation of classical liberalism. (Popescu, 1999)

In the early twentieth century, the growth of the states' social policy component fostered the emergence of economic distortions). The largest international economic crisis, unfolded in 1929-1933, highlighted the conceptual assignations at a macroeconomic scale. The most significant reaction of economics was traced in the work of J.M. Keynes who supported, besides the idea of the government economic intervention, a macro model based on the interwar economic realities. In this context the theory of economic growth referred also to "growth restrictions" related to pollution, resource depletion, the impact of the international economic relations and cyclical repetition of economic growth. (Ionescu, 1996)

Economic growth, usually associated with terms of development, progress, economic dynamics (especially at macro-economic scale) , induced, in some cases, the illusion of the myth of economic growth which could provide with a general solution social and economic issues at the state level. The globalization of some particular economic problems such as the increased gap between developed and underdeveloped countries, inflation, environmental pollution, resource depletion and further maintenance of large areas at a subsistence level brought into the attention of specialists and state structures, the need to create new concept and economic models in order to solve at least a part of these problems if not others too (unemployment, education and training, health, political issues).

The main feature of these models took into account the over-sizing of the state model to the global level due to problems with both regional and global character. Through specialized institutions and international organizations like OUN, U.N.E.S.C.O. or U.E., there were registered visible changes up - against the previous and rather passive policy of these institutions. In this respect, there are ongoing international programs of sectorial support with specific targets.

The theories based on these economic models regard also solving immediate aspects through effective programs designed to detect problems on long term. One of the largest non-governmental organizations in the twentieth century which took position on solving social and global matters and was represented by the Club from Rome set up in 1970 a simple sectorial model confined on: population, capital, resources, environmental pollution and food production. This model improvement contributed to implementing a zero-growth global strategy aiming to maintain a positive balance of the natural growth. This would essentially correlate the economic growth with the democratic one and stop the increase of the national income per head. The criticisms of this zero economic growth model came particularly from underdeveloped states which were practically condemned to poverty as opposed to developed countries whose income per head was already high. The UN model 1977, coordinated by Professor Leontief, planned the states into 15 relatively homogeneous regions and imagined eight scenarios for reducing economic disparities between developed and underdeveloped countries. (Rujan, 1994)

Currently, the European Union's regional economic policy is defined by a set of instruments and processes applied in order to accelerate economic and social cohesion of the community system. Cohesion is a level of real convergence between economies and regions of a system in an ongoing integration which ensures optimal functioning, balance and promotes sustainable economic development in conditions of minimum social and economic cost. Although, the European Union is one of the richest regions in the world, hence the interest in creating a communitary model of economic and political development, there are significant differences between its regions in terms of income and opportunity. Through its regional policy, the EU offers the possibility of transferring resources from the wealthy areas to the poorer ones. The objective is to modernize the less developed regions by enabling them to achieve the economic and social level of the other regions of the Community area. Regional policy is an instrument of financial solidarity between member states and, at the same time, a powerful engine of

economic cohesion and integration. This solidarity strives to help citizens from disadvantaged and less developed regions. Cohesion is based on the principle that EU citizens have more to gain from reducing disparities between regions in terms of income and wealth level.

Still, there are great differences between member states in the terms of prosperity. With respect to GNP per head (standard unit of measurement of wealth degree), most prosperous regions are located in urban areas of Western Europe or in the states belonging to the EU's hard core - London, Brussels and Hamburg. Luxembourg, the wealthiest country in the EU, has been for over seven years richer than Romania and Bulgaria, the poorest member states which joined the Union. The increasing powerful economic role of the massively industrialized countries, be it G7 or G8 (the United States, China, Japan, Britain, Canada, France, Italy and Russia) need to take account the new economic markets like Brazil, Iran, Indonesia, Mexico, etc.). In other words, the decision-making role in the global economic policy comes now to the emerging economies reunited with G8 into what is called G20. The democratization of global decisions can only be beneficial to the regions characterized by insufficient economic development or to third world states where measures must take into account the traditions and the precarious situation of the majority from Africa, Middle East, Oceania, South America, etc.

Prospectively, the European Union aims to become a model of economic growth both by ensuring the implementation of sustainable development concepts and regional development and by considering itself as one of the two major players of the global market after the United States. Currently, only certain indicators situate the EU on this honourable place, although the other strong economies of countries like Russia, China, India, Japan are serious competitors to EU member states. The economic model proposed by the European Union considers the concept of sustainable development, a concept which allows member states or the Euro-regions to develop economically in a project based on the repeated extension in waves. Increasing the number of member states by stages is an argument for the viability of the centre and periphery economic theory and European Union’s limited possibilities.

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Framework on Economical Implication and Issues of SADU Implementation

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Abstract: Due to software which plays an increasingly role in everyday life, interaction between humans and computers will increase in importance; therefore, the ability to support interactions for efficient re-use of experience is a major challenge for systems in the future. Trace Based Reasoning will have a significant impact on applications sharing experience, when they are based on the web in particular, since traces allow us to imagine several ways of interaction in systems and to combine multiple modes of interaction in a single system. In the conducted study we aimed at developing an Assist System of Human Diagnostician (SADU), meaning that this system will have the human knowledge and then information retrieved by interaction with humans at the SADU request.

Keywords: SADU; Case Based Reasoning; Trace Based Reasoning; diagnosis; intelligent agent

JEL Classification: C8

1. Introduction

Presenting and exploiting redundancy episodes from different levels of virtualization (virtualization layers, physical machine, administrating mechanisms for system engineer or human diagnostician in order to identify, discuss and illustrate specific episodes and content on levels of abstraction) represent the key point of the study.

Presenting and exploiting the episodes "serialization" as events that occur or are sequentially collected from the sub-systems used in virtualized system operation provide over time the sequence of messages that, in turn, offers valuable redundant information for refining diagnosis.

These episodes are enriched with information taken from predetermined moments (context) with numerical values (from sensors and performance or capacity

parameters of the resources) and qualitative values of human diagnostician (taken or measured at the man's initiative).

The sequence of events taken and supplemented with information from sensors and from the human diagnostician (all default serialized by virtualized system or through collecting information by SADU from sensors / person) –stands for "signatures" or "traces" that will be used in diagnosis.

Signatures (sequences) will be partly or wholly used (e.g. the emergence of a key event is expected to end the "chain" of event or the ongoing chain processes) thus being sufficient to implement the diagnosis.

Also, the knowledge acquisition regarding the inappropriate behavior of intelligent systems is a systematic process, firstly, that of presenting the processes, procedures and stages that occur, and secondly that of a proposed acquisition of knowledge and insight of the system. A good knowledge of the system with all its features is a decisive factor for the successful acquisition of knowledge. In addition, for accomplishing a fault diagnosis, knowledge and knowledge acquisition are necessary for the fault behavior (faults / symptoms and manifestations, defects granularity, relations between them in various contexts of operation).

Creating traces context and all the necessary tools and knowledge acquisition are things that will be made available to all staff, aiming to unify, update and validate them, and leading to a diagnosis of defects. The methods used for the acquisition of knowledge will focus on the classical knowledge acquisition from a human expert, and automatic knowledge acquisition method using intelligent agents, we will subsequently provide a community to offer experts for discussion and validation casuistry, which today is not unified, made public - there are just as tacit knowledge - or missing altogether.

2. The Approach

Trace activity context are stored in a database, similar with CBR database, which contains all necessary information about the involved events in a lot of applications, logical relationships between this information and appropriate processing techniques.

Database (DB) is a collection of many and different types of occurrences of logical records containing relationships between aggregated data records and basic data.

Database management system (DBMS) is a set of programs for the creation, maintenance and operation of the database.

As previously mentioned, the cases which indicate the failure are inserted into the database by intelligent agents characterized by their skills, according to the layer in which they are raised.

Initially, cases were inserted manually by the human agent because they occurred before or with the development of intelligent agents. Solutions for solving the initial cases are also provided by the human agent until a measure of trust granted to the intelligent agent. Subsequently, after inserting into the database by the intelligent agents of events signifies a malfunction or appearance of a new fault, human agent, based on similarity, search for a solution to the problem emerged again. If it exists, the found solution is adapted to the new case along with the rating, and if it does not exist, based on past experiences try solving the case.. If instead we do not have a solution for the new event, the issue is left to community debate.

If new fault occurs, a possible solution is adapted based on similarity and also if the candidate solution leads to events elimination, therefore of the fault, the solution rating increase simultaneous with the certain confidence degree granted to the intelligent agent, so that next time it encounters the same error the human operator intervention will not be necessary.

Currently, when an event occurs, intelligent agent inserts a new record in the database, indicating that a new case emerged along with assessing the degree of functionality of the system. The human agent intervenes and inserts the manner of case solving if there is no candidate solution. If deems it necessary to be granted a certain degree of confidence in solving the same intelligent agents problem, the human agent does so that in case of a new similar case emergence, the intelligent agent added to the database a new record and comparing it with the previous case based on similarity between cases, running the script that led to the best solution. It is possible to have several solutions for a past case with the same error but the decision of human agent is crucial for the beginning in choosing the best solution followed by the granting of its rating. Of course there is the possibility it could fail, but in time, the intelligent agent will improve through self-directed learning, which will lead to fewer human errors.

2.1. DBMS Architecture and Operation

The program – resort to DBMS, indicating the name of the program of data type and value of required registration key

DBMS

- Obtains a subschema used by external program and examines the data description;
- Obtains the scheme and determines the logic type of necessary data;
- Examines the physical description of the database and determine the necessary physical record;
- Sends a command towards the operating system (OS), demanding reading the physical record;

Operating System (OS)

- Interacts with the data storage devices
- Transfers the requested data from the device in the buffer zones of the OS

DBMS

- Deduces through the necessary and logical subschema and eventually, transforms the data
- Transfers the data from buffer zones in the working area of the program
- Provides to the program the storage information on the operation (eventually indicates the error)

The program – operates on data in its working area

Entity – Relationship Model is the graphical way of representing the data and relations between them, by entities, relations and attributes, described in detail.

A relational database model has three main components:

- *Data Structure* by defining some *domains*(atomic values) and of *relationship* "n" (attributes, tuples, primary keys);
- *Data integration* by imposing restrictions;
- *Data processing* through operations from the relational algebra or relational computing

The Entity – Relationship Model is presented in Figure 1.

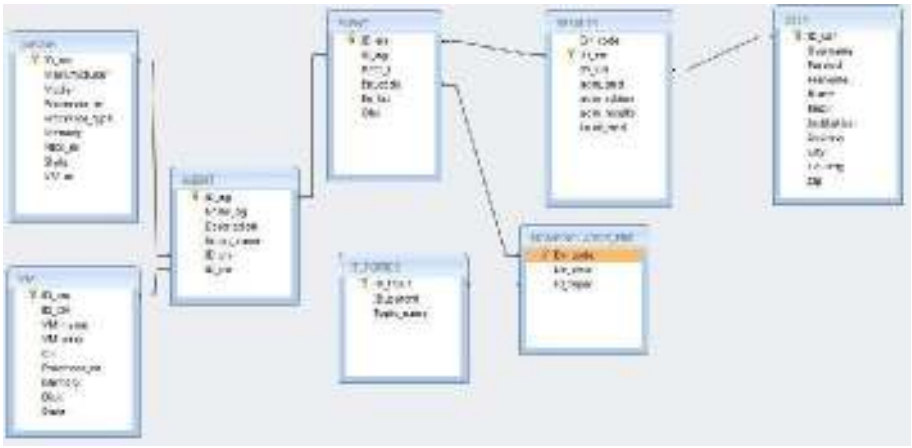


Figure 2. Tables relationship

2.2. Graphical User Interface

The interfaces allow access to the information of a database and a simple definition of applications, which enable the use of database and users. The interfaces include data access components, data presentation components, components of generating some applications and other features such as opportunities to use statistical methods, word processing, spreadsheet work programs, cores of expert systems, etc.

At these there can be added different possibilities of testing, simulation, of information processing (copying, sorting, merging, etc.), automatic design, multimedia and other work opportunities. The graphical interface of the diagnosis site is made with the help of PHP language and the database by using DBMS MySOL.

The main page shows us an overview of the entities that make the subject of the diagnosis. Here we find information on agents, at abstracted physical servers, virtual machines, events and categories of these – areas of interest (Figure 2).

Figure 3. The access main page

Using the interface we can display, insert, update and delete agents, abstracted physical servers, virtual machines, events and areas of interest (Figure 3 – Figure 7).

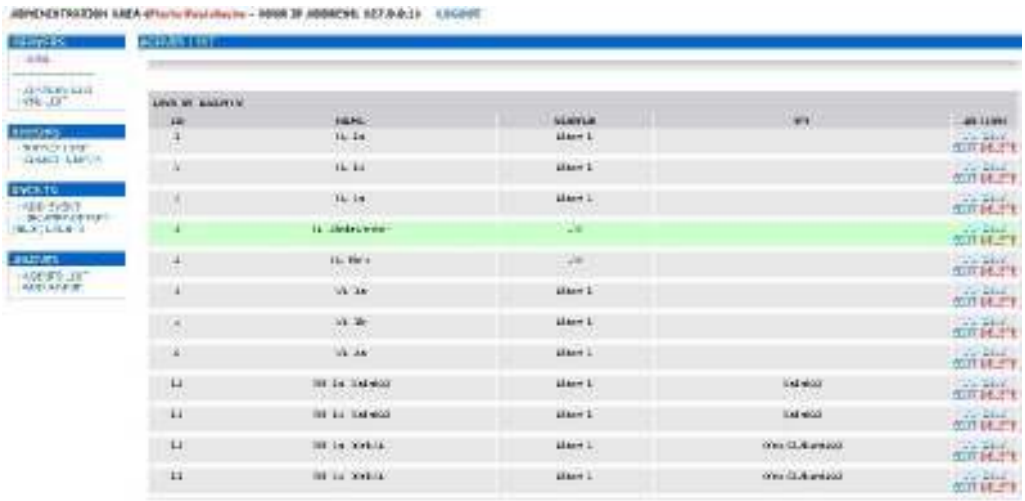


Figure 4. Listing Agents

Figure 3. Listing abstracted physical machines (servers)

Figure 5. Listing virtual machines

Figure 6. Editing virtual machine

Figure 7. Agent editing

2.3. Insert New Record in Database

The insertion into the database of a new case is made automatically by the agent but can be made and by the human agent, whether it is about adding events, abstracted serves, virtual machines or new users.

Thus the insertion of new occurred error is made automatically by the intelligent agent. Also, the human agent has an interface with which it can insert new cases, as is shown in the figure below.

Figure 8. Adding event

2.4. The Consultation of Trace Activity Context

Consultation the context activity trace (database) is made by interrogating the events or cases after keywords (Figure 10.). The intelligent agents insert new events which the human agent find them in the list of events without category (Figure 9), and after the insertion of the possible solution, the event subscribes at the field of interest, in other words it is attached to a category – area of interest (Figure 13). Here we can observe how many time we have faced with the same error and what were the possible solutions given, but and which solution was considered the best by granting the highest rating.

Figure 9. List of unresolved events

Figure 10. Search after keywords

2.5. Solving the Cases by the Human Agent and Providing Trust to the Agent

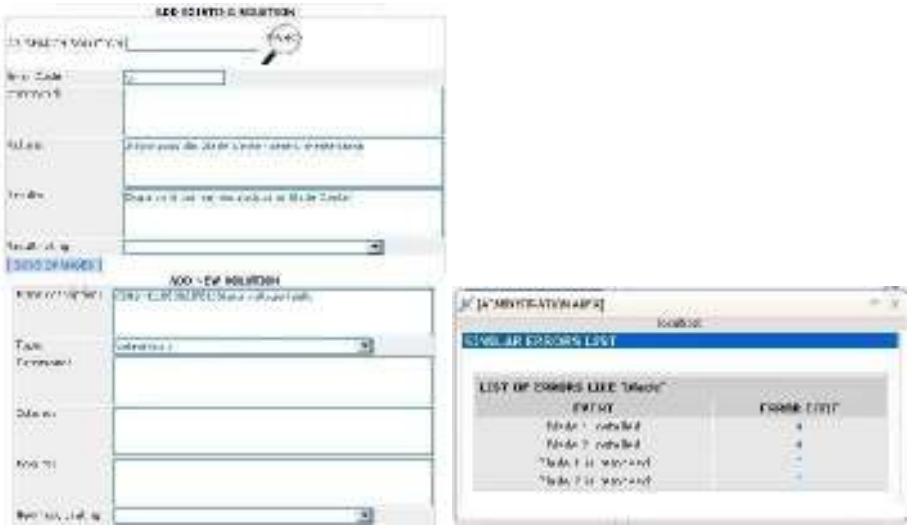
In resolving cases by the human agent and the eventual trust granted to the intelligent agent we have the next steps to follow.

In the list of unresolved events (and that does not belong to a domain of interest), it is selected the event that is wished to be resolved. In this moment are displayed the information about the agent who inserted it in the database and the location where it occurred. In the figure below is observed that the event was inserted by the appropriate agent of the physical layer (FL), and the name of the agent is FL_Blade Center. It is also observed the physical characteristics of the server were we have placed the agent (Figure 11). If the agent was placed on a virtual machines, there were displayed and the information about the virtual machine.

Figure 11. Event resolving

If this error has been encountered in a previous case, it is observed in the area ADD EXISTING SOLUTION action and result had after the action. (Figure 12a). If instead we are dealing with an event that never took place, we can have the most appropriate solution according to the similarity between cases. If it appears that we have a similar case it is selected after the error code, and after this action, the result of the previous solution is passed as a possible solution for the new case (Figure 12b). We can also, grant trust to the intelligent agent having as result the automatic

solving of a similar error.



a) b)

Figure 12. Edit existing solution and adding of new solution according to the similarity of cases

3. Fields of Interest

In Figure 13 are structured the fields of interest according to the levels that we have within the system subject to testing

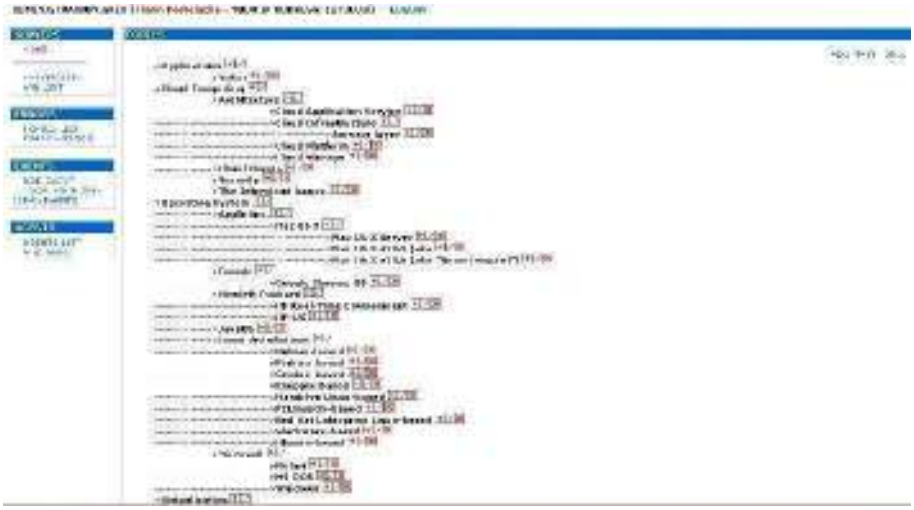


Figure 13. Fields of interest

4. Conclusions and Contributions

Due to the current economic climate and of the problems imposed by the security of informatics systems, the companies have now begun to use the virtualization technologies to protect better the most valuable assets: data stored. Decreasing the costs involved by the investments in hardware, software and by granting licenses as well as and the reduction of utility bills, minimize the downtime of equipments and simplification and streamlining the management processes are objectives of which we can benefit through virtualization. Once with the growth and development of the company, the needs grow and change. Of course we always hit with problems and new obstacles, so we have to consider that is possible that an application that today we virtualized – such as an SQL database – may have to be moved back to a physical environment, as a result of the growth of database or need of more computing power or due to some priority processes. We must analyze in detail with what instruments we operate for the migration of machineries and applications at a virtual environment, ensuring that the selection was corrected in the case in which we pass back to a physical server or we migrate the application on different installed virtual machines on different hardware machines.

When it is resorted to virtualization, configuration and implementation in the centers of data of the company offer a range of benefits concerning the costs and energy conservation. However the organizations can decide sometimes with

difficulty the involvement in a virtualization project, without assessing the way in which such a project will have an impact on traditional operations, both from technical and organizationally point of view. In addition, the companies must ensure that the capacity planning and monitoring tools are the necessary ones and able to asses within a virtualized environment the operation and performance of the application.

While the planning and configuration process concerning the virtualization can be viewed as a challenge, the advantages of application migration can be significant. The administrative rights will have to be reviewed, together with the roles and responsibilities, being responsible to act in a new scenario when one or two applications require access to a number of physical machines or require additional storage space. Hence, it can be computed the relation between software and hardware taking into account and by some reserve cycles to sustain a possible failure of the machine so that in time the project to give value to organization. The security strategy of the data center must take into account both the physical devices and of the virtual devices.

We recall that the hypervisor software and selected firmware plays a key role in virtualization and maintaining contact with the supplier of virtualization services (based on the analysis, services and project that they propose) is essential to determine the level of risk and of protection necessary to hypervisor. The virtualization also has an impact on the physical infrastructure due to the computing power necessary to physical devices that support multiple virtual machines, as well as and a certain capacity of the network to satisfy the requests of transfer between the virtual and physical machines. The virtualization has proven to be an effective mean of consolidation of hardware resources but is still limited by the non critical areas of operations from the Data Center. This means that man companies take initiative to strengthen the efforts: technology is there to continue the process, but the decrease of performances is sometimes too large to justify the reduction in costs. Here is about the installation on virtual machines of the operating system Windows, Linux, MacOS. But this reason is about to change, because a new generation of technologies improves both the speed and the performance of the critical applications and the ability to manage them.

These are the multitude of considerations, and it is essential that the project to be well planned and all the possible costs and complications that can appear to be take into the calculation of the project.

Recognizing these benefits of the virtualization previously listed and aiming the purpose of putting the base of a trained system which to support the decisions of human diagnostician after solving the appeared problems, modern complex IT systems lead at challenges for system engineers in understanding and troubleshoot the possible problems that may occur in throughout the operation, but especially in tracking the manifestations on each level that enters into the component of the target system, to locate and remedy the defect according to the supplementary hypotheses and investigations.

However, there is no single technique, that to be considered the best, in terms of accuracy, complexity, performance and adaptation at changes having as purpose solving the general problems in diagnosing the defects. Also, to develop a better solution (Katker & Paterok, 1997) many researchers try to combine different techniques.

In general the approaches based on rules can be used for a simple system, which is rarely changed when the systems based on model present a supplementary model of the system concerning the rules, which makes them superior to the systems based on rules but does not make them more attractive because of obtaining and updating the model with difficulty. Although the systems based on cases are less sensitive to changes from system, these are not suited to manipulate in real time the correlation of the alarm. The most accessible idea found behind many localization techniques of defects is considered the correspondence alarm/ event dye to higher capacity to restore relations between alarms/events.

Thus, as in the case (Bocaniala, 2005) the complex system will be divided into levels of interests (subsystems) where some techniques presented above can be applied successfully. The global diagnosis of the complex system will be obtained in the base of subsystems diagnoses.

Also, changing the model from a orientation focused on fault to one based on traces to facilitate or amplify the own capacities of different human experts or user is the strength in diagnosis of virtualized systems due to modeling the interactions between the physical and virtual resources. The fact that we overrate the available physical resources, we allow better equilibrations of the needs that ot can have an application at a time.

The major advantage comes from the fact that the diagnosis system is functional from the first time, without requiring the entire inserted casuistry related by the context activity of trace, because this is completed during the development of

processes, and in the case of occurring unknown faults, without immediate solution, the problem is left in discussion/ analysis for resolving the community of specialists from the domain. However it is necessary a structure of the domain well prepared, in order not to face major problems during the development of the diagnostic system.

Knowledge of weight of influence of a "situation" in global functioning of the system is another very important goal. Deepening on the degree obtained from the system at $t_1$moment an the degree given at the $t_2$moment of the fault, results the share that it has the fault in appreciation/ depreciation of functional state of the system.

A final goal achieved is the characterization of the global stat of the system that occurs in punctual allocation of the resources by a critical factor (resource allocation for a car that has a critical need for resources) due to:

- Situation (status of fault – networking, client, background services;
- Components (processor, RAM, HDD);
- Constraints I/O;
- Resources sharing

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Aspects on the Role of the Educational Process in Increasing the Quality of Human Resources at the Level of Public Administration

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Abstract: This theme has as necessity the requirements for the public administration staff's effectiveness, increasing professional performance directly related to policies and strategies for quality assurance in the national education system from Romania, for high and sustained training of specialists. We propose the analysis of some interaction directions between higher education and the entities to whom the educational offer addresses, in case of active involvement of higher education in human resources from the public administration and administration specialists in education process, aiming at developing the administrative capacity of public, central and local institutions, and introducing and maintaining the quality standards for public services.

Keywords: quality of human resources; quality of education; the interaction higher education - public administration

1. Introduction

The importance of using the best possible resources was expressed in the Communication on efficient investment in Education and Training (2003), Joint Temporary Report (2006)[1] and Council Conclusions of March 2006.[2] The investments in human resources are vital. Thus, it was found that an increase from one year period of education means an economical growth of 5% on long term and

[1] http://ec.europa.eu Modernising education and training in Europe: a vital contribution to prosperity and social cohesion in Europe, JO C 79/, April 1, 2006.
[2] http://www.consilium.europa.eu, Brussels European Council of 23/24 Mar. 2006, Presidency Conclusions.

2.5% short term. Education has a positive impact on active labor, health and social inclusion. A coherent set of actions will improve the competitiveness and quality of life in Europe and to achieve a democracy based on active participation of all citizens. (Dragomir & Dragomir, 2008, pp. 7-12)

In March 2010, at Brussels, the European Council agreed on the following headline targets, which represent shared objectives guiding the action of the Member States and of the Union and cover the main areas, where efforts are rapidly needed:[1]- aiming at bringing to 75% the employment rate for women and men aged 20-64; - improving the conditions for research and development, in particular with the aim of bringing combined public and private investment levels in this sector to 3% of GDP; the Commission will elaborate an indicator reflecting R&D and innovation intensity; - reducing greenhouse gas emissions by 20% compared to 1990 levels; increasing the share of renewable in final energy consumption to 20%; and moving towards a 20% increase in energy efficiency; - improving education levels, in particular by aiming at reducing school drop-out rates and by increasing the share of the population having completed tertiary or equivalent education; taking into account the Commission's proposal, the European Council will set the numerical rates of these targets in June 2010; - promoting social inclusion, in particular through the reduction of poverty.

The strategic objectives are integrated into a coherent whole, which aim at ensuring sustainable development of society, which represents a model for the use of resources and security for future generations.

2. Interactions and Directions to Achieve

Nowadays, the university continues to play a leading role in the development of the civic awareness, of public space, and Romania has proved to be aware of this process and it engages more actively in order to achieve the standards. The quality of the education is a priority, as a prerequisite for improving the professional employment, the social cohesion and competitiveness. According to the law, *the quality of education* is defined as all the features of a study program and its provider by which there are met the beneficiaries' expectations and also the quality standards.[2] A quality education requires that the institutions and their curricula

[1] http://www.consilium.europa.eu - European Council, Conclusions – 25/26 March 2010, EUCO 7/10.
[2] Government Emergency Ordinance no. 75/2005 on quality assurance in education, published in the Official Monitor, Part I, no. 642 of July 20, 2005, as amended and supplemented.

meet the needs and expectations of internal and external, direct and indirect beneficiaries. The education quality assurance is focused mainly on the outcomes of learning. They are expressed in terms of knowledge, skills, values and attitudes, which are obtained by attending and completing an education level or curricula. The purpose of an education process is to form professionals able to engage in the economic and social progress.

Improving training of personnel from public administration, human resource training and development at the highest European standards, represent an objective established by university policy and this can be achieved in multiple ways, including:

- the Master of science courses, in collaboration with local public administration;
- the involvement in joint projects of scientific research, promoting partnerships with local and regional authorities in order to develop joint projects, addressed to the community;
- the increase of competitiveness through training and research sessions in European universities or specialized institutes;
- the development of documentation infrastructure: books, treatises, subscriptions to specialized journals, with greater access to the sources of international circulation;
- the development of analysis, consulting, audit and evaluation centers that would provide services of economic and social environment, at regional and national levels;
- the collective organization from university to scientific and cultural events addressed to local community, with the participation of public administration staff;
- engaging the staff from the public administration in international seminars and conferences, with topics of interest and publishing in professional journals internationally disseminated;
- the development of cooperation with local and regional agencies and authorities, concluding some partnerships and cooperation agreements (Chamber of Commerce and Industry, SMEs, City Halls, Prefecture, etc.);

- attracting the local / regional community to events that popularize the university activities ("The day of open gates", national analyses and studies, conferences etc.);
- the dissemination of the excellence results and of personalities from the university and public administration through the media and public events.

3. Expected Results

The affirmation and the skills' use of academic staff and students in a bi-univocal interaction with the social, economic and cultural environment is a way of active involvement in the community life, beneficial to both parties, directly linked to market demands and society as a whole.

It is required a wider and responsible involvement of the direct and indirect beneficiaries of the educational process, in real partnership with the university, in order to guarantee the proper course of activity, focusing on long-term results and performance used both in academic environment and in society.

It is envisaged the involvement of specialists from public administration in training and improvement process of future university graduates, in the sense of being able to adapt the content of disciplines in order to stimulate creativity, innovation and entrepreneurship among students. We aim at cooperating closely and directly, by the proposals of decision-makers of public administration, on topics of interest (subjects/disciplines) in order to be included in the study through masters, in curriculum / discipline record at accredited Master courses, having as target the public administration or proposals for new masters; widening the educational offer of bachelor's degree and master studies for large groups of beneficiaries is a requirement derived from the dynamics and interactions of the society at local, regional and national levels.

4. Conclusions

The educational management firmly opts for accountability, transparency and efficiency, in this sense, computerizing the services, the academic management, introducing knowledge management and the concept of intelligent institution which will bring closer the university to the requirements of a modern and efficient educational process in relation to public administration as well. Quality assurance can be achieved through continuous improvement of academic activities, in close correlation with the requirements of socio-economic environment, by involving the decision makers in public administration, through a supported research effort, by the solidarity of academic staff, students and indirect beneficiaries, seeking creative present and future solutions, for educating the present and the future to international standards, in line with the imperatives of a modern society, at national level and integrated in the global structures.

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